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# The Business of Water

An Examination of private participation  
in water governance in the US

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## Abstract

The purpose of this thesis is to examine the involvement of the private sector in water management in the US. The chosen research field is therefore within the discourse on the privatization of water services. As this is a broad research area, the researchers of this thesis have chosen to do a case study with a focus on a particular private water company (American Water Co.) and their involvement in a local community (West Virginia). The case highlights many of the themes brought forth in the general discourse on private participation in water services, and the interplay between the civil and corporate actors is especially highlighted due to a chemical spill that occurred in the area back in 2014. This thesis this examines the interlink between conceptualizations of water as evoked through an ethical or market framework by both the corporate actors and the public opposition groups, and the implications these conceptualizations for the governance approaches to water management. The analysis, therefore, illustrates how both American Water West Virginia and the public opposition group Our Water WV, as well as the public advocacy organizations Public Citizen and Food & Water Watch, utilize an ethical framework in regards to water and water rights. These considerations are related to a Danish context and their further implications for the state of water governance is considered. Two fundamental points of contention were identified in relation to private involvement in water management: the ownership and responsibilities of providing a public service, and an inherent incompatibility between market profits and serving the public interest. Although other aspects of the frameworks may have coincided – e.g. a stewardship approach to management or a view of water as a human right – these aspects created an irreconcilable strain between the actors. This only highlights the already existing contestation and dichotomous nature of public versus private control of water governance and the surrounding debates.

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## 1. Introduction

Water is essential for human survival and access to clean drinking water is, therefore, a necessary prerequisite for the future of human kind. Water governance, and the management of the dwindling global water resources, has in the past decades become an important part of the global discourse concerning poverty and climate change (WWAP 2003). Aspects, such as water accessibility, conservation, and scarcity, have particularly garnered much debate in both academic fields and public and private spheres. Moreover, in order to cope with the challenges of water governance, many countries around the world have incorporated the private sector in some facet in their management approaches (Rubenstein 2000). Gonzales and Yanes (2016) note that for much of the last century, the driving force for environmental change has been the United States. The governance models set forth by the US are therefore telling of a greater internationally dominating approach and a part of this is an inclusion of the private sector. Focusing on the United States, the contestation on privatization become evident, as the country is dealing with aging infrastructure, a decline in federal capital, and a worsening of their water governance, as well as a significant public opposition to any inclusion of the private sector, whom others argue, are the ones that can improve the system.

The researchers of this thesis are, therefore, interested in examining the privatization aspects of water governance and how a local case illustrates governance approaches in the sector and the frameworks on which they are built. The case is the inclusion of American Water in West Virginia and this thesis will examine the interlink between how the corporate and civil actors included in the case conceptualize water and water rights, and how these conceptualizations, in turn, influence the governance of drinking water in West Virginia. Moreover, we will examine the water management in Denmark in order to put the US governance in a larger perspective. Lastly, we will consider the current state of water governance and the implications for future measures.

### 1.1 Historical Overview

Private participation in water governance in the US is not a recent phenomenon. Historically, private water companies owned much of the country's water service (Grant 2015). However, after the cholera outbreaks during the turn of the 20th century, water services were connected to public health and local municipalities gained control over their water provision.

Since then, various efforts were made to improve the water quality but not until the 1970s was any significant progress made. Back in the 1960s, only 60% of drinking water in the US met safety standards (Chmielowicz 2017) but there was a high level of environmental and consumer movements pressuring the government to act. This resulted in the Clean Water Act of 1972, which

aimed to restore and maintain water integrity, i.e. through the EPA. Although there were issues with the federalism and broad language of the bill, these were reduced through the Safe Drinking Water Act of 1974, which, amongst other things, allowed for greater flexibility to the states. Numbers from 2012 show that polluted waterways have been diminished from 60% to 35%. However, the regulatory state was replaced in concurrence with a neoliberal political change with a heightened role for the private sphere and thus throughout the last half century, a certain privatization of the state has thus occurred. In relation to water governance, this was specifically evident through the 1980s, as the UK's choice to privatize their water management spread to other nations.

Governments have been more likely to enlist market and civic actors in public policy and, as a consequence, the state has become more of a facilitator and enabler of public interest than a provider and controller of it (Paavola et al. 2009). In concurrence, the EPA's power has diminished since the Clean Water Acts creation and the federal spending on water services have similarly declined. Adjusted for inflation, in 1977 the federal government spent \$76.27 per person on water services, but in 2014 that number had fallen to \$13.68 per person (Food and Water Watch n.d.). This 82% decrease in federal investments is telling for the state of the water service in the US today. During the 1990s water was viewed as a commodity and an economic good in accordance with the Dublin Principle set forth by the International Conference on Water and the Environment in 1992 (Gonzalez & Yanes 2015). A decade later, on the other hand, the UN determined that water was a human right (WWAP 2003).

In recent years there has been a rising trend of re-municipalization resurging in America. From 2007-2013, there was a significant decline in the number of people being serviced by privately owned water systems, the number being estimated to be around 7 million people (Grant 2015). Comparatively, the number of people being served by local governments grew by 17 million, illustrating a trend of anti-privatization and for local governments to regain control over their local water resources and managements.

## 2. Literature Review

There is a general agreement within the field of water management that the water crisis is a crisis of governance, not a matter of scarcity (WWAP 2003). This literature review will, therefore, focus on governance-related issues within water management.

## 2.1 Water Governance

A paradigm shift occurred in governance approaches in the 1980s and 1990s, where water management moved from a state hydraulic system to a neoliberal market environmentalist approach. The state hydraulic paradigm was under increasing criticism, mainly dominated by the argument that the state and government had failed at the task and was less efficient than private actors could be. In response, market environmentalism emphasized liberalization, privatization, and deregulation (Bakker 2014). One of the recurrent tensions between these views is the contrast of monetary and non-monetary values and the corresponding incorporation of (non)economic practices and strategies. These (seemingly) dichotomous approaches have dominated the scholarly work on water governance since then and will be further examined below.

Issues concerning water and water management are part of a larger concern about environmental degradation and Karen Bakker notes that “environmental issues are both a driver and a source of critique of privatization: for example, the poor quality of drinking water serves as a justification for privatization, and concern over the impacts of privatization on fresh water is often a central concern of privatization opponents” (2010: 6). Proponents of market environmentalism, therefore, link their interest in private participation in water governance with environmental concerns. Pro-private and environmentally conscious arguments frame the debate to be about environmental conservation and how the private sector can best secure that. Their argument is that their participation will efficiently allocate and create distribution mechanisms that will reduce water waste (Castro & Heller 2009). In other words, “environmental goods will be more efficiently allocated and environmental degradation reduced or eliminated through establishing private-property rights, employing markets as allocation mechanisms, and incorporating environmental externalities through pricing” (Bakker 2010: 5). Market environmentalism, therefore, views environmental concerns through a market lens, which makes the private sector the solution for environmental problems and not the cause of it. Brook Cowen and Cowen (1998), for example, argued for a complete deregulation of the distribution of water and believed that it should be completely privatized. They saw the mismanagement of water as a representation of government ineptitude, seeing as a high level of regulation created an inefficient system and discouraged investments in the future. The report appeared in the neoliberal journal of the Cato Institute and presented an extreme side of market environmentalism, which relied on a laissez-faire approach to water governance. While Crain and Zardkoohi (1978) did find a higher cost in public provisions of water and a greater efficiency of private management, recent studies have since been more skeptical

of these claims. They have, instead, proved a different development, which showed little difference in efficiency or a higher effectiveness in the public sphere, and this is often a major point of contention in the field (Castro & Heller 2009). Michael Goldman (2007) argues that the neoliberal commercialization that powerful organizations like the World Bank promoted is based on a western superiority over developing countries and a disregard for the contextual difficulties in the countries. Sara Grusky (2001) supports this argument and stresses that privatization is not superior in efficiency or equity, but leads to a cost-recovery business model that results in price hikes and a lack of accessibility to water for the poorer population. Michael Rouse (Castro & Heller 2009), on the other hand, points out that both public and private enterprises operate from a cost-recovery principle. Regardless, Shiney Varghese (2007) notes in her report on privatization in the US that the public has struggled with providing quality water resources. This is largely due to a lack of funding and she believes that private participation has provided much-needed capital to the business. Varghese, therefore, focuses less on the question of whether private actors should be involved, and more on the lack of regulations and oversight that has accompanied private involvement. Mike Gonzalez and Marianella Yanes (2015) argue that privatization only focuses on revenue creating aspects of the management – i.e. the actual distribution and supply of water – but does not invest in infrastructure, which then remains a public responsibility that lacks funding. Whereas Cowen and Cowen (1998) argued for a market-based quality control, Varghese sees a need for strengthening the public water systems through private participation in order to “bring in needed revenue” but to still “ensure that all can afford water” (2007: 6).

Opponents of market environmentalism often argue that it prioritizes a profit-seeking agenda over any other concern and fear possible environmental consequences that may occur when market-based neoliberal leanings are applied to water management. The critique of privatization of water management often comes from those arguing for a human rights framework to water governance as opposed to a business framework. Gonzalez and Yanes (2015), for example, see privatization as an end to the social contract and a replacement of social solidarity with competitive individualism. The collective is thus fragmented into individuals – e.g. through an ‘individual property rights’-approach to the commons – and society becomes “a market place in which citizenship rights [are] earned” (140). The community should, instead, prioritize their collective responsibility to ensure water for all. The focus is thus more on the distribution of water resources – i.e. who uses them – and less on the allocation of resources – i.e. how they are used, which is the focus in the market environmentalism. José Esteban Castro (2007a) examined a sociological

perspective on private participation and the consequences it had for citizens, particularly focusing on developing countries. His approach was anti-neoliberal and he argued for a switch towards a human rights approach, as he believed this could better assure water for all and especially for the disadvantaged poorer regions. Whereas proponents of water privatization often cite private inclusion as a solution to public financial issues or management efficiencies, Castro further identified a tendency to focus on a pro-poor perspective within this argumentation. The argument, Castro notes, is that water privatization can have a positive impact on the low-income and poor areas of the world, not just in the provision of water, but in a greater societal aspect as well. However, he found that private sector participation often leads to unregulated and, at times, exclusionary and elitist outcomes within third world countries. He was critical of such approaches and argued that they would not benefit the poor, but rather harm them. Within the United States, Westcoat Jr., Headington, and Theobald (2006) noted similar issues and argued that, contrary to the general public perception, water was not accessible to all, as poor and low-income areas within the country suffered from a lack of accessibility to clean water. According to them, the water programs dedicated to this issue were severely lacking and the national discourse on poverty did not actually include water issues. Though the authors do not address privatization as a possibility in their paper, they do appear critical of the current public water governance. Castro (2007a) correspondingly argues for a reprioritization that shifts policies and principles towards a human rights framework in water governance, which can create a common view on it as a vessel for social rights and a way of protecting common goods.

Several authors, nevertheless, question the usefulness and basis of a human rights approach. A general critique is that the approach is simplistic and largely fails to present concrete policy suggestions (Bakker 2007; 2008, Salzman 2006, Dilworth 2007). James Salzman (2006) perceives the main weakness to be the ahistorical arguments set forth by the human rights movement. He believes that creating a juxtaposition between a rights approach and a market approach – as well as between public and private involvement – overlooks the complexities of the issues. Although he does not assess the universality of these approaches, he does present a compelling argument for the need to look beyond simplistic categorizations and instead consider water simultaneously as a social and economic good – an approach that has worked throughout history. Richardson Dilworth (2007) identifies a distinction between a technical and moral approach to private participation in water management but similarly argues that both extremes are flawed and unrealistic. Representing corporations as purely seeking profit-maximization and with no morals is unrealistic, but so is the

idealized society that is presented by the human rights approach. He acknowledges that a purely technical approach is undesirable as it completely ignores any moral considerations, but also sees the moral approach as often being alarmist and sensationalistic. His main argument is that the anti-privatization arguments are too focused on grassroots movements and community responses. Such an approach is incompatible with the reality of an urbanized society and instead, he seeks to find a more realistic approach to anti-privatization, e.g. through the creation of a new social contract that recognizes the inherent and legitimate role of corporations in society. Karen Bakker is similarly skeptical of a community-focused response to privatization (2007; 2008; 2010; 2014). She argues that such an anti-privatization approach will be unequal and relies on a romanticized idea of the community (2008). A complete return to public management of water seems unrealistic to her, due to several issues within water governance, such as underinvestment, inefficient management, bad infrastructure, and a general lack of awareness of the poor neighborhoods and their needs (2010). These issues would not be mitigated efficiently enough through a community-based governance approach. Furthermore, such a community approach reinforces the decentralization policies of neoliberalism and thus does not completely reconcile with the critique of neoliberal practices.

The human rights approach has limitations as a counter movement to privatization and Bakker, therefore, argues for a need to lessen the dichotomies present in the debate (2007). Instead, Bakker foresees a continued and expanding cooperation of public, private, and community sectors, although she does hope for these interactions to be less ideologically extreme (as the privatization movement of the 1990s) and with a greater emphasis and prioritization of distribution based on equity and a consideration of future needs (2014). Craig Arnold (2009) agrees that the debates on water privatization are about what role the state and the private sector should have in managing public services, not whether they should be involved. Like Varghese, Arnold argues for legislations and legal doctrines that limit the level of control given to the private sector over the water sources and systems, and therefore regulate the private participation so as to maintain and protect the security of individuals and the nation as a whole. He, therefore, sees this political debate as one grounded in ideology, especially since any form of private participation could lead to a reduction of the role of the government and an increase of the role of the private sector. Bakker (2010), in the same regard, views the debates as a juxtaposition of the public and the private spheres but with a need to recognize the nuances and variations between a completely publicly or privately controlled water management.

## 2.2 Sub-Conclusion

	Market Environmentalism	Human Rights Approach	A Mixed Approach
Water Frameworks	Water as an economic good, from a market framework	Water as a public good, from an ethical framework	Water as both a public and economic good
Key Words	Liberalization, Privatization, Deregulation Focus on allocation	Community; holistic, non-monetary water values, Focus on distribution	Private participation but strong regulation and public control
Critiques	Government control lacks revenue, creates no incentives for efficiency, incapable of attracting qualified workforces	Private actors prioritize profit-maximization, perform lower quality of service	Dichotomies are simplistic & unrealistic Human rights approach lacks concrete policies Sceptic of deregulation within the market approach

Table 1: Overview of Literature Review

In conclusion, there was a general division within the literature between those who saw private participation as a solution to the water crisis and those who saw such an inclusion as a disaster and instead focused on a turn towards a human rights framework. In response, there has emerged a third perspective that argues for a more pragmatic and realistic middle ground. Bakker, for example, noted that though she agreed that the goal should be to deal with the crisis in as “equitable and ecologically sensitive” (2010: 226) ways as possible, she still saw the exclusion of the private sector as unrealistic and unwarranted. As noted, scholars such as Karen Bakker and Richardson Dilworth see the very basis of this binary opposition as false. Instead of excluding either actor, there is a need to resolve or mitigate tensions between them, seeing as both sectors have a role to fulfill. There is, therefore, a need to move beyond the rights and commodity discourse and more towards a more pragmatic approach to water management.

This thesis furthers this argumentation and attempts to contribute to the research on models of water governance, specifically in relation to the interactions between different actors. We will, therefore, draw on the previously mentioned scholarly work in this area to investigate links between water conceptualization and water governance, with a focus on private sector participation in drinking water distribution.

### 3. Method and Methodology

This section outlines the research design and the ontological and epistemological basis for this thesis. The chosen case and selected data will be further explained here as well, and the limits of our research are briefly addressed at the end.

#### 3.1 Research Design

This thesis focuses on the phenomenon of water privatization in the US, and the point of investigation is therefore focused on the socio political and governing aspects of water resource management in the US. The investigative scope of this thesis is therefore narrowed to water rights and the corporate and civil involvement with the management and governance of water resources. The hypothesis investigated is that corporate actors are situated within a market framework, whereas civil actors are relying on an ethical framework and that contestations occur in the interplay between these two and the governance approaches envisioned for the future.

The research design best applicable for such an examination is a case-study design. A case-study design allows us to focus on the specific phenomenon of the privatization of water management, as it can be utilized to examine the many complexities and the different actors involved within a chosen case. As this thesis is part of a larger debate on privatization and the future of public-private variations of water management, the examiners are also interested in the conceptualization of water and water rights by the different stakeholders involved. As the research field offers a wide range of instances and cases concerning water privatization, we have selected to focus on one specific case: American Water's involvement in West Virginia as illustrated through the 2014 chemical spill and the subsequent public opposition and governmental investigation into American Water West Virginia that occurred. This is a recent case that covers multiple aspects of water governance relevant for our research. It is further important to the case-study design means that our findings are not derived from a large enough data pool so as to conclude a generalization on the topic. However, it does present a possible transferability of findings, which will, e.g., be considered in the discussion section on the applicability and relevance for the problem formulation in a Danish context, thus examining the universality of the issues. Throughout this thesis, we will examine the relations between the conceptualizations presented by different actors and the governance frameworks they each evoke. As such, we are touching upon a possible causality between two variables. However, as this study deals with a limited data scope – as it is only focused on one case – any causality links found are tentative at best and, therefore, receptive to contextual changes that are outside of our scope. Nevertheless, the implications and speculations of any

causality will be discussed further throughout the thesis. A case-study design allows for a more in-depth analysis of the framing and conceptualization of water within the chosen data. This thesis, therefore, utilizes the qualitative method to examine the case. The research design is also deductive in reasoning, as the case study is grounded on the theoretical choices. Moreover, this thesis is of a descriptive and explanatory design, as the intention of the analysis is to present the different types of frameworks utilized by the selected actors. The descriptive aspect of the approach also allows the researchers to outline the corporative and the civil society's conceptualizations of water and water rights. With the different sides represented, the explanatory approach allows for an examination of the correlation between the conceptualizations and the governance of water management.

This case-study research design relies on a critical discourse analytical framework, specifically the Foucauldian approach to CDA. As the academic literature on discourse contains many different forms of definitions and understanding, we have chosen to specify it to Hager's definition, which views discourse as "a specific ensemble of ideas, concepts and categorisations that are produced, reproduced and transformed in a particular set of practices through which meaning is given to physical and social realities" (Hager, as quoted in Sharp & Richardson 2001: 8). A distinction can, therefore, be made between a discourse analysis – with a linguistic focus – and, as this thesis does, an analysis of discourse – with a focus on the discursive representations of a given issue. Moreover, as Sharp and Richardson presented in their paper, the Foucauldian approach views discourse analysis as the examination of both the *texts*, the communicative and textual exchanges that occur within societies, as well as the *practices* these exchanges result in. Within this thesis, the 'texts' are reflected through our focus on frameworks and the practices aspect allows us to investigate the governance practices and regulatory aspects the conceptualizations lead to, as well as the interactive exchanges between the different parties included. Moreover, the analytical approach will also incorporate Robert Entman's framing tool of selection and salience. As he notes, framing consists of selection and salience – i.e. to "select the aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described" (1993: 52). By highlighting certain aspects of an issue, people can, therefore, influence how the audience sees the issues and the corresponding associations that are created. As well as putting salience on one issue, this also removes focus from undesired aspects and conceptualizations. However, it is worthy to note that frameworks are not universal, but are instead dependent on the society within which they are used. Frameworks are therefore often expressions of

dominant cultural perceptions but conflict can arise between differing frameworks. As much of the analytical focus will be on the framing of particular issues, this approach opens up for an in-depth examination of the conflicting frameworks and the contestations that occur in the subsequent governance.

### 3.2 Ontological & Epistemological Considerations

As this thesis examines the characterizations and role distributions of the different actors, it, therefore, acknowledges that there may be multiple depictions of reality. As researchers, we, therefore, approach our data – and reality – from relativist perspective, more specifically as social constructivists. Although there may be an objective reality, it is not within our reach to examine and analyze such a dimension, seeing as “the external world exists only insofar as our thoughts about it – the world does not exist independently from our perception” (Hein 1991). Instead, we can only consider the representations put forth by social actors and the realities that are shaped through societal interactions. As Bryman (2012) notes, social constructivism challenges the idea that social realities are predetermined and instead argues that reality is continuously dependent on its social context and may often lead to contention over the framework reflected within it. Nevertheless, it should be noted that not all accounts of reality are considered equally valid. Knowledge and systems are, therefore, often governed by what is normative and dominant within society – i.e. what is historically and culturally determined. That is not to say that reality is stagnant but, as Fairclough argues, that it is a dynamic state where society continuously shapes – and is shaped by – the social actors within it. The focus of this thesis is therefore on the social phenomenon and the interactions of actors within society that shape it. However, this ontological and epistemological basis does present certain challenges going forward, which will be discussed further.

First of all, as any identification of frameworks or social phenomenon is dependent on the analyst’s own worldview and interpretation of the data, there is the issue of researcher’s bias. As knowledge does not exist in a vacuum of objectivity, neither does our interpretation of the data come from an objective point of view, however, it is our responsibility to lessen our subjective leanings as much as possible. An example of this is the cultural differences between the system we are analyzing and the one within which we currently reside. The role and perceptions of, e.g., private actors are different within a Danish context than it is within a US one, and therefore it is important for us to acknowledge our difference of perspective. Moreover, the validity of our findings is highly dependent on its credibility, i.e. although complete objectivity is largely impossible, reflexivity will ensure that our personal values do not influence the findings (Bryman

2012). By triangulating our sources, we will also attempt to ensure a fair representation of the various viewpoints relevant to our topic. Our role as researchers is, therefore, to actively and self-reflexively engage with the empirical data. Another challenge here is cherry picking, which we will further address in our data collection.

Secondly, a general criticism of the relativist perspective is its lack of a universal truth. However, it is important for us to note that we are not attempting to arrive at a ‘real’ or ‘right’ perspective on the issue – i.e. to judge whether an ethical framework or an economic framework is ‘the right one’. We are instead interested in examining how the different actors engage and negotiate their different frameworks with each other, as well as how they influence or are reflected in the governance choices and practices made. Although we, for example, agree with Karen Bakker’s notion that water governance requires a multilevel approach that incorporates both frameworks, this was not based on a moral judgment, but simply as an attempt to give equal weight to the benefits each framework carries.

### 3.3 Data Collection

In order to identify communities’ privatization aspects to their water management, we decided to start at the corporate level, seeing as there are numerous local communities that could have been relevant to look at, but a lesser number of large cross-state private water companies. According to Bluefield Research (Report Highlights: Private Water Utilities 2015), the top five global private water utility companies – based on revenue – were in 2014, from highest to lowest: Suez, Veolia, SABESP, Thames Water, and American Water. Of these, the American Water corporation, which is the only US owned of the five, was chosen because it is the largest public water utility in the US.

American Water Inc. Co. is a parent company headquartered in New Jersey and with subsidiaries in multiple states, as well as in Canada. In examining their operations, we came across a chemical spill affecting the water services in West Virginia and saw this situation as a catalyst for a public discussion on the water services and the inclusion of private participation. In this case, 300.000 people were served by the American Water utility and the chemical spill that jeopardized their drinking water was of relevance to a large area of people (Rogers 2014). This local case allowed us to have a narrowed and specific perspective on the privatization of water services. The fact that the company also has national coverage gives a larger perspective on the issue, even though the West Virginia case is local. As such, the data chosen is both from the specific subsidiary, American Water West Virginia (AWWV), and the parent company. The company’s Corporate Responsibility Report (CRR) from 2013-2014 was used as it presents their business

values and management strategies. Similarly, the annual reports from the last three years (2014, 2015, and 2016) presented a specific overview of the respective years. Though both the CRR and the annual reports illustrate the corporation's business strategies and agendas, there is also the issue of their intended target. The annual reports, for example, are legally required and aimed at the company's shareholders, and they are therefore constructed with these interests in mind, and presented specifically as a means to further the company. Moreover, though the CRR is aimed at the public, its content still presents a more flattering image of the company, as it is still a marketing tool. Furthermore, aspects of an educational campaign – specifically two YouTube videos pertaining to the West Virginia branch. These were aimed at the citizens of West Virginia and attempts to change the consumer behavior.

We further identified a civil group specifically organized at the local level called Our Water West Virginia (formerly Advocates for a Safe Water System). During and following the spill, Our Water WV emerged to provide information about the safety of the water to those affected and continuous updates on the following legal processes. In September of 2015, this motivation changed, and the opposition group launched a campaign for a public takeover of their water system. The selected data from Our Water WV is gathered from their website, specifically their blog. It is important to note that they have two websites: one launched following the spill and another following their decision to start a campaign for a safer water system. The old website was thus archived and covers the civil group's agendas within the first year and a half following the chemical spill, whereas the other goes beyond that. The relevant blog posts were selected on a thematic and interpretive basis. The chemical spill also led to a governmental investigation led by the Public Service Commission, and Our Water WV were included as a civic advocacy group advocating for the interests of the public. The investigation is, therefore, also included in the data selected. Seeing as this is a relatively small town case, these posts will be a representation of the local mobilization and attitudes towards the water services and AWWV specifically.

Although Our Water WV is the main civil actor examined, two national groups were also included, namely Public Citizen and Food & Water Watch. Neither of these focus exclusively on water issues, but do have an interest in the field and advocate on behalf of consumers and citizens against privatization. Public Citizen is a nonpartisan, nonprofit organization situated in Washington, DC., which focuses on being the “people’s voice in the nation’s capital” (Public Citizen n.d.). Food & Water Watch sprang from Public Citizen in 2005 as a nonprofit organization more focused

specifically on food and water issues. These will present a general perspective on the debate, whereas Our Water WV argues from a more localized and contextual perspective.

### *3.3.1 Case Overview*

The West Virginia water crisis examined in this thesis concerns the chemical spill that occurred in January 2014, which eroded the primary water source for the state and left approximately 300,000 of its residents without clean water for over a week (Rogers 2014). The presence of American Water West Virginia (AWWV) in the state dates back to 1973, as that was the year the company took over the operation and management of the state's water system (Murphy 2014). A U.S. Chemical Safety Board report showed that the spill occurred due to certain deficiencies by the coal company Freedom Industries, which was located approximately 1.5 miles from the river AWWV intake their water from (CBS 2016). Freedom Industries lacked preventative maintenance procedures and adequate safety measures, and due to their insufficient communication and coordination with AWWV and governmental agencies, the chemical leak, which contained around 10,000 gallons of Crude MCHM, was not properly reported. The public was, therefore, not informed about the spill until they themselves complained to the state's EPA sector about the bad odor (Lebeau 2017). Many citizens did not know not to consume water from their taps, and this led to residents needing medical treatment. Though AWWV issued a 'Do Not Use' order once they found out about the chemical leak in their water source, they were not properly prepared for a leak in their operational water intake facility. This led the state's Public Service Commission to investigate the water company's safety measures and inadequacies present during the water crisis, which resulted in a settlement that included the company improving their operational strategies and safety measures (Garland 2017).

### **3.4 Delimitations**

Due to the complexity of the issue of water management, as well as the time and space limits necessary for this thesis, certain limitations were enacted along the way in order to create a focused and in-depth research.

One such limitation was our focus on data from civil and corporate actors, thus excluding specific data from governmental actors. Although such actors are likewise relevant to our problem formulation, it was necessary to limit the amount of data in order to allow for thick descriptions of the sources. Furthermore, the focus of this thesis is put on the corporate and civil actors interaction and this does not completely exclude governmental aspects, but simply means that these will be examined from the point of view of the corporate and civil actors.

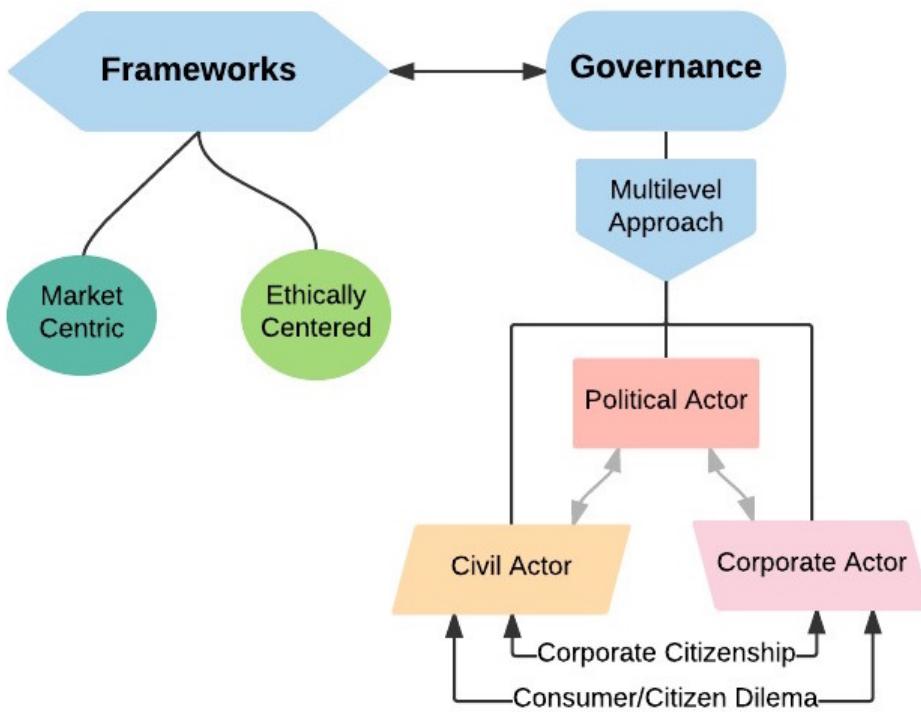
Initially, it was necessary to narrow down the notion of ‘water’ in itself, and here it was chosen to focus solely on drinking water. This excludes aspects of virtual water and industrial water use. However, within this, bottled water was also an obvious area of interest, but this was excluded and instead, access to drinking water was narrowed to mean tap water. Bottled water would have presented an interesting dimension to the commodification and marketization of water, but this was left out as an aspect of further research in order to keep the focus of the thesis.

A geographical limit was also set. Although much of the literature centered on third world countries and their access to clean water, we deliberately excluded these and instead focused on a developed nation in order to examine the issues of water governance within a society that does not have some of the more prevalent complications. A comparative case study could have been interesting in order to include multiple views and further examining the universality of the issues and perspectives. Initially, we had hoped to do so with an inclusion of Denmark as well, however, this proved too much and instead, this is in part done through a consideration of and comparison with the Danish approach to water management. However, this is not a full analysis of the Danish conditions but simply allows for a perspective on the case, though not to the same extent as a comparative case study design could have allowed for.

Although both the topic and scope of this project was narrowed along the way, further limitations could have been beneficial in order to simplify and constrict the research. Water governance and management is a complicated issue with many relevant dimensions and at times this meant a difficulty in clarity. Thus, further initial limitations could have helped to narrow the scope of research relevant for us further in order to produce a more insightful and well-rounded project – this was, e.g., the case for the exclusion of governmental actors. Nevertheless, it could have been further beneficial to narrow e.g. the management and governance approaches focused on.

#### 4. Theoretical Considerations

This section will examine theoretical concepts regarding the conceptualizations of water and the governance aspects of it. As Figure 1 illustrates, the frameworks will be divided into a market centered frame and an ethically centered frame – thus reflecting the market environmental and human rights focused approaches presented in the previous section. Next, aspects of governance will be examined, with a focus on civil and corporate actors, as well as their interactions.



**Figure 1: Conceptual Map**

#### 4.1 Framing Drinking Water

As previously stated, the normative conceptualization and frameworks of water were created within an era of political-economic neoliberalist context, and as such, the subsequent conceptualizations are highly reflective of this. José Castro (2007b) highlights the contestations and conflicts that have been prevalent in the water governance discourse. He infers from the past literature on the topic that the understandings given to water governance is often structured around principles that either view water as a common good – and therefore perceive that water services are a human right and should be publicly governed – or as an economic good, where the governance of water services should be centered around market principles. Both recognize the inherent importance of water and a need to protect it, however, the frameworks for doing so represent fundamentally different ideological approaches. David Groenfeldt and Jeremy Schmidt (2013) further this explanation of the contestation within the discourse of water management. In their paper, they posit that water governance is inherently rooted in ethics and value-based approaches, that are indicative of cultural and societal perceptions of water and water management. Furthermore, they argue that naturalized concepts, such as water and watersheds, are inevitably embedded with socio-political value factors that contribute to how water is classified as well as the legislative outcomes of how water should be

governed, as these values “order and legitimate conduct toward certain ends and not others” (Groenfeldt & Schmidt 2013). To best decode the chosen frameworks of water governance evidenced in the selected date, it is, therefore, necessary to first identify the inherent values given to water and water management.

A market framework for water management carries an intrinsic salience on economic values and principles. Therefore, the framework is founded on the notion that water should be priced through an economic evaluation to reflect its value and rely on a marketization of water to achieve this (Hoffman 2008). There is a fundamental buyer-seller frame within this, which in turn changes the roles given to private companies and citizens to one of providers of an economic good and customers of such a service. Furthermore, as noted in the literature review, the argumentation for marketization is to lessen water scarcity and it therefore also involves a moral responsibility for doing so. By commodifying water and approaching water management within a market and economic framework, this will encourage conservations and sustainability, and the value of water is, therefore, tied to the market pricing of it. The values here thus rely on market mechanisms as the best solution to the water crisis. This framework aligns with the market environmentalist argument presented in the literary review, and as such the belief is that actors can ensure a protection of the environment, whilst still allowing for economic growth.

An ethical framework, on the other hand, sees water as an intrinsic good that is inherently priceless and an incomparable natural resource that is equally owned by all. This is incompatible with economic values, as marketization creates an appropriation of the commons that will worsen existing problems. Drinking water, therefore, falls within a user-provider frame, not a commercially transacted commodity – though it should be noted that the issue lies in the pricing of water as a commodity, not a claim that water should be completely free. The argument is that water has a value outside of human use and that no matter how environmentally conscious the economic evaluation is, it necessarily prioritizes human interests above environmental well-being (McMullen & Molling 2015). This is exemplified by a sustainability or environmental stewardship approach to management. The focus within this is a responsible use of natural resources, which emphasizes the good of nature, society, and future generations (Worrell & Appleby 1999). The values within this frame thus rely on a collective approach to water allocation and distribution – i.e. that it should be for the good of society and nature. This belief draws heavily on an equality and morality frame that equates water as a fundamental human right and sees poverty, race, and other such equality issues

as something that cannot be separated from the discussion and believes water allocation should be based within a justice framework.

## 4.2 Water Governance

As previously mentioned in their report, the UN made the claim that the water crisis was one of governance (WWAP 2003). Here, they stress that available water may be finite, but that it is renewable and that it is the management of it that is the essential issue. This section will present the theoretical notions of governance in the academic sphere, in particular, the different approaches to governance relevant for the examination of water resources management as a multilevel platform. Lastly, we will examine the role of corporate actors and civic actors, as they have become more interconnected with the state and public policy, and the corresponding changing expectations and roles within governance.

### 4.2.1 Definitions and Frameworks

The concept of governance has a variety of definitions that are rooted in different interests and perspectives of scholars, international groups, and organizations. The definitions are, in most cases, dependent on the context and the scale of which governance is being examined. Peter Rogers & Alan Hall (2003), for example, define governance as encompassing “laws, regulations, and institutions but it also relates to government policies and actions, to domestic activities, and to networks of influence, including international market forces, the private sector and civil society” (4). They, therefore, perceive governance as an inclusive concept that covers both the participating actors and the mechanisms and processes involved. Governance is a complex system of norms, rules, and frameworks that evolves in the interplay between these. Castro (2007b) views governance in the same regard, although he differentiates between the administrative side and the ‘chunks’ of processes and issues that occur within governance. He argues that governance can be viewed as an ‘instrument’ – “a means to achieve certain ends” (98) – in which the focus is on the administrative and technical aspects of governance, i.e. the laws, regulations and institutional part of Rogers and Hall’s definition. Another aspect considers everything in between the initial proposition to the implementation of rules and regulations as part of the process. This aspect is in such broad terms, that nothing that occurs during the governance process of a certain issue can be excluded. Within this perspective, the sociopolitical aspect of governance is also given a higher role, as “the debate of alternative, often rival projects of societal development, and the definition of the ends and means that must be pursued by society, through a process of substantive democratic participation” (98). Environmental governance encompasses all of these aspects of governance. The definitions of

environmental governance, though specific to the management of environmental issues, are still dependent on what scale of governance is in focus. Lemos & Agrawal (2006), for example, view environmental governance as encompassing the institutionalization and management of environmentally related causes and issues, including the different mechanisms of decision-making and behaviors incorporated within the process. Their definition puts a particular salience on the political aspects of environmental governance, as they perceive that political actors participate and influence the actions and outcome of environmental governance to a high degree. According to Lemos and Agrawal, the scales of environmental governance is not merely an internal one, seeing as the framework for such governance takes place in many different areas, for example within international accords, transnational institutions, national legislations, as well as on the local level in regards to implementations.

Water governance can be seen as a specific concern within the larger issue of environmental degradation and governance (Bakker 2014). Though there are arguably subdivisions within this framework (such as ‘sustainable water management’ and the UN’s ‘Integrated Water Resource Management’), water governance applies to the general operationalization and management of water resources (Araral & Wang 2013). This field came into the spotlight in the context of the 1970s and 1980s’ neoliberal political background, as a rising awareness of the issues facing access to clean water resulted in a growing fear of water scarcity and concern for the mismanagement of water resources (Miroso & Harris 2012). Rogers & Hall (2003) reference the Global Water Partnership’s definition of water management, which states that water governance is the “political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society” (16). The governance of water, therefore, reaches across many arenas and includes a variety of actors who influence the approaches to management taken by states and cities. Moreover, as water is a trans-boundary resource, the approaches to the governance of water have incorporated an interplay between national, transnational and global institutions, organizations, and actors. As Pahl-Wostl, Gupta, and Petry (2008) present, the traditional approaches to water resource management were employed at the local level, as any problems concerning water were viewed as a localized issue. The national level was then the decision-making level, in which regulations and policies were brought forth, though the implementation still occurred at the local areas. Although there is a tendency to believe the topic should be depoliticized, Peter Mollinga (2008) argues that the inclusion of politics brings forth issues of accountability, responsibility, legitimacy, and transparency, which are vital to the

debate. As well as compliance with rules and norms, this implies a need to respond to the expectations and rights of those governed. Furthermore, he notes that the sociopolitical structures of the society in which the water governance occurs are also vital to the debate issues – e.g. concerning the allocation of rights when it comes to water management, the decision-making process, and the water resources themselves, as well as rights given to non-state actors involved with the resource management. Furthermore, concurrently with globalization, there has been a broadening of the scope when it comes to water governance. The global level has become more relevant when addressing water conflicts and issues that “elude appropriate solutions at the local level or within national or basin boundaries” (Pahl-Wostl, Gupta & Petry 2008: 421) as well as due to the increasingly multinational tendencies of the participating actors. Yet the local level remains vital, as this is where more general policies can be facilitated and this thesis focuses on this level, but also acknowledge the argument made by Pahl-Wostl, Gupta & Petry for an interlinkage between the different levels of water governance and therefore aims to include such aspects when possible.

In correspondence with Lemos & Agrawal’s (2006) supposition that there are different scales of environmental governance that should be taken into consideration – international, national and local dimensions of governance – water governance is also a complex phenomenon, as the division of decision-making does not lie with one sector alone. Any governance is continuously a negotiated process between the different levels and actors. Although national governments may set policies on the issues, these are influenced by supranational institutions as well as local conditions and vice versa. It is thus neither a top-bottom or bottom-up approach but one that is mediated between the involved actors. Multi-level governance highlights the interaction between the participating actors within water management, in particular, the allocation of roles and responsibility given to each actor or sector (OECD Report 2011). In relation to this, John Law (1999) noted that the identity of an actor is negotiated and transformed through interactions with other actors. Relying on a social constructivist perspective, he, therefore, argues that actors are characterized and defined through their relations, as well as their performativity, and focused on how actors distribute roles and define how others fulfill these. Tony Allan (uwaterloo 2013), for example, argues that governance in a neoliberal political economy (such as the US) occurs precisely in the interplay between governmental, civic, and corporate actors who have an equal role. In other societies, the government may outweigh the others or the civil side may have a limited role to play. It is therefore important that these actors balance each other out, as the variants and negotiations within this determine the type of governance performed. The multi-level framework thus showcases

a decentralization of authority, as “governance must operate at multiple scales in order to capture variations in the territorial reach of policy externalities” (Hooghe & Marks 2003). The 2011 report from the Organization for Economic Co-operation and Development highlighted the positive outcomes of having a multi-level approach. In their view, the approach allows for an examination of areas where there are gaps or mismanagement of water governance and thus requires an improvement, and allows for solutions going beyond public government and instead tapping into the resources of the private sector. In other words, it “aims to identify good practices for managing interdependencies between the many stakeholders involved in water management” (OECD Report 2011: 3).

As previously noted, Karen Bakker (2014) details market environmentalism as a new phase in water management, which focuses on "the privatization of resource ownership and management, the commercialization of resource management organizations, environmental economic valuation and water pricing, the marketization of trading and exchange mechanisms, and the neo-liberalization of governance" (Bakker 2014: 475). These issues are often interrelated and showcase the varied ways and scales to which non-state actors can be included within water governance. Although privatization is not the only aspect of market environmentalism – and although Bakker warns of overstating the existing role of private actors – it is a concept often used to cover the general aspect of market environmentalism. There are many disputes concerning what privatization entails and to what degree the inclusion of the private sector can be considered a form of privatization. Bakker (2010) argues that these definition disputes showcase the “slippery analytical terrain of water privatization debates and the inadequacy of conventional terminology” when it concerns the complexities of water management. According to her, proponents of private participation in water management tend to use terms such as ‘private participation’ and ‘public-private partnerships’ rather than privatization, as privatization is often viewed by the public masses to imply complete private ownership or control of public goods. José Castro (2007b) argued that the negative connotations carried with the term ‘privatization’ – such as corruption, mismanagement, and public opposition – is why most private water companies tend to shy away from categorizing their involvement with that term. Instead, Bakker (2010) argues that terms like ‘public-private partnerships’ is preferred as they connote inclusivity and frame private participation as done on behalf of the public. Furthermore, she states that it is the opponents of the inclusion of the private sector that tend to use the term ‘privatization’ as an umbrella term that encompasses any form of private participation, be it only consultation contracts or management contracts. The opponents,

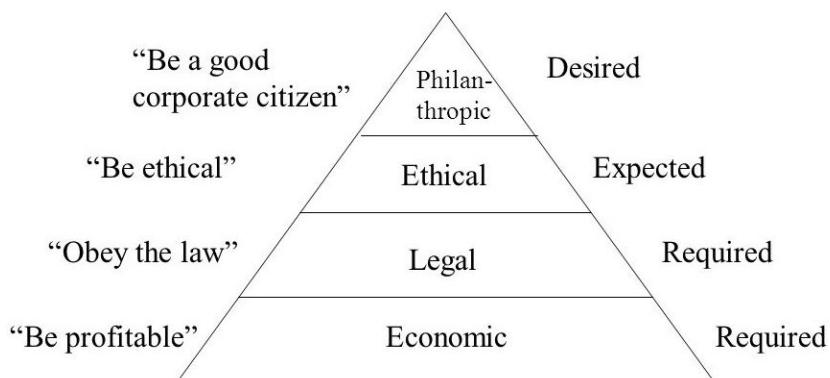
Bakker reasons, use the term to emphasize any form of private sector involvement that entails “the redistribution of governance to nonstate actors and the application of market-based norms, values, and practices in management and regulation”. Other academics, such as Craig Arnold (2010), view private participation in water management as a broadly applicable term as well. He presents water privatization to be “the private ownership, control, development, exploitation, trade in, and use of water for private purpose or gain” (4). Within this, Arnold argues that any form of outsourcing publicly owned water supply and service systems to private water companies – either for management, maintenance, private investment, or simply for consultation – is a form of privatization. The authors of this thesis use water privatization in Arnold’s definition, but nevertheless, recognize the points made by Castro and Bakker. In Bakker’s perspective, market environmentalism thus further consists of commercialization, which denotes the introduction of, for example, market derived models, norms, and customs in the sphere of public policy enactment. This could, for example, be through private consultation on running an otherwise public institution but also relates to the economic valuation of water. The marketization of water governance is especially evident in the bottled water industry but is also evident in a more direct trading of water sources between countries. Lastly, there is the neo-liberalization of governance, which is exemplified in the privatization of the state and public interest fulfillment. The governmental role in water management is therefore renegotiated through, e.g., deregulation, decentralization, or delegation to non-state actors. Furthermore, Bakker states the justification of this approach is that it would “enable better achievement of good governance principles, including accountability, equity, environmental and economic sustainability, participation and empowerment of stakeholders, and transparency” (484). However, there is also the criticism that such an approach would be difficult to implement due to the contestation and often tension around privatization and the private sectors’ inclusion in environmental governance and the management of natural resources.

#### *4.2.2 Corporate Citizenship*

It is a general notion that, as the world has become more globalized, the sovereign state has been challenged. Multinational corporations have especially gained more influence on markets that cannot be tied to geographical borders, as well as the governance of those. This has, in turn, changed the theoretical implications of corporate actors in governance.

Dirk Matten and Andrew Crane (2005) present a theory of corporate citizenship. Although this term has previously been used within the Corporate Social Responsibility (CSR) field, their reconceptualization attempts to clarify and add value to this term. They argue that the previous

views on corporate citizenship are simply slight variations of classical CSR theories and not independent terminology. Instead, they attempt to reframe corporate citizenship to examine the particular role of corporations in society and note this to be a role as administrators of citizenship, not as citizens themselves. Their argument goes that the role of business in society has changed and that corporations “have emerged as active players in the administration of citizenship” (177). This is based on a liberal notion of citizenship that focuses on civil, social, and political rights. Although this is a simplistic approach, they argue that it is the most widely accepted within Western democracies and sufficient for their initial concept development. In relation to water, Andrés Mulas notes that it has three main dimensions (Castro & Heller 2009). The first is water for life, which entails basic needs and is considered a human right. But there is also water for economic growth and water for purposes of general public interest, which are not considered human rights, but instead subject to citizenship rights and should be treated differently than the human right to drinking water and sanitation. Traditionally, Matten and Crane argue, two actors are dominantly involved in a citizenship arena: The state as the administer of citizen rights and the individual as the receiver of these. However, as noted, this traditional role of the state as the sole protector and mediator is being reshaped. Corporations are becoming more and more involved in previously state dominated fields and as such have become powerful actors in the administration of citizens’ rights. Matten and Crane identify three main circumstances where this might happen; instances where governments are not already fulfilling this role, instances where the administration of rights is beyond nation states, and instances where the government ceases to fulfill the citizens’ social, civil or political rights. In relation to social rights, the corporation functions as the provider, in civil rights as the enabler, and in political rights as a channel. The privatization of the state can, therefore, happen either when the government retreats from their role or when corporations enter a previously exclusive state market.



**Figure 2: Carroll's Pyramid of Responsibilities (as quoted in Matten & Crane 2005: 167)**

However, this changing role of corporations has further implications. Matten and Crane (2005) argue that, if corporations have fulfilled the facilitating role of rights, then they are now expected to assume more responsibilities and accountability to the citizens – i.e. the same level of accountability expected from the state. Although it could be assumed that a corporate actor fulfilling these rights would equate into a depoliticization of them, this is not necessarily the case. Matten and Crane echo Archie Carroll's pyramid of responsibilities, as seen in Figure 2, to note the four traditionally associated responsibilities of corporate actors: "(1) the economic responsibility to be profitable; (2) the legal responsibility to abide by the laws of society; (3) the ethical responsibility to do what is right, just, and fair; and (4) the philanthropic responsibility to contribute to various kinds of social, educational, recreational, or cultural purposes" (167). Whereas corporate actors may attempt to highlight the first required two, their changing role can be said to highlight the latter, arguably more voluntary two. However, an argument can be made that a fifth responsibility is relevant as well: a political responsibility towards the citizens. As Matten and Crane note, this relies on a normative political theoretical thinking that balances fulfillment and administration of citizen rights with an accountability to those citizens, e.g. through the electoral process. Although a similar mechanism is not equivalently present within a corporate-consumer relationship, other options are present for the consumer, as will be further noted below. Nevertheless, as Peter Mollinga (2008) noted, the inherently political nature of rights fulfillment, or simply the fulfillment of a public good, necessitates a corresponding framework of accountability, responsibility, and legitimacy. Although it can be argued that such a framework is also applicable to general actions by corporate actors, the standards are considered to be higher when the field is within public policy, human rights, and common goods. When the corporation fulfills a right, they thus undertake the political responsibility.

Furthermore, it is important to note that the theory of corporate citizenship does not examine the motivations of why corporations might expand to these areas. However, the basis for a free market oriented society, as David Harvey (2003) argues, is the notion of accumulation by dispossession. His concept is based on the Marxist idea that within a capitalist market, a surplus is continuously reinvested in order to create further surplus and that this will inevitably lead to an exhaustion of the available market. Consequently, capitalist markets will always attempt to expand in order to prosper, thereby accumulating resources through a process of privatization of the commons that limits or removes the public accessibility to these resources. Following this logic, the motivations of corporations are therefore driven by a wish to expand into more and more markets,

and in line with the theory of market environmentalism presented by Karen Bakker (2014). They do not necessarily wish to assume the responsibilities of administering citizenship but want the market benefits associated with this role. Although such a motivation is simply speculation at this point, it is echoed in arguments by various scholars, as previously noted, that private actors neglect the upkeep of infrastructure and leave that to state actors instead. Within water governance, this, therefore, relies on the conceptions dominating the process. The corporate citizenship terminology, for example, deals heavily with the fulfillment of rights, and the conceptualization of water as a right, an economic good, or something completely different is therefore directly reflective in the role assumed by corporations – and the corresponding associations of that role.

#### *4.2.3 Civil Actors*

The civil society is considered the arena in which groups or individuals come together to negotiate values and attempt to further their own interests and agendas. Civic engagement is, therefore, not simply a collectively based action, nor are civic actors necessarily collectives. Newig & Fritsch (2008) posit in their paper on environmental governance that public participation plays an important role in governance, as the inclusion of different stakeholders in society influences the implementation of the policies and legislations that are created. The conceptualization and role of citizens as participants of civic engagement, which can range from political participation to social movements as well as to corporate activism, is therefore essential for the consideration of enacted governance practices. Studies have similarly suggested that a stronger and more engaged civil society and civic groups have a positive effect on governance, as it makes it more effective and responsive (Enroth 2011). With regards to environmental issues, in particular, incorporating the civil society of the local and regional areas allows for a more participatory decision-making process, which creates stronger ecological progressive outcomes. According to Joakim Ekman & Erik Amnå (2012), civic engagement is often viewed as a political action, as collective action is always geared toward improving conditions in the civil sphere by engaging within the political arena to either publicly oppose or mobilize action in favor of governmental changes. Moreover, they argue that because of the heightened accessibility of knowledge and information on current political and societal issues, which the digital age has allowed, the civil society engages and participates in society much more than they previously did. As they have more information at hand, they are not only more incentivized towards taking action, but also more able to do so. Moreover, Ekman & Amnå further posit that much of the civic participation is derived from localized issues that have a specific impact on the local citizens, and as such, any civic engagement, individual or

collective, is rooted in and mobilized from these issues. Such participation can be to sign petitions, influence civic mobilization, participate in local political debates, or even by boycotting certain brands or products for ideological, environmental, or ethical reasons.

This latter action represents a change from civic action in a political arena to civic action in a corporate arena. Although the theory of corporate citizenship does not speculate heavily on the perspective of the citizens, Matten and Crane (2005) do note that individuals have seemingly responded to corporate actors entering a political framework. Whereas political action from civil actors would traditionally be directed at governments, consumer boycotts or anti-corporate protests have become examples of political action directed at corporate actors instead. This indicates that civil groups – or simply just individuals – have re-categorized corporate actors, and correspondingly ascribed them different attributes than was inherent in the previously mentioned traditional responsibilities of corporate actors. Furthermore, this touches upon the issue of how ‘citizen’ is confined within corporate citizenship. The nation-state’s territorial borders are not applicable, but neither should it simply be the customers of the corporations, seeing as other citizens within the society are often also affected. It creates a question of when the individuals are acting as citizens and when they are acting as customers.

		Frame	
		Citizen	Consumer
Proper Forum	Political	Market (or by market-like mechanisms)	
	The public interest, The common good	Satisfying individual preferences	
Motivation			

**Table 2: Citizen & Consumer Frames (adapted from Orr (2006))**

According to Mark Sagoff (2008), individuals are not, in any one situation, acting as either a consumer or a citizen (as conceptualized in Table 2) but are instead constantly navigating between differing or conflicting preference/value maps. In the purest sense, the consumer identity relies on individual desires and a preference map that considers only personally beneficial factors. On the other hand, citizens evaluate what is desired as a collective and rely on moral and ethical values to consider what is best for the future. This identity is reflective of community-based values and is mediated between several individuals. Thus, there can be both contentions within the individual and within society. Sagoff presents the example of a consumer’s preference for a new up-to-date skiing resort, but a citizen’s preference for preserving the forest and wildlife on which it would be built.

He, therefore, critiques the economic notion of the rational man, noting that it fails to account for a simultaneous multitude of preferences and identities. As he states: "To try to combine these preference schedules into one is to search for a single comprehensive role the individual plays; it is to ask for the individual to think and behave not as a parent, citizen, consumer, or the like but in all and none of these roles at once" (51). Within policy making, he argues, it is not possible to ignore either of these preferences but is instead necessary to acknowledge that they coexist and are often irrational.

Furthermore, the corporate entrenchment into the political arena can be said to blur the lines further between Sagoff's consumer/citizen conceptualization. By engaging in boycotts, it can be argued that consumers express morally based values or attitudes that are reflective of what they want for the collective society, and not only their personal preferences. However, Stephen Orr argues that Sagoff's "distinction between values and preferences is underspecified" (2006: 379). Whereas, Sagoff sees a citizen's perspective as being reflective of fundamental values and substantively different from a consumer's preference, Orr argues that "citizen preference is mostly just what individuals think is a just demand on collective resources, not a substantive principle of what is good" (387). Orr, therefore, notes that consumer boycotts showcase the simplicity of the preference/value dichotomy – i.e. that individuals are often aware of the value consequences of their consumer preferences and do not view these in a moral-free zone that completely changes in a citizen identity. Instead, he argues that both the consumer and citizen identity acts from a preference maximization goal, whether this is an individual or collective preference. However, it should be noted that Sagoff (2008) does argue for the blurred lines between the two identities and that they are always influencing each other. As Sagoff himself noted, the values a citizen acts from are negotiated within the community – but that is not to say that they are universally agreed upon values. As such, Orr argues, collective reasoning is not the same as impartial reasoning, nor is to reason collectively the same as "to reason as a citizen" (2006: 389). In accordance with Ekman and Amnå (2012), civic actors can, therefore, both be individuals and groups. However, within this thesis, we focus not on the individuals influenced by social trends or movements, but on individuals engaging in organized civic engagement. The latter therefore represent an organized attempt to address a specific issue and to achieve a set of goals.

### **4.3 Sub-Conclusion**

From a theoretical standpoint that focuses on two of the primary actors within a multi-level governance approach – namely the civil and corporate actors – this thesis will examine the

frameworks presented by these actors. Although the focused upon frameworks (market and ethical) are not the only variations within the issue, the authors of this thesis have chosen them as they are prevalent in the previous research on the issues (as detailed within section 2). Table 3 presents a brief overview of the characteristics of the two frameworks.

	Market Framework	Ethical Framework
Key Belief	A good society needs strong Market mechanisms	A good society needs a strong community and social contract
Water	Is an economic good, which value is based on a market evaluation	Is a common good and human right that has an intrinsic value, separate from human use
Roles	Consumers as individuals, who act from personal preferences  Private actors replace inefficient state actors and improve services	Citizens in a collective, who act for the public interest  Private actors inhere to profit maximization and are incompatible with governing the common good
Corporate Responsibility	Responsibilities in water services are related to general corporate ventures	Responsibilities in water services go beyond economic and legal aspects (political responsibility)
Governance Approach	Multi-level  Environmental marketization (pricing, liberalization, deregulation)  Public-Private Partnerships	Multi-level  Sustainable/Stewardship (holistic treatment) & Community based (public good, equity)  Public-Public Partnerships

**Table 3: Overview of Frameworks**

Furthermore, governance, in itself, is built on the norms and ideals of the governed society, and as such how water is framed influences the governance practices chosen. As Castro noted, the principles in which water is perceived, influence the management of water and, therefore, those that perceive water under an economic lens often present frameworks that incorporate the importance of the market. The conceptual map presented at the beginning of this theoretical section showcases

how the different concepts and frameworks correspond and interact with each other. Although the state is traditionally viewed as the primary actor within governance, this thesis does not consider the governmental framing of water. The political aspects of governance will, therefore, only be considered from the perspectives of the civil or corporate actors. These theoretical concepts create a foundation for the analysis, which will consider how the treatment of various themes – e.g. human rights – reflects the chosen frameworks and how the actors portray their own and each other's role in water management. In relation to the roles the different parties represent and perform, notions of corporate citizenship and civic engagement will be utilized to illustrate the frameworks and categorizations operationalized by each actor. Though these concepts focus primarily on one actor – corporate actors and civil actors respectively – they also have implications for other actors, thus they can create a fuller picture of the relationship between the corporate and civil actors. The subsequent part of this thesis will consider the interconnection between the frameworks identified and the practices in place.

## 5. Analysis

As previously stated, governance is built on the conceptualizations of water and the added salience on an ethical or market framework thus play an intricate role in how water is governed and aspects and themes within these frameworks will, therefore, be examined below. Water management is a complex subject and there are many relevant aspects of note, but within this analysis, we will focus on business practices, public control of resources, accountability and affordability issues, as well as rights fulfillment. This section will end with a conclusive part in order to draw together these various issues and create a clear picture of the frameworks used by the corporate (American Water) and civil (e.g. Our Water WV, Public Citizen, and Food & Water Watch) actors.

### 5.1 Clean Water, For Life

Though both the water management corporation American Water and civil groups – such as the public opposition group Our Water WV and NGO's like Public Citizen or the Food and Water Watch – apply frameworks that are rooted in ethical and human rights based values, their approaches differ significantly. The common theme across the border, however, seems to be on the correlation between water and public health and well being.

In their Corporate Responsibility Report (CRR) (American Water 2015a), American Water uses this theme to showcase their particular conceptualization of water, as well as the categorization

of their own role and presence in water management and the role of their customers. The focus on public health allows them to utilize an ethical framework that adds salience to their chosen corporate responsibility approaches. An example of this is their company vision: “Clean Water for Life” (6), which is reiterated throughout the entirety of the CRR, their annual reports, and their home page. The reason given for this chosen vision is twofold: the ‘clean water’ denotes their focus on the customer’s health, seeing as this is an essential contributor to their well-being, and the ‘for life’ represents their current presence as providers of said clean water, as well as their wish to remain the providers in the future. ‘For life’ further has a twofold meaning: it is literally a prerequisite for the life of their customers, as well as it is a statement of the commitment American Water has to the communities – they are here to provide water long-term. This reasserts their importance and their irrevocable position in society and the water management process, which they perform in the interest of the public. Their vision showcases the underlying value of water as a human necessity that people cannot live without, as further demonstrated by their statements such as “Water is necessary for our customers’ health and wellbeing” (ii) and “the water, wastewater, and recycled water services we provide are critical to their daily lives” (iii). Though this conceptualization of water as a human necessity denotes a particular focus on the social welfare and well-being of their customers, it also functions as an operationalization tool to implicate American Water as a necessity as well, seeing as they fulfill the important role as providers of this “essential and critical service for a lifetime” (ii). This adds value to their presence in the local areas in which they preside, and – though the value is self-given in their report – it can be viewed as creating a justification for their presence in water management. Moreover, their inclusion also becomes ethically and morally just, as they are categorically providing a service that is needed and required by their customers – a responsibility they readily acknowledge. The ‘clean water’ part of their corporate vision, in particular, furthers their importance in the management of water, as their presence also contributes with certain management services and infrastructural and sanitary measures needed to provide accessibility to not just water, but safe and clean drinking water to their customers.

American Water’s function in the provision of water is established in the American Water West Virginia’s (AWWV) educational campaigns, i.e. through a Youtube video titled “The Water Treatment Process” (wvamwater 2013). This video starts by asserting a misconception surrounding the supposed simplicity of the provision of water. It starts with a variety of people noting how they do not know how tap water works, e.g. guessing that it comes from some kind of pipes or pumps,

but not being aware of any more of the process. This is done to show the lack of knowledge surrounding the work AWWV does. Throughout the video, a personified drop of water called ‘Splash’ discovers what exactly the company does, as it goes through the water cleaning process itself. First, it is established that the water in nature is not for consumption. The narrator describes how drinking water is taken from a pictured reservoir and Splash is horrified. He exclaims that “Wait a minute there, you- you don't wanna drink this stuff! I'm telling you, I've been in a lot of water, including this reservoir, you know what's in there? Fish. You know what they do, right?” (01:00), he says alluding to animals excreting in the water and the subsequent unclean state of ‘natural’ water. Splash, who is portrayed in a clean blue color, changes in the next frame to a dirtier grey color, to indicate that, directly from the reservoir, the water is unclean and undrinkable. Firstly, this reestablished the misconception that there is little processing done to produce clean drinkable tap water, seeing as water without any treatment does not look as appetizing. It thus ascertains that there is an important intermediary process, where AWWV adds value to the water – thereby transforming it from a natural resource to a commodity. Water in itself is not a valued domestic product, but instead, a bacteria filled substance and, only through the cleaning and distributive process that AWWV provides, does it gain value and usefulness. Although the video mainly presents this as a natural state of water, many of the unclean chemicals found in the main water sources are in fact unnatural. A geological study by the National Water-Quality Assessment Program from 2007 noted that 97% of streams and 55% of shallow groundwater exhibited detectable levels of pesticides (Gilliom et al. 2007) and the company’s treatment process similarly deals with these human made contaminants. This further establishes the variety of associated ‘invisible’ economic costs to clean, accessible drinking water, which AWWV sees as often being underappreciated. After undergoing various cleaning phases – thereby illustrating the numerous processes needed as well as how meticulously they are completed – Splash notes: “I'm certified, verified, decontaminated and feeling fine” (wvamwater 2013: 04:00), once again portrayed in a clean blue color to signify the completion and significance of the process. The *cost* of water is thus connected to the *value* of water and reinforces the notion that value is added within the treatment process. As Michael Rouse noted, water as a human right does not equate to water being free (Castro & Heller 2009). The substance itself may be free, but the provision costs associated with it carries a price, and as AWWV showed, the untreated water is not worth much as a drinking supply – it thus only gains value when it becomes a commodity.

Our Water WV, however, see an imbalance between customer safety and AWWV's company profits in relation to the 'safe' and 'clean' aspects of their drinking water. They draw into question the safety measures of AWWV's services and the cleanliness of their water, e.g., pointing to the fact that the testing laboratory at the Elk River treatment plant, where the 2014 chemical spill occurred, was closed in 2004 in order to save costs (Our Water WV n.d.-b). The chemical spill, they argue, was, therefore, worse than it should have been and following the spill the safety of their consumers was not a main concern for the company, nor were their following actions indicative of a concern for public health, i.e. noting that "WV American Water customers are still at risk of chemical contamination. The company's newly-installed monitoring equipment on the Elk River does not monitor for MCHM" (Our Water WV n.d.-b), which was the key chemical risk to the water source. They believe that, even though the company has (re)instated a testing facility, this is not a 'proper' one that can effectively protect the consumers, seeing as the surrounding risk factors were not taken into consideration. They, therefore, draw into question the cleanliness of the water provided by AWWV, and thus also whether the added value that the company established through their process is legitimate. Whereas AWWV presented their water treatment process as resulting in a "certified, verified, decontaminated" water supply (wvamwater 2013), Our Water WV instead argues that the water is not properly protected or monitored and thus the process is negligent and the added value inconsequential. Responding to the critique of their water standards following the spill, the president of American Water West Virginia, Jeff McIntyre, noted that any lingering issues were purely "aesthetic" and the water itself was safe to drink. Our Water WV countered this by asking "Can anyone honestly say [pure and in no way dangerous] about the contaminated water that WV American Water allowed to flow into people's homes, schools and businesses, and which continues to flow from WV American's customers' taps?" (Bill 2014a). Here Our Water WV puts specific focus on the contaminated water in schools and business – i.e. the safety risks posed to the children of the community and the financial issues imposed on the local economy. The use of the word 'allowed' further indicates that this was not an accident, but a deliberate choice by AWWV and, they, therefore, view the company as disregarding the health and well-being of their customers.

Our Water WV does not argue against water provisional costs and the need for an added value to drinking water – i.e. in the form of decontamination and controls – but simply argue that American Water is neither accomplishing this nor prioritizing it. Their criticism is not of the pricing of water, but of the service itself, and both actors rely on a market framework of water. There is,

therefore, a disconnection between what American Water represents as their valuable contribution to water management, and how the public actually views their managerial skills and approaches.

## 5.2 Ethical Dimensions

In regards to ethical responsibilities, American Water puts salience on two main aspects of this: an environmental responsibility exacted through a stewardship management approach and a human rights responsibility. The civil groups, on the other, have a larger focus on the political responsibilities of this and the importance of public management. These will be examined below.

American Water emphasizes the green aspects of their business – e.g. their conservation strategies and minimization of their carbon footprint. They incorporate these as aspects of their role as ‘stewards’ of water and the environment, which they emphasize throughout their CRR and annual reports. An example of this can be seen in their Annual Report from 2015 when they state that “Because water is such a precious resource, we must not only be a supplier of water, we must be a steward as well. That is why many of the advances we make are shared with the water industry as a whole” (American Water 2016). They, therefore, acknowledge the duality and complexity of their expected role in water management. They are not just suppliers of a product, as other companies are, but suppliers of a fragile commodity that needs to be looked after in order for it to still be available for future generations. The specific use of steward – and not, e.g., protector or guardian – is also significant in that it relates to a specific ethical position, as previously outlined. Environmental stewardship is thus the notion that humans have an inherent responsibility to preserve nature (Worrell & Appleby 1999). This can be done through a responsible planning and management of resources that highlight the sustainability of the process – just as American Water emphasizes they do. This governance approach, therefore, reflects an ethical framework and thus sees water as a part of an ecological cyclical process and not simply as an isolated product. The use of water has implications beyond human involvement and water is, therefore, given an intrinsic value beyond the economic one reflected in the pricing of it. As such, American Water is undertaking a responsibility not only to their customers – who they are supplying a service to – but to nature as a whole as well. Water as such is ‘precious’ and American Water acknowledges their role as a caretaker of an essential resource.

The company further connects this to not only the special properties of water but also the finiteness of water: “The importance of our role as a responsible business has never been clearer. People across the globe consume water at different rates, but all countries tap into the 1 % of the world’s eligible drinking water. We must work together to protect and safeguard these supplies,

acting as stewards when water is under our care” (American Water 2015a: 3). Here they connect their specific water services to a larger global aspect and reaffirm that water cannot be considered in local isolated cases. They, therefore, assert an integrated management approach that sees water as an interconnected resource, which has an effect on and is affected by global dimensions. Although they acknowledge the globality of the issue, they nevertheless assert that their role is limited to local dimensions, as American Water is only acting as stewards ‘when water is under our care’, i.e. in local contexts. They further note that there is a limited supply of water and that they have a responsibility to safeguard the use of this. A central aspect of stewardship is that the steward is looking after something they were entrusted with by someone else (Worrell & Appleby 1999: 266). In this case, this someone is not the whole world, but neither is it only their customers. Instead, it is the local society as a whole, as well as the future generations within this. This also implies that American Water has a role to play outside of their provider-user scenario. They are also performing a service for those who are not their customers, but who are nonetheless benefiting from their stewardship of the water. They further note that ‘we must work together’ to achieve this goal and that it is in cooperation with others that they perform their role as stewards, not alone. They thus reinforce the importance of multilevel aspects to water governance, as they note that others, like state utilities and other relevant players in the field, are as important in reaching this goal. Nevertheless, American Water is a key player in this process as the environmental leaders in the sector. Correspondingly, as one of four water management companies, they were acknowledged for their technical innovation as an ‘Environmental Leader’ in 2013 by the Insider Knowledge Report and awarded the Business Achievement Award in the category of Industry Leadership (Environmental) by the Business Journal in both 2014 and 2015 (American Water 2015a). They prioritize sharing their advances with the ‘water industry as a whole’ in order to share the sustainable practices they invest in. Their environmental management goals will be done both through the legal responsibility of following the regulations set forth by state and federal laws, as well as through an ethical responsibility that emphasizes the company’s role as stewards by having a “responsible business practice” and being “efficient in [their] use of natural resources” (American Water 2015a: 42).

As well as having a larger environmental ethical responsibility, American Water also has a humanitarian one. The company’s CRR has a section titled ‘Human Rights’, in which they explicitly reference the UN’s Universal Declaration of Human Rights, with a subsection that is titled “The Human Right to Clean Water and Sanitation” (American Water 2015a: 20). The explicit

inclusion of the UN's recognition of the rights to water through the International Covenant on Economic, Social and Cultural Rights (ICESCR) furthers their conceptualization of water as a human necessity, adding values of rights and entitlements to its construction and thereby making the accessibility to water not only a human right for their customers, but also an access that they are rightfully entitled to. However, it is important to note that although this is regarding rights fulfillment, it does not bear any legal responsibilities, seeing as a human right is not a citizenship right and therefore not a legally binding right in the same way. Human rights are granted by the basis of simply being human, but civil rights are more narrowed – they are granted through laws and are as such limited to citizens of a nation or even just a state, seeing as the US has different laws depending on the states. Whereas South Africa has inserted a right to water in their constitution, this is not the case in the US, as they have not ratified the ICESCR (Gonzalez & Yanes 2015). American Water can, therefore, claim the ethical responsibility of providing clean water to their customers, without necessarily having a legal responsibility to do so. There are thus no repercussions for not providing this service. Though this ethical responsibility is something that American Water has assumed on their own, they are nevertheless entrenching on an area of rights fulfillment. This similarly reflects the responsibility pyramid theorized by Carroll (figure 2). Whereas the company's legal responsibilities are required, their ethical ones are simply expected and this is reflected in American Water's assertion of their duties. By first affirming the essential entitlement of their customers to clean drinking water, American Water makes it inconceivable not to fulfill this ethical role as well. The entitlement given to their customers makes them right-holders of the service that American Water provides, and shifts the categorical relationship between the company and their customers. Though the users-providers categorization is still the main role division between the company and their customers, this adds another dimension to those categorizations, namely that American Water is not only providing a service, but also fulfilling a duty to their customers. The company's self-ascribed role of duty-bearers to their customers also aligns with Dirk Matten & Andrew Crane's (2005) characterization of corporate citizenship. As American Water has garnered some of the control of the operationalization and management of water sources, which the states previously had control over, they have also gained some of the responsibilities that the states were previously held accountable for. Although they differentiate themselves from other corporations due to their provision of an essential resource, they still present this as part of their ethical responsibilities to provide a service – not as a higher level of political responsibility or through a justice and equity framework. Nevertheless, this inclusion of an ethical

human rights framework to water management not only furthers their conceptualization of water as a human necessity, it also adds salience to the importance of their presence as the enablers and providers of said service. This is evidenced by the statement they make within the Human Rights section: “We supply our customers with something they cannot live without: clean water. We believe that fulfilling this responsibility in a sustainable manner is critical to the overall health and wellness of our world” (American Water 2015a: 20). This statement, in continuation with their company vision, places the focus on the role of the company and the added value of the service that they are providing. Moreover, the interlinkage that they create between their conceptualization of water as a human necessity and a right on its own and their role as enablers/providers of clean water to their customers legitimizes their existence and portrays their services as essential.

### *5.2.1 A Public Good Under Public Control*

The ethical framework is operationalized differently from the public opposition groups and organizations, though their focus is also still on public health and the well-being of the citizens. However, their perspective tends to be on the failures of private water companies to maintain their goal of providing access to clean water to their customers. Whereas American Water’s CRR presented the company as duty-holders to their customers, providing a critical and essential service that was, in a sense, rightfully required by the citizens, Our Water WV and Public Citizen argue that the company has, instead, prioritized business growth over the well-being of their customers.

Public Citizen in a paper titled *Top 10 Reasons to Oppose Water Privatization* illustrate this critical perception of privatization by stating that “If water rights are handed over to entities whose declared purpose is to maximize profits rather than to serve the public good, hundreds of millions — perhaps billions — of people will be elbowed out of their access to water” (2003). They argue that once private companies gain control over water sources, their main focus would be on corporate profits, rather than on the protection of their customers, and as such the affordability of the services may increase beyond a large part of people’s capabilities to pay. Though this could be viewed as an exaggeration, it does speak to the fear that public health and well-being would not be in alignment with the common corporate goals of business growth. This basic prioritization is comparably reflected in Carroll’s responsibility pyramid where economic (and legal) obligations are fundamentally required, and, although they are expected, ethical ones are not presented as essential. Within the ethical framework, this incompatibility of the public good and business values is especially prominent. On the other hand, American Water does present a firm connection between these two responsibilities through an argument that their economic profits were built on their

ethically conscious business strategy, as will be further examined later. However, this does not negate the primary goal of businesses, which is the central concern of Public Citizen. A shift of priorities would, therefore, leave the citizens at a disadvantage as the private companies are accountable only to themselves and their shareholders. Although the company may uphold environmental and public interest values, these will always be subordinated to the company's profits. Public Citizen thus echoes Gonzalez and Yanes (2015) belief that non-revenue creating aspects of the business will be ignored and those who cannot pay 'will be elbowed out of their access to water'. The inherent value here is, therefore, not placed on the water itself, but on a public control of the water services. Though the Public Citizen paper does, in fact, conceptualize water as "one of the most basic human needs. Many nations and traditions, in fact, consider water a human right" (7), the conceptualization is utilized to showcase the consequences and problems a loss of public control of water could produce. Correspondingly, water and water rights are conceptualized within a framework that focuses on the contestation between public and private control and ownership of water governance. However, water rights are given a higher importance and more salience from the civil side, especially in regards to the public's control and ownership of their own water sources. Rather than viewing the inclusion of corporate actors in water governance as an opportunity for a multi-level approach to water management where both governmental, civic and private actors can negotiate their roles, interactions and approaches to water governance, Public Citizen fear that private inclusion could instead lead to a centralization of water governance. From their perspective, a publicly led water management service already distributes a certain amount of rights and control to civic and governmental actors, and any inclusion of private actors would tip the scale of distribution towards the corporate side, thereby giving more control and ownership to private entities. The fear is thus that once private entities enter water management, the public is placed in a disadvantage positioning rather than given another possible outlet for clean water accessibility.

One of the reasons against privatization given in the paper is that "when water services are privatized, public control is transferred to a corporation, be it domestic, foreign or transnational. Once water rights have been signed over, very little can be done to ensure that the private company will work in the best interest of the community" (Public Citizen 2003: 4). Public Citizen paints a picture where an inclusion of private companies in water management is the same as giving away their civil rights to water to an unknown entity. This perspective is directly countered by American Water, who instead argue that "While no one owns water, the federal government and state agencies

grant rights to utilities such as American Water to collect, treat, and distribute water to customers” (American Water 2015a: 64). According to them, their control of the water service does not equate to them owning the resource, but neither does anyone else owns the resource either. This reflects their stewardship approach to water management, where nature is both owned by all and by none, and negate the privatization of resources aspects within market environmentalism. Instead, they acknowledge the rights of governments to ‘grant’ rights to the water and thus paint the public as inescapably in control of the water rights – i.e. they can withdraw these rights if the company is not fulfilling their role. However, Public Citizen instead makes the claim that the rights to fulfill the water services – and corresponding rights fulfillment – belongs to the public and any privatization elements can be viewed as a loss of these rights, as well as an inability to ensure a suitable fulfillment of a human right. Any private involvement is therefore bad – as they warn: “No matter what form privatization takes, there is always a risk it could backfire” (Public Citizen 2001) and that “the bottom line is that water resources – by their very public nature – require public oversight to ensure that people, not profits, come first” (2003).

Our Water WV, though not as exaggerated as the Public Citizen statement, echo the same sentiments. The group, as previously mentioned, used the 2014 chemical spill that eroded their local water sources to showcase the failures of American Water West Virginia to provide their services of clean water to the citizens of that state. The name the group has chosen illustrates their goal and perception of the water. The name is twofold, as the ‘Our’ denotes both our as in general citizens as well as the specific local citizens of West Virginia. This claims a specific public ownership of the water and in part negates the stewardship aspects of the ethical framework. Previously, they were Advocates for a Safe Water System, which is less excluding of privatization, but over the course of the chemical spill and its legal fallout, this changed into a specific focus on water as a public good, which they have to reclaim. By naming themselves Our Water, the group thus conceptualizes water within an ownership construction, which they then utilize to further their narrative of regaining public control. Similarly, the Food & Water Watch, another non-profit advocacy organization, argues for public control of water services. However, they place their focus on public services and their abilities to maintain public health and well-being rather than on private failures. In a paper titled *The State of the Public Water in the United States* (Food & Water Watch 2016), the advocacy organization argues that a publicly controlled water services management, with local governments in control over the overall decision-making process, would provide “the most affordable and equitable service” (4) and that, as opposed to private companies, the main priority would be on

public health. As the public would have more control and say over governmental officials, there is a higher rate of accountability within public management. Although Matten and Dirk (2004) argue that this sentiment *can* be transferred to corporations that does not mean it is. As illustrated, American Water asserted their ethical responsibilities but there are still no mechanisms in place for public control or accountability. This is especially evident in the legal fallout from the chemical spill where American Water redacted most of their findings and reports citing confidentiality and trade secrets, as will be further examined later. Moreover, the local governments already have a “fundamental responsibility to promote and protect public health and safety” (Food & Water Watch 2016: 11), so allowing them control over water services would only be another facet to their accountability to the public. Food & Water Watch also note that public control is “more equitable because it provides customers with clearer legal protections from discrimination” (7) and thus draw on an ethical framework that is focused on equitable justice, as they argue that public control over water would not only concern profitability but also focus on issues of social equity.

All in all, the public opposition groups highlight a fundamental conflict between public interests and corporate growth and it is from this point of view that they oppose any form of private inclusion in water management. They, therefore, argue within an ethical framework that highlights the basic principles of a privatization of water services and on the lack of accountability and equity in private management, i.e. elements of a political responsibility. American Water, on the other hand, emphasizes their ethical responsibilities and priorities in order to assert their essential and beneficial role in water management.

### 5.3 Providing a Human Right

American Water presents three key areas of their corporate approaches in which they fulfill the role of rights providers: affordability, water efficiency, and infrastructure (American Water 2015a: 20). These areas are connected with the company vision and values for doing business the ‘right way’ and thus combines economic aspects with the ethical components of providing a human right. The civil groups, on the other hand, are critical of these arguments, as will be shown throughout this section.

#### 5.3.1 Water efficiency

Water efficiency is throughout American Water’s CRR and annual reports asserted to be both beneficial for society, as well as for the company, and they continuously connect ethical and economic advantages and emphasize the environmentally beneficial aspects of the company’s

economic growth. Firstly, as Carroll's Pyramid of Responsibilities (Figure 2) established, corporations have a fundamental responsibility to be economically profitable. American Water presents their financial standings throughout the company's Annual Reports to their stockholders. In 2015, they increased dividends by 10% and had a shareholder return of 14.9% (American Water 2016) and had similar results in 2016, noting that "The company has increased its dividend every year since its initial public offering in April 2008, and this is our fourth consecutive year of dividend increases of about 10 percent" (American Water 2017). They, therefore, establish a consistent upholding of their economic responsibilities to their stockholders. However, American Water makes it clear that their financial performance is not the primary rationale for investors nor the principal leading force of their company policy: "But financial success is an outcome, and that alone does not explain why a company flourishes year after year" (American Water 2016). Instead, their financial growth is presented as a result of their good business ethics and is, therefore, inherently dependent on a continued 'good business'. Within their conservation policy and water efficiency goals they, e.g., state that conservation and water efficiency "Both yield tangible business benefits" seeing as "Less water use leads to reduced power consumption, chemical usage, and waste disposal throughout the value chain. Decreased demand results in lower or deferred operating and capital costs, and reduces our carbon footprint" (American Water 2015a: 55). The focus is therefore placed on the benefits of economic savings associated costs with treating water, not on the water itself. However, by including water efficiency as an essential aspect for human rights fulfillment, they also connect it to an ethically important trait. As previously established, American Water notes the finiteness of drinkable water for the earth's population and using water more efficiently is thus presented as a way of assuring there is enough water for all and that none of this 'precious' resource is wasted. Water conservation and efficiency are therefore crucial strategies for ensuring water as a human right and they are thus seen as a favorable policy for society, as well as beneficial for the company. The value of water is precious, i.e. it should be a goal to use it efficiently and safeguard its use, and prioritizing this is not a money-wasting operational strategy, as green initiatives are occasionally viewed in a fossil fuel dominated society. Instead, this reinforces their sustainable and stewardship management approach. The conservation of water is in fact further connected with non-water associated environmental benefits, such as the company having a lower carbon footprint. The main argument is thus that water can simultaneously be treated through an environmentally and an economically sound business strategy, which in turn furthers American Water's representation of themselves as both an economically profitable and an environmentally conscious company – two

traits that are interconnected. This environmental consciousness of the company coincides with Karen Bakker's (2014) inclusion of market environmentalism to water governance. As with Bakker's argument that private inclusion in water governance could actually contribute to producing a model of water management that benefits both environmental and economic sustainability, American Water also uses this perspective to justify both their existence in water management and their corporate actions and management approaches.

They further emphasize this policy to their customers, i.e. noting the importance of domestic conservation through customer focused educational campaigns. Throughout the CRR there is a focus on domestic leaks and the financial and environmental impact such leaks can have – e.g. with the creation of a 'Fix a Leak Week' program where "California American Water distributed outreach materials that encouraged customers to repair leaks to save money and water" (American Water 2015a: 11). The same general business approach is thus transferred to their customers as well, with a large focus on educational campaigns to change customer behavior. Moreover, in a section of the CRR regarding the importance of communicating the value of water, it is first noted how "There is a perception that water treatment and delivery has few if any, associated costs, a view perpetuated by the historic low price of water. It is typically the least expensive utility service in the average American household – pennies per gallon or less in most of the communities we serve. Public understanding around the economic value of water services is growing" (28). The use of 'perception' makes it clear that this is not a fact and indicates that American Water does not share the notion that there are little to no costs in providing water services. This is what they wish to change and – through their educational campaigns – they assert that the 'truth' is becoming better known. The low cost of water has meant that its availability is undervalued and wasted water is, therefore, not seen as a big financial concern for customers – as it is only 'pennies per gallon' it is essentially disposable from a domestically focused economic aspect. Relatively easily conservation methods, such as fixing leaks, are therefore not necessarily prioritized, as there is no real financial issue with it. However, American Water also points out that 5% of domestic water use is taken up by leaks (40). Whilst they assert that water is the least expensive utility, they nevertheless still maintain a financial gain as a motivation to conserve water on a domestic level. This is an approach often used by public actors as well – e.g. 26.9% of local governments had used water prices to encourage conservation by 2015 (ICMA n.d.). Nevertheless, American Water notes how 69% of Americans "take access to clean water for granted" (American Water 2015a: 28), thus presenting it as an under-appreciated product and service. American Water thus wishes to encourage less

wasteful water use and to create a fundamental ethical change in the consumer perception of water use and services. However, according to the numbers on non-revenue water (NRW) American Water is less efficient than they claim, as illustrated within the Boston Action Research report titled *West Virginia American Water Company and the case for Public Ownership and Operation* (Smith & Jasset 2015). NRW is all water produced by the treatment plant with the customer consumption detracted. It details the water that does not reach consumers, e.g. leaks. In October of 2014, the system wide NRW was about 38% and in the Kanawha Valley District, where AWWV is based, it reached 45%. Accounting for non-revenue consumption the District had a 36% UFW (Unaccounted for Water), which is high above the 15% maximum standard set by the Public Service Commission. This illustrates that American Water West Virginia is lacking in efficiency and the report concludes that the company is “having difficulty controlling [...] system integrity” (Smith & Jasset 2015).

### 5.3.2 Infrastructure

Similarly, infrastructure – which presents a big challenge for future water services and an equally big investment opportunity – is a vital aspect of the debate as well and as such it is relevant to note the heavy focus American Water puts on their involvement in this area. Correspondingly, the company also furthers the connection they have made between water as an economic opportunity and its direct connection to American Water’s role as a provider of rights. First, it is noteworthy that a large part of the value American Water adds to water and water service is related to investments in technology and infrastructure. In an educational video titled ‘What’s Beneath Your Feet?’ (wvamwater 2014), American Water West Virginia notes how around 44% of the pipes in the US – 46.000 miles of which American Water operates on a nationwide scale – will be in severely poor condition by 2020. Just as the title denotes, the video argues that “our aging infrastructure may be out of view, but it’s our focus”, emphasizing that although the importance of pipes and infrastructure is not noticeable in the everyday life, it is nevertheless an essential aspect of water provision – something that *is* a noticeable component to everyone’s daily life. Whilst people may not have it in mind, the company does and is “continuously working to rehabilitate and replace its pipes on a proactive basis”, and thus stress the continued investments they make in the infrastructure. Furthermore, this also contributes to ensuring the safety of the water supply system for future generations to come. Once again, their motto of ‘Clean Water for Life’ is enacted. They are not merely working to ensure their current customers’ right to clean water, but the rights of their future customers – or simply just future generations – as well. Their investments in infrastructure are therefore also utilized to characterize themselves as the protectors of future generations.

Moreover, by noting the proactive quality of their actions, they are also showcasing that they are actively addressing the issue and not just doing emergency repairs – something that would cost up to ten times more than the continuous repairs. They also incorporate their customers in these investments, noting that “every time you pay your water bill, you help us fund continuous improvements to our aging infrastructure”, thereby making the investments an essential part of the service they provide and that the customers pay for.

American Water further establishes their role in regards to aging infrastructure when they state: “When utilities like American Water are able to apply their expertise and invest more resources toward solving this problem in the areas they serve, everyone benefits. Customers are provided clean, safe and affordable water. Municipalities are spared major capital outlays” (American Water 2017). They are, therefore, also providing an important service to the municipalities, as they are taking on their financial burden. Within the literature on private participation in water management, this is a common justification for local municipalities partnering up with private companies. Moreover, though the company does not portray the municipalities as inefficient, they do, however, note that they have certain expertise and resources that could fix the problem, which subsequently makes it seem like the municipalities do not. They are, therefore ‘sparing’ the municipalities cost heavy assignments that they themselves are better equipped to handle. This also denotes a multi-level approach to governance, as American Water present themselves as more than capable of fulfilling certain financial gaps that local municipalities, or state governments, cannot fulfill themselves. Furthermore, by first directly connecting infrastructure to a right fulfillment and then noting that the municipalities are struggling with this, American Water is exemplifying Matten and Crane’s (2005) argument that corporations are often initiated into rights fulfillment when the public is not accomplishing it. Privatization – or simply private participation in some form – is portrayed as a good thing, that benefits both the companies, the local municipalities, *and* the customers. It also reaffirms the severity of the challenge, seeing as it will take major capital and is a continuous and time sensitive operation that the public cannot complete by themselves.

Contrastingly, Our Water WV appear doubtful of the nature of the company’s investments, e.g., by disputing American Water’s emphasis on their commitment to environmental improvement – the repairs of leaks and the failing infrastructure as an essential aspect of this. They, instead, note that American Water West Virginia spends more on ‘Unscheduled Main Replacement’, which involves repairing leaks, than on replacing outdated pipes. Our Water WV argues that AWWV makes money off these repairs without adding any value of reinvesting in the community – in fact,

the current rate of investment would take up to 400 years to replace the water infrastructure (Cathy 2014b). Therefore, it would not be the interest of the company to replace the pipes, as it appears to be more financially profitable for them to only repair the leaks as they happen. This also directly opposes the image American Water presented earlier of themselves as proactively dealing with the aging infrastructure, and instead shows that they are in actuality just doing patch-up work to their pipelines. Moreover, the same logic holds for domestic leaks, which American Water is attempting to limit – though the scales of profits are vastly different. American Water is presented as living up to their economic responsibility to be profitable, but the ‘good business strategies’ they claim to adhere to is invalidated. Furthermore, Our Water WV argues that the economic growth is not properly balanced. Discussing the rising shareholder dividends, they note that: “Money that American Water Works pays to its investors is money that American Water Works is not re-investing in its infrastructure. In other words, over the same period that the leakage rate for their WV system increased from 22% to 28% (with the Kanawha Valley district up to 37%), American Water Works’s shareholders have gotten an extra \$72 million per year” (Cathy 2014b). Here the company’s profit is presented as unjustifiable, seeing as it the outcome of poor service provided. The company is not providing the needed infrastructural updates to maintain the water system, so they are therefore not doing the job they were hired to do, and any profits paid off to shareholders should therefore not be considered rightful profits. American Water may, therefore, be profitable, but they are not economically responsible to their customers, as they are essentially sending money to shareholders that should go to infrastructural improvements. The profitability of the company is instead hurting their future abilities to provide safe, clean and affordable drinking water – and the company is, therefore, not living up to the responsibilities they have towards their customers. As such, Our Water WV questions the basis of the corporate economic responsibility and instead presents the accountability of the firm as a more foundational concern for a water service entity.

### *5.3.3 Affordability & Accountability*

Throughout American Water’s data material, the buzzwords “safe”, “clean”, “reliable”, and “affordable” water reappear again and again – respectively 33, 40, 25, and 31 times, as well as 18 instances of them appearing together – thus asserting the affordability of their services as an essential business feature. As they state: "All our investment to ensure excellent service must be balanced with what our customers can afford to pay" (American Water 2015a: 4), thus creating a direct correlation between business opportunities and affordability for their customers. They enact an equity framework when emphasizing the importance of all being able to afford their services and

counter the argument that privatization means no service to the poor. In fact, they have customer assistance programs in place to assist low-income households through discounted prices or grants and through this illustrate their commitment to making water affordable. However, this is not an effortless goal: "Rising costs associated with treating and supplying clean water represent a critical challenge to keeping water affordable for all. While governments set the rates for our customers, we have a critical role to play in ensuring affordability" (20). They, thereby, stress that the overlooked servicing costs of water provision are rising to such a degree that it is threatening their affordability goals. Seeing as water is a human right and a vital necessity, everyone must be able to afford this service in order to ensure their rights fulfillment, but due to the rising service costs, this may not be possible. The conceptualization of clean water as affordable is therefore in jeopardy. However, these rising costs are often dependent on the ownership type of the water service – i.e. public or private. In 2015, Food and Water Watch noted that the average annual water bill on a national level was \$316 for a publicly operated water service, but \$501 for privately held ones (2016). Similarly, the nine least expensive water providers – with Phoenix paying the least amount at \$84.24 – were all publicly owned. In contrast, the most expensive came in at \$910.05 for Flint, Michigan (though a special case due to recent events) and the average annual bill for Kanawha Valley lay at \$710.63 making it the tenth most expensive water bill in the country. Correspondingly, six of the priciest water bills had American Water as the provider of their water services, and though these were mainly part of their Pennsylvania facilities, it does demonstrate a high pricing trend in the company that goes beyond the Kanawha Valley in West Virginia. Although this does not address the level of quality in their services, it does draw into question their goals towards securing affordability for their customers – if not their motivation, then at least their ability to carry this corporate value strategy out in practice. Nevertheless, after having re-established their 'critical role' in assuring that everyone can access their services, American Water correlates the 'rising costs' with the treatment and supply of water. Therefore, the issue that threatens universal accessibility to clean drinking water is not about water scarcity, but rather an economic issue of needed investments and associated costs, e.g., with infrastructure or technology. The higher profits the company seeks are therefore presented as a prerequisite for any technological, environmental, or quality improvements and it becomes less a question of greed and more an aspect of encouraging investment. Whilst they initially note the historically low cost of water – as well as stressing its low costs in relation to other household utilities – they also note that this low cost is mistakenly underappreciated, and not sustainable for the future. Their economic responsibility to be profitable is thus unequivocally

connected to a responsibility to their customers; however, they cannot produce a profit, if their prices do not reflect the capabilities of their customers or if their approach is not reflective of their values.

However, Our Water WV questions the affordability of AWWV's services and whom they are economically responsible to and in doing so they reiterate the ethical perception that businesses are necessarily prioritizing profits over people. They are continuously critical of the company's financial motivations, as they view it to be driven by out of state entities – like its parent company headquartered in New Jersey – that have no accountability towards the local community in West Virginia: "We know that West Virginia American Water will continue to spend our money according to the priorities dictated by shareholders and its parent company in New Jersey" (Our Water WV 2016b). Although the company consistently notes their responsibilities to balance the customer's needs with profits, Our Water WV instead characterizes them as being driven by shareholders financial expectations, not the certain needs or capabilities of their customers. The emphasis on the company's New Jersey headquarters portrays AWWV as a 'foreign' actor that is sending money out of the state and not contributing it to the state's or local communities' economy. Our Water WV thus also point to the importance water accessibility has in an economic sense. In their press release launching their campaign for a public takeover of the water system, Our Water WV quoted a local business owner as saying that "The water crisis and more recent main breaks have cost my business hundreds of thousands of dollars. Safe and reliable water service is critical to any kind of economic future for this region. Without a safe water system, my business can't afford to stay here" (Our Water WV 2015a). Water in this instance is not a 'need' in the same way that it is conceptualized through a human rights framework – i.e. a biological prerequisite for life – but is instead a market need for a stable business. It, therefore, goes beyond the domestic elements of water provision and incorporates an industrial aspect of the issue. Issues with water are connected to a financial loss both for the business itself, but also for the community if their local businesses are forced to close down due to unreliable water services, as happened following the Elk River chemical spill where restaurants in the surrounding cities were unable to operate. By noting that water services are 'critical to any kind of economic future for this region' it, therefore, becomes a larger problem and the lack of such a service is a threat to the very future of the local communities. The Our Water WV campaign is thus conceptualizing water as not only a life sustaining necessity but also a financial necessity for economic growth or even for the very existence of the communities. Once again, they negate American Water's claim of safe, reliable and affordable

water for life, instead claiming the company's unreliable service has threatened local businesses. Their accusation that American Water takes money out of the community is thus both in relation to direct money flow and a lack of infrastructural investments. A statement made by Karan Ireland, a member of the opposition group, shows the lack of trust the public have with the West Virginia subsidiary of American Water, and their wish to regain control of their water system. She states that they "need to replace West Virginia American Water with a West Virginia-based, public water system that is accountable to the people who live here. Creating a public water system is the only chance we have of making sure that safe and reliable service takes priority over profits" (Our Water WV 2015a). For her, a fair and accountable system must be locally based and publicly owned in order to ensure that those who use the service are the ones who the service providers are accountable to. The responsibility to be profitable, Our Water WV argues, is therefore nullified by the nature of who benefits from that profit and who the company is correspondingly (financially) accountable to. American Water is thus characterized as an outsider funneling money out of a fragile local economy and neglecting to protect their customers.

Our Water WV sees a specific example of this when they note that "W.Va. American Water's rate increase proposal reflects its accountability to its parent company, not our community" (2016a) and further views the 2016 15% rate increase, which AWWV gained to deal with the previously mentioned rising costs of providing quality drinking water, as a risk to the affordability of their drinking water. Our Water WV argued that this was an unnecessary and harmful increase, instead noting that "We need a public water system where more of our rates can go towards providing the safe, reliable water we need, not higher profits for WV American Water" (Our Water WV 2016b) and that "The water company says they won't make the investments we need without higher profits. We need a public water system so that safe and reliable water can be the top priority" (Our Water WV 2015b). They see the rate hike as an expression of corporate greed, which will neither benefit the community nor is a necessity. Instead, they believe only a public water system can generate the safe and reliable water needed. As such, they question the commitment that American Water states in their CRR to balance their investments with the affordability of their customers as well as their claim that quality water supply is their top priority. Our Water WV note that they "have some of the most expensive water in the state" (Caitlin 2014) – as supported by the Food and Water Watch report (2016) – whilst some of the worst services and they instead argue for the need of fairness: "We deserve a water system that is [...] Fair: customers get what they pay for – safe and reliable water" (Our Water WV n.d.-a). Whereas American Water has an imbalance

between their prices and services, a publicly held water service would prioritize services over profits, as the group claims. The water should still be affordable, but the fairness of the prices is more essential. The critique of private utility companies inflating their prices is a dominating one – and one not without basis as previously noted.

All in all, there is a contrasting perception between how American Water represents their corporate values and strategies in regards to the presented areas of human rights (infrastructure, affordability, and efficiency) and how the civil groups perceive them. Though American Water portray themselves as operating from a space where their corporate interests are interlinked with public interest and health, Our Water WV are incredibly critical of this position, as they use their water bills to show that corporate growth, or the interests of outside private entities, might actually be in control of their water services. It thus becomes a conflict between the civil groups arguing that privatization will always prioritize profit maximization, and a corporate actor arguing that profits and public interest are not mutually exclusive but are instead interconnected – i.e. they make profits *because* they are acting in the public's best interest. This thus presents the fundamental differences in the ethical and market frameworks.

## 5.4 Everybody Plays a Part

As John Law (1999) noted, the interplay between governmental, civic, and corporate actors accounts for both the role distribution of the actors, how each actor is identified and categorized, as well as how they interact with each other. After the chemical spill in 2014, the interplay between the citizens of the state, the American Water West Virginia (AWWV), and the governmental actors highlights both the distribution of roles between the different actors, as well as the aspects where the state's current water governance has failed, and this will be examined within this section.

### 5.4.1 Public Accountability

For the citizens of West Virginia, the chemical spill highlighted the dual roles often given to civil actors, in particular since they faulted both the state and local government, as well as the AWWV corporation for the spill. Our Water WV emerged from this civic mobilization, and the opposition group was operationalized as both a tool for civic engagement against the West Virginian subsidiary of American Water and as a tool for political mobilization against the West Virginian governmental actors. Moreover, the group also utilized the digital sphere as a platform to engage and mobilize the local citizens. Our Water WV's blog changed from a largely customer concerned informational site in the beginning, to a directly engaged advocacy campaign for a public water

system as a reflection of their dissatisfaction with AWWV's actions in regard to the chemical spill. As stated in their first blog post, their intent with their digital presence was to provide "citizens with the resources and tools that we need to get serious about change in West Virginia. We know that it will take sustained citizen pressure, not just immediate outrage, to really make West Virginia a healthy and safe place for us to live" (admin 2014). At this time, the details of the spill were not yet known and neither was the role of AWWV, but throughout their blog posts, it becomes evident what they perceived the needed change to be. Their online activity, therefore, ranged from being a source of information sharing, concerning the timelines and up-to-date changes that happened with the chemical spill investigation, to available resources for the affected citizens, as well as their initiative platform to organize town hall meetings, rallies, demonstrations, and public engagements. As evidenced by their first post, the role this group assumed was one of sustained public opposition. As both customers of AWWV and as citizens of the state, the public of West Virginia was the ones that would suffer the consequences of another chemical spill or erosion with their water sources. Their civic mobilization and engagement, therefore, came from a legitimate place of fear and outrage in the failures of both the company hired to keep their drinking water clean and reliable, as well as the state for having procured the private water company, to begin with, and becoming negligent in their dealings afterward. As Ekman & Amnå (2012) noted, civic engagement changes through various approaches, e.g., political action, civic participation, and consumer activism. Civil actors thus engage with the corporate and the governmental spheres in different ways. As customers, they have a specific role towards the company, and their particular interactions and public oppositions against the company often occur within these categorization constructions. As customers, they can directly engage with the company to showcase their disapproval, i.e. through complaints, but the consumer activism is often based on more political methods, i.e. demonstrations. This is evident in the case of Our Water WV as well.

A blog post from February 2014 shows how they operationalized their opposition through a customer and market arena. The short post, titled *Do we owe American Water or visa versa?*, describes their reasoning behind a protest against AWWV. The protest consists of them "delivering bills to West Virginia American Water for the cost of all the water that they have had to purchase themselves, to make up for the safe water that West Virginia American Water was supposed to provide them" (Cathy 2014a). As they argue, the company's main goal should be to provide access to reliable clean water, and after the chemical spill, they have not only failed to maintain this goal, but they have also lost the trust of their customers. This distrust of and dissatisfaction with the

company is evident in the post as well, as the customers are still wary of using their tap water seeing as no one at the time could prove if it was safe to drink. This demonstration brings up the issue of boycotting, which is usually the approach customers use to showcase their disapproval of the service or product that they are paying for. However, as customers, the people of West Virginia cannot create a direct boycott against AWWV, seeing as they cannot change utilities. Instead, they used their own bills and receipts from the alternative water sources they have had to buy, in an attempt to showcase the amount of money that they had to use bottled water instead of the service provided by AWWV. However, even though the customers in West Virginia did not use any water in the month following the chemical spill, they were still required to pay a minimum bill to AWWV and as such, they were unable to actually boycott the service. Nevertheless, the protest tried to emphasize that they, as customers, had to seek services elsewhere, but as water is too essential in the customers lives and the alternative (bottled water) is not a viable option for every citizen nor every needed water use (e.g. showering, flushing) this was a limited form action. This also brings forth issues of equitable justice. One blog post showed a picture taken four months after the chemical spill, that showed the bottled water aisle in one of their local stores, where every shelf was empty (Bill 2014c). The picture is used to highlight both the distrust there still was towards whether or not the tap water was clean enough to drink, as well as the fact that many citizens were still seeking access to water from other sources that were not from their tap water. However, the post also states that “the only people buying water are those who can afford it. The rest of us are stuck with what comes out of the tap” (Bill 2014c). Whilst some may have had the option of buying safe and clean water, others did not have access to this. Thus, as water is a daily necessity – and bottled water is not a viable option for every needed water use, e.g. showering – this perfectly illustrates how some citizens had no other option but to consume water from their tap without knowing the risks. Although the choice to either ‘boycott’ or consume the water coming from their tap is an individual one, the fact that low-income citizens cannot afford to get water from other sources e.g. bottled water, situates water in an equity framework as well.

Furthermore, although water may exhibit certain properties of a commodity, it is vitally different in others. One cannot simply choose not to ‘buy’ the product, seeing as it is needed for most aspects of everyday life, and, in most cases, neither can the customer choose a different supplier, seeing as water service is based on a larger scale. During the last decades, AWWV has expanded and centralized various local water works, and as such, it is harder for local communities to change supplier. As Karen Bakker (2014) noted, water services are subject to a natural

monopoly, seeing as the costs and risks for a competitive market are too high, the competitive free market mechanisms do therefore not apply and, she argues, this is part of why market oriented frameworks are not sustainable for water management. There is thus no real way to establish a consumer choice it is, therefore, difficult to use the market-based actions that are usually a part of consumer activism, i.e. boycotts. This problematizes the market oriented civic engagement and instead relies on politically oriented engagement – both towards the companies but largely towards the government as it mitigates the confines of a natural monopoly. Even the prices of water are not governed by the standard free market forces but are instead set through regulatory processes, and as such, the protest over pricing is similarly aimed at both the corporate and governmental actors. This thus illustrates a duality of the organization's role.

Moreover, Our Water WV also used their blog to continuously showcase their distrust with AWWV. One of the main reasons for this distrust is the fact that there is no direct line of communication with the company and little transparency for the public. A post from July 2015 addressed this issue. The post, titled *WV American Water wants to continue the one-sided conversation*, talks about yet another water main break that has occurred in the area, and how the company handled the situation publicly. The post notes that the company's version of communicating with their customers consisted only of "taking out numerous newspaper ads, writing op-eds, and providing inserts in our water bills" (Cathy 2015), and not actually having a direct conversation. This is, consequently, viewed as merely PR from the opposition group's point of view, especially since they have tried to engage with the company multiple times and each time was shown that the company is only interested in a "conversation where it controls all of the information". As this does not allow the customers to engage with the company, this leaves them in a position where they have to publicly oppose or critique AWWV's management strategies, but they have no direct influence. Moreover, this also coincides with issues of transparency, which is continuously brought up on the blog. After the chemical spill, the opposition group viewed themselves as being entitled to certain information from the company regarding their management to assure the safety of their drinking water. This further ascribes AWWV a higher level of accountability than other companies in concurrence with the political responsibility presented by Matten and Crane (2005). The spill illustrated certain lacking aspects in the corporation's management of their main water source, and as the customers were not aware of these previous to the spill, they wanted more knowledge regarding the company's operation of the plant, as they would be the affected group if another chemical spill were to occur. One post, dated almost a year

after the spill occurred, noted that the company was continuously being secretive as most of their actions had been “behind closed doors with no discussion with local leaders, its customers or the public” (Bill 2014d) and during the West Virginian Public Service Commission’s (PSC) investigation into AWWV and their role in the chemical spill, the company continuously redacted and classified information by citing that it would endanger their business platform. They thus did not accept the political responsibility that requires higher transparency and accountability from rights providers. As customers, the public opposition group has also placed themselves as stakeholders, not necessarily of the company, but of any outcomes, the company’s future approaches and actions could lead to, as they are the ones who would suffer from any of the issues that could occur.

Our Water WV continuously argued against the company’s lack of transparency throughout the PSC investigation. As customers of the service, American Water provides, the role of Our Water WV in the investigation is legitimized, seeing as they are the affected group of the actions taken by the company. The investigation is, therefore, a possible outlet for them to engage directly with the corporation on a public level, and share with AWWV the complaints their customers have against their management. Moreover, as citizens, their presence in the investigation heightens the civic aspects of water governance, as they are both advocating for their own interests and goals as well as the interests of the community as a whole. Throughout the entire investigation, which concluded with a settlement consisting of terms to improve the West Virginian water system, Our Water, along with other advocacy groups like the Consumer Advocate Division and local businesses, maintained pressure on the PSC and a consistent civic presence to ensure a thorough investigation. As the investigation was focused on the chemical spill and AWWV’s actions before, during, and after the spill, the opposition group made it their main goal to find out why the event even occurred. In an op-ed by Karan Ireland, she notes that at any community gathering or demonstration in the months following the spill “the most frequently asked questions was, ‘How could this have happened?’” (Ireland 2016), and two years later that was still a question that remained unanswered by both the PSC and AWWV. The lack of knowledge and information the public was given was, therefore, one of the main points of interests for Our Water WV’s involvement with the PSC investigation. Throughout this, they hoped to hold AWWV accountable to a higher standard and assert that standard issues of confidentiality did not apply in relation to water services. They, therefore, made a larger claim on transparency from those providing such an essential service and thus emphasized accountability to the public as their main interest.

Furthermore, Our Water WV supports Sagoff's argument that people do not act purely based on one identity. Throughout their argumentation, they simultaneously emphasize their (individual) monetary arguments for privatization at the same time as arguing for a community-based wish for a better water system owned jointly through a public control. They are necessarily arguing from a personal preference of better service and lower prices, but also for the good of the collective, as they believe that a public takeover will be in the best interest of the public.

#### *5.4.2 When the Government Fails*

The PSC investigation is a perfect example of how the West Virginian public engaged with the governmental aspects of the water crisis and attempted to influence the outcome. As Newig and Fritsch (2008) noted the participation of the public is vital to the governance process as it assures that those who are affected by the process are also heard. The investigation further shows how the different parties included – the different governmental sectors, the civil society, and American Water West Virginia – interacted with each other throughout the investigation.

As the Public Service Commission is a regulatory governmental agency that “support and promote a utility regulatory and transportation safety environment that balances the interests of all parties and pursues excellence through quality” (PSC 2016), they are charged with including both the interests of the citizens of West Virginia and of AWWV. The investigation’s main goal was to examine AWWV’s safety measures and corporate strategies surrounding their reactive processes towards any water contamination and to improve on those strategies to the benefit of all parties. Our Water WV characterize the agency as “the one public body most knowledgeable about WV American Water’s system” and “the agency charged by law to ensure that water delivered to consumers is ““pure, wholesome, potable and in no way dangerous to the health of the consumer”” (Ireland 2016). They thereby assign a specific role and mission to the governmental agency, one that views them as being the protectors of public health, as they are required by law to ensure that the tap water the citizens consume is clean and safe to drink. Moreover, this perception of the PSC correlates with the lack of knowledge the public have of AWWV’s corporate safety measures and strategies. The PSC’s role in the investigation is, therefore, also about deconstructing these walls of secrecy that exists between the public and the private company. From Our Water WV perspective, as the governmental agency has the ability to access the corporation’s internal communication – which the public have been given no access to – the PSC should utilize this to further the public’s interests in the company. However, they also note that without citizen pressure, this will not happen. They have therefore ascribed themselves the role of overseers of public interests, which

they utilize throughout the investigation in multiple ways. One example is their actions regarding the information gap produced by AWWV's lack of transparency. As the opposition group lost trust in the company, they filed multiple requests to the PSC to force AWWV to make public all the data and corporate documents they have on their safety measures and water management. Though the corporation filed requests to redact certain parts of their corporate documents due to confidentiality issues, the public opposition and advocacy groups fought against that continuously. According to one of their blog post on the case, the group viewed the confidentiality argument as a secretive measure from the company to try and "limit its accountability to the public and withholding as much information as possible" (Cathy 2014b), rather than a legitimate reasoning for the company. They thus see full transparency from the company as vital in order to ensure the public safety and interest and their ability to hold the company accountable.

As they have gotten little to no information as customers from the company, as shown by the lack of communication between the two parties, Our Water used the PSC investigation and their role as citizens to continuously fight against this lack of information sharing. Though the investigation ended with a settlement – in which both AWWV, Our Water WV, and other public advocacy groups gained some common understanding that there needed to be more safety measures added to ensure that another chemical spill or erosion would not occur – Our Water WV took to their blog to acknowledge both the power their public resistance has had in the investigation, as well the lacking aspects of water governance the investigation has shown. They noted that their involvement had "pushed for this investigation to happen, and we are confident that this outcome would not have been achieved without everyone who came out to show that the public was watching" (Bill 2014b). Their civic engagement, therefore, allowed for an accountability measure to be present in the investigation, as their efforts show that their opposition to AWWV and the actions of the company were documented throughout the entire process, and at the very least acknowledged by the Public Service Commission. However, the group also acknowledges that "the investigatory process did not go far enough to allow the public to learn all of the lessons from this crisis" (Our Water WV 2016c). They place the blame on the PSC, as they note that the governmental organization focused more on reaching a settlement than investigating AWWV and improving the water system. Much of the company's internal data and documents were kept from the public eye, and therefore much of the company's actions and management skills were not considered within the scope of the investigation. As such, they argue that the PSC did not hold AWWV accountable. Although corporations do have a certain accountability to their customers, as Matten and Crane

(2005) noted, the level is higher for areas that entrench on a political field, as rights fulfillment does. Although the coal company Freedom Industries caused the chemical spill, the public opposition was more focused on AWWV's actions. The situation is referred to as the Freedom Industries chemical spill or just the Freedom spill, but only 29 of the 255 posts on the archived Our Water WV blog are categorized under 'Freedom Industries', whereas 94 are categorized as 'WV American Water'. Whilst the legal case regarding Freedom Industries was closed sooner than those regarding AWWV, the preoccupation with the water company still illustrates a higher level of expectations from the public, i.e. places a political responsibility on AWWV. Freedom Industries was not as heavily critiqued for conducting irresponsible practices close to a water source as AWWV was for not taking the chemicals used at the Freedom Industries plant into consideration in their planning. The coal company was held responsible for their actions, but the legal process against AWWV was not deemed sufficient for Our Water WV. Instead, they seek a higher level of accountability from their water services, i.e. from a direct electoral process where those responsible for the service (the local government) can be directly accountable to the citizens and consumers of the water. This would also allow for a larger degree of transparency, seeing as the confidentiality arguments used by AWWV is not as applicable and the freedom of information act guarantees citizens insight into government processes.

From the governmental side of the investigation, however, there were other issues at play that either derailed or prolonged the investigation into the chemical spill. The investigation, which began in 2014, turned into a years-long inquiry as the final settlement agreement was only recently decided upon. This prolongment shows that the cause was actually due to governmental issues. During the early stages of the investigation, the Commission had one member that resigned and another that had voluntarily recused himself from the investigation due to close ties with the American Water corporation (Brown 2015). The loss of the two members then led to nine-months of inactivity, as there needs to be at least three members on the Commission for it to properly investigate the state cases and take regulatory action. The PSC investigation into the chemical spill, therefore, had to wait for the Governor of West Virginia to appoint a new commissioner. During this time, AWWV still maintained their control of the state's water sources and, though the civic opposition did not stop during this hiatus, governmental changes could happen without the participation of the PSC. The multilevel governance here presented a roadblock to the local improvements of the water systems. This is also an issue in the possibility of an overlap of jurisdictions and governmental agencies, as both the PSC and Our Water WV argued. The PSC

noted that Senate Bill 373, which was passed by the West Virginian legislature in March 2014, created a conflict of interest for their investigation into AWWV, as the bill included an addition of jurisdiction authority given to the Bureau of Public Health (PSC 2016). The bill states that any water service company or utility that sources water from a surface water supply source should submit a plan to the Bureau of Public Health that includes “an examination and analysis of the technical and economic feasibility of each of the following options to provide continued safe and reliable public water service in the event its primary source of supply is detrimentally affected by contamination, release, spill event or other reason” (Senate Bill No. 373 2014). As the PSC investigation’s main goal was to examine the practices and safety measures of AWWV before, during, and after the chemical spill to ensure an improvement in the company’s future practices, they were concerned whether they should continue with their investigation, as Bill 373 would ensure that AWWV would have to submit any future plans of practice of safety measures to the Bureau of Public Health anyways. This governmental overlapping, therefore, derailed the investigation for a while, as the conversation turned from AWWV and their safety measures to whether or not the PSC had a role or a scope of governmental power to continue the investigation. Although the Senate bill was a measure to ensure statewide water safety, it became a problem at the local level. This is an example of how water governance is a multilevel process and that an interplay between the different levels is needed in order to avoid overlapping. The state level safety measures would also ensure more transparency on the local level, but in the PSC investigation, it jeopardized the need for an in depth examination of the process surrounding the spill. Although the safety plans and practices would be disclosed in future cases, there was a need to understand and learn from the ‘past’ case as well.

Our Water WV also put forth this sentiment. Though jurisdiction overlapping is a legitimate concern, and a valid point to bring up during the investigation as it would affect any sort of legislative outcome from the PSC, Our Water WV, and the other advocacy groups involved, argued that the fear of overlap was not a legitimate enough reason to cancel or narrow the scope of the investigation. They instead, reasoned that the investigation into AWWV was a necessity, even if it would slightly overlap with newly enacted state legislations. Their argument was that “if handled appropriately overlapping agency jurisdiction can significantly advance the public interest”, especially since Senate Bill 373 only expects AWWV to submit their plan of safety measures and not necessarily a specific guideline of what those measures have to entail. The PSC investigation would, therefore, allow for an overview of AWWV’s practices in safety measures and water

management, which could thus further be used to create improvements and changes to the company's approaches and handlings of safety issues. This, instead, views the overlapping between the PSC and BPH as a complementary overlap rather than a point of conflict, as the investigation would allow for the Public Service Commission to find instances of corporate failures in regards to their management that can thus be utilized by the Bureau of Public Health to ensure that the summary plan submitted by AWWV addresses such concerns. Moreover, the public advocacy groups also posit that the legislations would not have been accepted into state law if there was a genuine concern of governmental overlap, and that since "the Legislature created both of these provisions, we are bound to presume that it intended that they would both exist and be compatible with each other" (PSC 2016: 29). They further this supposition by stating that each governmental agency has a specific amount of legislative power intended to protect the public, and instead of focusing on issues of conflict, and consequently limiting their own governmental powers, they should instead use their "powers and responsibilities in these areas in a complementary way, which rationally and productively serves the public interest" (33). Moreover, in response to PSC's fear of governmental overlap corroding the investigation, Our Water WV testified that, while the investigation could have implications for the requirements of the Bureau of Public Health, "remedies which are appropriate and which do not create conflict should not be decided upon until the investigation phase is complete" (5). The civil side thus fear what consequences could arise if there is not done a complete overview of AWWV's safety measures and management approaches. Though there is an acknowledgment of jurisdiction conflicts between the PSC and the BPH, the public advocacy groups instead posit that the investigation could produce valid knowledge of the company's corporate strategies in all regards, and any narrowing of scope or focus of the investigation would instead take away from the possibilities of discovering such information. They back up this position by arguing that past fears of governmental overlapping could be seen as a corresponding causal effect of the chemical spill, by using the lack of governmental oversight of the corporation. An example they provide is the AWWV's removal of their testing equipment and chemical laboratory in 2004, which neither the PSC nor the BPH investigated at the time. Such governmental oversight cannot be allowed again, as the consequences could lead to another water crisis. In correspondence with this, Our Water WV, in one of their blog post, note that the crisis "was the perfect example of what can happen when regulators are not paying attention or when they assume something is another agency's responsibility" (2016c). Tony Allan (uwaterloo 2013) noted the importance of each actor balancing each other out in the governance process. Regulators 'not

paying attention' therefore illustrates an unfulfilled governmental role and there is an imbalance in the process. If the government had fulfilled their regulatory role to keep the corporate actors in check, then the AWWV's practices would have been more integrated and the water crisis would most likely not have been as severe. The civil groups are attempting to re-fill this lack from the government's side and reassert the role division, i.e. through a public takeover of the water system. As Our Water WV argues: "Leadership on water protection is ultimately in our hands, not the politicians' [...] Only when we have done our jobs as citizens will we know that the situation has been fixed" (Bill 2014e).

All in all, the 2014 chemical spill highlighted certain issues with the roles the civil, corporate, and governmental actors perform in water governance within West Virginia. Through their civic engagement in the Public Service Commission's investigation into American Water West Virginia, Our Water WV's main point of critique was the lack of accountability of AWWV. They argued that the role the corporation plays in providing a right necessitates a higher level of transparency and responsibility towards the public, but AWWV did not adhere to this. The group also places some of the blame for this on governmental officials and organizations. The group viewed the lack of regulations and the failures of governmental agencies to actually regulate the actions and outcomes of AWWV company's management approaches as another reason for why the chemical spill happened in the first place. They argue that, even if privatization should continue, the deregulatory approaches of the environmental marketization approach is unsustainable. Instead, they argue from an ethical framework for a strong state role and that corporate responsibilities in this area incorporate a high level of transparency and accountability to the citizens. They place themselves as overseers for both the corporate and governmental actors and argue that it is their responsibility to ensure a good water system.

### 5.5 Sub-Conclusion

The above analysis illustrates that, although aspects of both the ethical and market frameworks are enacted, the conceptualizations are not dichotomous nor solely used by one actor. Nevertheless, there remains a fundamental contestation grounded in the frameworks ideological basis: market inclusion or public control.

As the examination of the West Virginia case shows, there is still a significant difference between how civil actors construct water rights and water governance, and how private actors conceptualize water within their management frameworks. The analysis, therefore, shows that much

of the contestation in the water governance discourse, presented in the literary review, is still present in the current time. Though there are aspects of the frameworks enacted by the different parties that share a common belief – e.g. water as a human necessity and right – the fundamental aspects of the conceptualizations utilized produce inevitably different implications for water governance. Especially American Water mixed the two frameworks, e.g. enacting stewardship ideals as well as marketization and privatization arguments. This corresponds with their business strategy and ideal that doing business in a sustainable and ethical manner correlates with a profitable business. The civil groups, on the other hand, were more firmly set within an ethical framework. The salience each actor places on their chosen approaches also contributes to the disconnection that is created between the two parties. In the case of the economic aspects of governance, American Water placed salience on the infrastructure and the costs of water management. Their corporate strategies regarding their business finances, as well as the billings of the service they expect from their customers, is therefore presented as a prerequisite for their abilities for performing their duties well. The disconnection, however, is evidenced by the response given by Our Water WV. Whereas American Water stresses that price hikes are the price of doing business, the public opposition group view the profitability of the business as a questionable feature. They acknowledge the need for pricing of water and capital needed to renew infrastructure, but they do not see the considerable profits the company makes from this as a necessary part of the water service. The corporate strategies are thus considered as primarily making a profit, not focused on the public good. There is, therefore, a difference of belief when it comes to where the money ends up. Arguably, it is this difference of perspectives that creates contestation between the actors.

Although the basic question of privatization continuously created contestation, there is the question of whether this was due to an ideological opposition to it or simply a case specific aversion. Though Our Water WV became a strong advocacy group for public ownership of the local water systems that was not their starting position on the issue. At first, they were mainly interested in providing information and civic services to the local community dealing with the aftermaths of the spill. Prior to the spill, AWWV had operated the state's water services for decades without any significant public opposition. Arguably, this does bring forth the issue of whether Our Water WV opposes privatization in its entirety, or if their opposition stems from the recent failures of the company and other privatization efforts would be welcomed. However, their argumentation is largely based on public control and ownership as the only good alternative and where AWWV is portrayed as outsiders funneling money out of state, the criticism of shareholder profits and rate

hikes is a more general critique of the private involvement. The phenomenon of water privatization thus also opens up to a larger debate about public ownership of natural resources and what the inclusion of privatization elements could have for the future of this resource. Any future implications for water management would, therefore, be rooted in this contestation. As illustrated, a large part of the issue was not with American Water's actions – as they were just doing what corporations do – but with the governmental failure to fulfill their role in this case. However, as the water governance discourse in the US is a continuously ongoing, the analysis of this thesis can be utilized to highlight the key aspects of the debate concerning economic and ethical frameworks used by the different parties.

## 6. Discussion

This section will include an examination of the Danish water utility governance in relation to the topics and themes presented. Furthermore, a consideration of the current state of water governance in the US will be presented, as well as the implications of what the future of water governance might be for the country.

### 6.1 In a Danish Context

In 2016, the American consultancy company, McKinsey & Co. reviewed Denmark's current utility services and recommended several changes that would both improve its efficiency and save the country up to 7.1 billion DKK (Vibjerg and Pihl-Andersen 2016). The main point of their suggested solution was privatization of the Danish utility services, amongst them the water sector. This initiated a public debate on the nature of Denmark's water services, which touched upon many of the topics seen throughout the West Virginia case. This section presents some of these debated topics and correlates the Danish water management with the US perspectives on the matter.

Both the US and Denmark are market economies, but the mechanisms of their market forces differ vastly. Whereas the US is considered a liberal market economy, Denmark is more of a coordinated market economy, where strategic government interactions weigh as heavily as market competition (Hall 2006). This illustrates the contrasting views on the role of the government and the interplay between governmental and corporate actors. The United States is often divided on these issues – especially on a state to state basis – but speaking on a national scale, the state is not involved to the same extent as in Denmark and there is a perception that the government should be small (ranging from a conservative wish for government to be as small as possible so as not to

hinder the free market, to a liberal belief in a larger role). Thus, though there are many similarities between the two countries – i.e. beliefs in a capitalist market economy – their approaches to government size and the underlying governance tendencies differ. In a debate on the issue, the American origin of the McKinsey consultancy was accentuated and it was argued that their report is built on a fundamentally different ideology than Denmark's, and therefore not applicable in a Danish context (Mogensen 2016). Essentially, two ‘issues’ of the American perspective on the water industry are highlighted: they have no real concept of owning something collectively as a society, as well as no concept of doing business optimally with no profit. These two principles make up the foundation for the Danish water sector. It is equally owned by all, with the most primary purpose being the societal benefits gained. As one cannot make money off of the service, this means that from an American perspective there must be no incentives for optimization nor any real interest in the business. However, as mentioned, the Danish water sector has other mechanisms to ensure efficiency. These are still tied to monetary savings but do not result in a profit for the utility owners. It is therefore argued that there are fundamental differences between the two countries and that the privatization arguments presented by McKinsey & Co. – an American company – are not applicable in a Danish context.

The McKinsey & Co. report, nevertheless, emphasized that privatization of the water sector would allow for greater competition, which would, in turn, create lower prices (Vibjerg and Pihl-Andersen 2016). However, as a natural monopoly, liberalization within the water sector would not lead to direct product market competition but instead comparative competition or competition for the market itself (Sørensen 2010). As the water sector is specifically designed for little competition, it requires a higher level of regulation to protect the consumers and keep prices manageable. Thus, when the regulatory dimensions fail, as they did in the case of West Virginia, this presents a problem. Necessarily, natural monopolies are contradictory to free market policies as they are often limited to one player through government policies in order to ensure the affordability of the services and because it is more cost-effective to have a monopoly in the market. The ‘invisible’ hand of the market’s price mechanisms thus does not force the business to innovate and keep prices low, so this is a role the government fulfills through regulation instead. In Denmark, the lack of competition is mitigated through a twofold solution. Firstly, various aspects of the water services are outsourced and thus competition is ensured for these tasks. Secondly, benchmarking allows for comparative competition (Castro and Heller 2009). Benchmarking is an incentive-based system, where efficiency is the goal and a yearly assessment is carried out of all water service providers. In

Denmark, this is, e.g., done by the Danish water and wastewater association (DANVA) who found that between 1997 and 2006 water consumption fell 18.5%, but also noted that the CO<sub>2</sub> emission in the business was high and could be reduced by 20% (Lauesen 2011). It can thus identify areas for improvement. Some aspects of the benchmarking process are mandatory, as it allows for a comparison of the utilities' performances, whilst others dealing with operation costs and technical issues are voluntary. However, the optimization goals identified through benchmarking can also be too constricting and lacks contextual considerations for the individual utility services. Through these benchmarking reports, DANVA simultaneously reviews performances, encourage further improvements, and share experiences and knowledge between the firms. As each company's efficiency is compared, the benchmarking creates a form of competition between them. Although it is not a direct market force, Michael Rouse argues that this surrogate assures performance improvements (Castro and Heller 2009). However, benchmarking is not exclusively a public sector method, but is instead a voluntary option for companies to optimize efficiency and, as Rouse points out, a way of mitigating the issues of a monopolized water market.

The knowledge sharing aspect of benchmarking is similar to what American Water wished to do through their involvement with both the EPA and various trade groups. However, in the US this is purely a voluntary approach and thus little data on e.g. leaked water was gathered nationally. Only a few years ago did auditing become mandatory in California (Kunkel 2015). In the case of West Virginia, price setting is another example of a governmental intervention in a natural monopoly to curb price hikes. Both Denmark and the US rely on a cost recovery principle in their management approaches, i.e. that the costs of the services cannot outweigh the profits. Though the American Water corporation profited from a reasonable rate of returns, in Denmark, the existence of a break-even principle means that water prices only "covered the costs of water protection, catchment, treatment, and distribution" (Guerrini et al. 2015) and it is, therefore, illegal to profit from the service. Although American Water does make a point of their profits being reinvested in their water services, Our Water WV disagreed with that and saw their high rates as an expression of corporate greed. This contention is avoided in the Danish system as the rates are always set to what it costs to provide the service, without a consideration for making a profit. Pricing setting is also used in Denmark in order to incentivize businesses to heighten efficiency in their operation. The Danish system thus operates from a non-profit principle, even with pricing market mechanisms. As the break-even principle is connected with a national optimization strategy, this is one of the existing principles that the McKinsey & Co. report suggests changing. This would mean a

fundamental change in the governance approach to the sector, as it would allow owners to make a profit from the water management.

Nevertheless, in Denmark, private participation in water services is a long-established practice, though this participation is not the same as a full privatization. Most utilities are either owned by the municipality or cooperatives, which are co-owned directly by the users (Lauesen 2011). A 2007 reform of the water laws, the Water Sector Law, dictated the corporatization of the municipal utilities, e.g. by creating limited companies or publicly owned enterprises. This created a form of hybrid organizations, as they are owned by the public but managed like a private company. Michael Rouse (Castro and Heller 2009) argues that publicly held utility operations allow for the politicization of an operational issue and that there is a lack of separation between the policy and delivery aspects of the water services. The corporatization of the municipal utilities allows for a separation between the operation of the service and the authority and policy aspects within it. By creating this separation, there is also assured a clear focus on responsibilities, objectives and a transparency of the process seeing as there must be corresponding separate accountability for the performance requirements and monitoring. The utility company thus operates from a market place and through market mechanisms. The Water Sector Law was enacted in order to achieve a potential 1 billion DKK in savings through efficiency improvements and a greater competitive approach to the water utility companies (Lauesen 2011). Though this is similar to the relationship between private water companies and their local municipal contractors, there is a conditional stipulation added here, which is that a part of the board of the publicly owned enterprise must be elected through the municipal elections. The city officials, therefore, sit on the board with employee representatives and are thus accountable to their voters, who are simultaneously the customers of the utility. The dual citizen/customer role previously examined is very clear in this instance. Whereas the American Water customers had no direct impact on the company's practices, Danish customers have the option to elect their representatives to fulfill both a political and business role. Lauesen (2011) argues that the benefits of such a system are best illustrated in instances where privatized water systems fail, due to inefficiencies and high costs, and the water services are re-municipalized by the public. The customers can, in this case, therefore also be seen as the owners of the utility company, since the city officials on the board are only representatives of their electorate, and as such more able to influence the company's practices. Although this still does not allow for customer choice, as is possible in other market sectors, it does allow for a citizen oversight where the 'choice' of water company practices is enacted through a political mechanism.

However, this political presence on the boards also presents some problems. The McKinsey & Co. report noted that this means that there is a consequent lack of professional know-how when it comes to the management in the water utilities and a lack of proper leadership of the company (Svandborg and Kjeldtoft 2016). This presents a valid critique of the management approach. Correspondingly, a spokesperson for the national association for the municipalities welcomed an inclusion of experts on the boards in order to heighten the expertise of the board – but this would be as a supplementary inclusion and not as a replacement of the current political presence. An inclusion of experts could further create a more stable continuity of the boards as they would, most likely, not be replaced at the same intervals that politically assigned members would be. The inclusion of the politicians, nevertheless, ensures a citizen representation and gives a local insight from the communities. Both Rouse (Castro & Heller 2009) and Sørensen (2010) also points towards a politicization of the issue. Sørensen notes that politicians “may use their influence in public utilities to promote employment or support local suppliers” and thus their conduct would not be the optimal strategy for the business, but only for their own agenda. Although they are not seeking profits, their incentives are based on their own political future. This could lead to politically motivated business choices – Rouse gives the example of interfering with staffing to create higher employment (Castro & Heller 2009) – but the separation of policy and delivery ensures that operational efficiency is also taken into consideration. Whereas American Water’s practices were not an expression of local municipal governance values, there is a direct representation of the political policy in the Danish case. Consequently, this would mean that any shifts of power in the political sphere could create unstable shifts for the private water utilities, but since municipal plans are created on a twelve-year basis, as well as regularly updated every four years, there is a standard of reliability presented for the companies. Similarly, because of this hybrid status, Lauesen (2011) argues that these utilities have a larger degree of responsibility due to their political power and thus are more regulated than normal private companies.

Furthermore, whereas the Danish market is heavily decentralized, the US is more centralized. In the case of West Virginia, American Water has, throughout two decades, expanded and merged many of the smaller local water services, an expansion which the opposition group Our Water WV argue contributed to the scale of the chemical spill (Caitlin 2014). Pekka Pietilä et al. (Castro & Heller 2009) argue that the decentralization of the Danish system – as well as the Nordic countries in general – is due to the high amount of groundwater sources and is, therefore, less damaging to the environments where the water is extracted. This also means that the local water

supplies only service the communities close to it, and if any contamination of the water should occur, only the local communities would be affected by it. Furthermore, the decentralized structure allows for more competition between the smaller utilities – i.e. through benchmarking. However, although American Water limits the local competition, the state subsidiary status does allow for a competitive structure. The West Virginia company may not have a neighboring utility for comparative competition, but they are competing with other state subsidiaries for investments from the parent company. This is a different mechanism, as it is not used by the customers as an expression of quality, but as a focus on the efficiency and profit maximization potential of the specific company. American Water West Virginia, therefore, have to illustrate that they have a more lucrative business than their neighboring Pennsylvania American Water company, in order to attract investments. However, this largely incentivizes the businesses to create profits and not to perform services adequately and, although there was competition in the initial contracting with the local municipalities, there is little possibility for the consumers to influence or incentivize them to improve services. However, Rouse points out that too small and decentralized systems are not possible, as they need to reach a certain size of customers to be financially viable. On the other hand, Pietilä et al. note that a centralization move in an already decentralized system would be expensive due to new infrastructure needs – although Rouse notes several successful examples from England, Australia, and the Netherlands (Castro & Heller 2009). As the municipalities are centralized more and more in Denmark – moving from 271 smaller municipalities to 98 larger ones in 2007 – it correspondingly created more centralized management for the water services (Lauesen 2011). However, due to the simultaneous new Water Sector Law, the split meant that although the municipality may be the owners, the water services are divided among a number of water treatment facilities. The city of Aalborg has around a dozen treatment plants, whilst Charleston in West Virginia does not have even half of that. From a governance perspective, on the other hand, Denmark is more centralized, seeing as national laws create a common policy for the utilities. In the US, their state system means that the regulations and practices vary a lot from state to state, and there is a small federal role for oversight, the Clean Water Act is an example. A centralized system can also mean a lesser level of responsibility for the local authorities, but this can be mitigated by the type of shareholder status that the municipality has in Denmark (Castro and Heller 2009: 142). Nonetheless, there is a move towards more centralization in the Danish market, as showcased by the Water Sector Law from 2007 as it created a centralized state agency to oversee benchmarking efforts (Sørensen 2010). Similarly, a new company, Novafos, recently took over water and

wastewater services from nine municipalities (DANVA 2017). The company is still owned by the nine municipalities and the water supplied to the customers is still localized in the municipalities – e.g. the price setting is not influenced by neighboring municipalities and the water comes from the same plants. The centralization is meant to allow for more efficiency and a pooling of resources, experiences, and expertise. This is still a new endeavor that is untested, but it hints at the future for a decentralized Danish system – though with localized controls.

On the other hand, the governmental oversight has other consequences, e.g. a high water price consisting of taxes and environmental levies. Denmark has the most expensive water in the world, with the four highest priced city water services being Danish (IWA 2016). In 2011, the total average water cycle charges for a consumption of 100 m<sup>3</sup> was only \$244.02 in the US compared to \$839.08 for the Danish services (IWA 2012). Looking only at the average drinking water charges, Denmark is still double that of the US with \$318.01 to \$137.23. However, it should be noted that the price range of US cities differs as well – e.g. Washington D.C. has a total drinking water charge of \$287.8, whilst Miami's is \$51.60 – whereas the Danish differences are slighter – with Aalborg at \$348.08 and Odense at \$285.27. This illustrates a more internal stability in the Danish system, which provides a consistently high quality in all parts of the country. However, this is most likely a result of the fundamental different structure in the US, where federalism allows for different state laws and practices on the subject. Comparatively, there has been a more coherent national policy in Denmark and a correspondingly smaller price range. The Minister of Energy, Utilities, and Climate Lars Christian Lilleholt argued from an affordability perspective when considering the McKinsey & Co. report (Vibjerg and Pihl-Andersen 2016). He noted that if privatization can create lower costs for the consumers, then it is his responsibility to work towards it. Though, as previously mentioned, privatization has often lead to higher costs instead. Furthermore, a large part of the water price in Denmark is due to taxes and added tariffs, and these would not disappear with privatization. The consumers are skeptical of privatization all the same. According to a recent poll, 87% of those asked were against a sale, with 10% supporting such a change – but only if the buyers are Danish investors, such as pension funds (Weirup 2016). Without this stipulation, only three out of a thousand were positive of a sale. Furthermore, the process of the report itself was heavily criticized as there was a lack of transparency. Bent Greve, professor of Social Sciences at the University of Roskilde, argues that this makes an informed debate on the issues difficult and implies that the government does not have proper argumentation for their privatization strategies (Mogensen 2016). A caller similarly dismissed Lilleholt's reasoning by noting that he was treating the public as

consumers, not citizens, thus directly enacting Sagoff's conceptualization. The director of the Danish Waterworks Allan Weirup argues that the societal importance of the water sector outweighs any possible financial gains from a sale – gains that would only be beneficial in the short term anyway. Kristian Weise (2017), director of the think-tank Cevea, similarly sees privatization as a fundamentally wrong policy for Denmark. He emphasizes the quality of the Danish system and the fact that it is built on citizen's trust and sense of community, which a competitive private structure would destroy in order to maximize profits. In his view, the consumers would ultimately pay more in order to secure a profit for the company and this price hike would not result in better service. In the case of West Virginia, this argument was echoed by Our Water WV. The price hikes requested by American Water West Virginia were not earmarked for infrastructural improvements or other services, but instead simply a self-evident aspect of their contract for a reasonable rate of return. But even disregarding the reality of the possible savings from a privatization, both Weise and Weirup prioritize the societal usefulness of the sector over the affordability of the water. Weirup, for example, notes that the privatization of the water sector would threaten the security of supply (Mogensen 2016). He gives the example of the privatization of phone services to illustrate that consumers farther from the cities are receiving worsening services or no coverage at all and argues that the same could happen through the privatization of water. However, in this case, the special status of water as a human right and public good changes this analogy. It would, therefore, be highly unlikely that a privatization process would result in some parts of the country or some specific households getting no water service, but the quality of it is not guaranteed in the same way.

The quality and expertise of the Danish water sector have created a high export possibility and just between 2014 and 2015 the Danish water sector's exports to the US rose by 24% (Svansø 2017). This is, in part, due to the joint Water Vision plan with cooperation from DANVA, Danish Industry, Danish Environmental Technology and the Environmental ministry (Vand Topmøde 2015). This plan aims to make Denmark a world leader in sustainable and efficient water solutions, e.g. through creating a global platform for Danish companies to present their solutions. One such opportunity was the World Water Day conference in the White House in 2016 (Bærentzen 2016). Here, Danish delegates were invited as one of only ten exhibitors – and the only non-American business – to present solutions to the US water crisis and improvements to a troubled system. A specific goal of the conference was to reduce the US water consumption by 33% and Danish technology could help with that. As was also noted by American Water, water conservation is both an issue of consumer behavior and optimal water uses. In 2010, Denmark had an average water

consumption of 138 liters per capita per day whereas the US had 378 (IWA 2012). However, this is largely due to a large industrial consumption, which Denmark does not have. Looking only at households and small businesses, the numbers are 111 L/capita/day for Denmark and 138 for the US. Denmark's domestic percentage of the total freshwater use is thus 58% to the US's 13% (Gleick 2014). There is a sizeable possibility for conservation in these areas. Furthermore, in the US, non-revenue water (NRW) – i.e. water pumped from the water works that does not reach the consumers but is instead lost to leaks – are high, and this is an area where Denmark is specifically accomplished. The NRW in Denmark is around 7.8% of all water, but in some places, this number is as low as 1% (Miljøstyrelsen n.d.). This low water waste is ensured by a state tariff on any NRW above 10%, which was introduced in 1994 and has since created an incentive for water works to minimize leakages and optimize their delivery. In the US, on the other hand, the NRW often reaches over 20% (Kunkel 2017). As noted, the NRW for the Kanawha Valley District reached 45% in some months (Smith & Jasset 2015). Traditionally, the data on NRW in the US is lacking, as there was little auditing of the lost water and revenues before 2009, but since then, droughts and sustainability concerns have improved the records and allowed for a better improvement within the sector. Although the federal government has standards for the quality of water, there are no demands on the efficiency of the water management as there is in Denmark. However, though there are no tariffs on the NRW, it still represents an economic loss for the water utility companies and, therefore, still an incentive for lowering their water waste. Yet, replacing infrastructure is a large part of this and the high costs may outweigh the possible gains from a lower NRW. However, infrastructural improvements are not the only options. California implemented a statewide water loss management program in 2015 (Kunkel 2017). The program focuses on better auditing, which will amount to localized, system-specific reduction targets through benchmarking over a 7-year period. California is a state that has seen several years of drought and has a vital need for improvements in their water sector, e.g. through a more optimal and sustainable use of the groundwater resources in the state – something that Denmark can help with. Whereas Denmark almost exclusively uses groundwater, the US is more equally split between surface and groundwater use (IWA 2012). Pietilä et al. (Castro & Heller 2009) note that groundwater use means the source is less vulnerable to contaminants and is already cleaner than surface water, which thus means fewer chemicals are needed in the water treatment. On the other hand, groundwater extraction is more expensive than surface use. The Danish Water Vision sees California as an obvious market for

Danish consultancy and technological exports and an essential step in securing Denmark's global leadership role in the water sector (Svansø 2017).

All in all, whilst there are similarities between the Danish and US water systems, there are more divergences. The most essential difference is a strong perception of the Danish water utilities as a common good, thus relying on an ethical framework and large role for state actors. Although there is a heavy involvement from the municipality, there is thus an equal involvement from the private sector and the utility is therefore operated according to market principles, i.e. through the corporatization of the utilities. Although the prices for water in Denmark are high, these are representative of a high-quality water system as well. The Danish expertise in the water sector further means that countries' like the US are looking to Denmark for technological and management improvements.

## 6.2 The State of Water Governance

Though the West Virginian case examined in this thesis could be inferred as an indicator of the water privatization phenomenon in the US, it also brings forth questions of future implications of water rights and water governance at the national level. In particular, as the case is a current one, it also highlights the ongoing debate on whether the inclusion of private participation in water management is the solution for the US' lack of federal funding and aging water infrastructure, or if public ownership and management of the water services would be better suited for the country.

The case for private participation is not merely a case about public rights versus private entities gaining control over public resources. The country is in a situation where there are multiple governmental gaps in water management, e.g. the issue of funding that is neither being fulfilled by the states or the federal government. The American Society of Civil Engineers gave the country's water infrastructure a D grade, meaning that there are multiple areas of their infrastructure that are severely lacking. An American Water Works Association report expands upon this grading by adding that the infrastructure is so outdated, that some of the underground pipes still being used date all the way back to the 19th century (Law and Public Policy North America 2015). The report also references a statistic from the Center for Neighborhood Technology in Chicago that estimates the number of water wastage in the country to be approximately 6 billion gallons a day. There is, therefore, an incredible need for improvements on America's water infrastructure, and this is where the private parties argue for their presence in the processes to do so. As the report indicates, the cost of repairing and restoring the current water infrastructure in the country could cost up to \$1 trillion

over the next 25 years, and in 2050 they estimate that it could cost the country around \$30 billion annually. Much like American Water argued in their materials, the report contends that allowing private participation would be beneficial for the country, as they could help shoulder this financial burden or even possibly supply a sizable amount of the financial requirements needed. Mindy Fettermen (2016) notes that the federal government is spending less on governmental funds and grants. She references a Congressional Budget Office report that shows that the federal government is spending less of their capital on federal grants, as well as construction and rehabilitation projects for water utilities. Moreover, the report highlights that “Capital spending by state and local governments hit \$33 billion in 2014, down 23 percent from \$42.7 billion in 2009, in inflation-adjusted numbers. And federal spending on grants and loans fell to \$3.4 billion in 2014, down 35 percent from \$5.3 billion in 2011” (Fettermen 2016). A 35% decline over the course of only three years perfectly illustrates how the governments are not prioritizing water infrastructure in their general financial strategies. Furthermore, Congress has changed from providing federal grants to local communities – that contributed the provision of funding up to 75% for improvements to water infrastructure – to giving out loans instead (Law and Public Policy North America 2015). This change removed any economic responsibility from the federal government and forced the local communities to carry 100 percent of the responsibility for any costs to their water governance, as they are by law required to repay the loans. Consequently, the result of such a change is that some cities could not afford to take out loans, or were already in debt due to previous loans, which in turn did not allow them to improve their water infrastructure and thus could not prevent water crises. Local communities are not able to receive the funding they need and, as a 2015 survey by the U.S. Conference of Mayors shows, the underinvestment in infrastructure is the number one concern for the majority of the mayors of the country (Fettermen 2016). As such, there is a need for a different revenue stream of funding for local communities to both improve their aging water infrastructure, as well as the operation and management of their water systems and this is a role private actors could fulfill. The lack of public funding for infrastructure projects is the overwhelming reasoning behind state and local governments seeking out private companies assistance instead of federal help. However, as the West Virginia case showcased, there is still a significant amount of public opposition against any form of private inclusion in water governance. Janet Kavinoky, an executive director of transportation and infrastructure at the U.S Chamber of Commerce, noted that the difficulty in convincing the public that water management is a costly business is due to the public’s inability to connect the idea of water being a basic public good and the fact that the management of

water sources requires some form of revenue stream to be able to be operationalized (Law and Public Policy North America 2015), which is similar to the argument made by the American Water and what they attempted to communicate to their customers.

Although re-municipalization has gained traction in the past years, there are still current trends of privatization that indicate that the future might include a larger presence of private participation in US water governance. The Reason Foundation's 2016 Annual Privatization report highlights many of the steps being taken in the direction of privatization in the US, especially on the state and local levels, where private participation is becoming more normalized due to the need for financial assistance in governance (Stuart & Gilroy 2016). On the federal level, legislations like the bipartisan Water Resources Reform and Development Act, signed into law in 2014 by Obama, show that public-private partnerships are becoming an easier way for the federal government to gain the financial requirements needed for water projects from an external source. Moreover, this law could also indicate why the federal government is spending less capital money on water infrastructure, as they are trying to secure another way of gaining the capital through private inclusion. There has definitely been an increase in private participation in water management, as seen by the increase in the water/wastewater outsourcing market – which the report notes have reached a \$2.2 billion in estimation, a 5% increase from its estimation in 2014. However, this statistic, which was estimated by the Public Works Financial annual water partnership survey, only includes four major private water companies (Severn Trent, Suez North America, CH2M HILL, and Veolia Water North America), and not American Water, or many of the other smaller water companies. The estimated number might, therefore, be assumed to be much higher than the one reported. Either way, it does illustrate the rising trend of private participation, which is occurring more and more on the state and local levels. A reason for such an increase in the amount of private inclusion could be due to the changes made on a state level as well. For example, in 2015 the state of New Jersey signed a bill into law – the Water Infrastructure Protection Act – which allows municipalities in the state to either sell or lease their water services to private entities without including the public's position on the case. The state law previously requested that there be a public referendum on any privatization elements brought up in water governance, however, this bill bypasses the public entirely, thereby making it easier for municipalities to release control over their water systems. Many of the public opposition groups, like Corporate Accountability International, have argued that this is an attempt by the governments to push for privatization, as they know that private inclusion is very unpopular with the public (Erbentraut 2015). Food & Water Watch also

argued that bills, such as these, are in fact against the interest of the public, as they, by definition, exclude public input (Dovey 2015). Whereas the public opposition in West Virginia was seeking a higher level of public accountability for their water services, this bill diminishes public participation in the debate. Similarly, in Stockton in California, the privatization process in the early 2000s led to public opposition and they attempted to force the local government to require a referendum on the issue (Kaufman & Snitow 2004). They believed that water governance should be in public hands and did not trust the politicians to uphold their interests but instead saw the governmental process as designed to bypass the citizens' wishes, just as the bill in New Jersey does. Although they were unable to stop the privatization of their water supply, the contract was terminated after only three years as the initial privatization process was deemed illegal due to a missing environmental report (Food & Water Watch 2006). However, these cases illustrate the difficult situation many state and local municipalities are placed in, as neither the federal government can provide funding – due to costs in capital spending – nor can they incorporate the private sector in the operation and management of their water systems – due to public opposition –, which leaves them with minimal opportunities to improve their water services. They can, therefore, either continue with their current status quo, or get the capital by cutting funding for other governmental services, or they can raise taxation for their local citizens, however, that might not be received well by the public. Laws such as the New Jersey one, therefore, gives them some leeway into taking matters into their own hand for the greater good of the community, as the proponents of such laws argue.

Critics of privatization, and private participation without a public referendum, instead claim that public-private partnerships are not the only options local municipalities have. As the analysis showed, ownership and control of water services are the key themes within the public opposition debates. Therefore, any possible water management proposal argued for by civil groups tends to take root in public control. Public-public partnerships are often brought up in these instances. As Mary Grant (2013) states, such partnerships actually give local municipalities another outlet, in which they can gain some financial help while still maintaining their public control over their water systems. Public-public partnerships allow two or more municipalities to centralize their water management and pool their resources. The Danish Novafos is also an example of this practice (DANVA 2017). Grant also notes that public-public partnerships are actually more prevalent than public-private partnerships in the US, and public sector collaborations have increased in the last couple of years, whereas public-private partnerships have declined. However, proponents of public-private partnerships argue that their approach is more beneficial to municipalities than the public-

public partnerships. Adam Millsap (2016), for example, presents the argument that since corporations tend to operate in different jurisdictions, they have more expertise and experiences – an accumulation of knowledge – that they can then utilize to come up with management and operation approaches that best fit the local communities they operate in. Moreover, in alignment with what American Water argued in the analysis, private participation actually creates an incentive within water governance, as the companies controlling the water services have to show that they are fulfilling the job that was given to them. On the other hand, the long term contracts that are often awarded private actors can be said to limit this incentive as they are not at risk of not being renewed for the foreseeable future. Proponents of public-private partnership often reference San Antonio in Texas as a perfect example of the improvements private inclusion has had on the city's water governance. The city has set forth a 30-year public-private partnership, in which the control of financing, building, operation, and maintenance is given to a private team led by Abengoa Water USA and Bluewater Systems (Stuart & Gilroy 2016). This partnership has helped to improve the city's water infrastructure and increased its water supply intake as well and illustrates that privatization in itself is not necessarily a bad thing. However, as the decision-making and agreement process shows, transparency and public inclusion in the discussions were incorporated and utilized throughout, and thus the outcome produced had gone through changes added by all parties – public, private, and governmental actors. Comparatively, cases like West Virginia, where there is a lack of communication between the different parties, exemplify the opposite end of the private participation spectrum.

Moreover, Millsap posits that private inclusion depoliticizes water governance, as the control and ownership of the management of water services would be placed in private hands, thereby removing the responsibilities of the state to the private companies instead. This supports the arguments made by Sørensen (2010) and Rouse (Castro & Heller 2009). Millsap (2016) furthers this notion, by arguing that governmental ownership of water systems often carries a political dimension to it that private ownership does not, as politicians and governmental officials can base any water management decisions on political affiliation. For example, if governmental officials have elections coming up, they can decide to lower the billing rates of water, which in turn cuts some of the governmental funding for water governance and thus worsens the future of local communities' water services. Furthermore, many privatization proponents are critical of how public ownership is portrayed by the civil groups. William Shughart, for example, notes that proponents of governmental control of public water systems presume that "participants in the political sphere

aspire to promote the common good. In the conventional “public interest” view, public officials are portrayed as benevolent “public servants” who faithfully carry out the “will of the people” (2008). In the case of West Virginia, this was not the case and public servants were instead portrayed as negligent precisely because they did not act in the public interest. As such the ideal presented by the Our Water WV group is grounded in Shughart's conceptualization, but the case illustrates that this ideal is not always reality. In the same regard as Millsap, Shughart argues that it is the political dimensions of governance that negates any notion of such ideas. Instead, private actors are able to carry out the public interest without any political considerations.

Another point of contestation is the difference in the data and statistics produced by both public and private parties. Due to the decentralization of water governance, much of the data produced is heavily influenced by what aspects or areas of water governance are being examined (Dovey 2015). From the public side, statistics that illustrate a trend in re-municipalization and the public regaining control of their water services are often given salience and used to further their argument for public ownership, much like Mary Grant's (2013; 2015) papers have shown. However, from the private side, data that highlight a rise in public-private partnerships and private inclusion are given salience, as Public Citizen also emphasized (2001). For example, a Bluefield Research report noted that the private water market now serves around 15% of the US population, a number which they argue might grow significantly in the upcoming years (Stuart & Gilroy 2016). Comparatively, Grant (2015) presents a completely opposite image, as she argues that privately owned community water systems have been in decline for the past couple of years. This, therefore, furthers the contestation between public and private actors and also contributes with an amount of information bias on both sides that makes it harder to work through the contestation in the discourse.

All in all, current trends show that the US has incorporated the private sector in their water management, on both the federal and state level. However, this inclusion stems from the country's worsening water infrastructure as well as their financial lack of capital funding. Whereas proponents of privatization argue for a public-private partnership approach as a means of solving the two issues, public opposition advocate groups instead argue for public-public partnerships with the ownership and control only given to the public sector. The contestation within water governance discourse is therefore very much present, and any future considerations have to take these into account.

## 7. Conclusion

In conclusion, the examination of the corporate and civil actors conceptualization of water and water rights illustrates that the conceptualizations of water are not dichotomous nor solely used by one actor. Yet there is still a fundamental contestation between the ethical and market frameworks, namely the basic perspective on the ownership of the water resource and the role of private actors.

The case of West Virginia illustrated that the academic debates in the field, presented within the literature review, are also prevalent in the general public as represented by the corporate and civil actors. Although American Water enacted the ethical framework, they were still heavily based within the market framework. Nevertheless, their main argument was that profitable and sustainable business practices in water management are not mutually exclusive, but are instead complementary. Their interchangeable use of the two frames thus furthers this argumentation. However, one of the most prevalent arguments from the civil side was the need for public participation in the process. This was illustrated in the emphasis on the corporate accountability towards the citizens and the continuous assessment that water is a public good that should be under public control. Furthermore, they were not convinced by American Water's assertion that they can have in mind what's in the public interest as well as what is profitable. Instead, Our Water WV reinforced the cornerstone of the ethical framework, namely that private actors will always prioritize profits. Furthermore, the civil group drew into question how the state fulfilled their role as well. They saw the need for a strong legislature and state to oversee the private involvement, but when this was not present, had to step into this role themselves. The infrastructural challenges the water utilities face were used by both sides of the debate to further their argumentation. American Water noted that they were best equipped to deal with this issue, even if prices – which they emphasized were low – would have to go up. Our Water WV, on the other hand, saw this as an expression of profit maximization. Even if the rates were allowed to rise unchallenged, the company still would not invest in the infrastructure and the local community. However, public utilities struggled to gain funds from anywhere else as federal funding has declined over the last decades. The infrastructure challenge thus presents an issue for both public and private management. Furthermore, privatization debates are also heavily rooted in the question of ownership. Although American Water states that they do not own water, their lack of public transparency and accountability created contestation with the civil opposition. Private involvement would thus have to overcome these fears and mitigate the higher responsibility considered for water management, as they did in the case of San Antonio. However, as Rouse argues, private participation cannot be completely excluded from the process, and the importance is

in mitigating the different role divisions. The need for a more practical approach suggested by Bakker and Dilworth is thus reinforced as the actors need to overcome their fundamentally differing approaches. This could, e.g., be mitigated by a strong state authority, like there is in Denmark. However, the large municipal role in regards to water service can arguably lead to inexperienced boards and politicization of the treatment of water. Although the corporatization of the Danish service does involve the market, the system is governed by the community-based approach that emphasizes water as a common good.

Throughout this thesis, two fundamental points of contestation were identified in relation to private involvement in water management: the ownership and responsibilities of operating and providing a public service, and an inherent incompatibility between market profits and serving the public interest. Although other aspects of the frameworks may have coincided – e.g. a stewardship approach to management or a view of water as a human right – these aspects created an irreconcilable strain between the actors. As illustrated by other cases throughout the US this is a general trend.

## Bibliography

- Admin. (2014). ‘Welcome!’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/hello-world/>
- American Water (2015a). *Corporate Responsibility Report 2013-2014*. Retrieved from
- American Water (2015b). *2014 Annual Report*. Retrieved from
- American Water (2016). *2015 Annual Report*. Retrieved from
- American Water (2017). *2016 Annual Report*. Retrieved from
- Araral, E. & Wang, Y. (2003). ‘Water Governance 2.0’. *Water Resources Management*, 27. Pp. 3945-3957.
- Arnold, C.A. (2009). ‘Water privatization trends in the United States: human rights, national security, and public ownership’. *William and Mary Environmental Law and Policy Review*.
- Bakker, K. (2007). ‘The “Commons” Versus the “Commodity”: Alter-Globalization, Anti-Privatization and the Human Right to Water in the Global South’. *Privatization*. Pp. 38-63.
- (2010). *Privatizing water*. Ithaca: Cornell University Press.
- (2008). ‘The Ambiguity of Community: Debating Alternatives to Private- Sector Provision of Urban Water Supply’. *Water Alternatives*, 1(2). Pp. 236-252.
- (2014). ‘The Business of Water: Market Environmentalism in the Water Sector.’ *Annual Review of Environment and Resources*, 39(1). Pp. 469-494.
- Bill. (2014a). ‘WV American Water says “Here’s your \$10.29 credit, now go away”’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/wv-american-water-says-heres-your-10-29-credit-now-go-away/>
- Bill. (2014b). ‘Keystone Cops routine continues to play out in water crisis’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/keystone-cops-routine-continues-to-play-out-in-water-crisis/>
- Bill. (2014c). ‘Do you think people trust WV American’s water?’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/do-you-think-people-trust-wv-americans-water/>
- Bill. (2014d). ‘WV American Water: Progress or PR?’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/wv-american-water-progress-or-pr/>
- Bill. (2014e). ‘Governor’s proposed water bill is a good start, but not nearly good enough’ [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/governors-proposed-water-bill-is-a-good-start-but-not-nearly-good-enough/>
- Bluefield Research. (2015). *Report Highlights: Private Water Utilities 2015*.
- Brook Cowen, P. & Cowen, T. (1998). ‘Deregulated Private Water Supply: A Policy Option for Developing Countries’. *Cato Journal*, 18(1). Pp. 21-41.
- Brown, A. (2015). ‘Governor appoints new PSC commissioner’. *The Charleston Gazette-Mail*. Retrieved from <http://www.wvgazettemail.com/article/20151009/GZ01/151009485/1101>
- Bryman, A. (2012). *Social Research Methods*. New York: Oxford University Press.
- Bærentzen, S. (2016). ‘Derfor viser USA interesse for danske vandløsninger’. *Vandposten*, 204.
- Caitlin. (2014). ‘What is the relative cost of WVAW water?’ Retrieved from <http://archive.ourwaterwv.org/what-is-the-relative-cost-of-wvaw-water/>
- Castro, J. E. & Heller, L. (2009). *Water and Sanitation Services: Public Policy and Management*. London: Earthscan

- Castro, J.E. (2007a). 'Poverty and citizenship: Sociological perspectives on water services and public-private participation'. *Geoforum*, 38. Pp. 756-771.
- Castro, J.E. (2007b). 'Water Governance in the twentieth-first century'. *Campinas*, 10. Pp. 97-118.
- Cathy. (2015). 'WV American Water wants to continue the one-sided conversation' [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/wv-american-water-wants-to-continue-the-one-sided-conversation/>
- Cathy. (2014a). 'Do we owe American Water, or vice versa?' [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/do-we-owe-american-water-or-vice-versa/>
- Cathy. (2014b). 'American Water Works invests in shareholders, not infrastructure'. [Blog Post] Retrieved from <http://archive.ourwaterwv.org/american-water-works-invests-in-shareholders-not-infrastructure/>
- Cathy. (2014c). 'WV American Water violates PSC order and continues to "keep the public in the dark"' [Blog Post]. Retrieved from <http://archive.ourwaterwv.org/wv-american-water-violates-psc-order-and-continues-to-keep-the-public-in-the-dark/>
- Chemical Safety Board (2016). 'CSB releases final report' Retrieved from <http://www.csb.gov/csb-releases-final-report-into-2014-freedom-industries-mass-contamination-of-charleston-west-virginia-drinking-water-final-report-notes-shortcomings-in-communicating-risks-to-public-and-lack-of-chemical-tank-maintenance-requirements-/>
- Crain, W. M., & Zardkoohi, A. (1978). 'A Test of the Property-Rights Theory of the Firm: Water Utilities in the United States'. *The Journal of Law and Economics*, 21(2). Pp. 395-408.
- DANVA. (2017). 'Novafos er nyt vandselskab i ni kommuner' [blog post] Retrieved from <https://www.danva.dk/nyheder/2017/novafos-er-nyt-vandselskab-i-ni-kommuner/>
- DeSimone, L.A., McMahon, P.B., and Rosen, M.R.. (2014). *The quality of our Nation's waters—Water quality in Principal Aquifers of the United States, 1991–2010*. Retrieved from <https://pubs.usgs.gov/circ/1360/>
- Dilworth, R. (2007). 'Privatization, the World Water Crisis, and the Social Contract'. *Political Science & Politics*, 40(1). Pp. 49-54.
- Dovey, R. (2015) '4 Things to Know Before Your Water is Privatized'. *Next City*. Retrieved from <https://nextcity.org/daily/entry/city-water-private-utilities>
- Ekman, J. & Amnå, E. (2012). 'Political Participation and Civic Engagement: Towards A New Typology'. *Human Affairs*, 22. Pp. 283-300.
- Enroth, H. (2011). 'Policy Network Theory'. *The SAGE Handbook of Governance*, pp. 19-35.
- Entman, R. M. (1993). 'Framing: Toward Clarification of a Fractured Paradigm'. *Journal of Communication*, 43(4), pp. 51-58.
- Erbentraut, J. (2015) 'There's A Secret War Being Waged Over Your Drinking Water'. *Huffington Post*. Retrieved from [http://www.huffingtonpost.com/entry/water-privatization-why-you-should-care\\_us\\_5671cb10e4b0648fe301fab2](http://www.huffingtonpost.com/entry/water-privatization-why-you-should-care_us_5671cb10e4b0648fe301fab2)
- Fetterman, M. (2016). *As Water Infrastructure Crumbles, Many Cities Seek Private Help*. Retrieved from <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/03/30/as-water-infrastructure-crumbles-many-cities-seek-private-help>
- Food & Water Watch (2006). 'Stockton, CA Regains Control of its Water'. Retrieved from <https://www.foodandwaterwatch.org/impact/stockton-ca-regains-control-its-water>

- Food & Water Watch (n.d.). *Corporate Control of Water*. Retrieved from <https://www.foodandwaterwatch.org/problems/corporate-control-water>
- Food & Water Watch. (2016). ‘The State of the Public Water in the United States’. Retrieved from <https://www.foodandwaterwatch.org/insight/state-public-water-united-states>
- Garland, M. (2017). ‘WV PSC accepts water crisis settlement, closes investigation’. Retrieved from <http://www.wvgazettemail.com/water-crisis/20170616/wv-psc-accepts-water-crisis-settlement-closes-investigation>
- Gilliom, R.J. et. al.. (2007). *Pesticides in the Nation’s Streams and Ground Water, 1992–2001*. Retrieved from <https://pubs.usgs.gov/circ/2005/1291/>
- Gleick, P.H. (2014). *The World’s Water. Volume 8: The Biennial Report on Freshwater Resources*. Washington, DC: Island Press.
- Goldman, M. (2007). ‘How “Water for All!” policy became hegemonic: The power of the World Bank and its transnational policy networks’. *Geoforum* 38. Pp. 786-800.
- Gonzalez, M. & Yanes, M. (2015). *The Last Drop: The Politics of Water*. London: Pluto Press.
- Grant, M. (2013). ‘Water Privatization Overview’. *Journal of Law in Society*, 14. Pp. 167-199.
- Grant, M. (2015). ‘Water in public hands: Remunicipalisation in the United States’. In S. Kishimoto & D. Gendall (Eds.) *Our Public Water Future*. Amsterdam: Transnational Institute.
- Groenfeldt, D. & Schmidt, J. (2013). ‘Ethics and water governance’. *Ecology and Society*, 18(1).
- Grusky, S. (2001). ‘Privatization Tidal Wave’. *Multinational Monitor*. Pp. 14-19.
- Guerrini, A., Romano, G., Leardini, C., & Martini, M. (2015). ‘The Effects of Operational and Environmental Variables on Efficiency of Danish Water and Wastewater Utilities’. *Water*. 7. pp. 3263-3282.
- Hall, P. (2006). ‘Danish Capitalism in Comparative Perspective’. In Campell, J.L. & Pedersen, O. (Eds.) *National Identity and the Varieties of Capitalism*.
- Harvey, D. (2003). *New Imperialism*. London: Oxford University Press.
- Hein, G. (1991). “Constructivist Learning Theory”. *Institute for Inquiry*. Retrieved from: <https://www.exploratorium.edu/education/ifi/constructivist-learning>
- Hoffman, J. (2008). ‘The Proposition’s rebuttal statement’ *The Economist debate series: The Value of H2O*.
- Hooghe, L. & Marks, G. (2003). ‘Unraveling the central state, but how?: Types of multi-level governance’. *American Political Science Review*, 97(2). Pp. 233–243.
- ICMA. (n.d.). Share of local governments that have taken actions to reduce or manage water usage in the United States as of 2015. In *Statista – The Statistics Portal*. Retrieved from <https://www.statista.com/statistics/650599/water-use-reduction-or-management-actions-taken-by-local-us-governments/>
- Ireland, K. (2016). ‘Op-ed: PSC should not drop general investigation of water crisis response’ [Blog Post]. Retrieved from <http://ourwaterwv.org/blog/2016/1/24/op-ed-psc-should-not-drop-general-investigation-of-water-crisis-response>
- IWA (2016). *International Statistics for Water Services 2016*. Retrieved from <http://www.iwanetwork.org/publications/international-statistics-for-water-services-2016/>
- IWA (2012). *International Statistics for Water Services*. Retrieved from <http://www.iwanetwork.org/publications/international-statistics-for-water-services-2012/>

- Kaufman, D. & Snitow, A. (2004). *Thirst*. [Motion picture]. United States: Bullfrog Films.
- Kunkel, G. (2017). 'A Call to Action for Non-Revenue Water'. *Water Finance & Management*. Retrieved from <https://waterfm.com/a-call-to-action/>
- Lauesen, L. M. (2011). 'CSR in publicly owned enterprises: opportunities and barriers'. *Social Responsibility Journal*, 7(4). pp. 558-577.
- Law, J. (1999). 'After ANT'. *The Sociological Review*, 46. Pp. 1-14.
- Law and Public Policy North America. (2015). *U.S. Needs \$1 Trillion in Water System Upgrades*. Retrieved from <http://knowledge.wharton.upenn.edu/article/americas-neglected-water-systems-face-a-reckoning/>
- Lebeau, K. (2017). 'Final report released on January 2014 MCHM chemical spill'. Retrieved from <http://www.wsaz.com/content/news/Final-report-released-on-January-2014-MCHM-chemical-spill--422004124.html>
- Lemos, M.C. & Agrawal, A. (2006). 'Environmental Governance'. *Annual Review of Environment and Resources*, 31(1). Pp. 297-325.
- Matten, D. & Crane, A. (2005). 'Corporate Citizenship: Toward An Extended Theoretical Conceptualization'. *Academy of Management Review*, 30(1). Pp. 166-179.
- McMullen, S. & Molling, D. (2015). 'Environmental Ethics, Economics, and Property Law'. In *Law and Social Economics* (pp. 21-40). Palgrave Macmillan US.
- Miljøstryrelsen (n.d.). 'Find frem til vandtabet'. Retrieved from <http://mst.dk/natur-vand/vand-i-hverdagen/vandtab/>
- Millsap, A. (2016). 'Privatizing Water Facilities Can Help Cash-Strapped Municipalities'. *Forbes*. Retrieved from <https://www.forbes.com/sites/adammillsap/2016/10/05/privatizing-water-facilities-can-help-cash-strapped-municipalities/#2324c7f74b5c>
- Mirosa, O., & Harris, L. M. (2011). 'Human Right to Water: Contemporary Challenges and Contours of a Global Debate'. *Antipode*, 44(3). Pp. 932-949.
- Mogensen, L.T. (2016). 'Privatisering af Vand (2)'. *Det Røde Felt*. [Audio post] Retrieved from <http://www.radio24syv.dk/programmer/det-roede-felt/14340332/privatisering-af-vand-2?start=0>
- Mollinga, P. (2008). 'Water, politics and development: Framing a political sociology of water resources management'. *Water Alternatives*, 1(1). Pp. 7-23.
- Murphy, M. (2014). 'West Virginia American Water has long history in Kanawha Valley' <http://www.wvgazettemail.com/News/Kanawha/201401260116>
- Newig, J. & Fritsch, O. (2008). 'Environmental Governance: Participatory, multi-level - and effective?', *UFZ Diskussionspapiere*, 15.
- OECD. (2011). *Water Governance in OECD countries a multi-level approach*.
- Orr, S. (2006). 'Values, preferences, and the citizen-consumer distinction in cost-benefit analysis'. *Politics, philosophy & economics*, 5(3). Pp. 377-400.
- Our Water WV (2015a). 'Press Release: Our Water Campaign Launches for Public Takeover of WV American Water's Kanawha Valley System'. Retrieved from <http://ourwaterwv.org/blog/2015/9/8/press-release-our-water-campaign-launches-for-public-takeover-of-wv-american-waters-kanawha-valley-system>

- Our Water WV (2015b). ‘Press Release: Community members speak out against WV American Water’s proposed 28% rate increase’ Retrieved from  
<http://ourwaterwv.org/blog/2015/10/26/press-release-community-members-speak-out-against-wv-american-waters-proposed-28-rate-increase>
- Our Water WV (2016a). ‘Op-ed: How do we make our water system safe?’ [Blog Post] Retrieved from <http://ourwaterwv.org/blog/2016/2/4/op-ed-how-do-we-make-our-water-system-safe>
- Our Water WV (2016b). ‘Advocates for a Safe Water System statement on 15.1% rate increase’ [Blog Post]. Retrieved from <http://ourwaterwv.org/blog/2016/2/25/advocates-for-a-safe-water-system-statement-on-151-rate-increase>
- Our Water WV (2016c) ‘Take action!’ [Blog Post]. Retrieved from  
<http://ourwaterwv.org/blog/2016/1/14/take-action-tell-public-service-commission-not-to-drop-their-investigation-of-wv-american-waters-response-to-the-freedom-spill>
- Our Water WV (n.d.-a) ‘Fact Sheet: West Virginia American Water’ Retrieved from  
<http://ourwaterwv.org/s/Our-Water-background.pdf>
- Our Water WV (n.d.-b) ‘We deserve a water system that is transparent, accountable and fair.’ Retrieved from <http://ourwaterwv.org/about/>
- Paavola, J., Gouldson, A. & Kluvánková-Oravská, T. (2009). ‘Interplay of Actors, Scales, Frameworks and Regimes in the Governance of Biodiversity’. *Environmental Policy and Governance*, 19. Pp. 148-158.
- Pahl-Wostl, C., Gupta, J., & Petry, D. (2008). ‘Governance and the Global Water System: A Theoretical Exploration’. *Global Governance*, 14(4). Pp. 419-435.
- Public Service Commission. (2016). ‘Memorandum’. Retrieved from  
<http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm?CaseActivityID=443005&NotType=%27WebDocket%27>
- Public Citizen (2001). *Water Privatization: A Broken Promise*. Retrieved from  
<https://www.citizen.org/sites/default/files/acf146.pdf>
- Public Citizen. (2003). *Top 10 Reasons to Oppose Water Privatization*. Retrieved from  
[https://www.citizen.org/sites/default/files/top\\_10\\_pdf.pdf](https://www.citizen.org/sites/default/files/top_10_pdf.pdf)
- Rogers, H. (2014). ‘Don’t Drink the Water: West Virginia After the Chemical Spill’ Retrieved from <http://www.rollingstone.com/culture/news/dont-drink-the-water-west-virginia-after-the-chemical-spill-20140312>
- Rogers, P., & Hall, A. W. (2003). *Effective water governance*. Stockholm: Global Water Partnership.
- Rubenstein, E.S. (2000). *The Untapped Potential of Water Privatization*. Hudson Institute Report.
- Sagoff, M. (2008). *The Economy of the Earth*. New York: Cambridge University Press.
- Salzman, J. (2006). ‘Thirst: A Short History of Drinking Water’. *Yale Journal of Law & the Humanities*.
- Senate Bill No. 373. (2014). Retrieved from  
[http://www.legis.state.wv.us/Bill\\_Status/bills\\_text.cfm?billdoc=SB373%20SUB2%20ENR.htm&yr=2014&sesstype=RS&i=373](http://www.legis.state.wv.us/Bill_Status/bills_text.cfm?billdoc=SB373%20SUB2%20ENR.htm&yr=2014&sesstype=RS&i=373)
- Sharp, L. & Richardson, T. (2001). ‘Reflections on Foucauldian Discourse Analysis in Planning and Environmental Research’. *Journal of Environmental Policy and Planning*, 3(3). Pp. 193-210.

- Shughart, W.F. II. (2008) "Public Choice." *The Concise Encyclopedia of Economics. Library of Economics and Liberty*. Retrieved from <http://www.econlib.org/library/Enc/PublicChoice.html>
- Smith, G. & Jasset, A. (2015). *West Virginia American Water Company and the case for Public Ownership and Operation*. Boston Action Research.
- Stuart, A. & Gilroy, L. (2016) "Local Government Privatization". *Annual Privatization Report 2016*. Retrieved from <http://reason.org/studies/show/apr-2016-local-privatization>
- Svandborg, R. & Kjeldtoft, S. (2016). 'McKinsey: Lad kommuner sælge forsyningsselskaber' *Information*.
- Svansø, V.L. (2017). 'Erhvervsministeren øjner dansk vandeventyr for milliarder i Californien', *Berlingske Business*. Retrieved from <http://www.business.dk/global/erhvervsministeren-oejner-dansk-vandeventyr-for-milliarder-i-californien>
- Sørensen, E. (2010). 'The Danish Water Sector Reform'. *Danish Institute of Governmental Research*.
- uwaterloo (2013). 'Tony Allan, Water Security and the Role of Trade, 2011' [video] Retrieved from <https://www.youtube.com/watch?v=pE9towQxE5M&t=3703s&list=WL&index=16>
- Vand Topmøde (2015). *Vand Vision 2015*. Retrieved from [https://www.danva.dk/media/1797/vandvision\\_2015\\_folder.pdf](https://www.danva.dk/media/1797/vandvision_2015_folder.pdf)
- Varghese, S. (2007). 'Privatizing U.S. Water'. *Institute for Agriculture and Trade Policy*.
- Vibjerg, T. & Pihl-Andersen, A. (2016). 'Fortrolig rapport: Der kan spares milliarder på vand- og varmeforsyningen', *Jyllands-Posten*.
- Weirup, A. (2016). 'Danskerne frygter privatisering af vandværker – og med god grund', *Jyllands-Posten*. Retrieved from <http://jyllands-posten.dk/debat/breve/ECE8921806/danskerne-frygter-privatisering-af-vandvaerker-og-med-god-grund/>
- Weise, K. (2017). 'Cevea: Nederlag for regeringen: Vand og varme ude af Finansministeriets hænder', *Altinget*. Retrieved from <http://www.altinget.dk/artikel/cevea-nederlag-for-regeringen-vand-og-varme-ude-af-finansministeriets-haender>
- Wescoat, J. L., Headington, L., & Theobald, R. (2007). 'Water and poverty in the United States'. *Geoforum*, 38(5). Pp. 801-814.
- World Water Assessment Programme (United Nations). (2003). *Water for People, Water for Life: A Joint Report by the Twenty-three UN Agencies Concerned with Freshwater*. Unesco.
- Worrell, R. & Appleby, M.C. (1999). 'Stewardship of Natural Resources: Definition, Ethical and Practical Aspects'. *Journal of Agricultural and Environmental Ethics*, 12. Pp. 263–277.
- wvamwater, (2013). 'The Water Treatment Process'. [Video file] Retrieved from <https://www.youtube.com/watch?v=TbQf1QZpRTQ>
- wvamwater, (2014). 'What's Beneath Your Feet – Whiteboard Video on Water Infrastructure'. [Video file] Retrieved from <https://www.youtube.com/watch?v=Fgalf9GWDNE&t=4s>