

WATER BEYOND THE MARKET



**LOTS CHARLOTTE
VICO GUILLAUME**

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VLERICK PROMOTER : PROF DR LEONARDO MEEUS

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Executive Summary

The following is a proposal for Sli Na Bande to use the collected information, research, results and recommendations in order to raise awareness on water privatisation and to go against the implementation of water as a commodity in Ireland or other parts of the world. Our goal is to highlight the injustices faced by the people at the hands of government, in Europe and across the world by executing a historical campaign analysis and mapping out the environment of different actors playing a role on water in Ireland particularly.

The two main parts of the report are: (1) a historical campaign analysis of water privatisation, which focuses on a global and European level, and (2) a mapped-out environment focusing on Ireland itself. The research starts with a global scope and then slowly narrows down to focus on a national, Irish level.

To introduce the topic, the paper first highlights the necessity of water for the survival of species around the globe. This is done by focusing on topics related to climate change, such as food insecurity, water scarcity, the amount of freshwater available, melting icecaps and changes in precipitation patterns.

The paper then transitions to a European perspective. The quality of water in Europe, the European directives and the regulatory framework of water utilities used by European countries are discussed. This leads to the historical campaign analysis, when the European movements against water privatisation fight for the recognition of water as a human right.

The historical campaign analysis is continued and extended by analyzing four other cases of water privatisation in other countries: the UK, Senegal, France and Bolivia. The historical campaign analysis puts its entire focus on the problem statement of this research: the privatisation of water.

The historical campaign analysis of water privatisation forms a bridge between the past, the present and the future by using the past Irish Water crisis, the current Bill aiming for public water ownership, and the future actions that will be undertaken for a referendum on water ownership. The referendum will show the implication of citizens and the importance of water as a public good instead of a commodity.

Following the historical campaign analysis on a global, European and national Irish level, the scope is entirely put on Ireland by mapping out the environment of the different actors impacting water such as the regulators, organisations, politicians, activists, citizens, media and academics.

The recommendations will be presented based on the results of this research. The paper hopes that these recommendations will ultimately enable the creation of an Irish hub, promoting an efficient cooperation of citizens, politicians and organisations fighting against the privatisation of water, through which common goals will be easier to achieve. The obtained results and recommendations can be replicated for future projects, such as the creation of a game board which schools could use to raise awareness about water, or school field trips at the facilities of Sli na Bande.

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Introduction

Water is the most abundant, yet valuable and important resource available on earth, for it is vital for all known forms of life. Three quarters of the Earth is water, yet, we live in times where drinkable water has become a scarce resource. It is estimated that every year, around 126 billion liters of water are lost due to water leakage, and this number keeps rising. Since the 1970s, as a result of the spread of neoliberalism – alleging that private companies and markets can operate all goods and resources better than governments – the idea of water as a commodity has become increasingly common (Agnew, 2016).

This way of thinking has led many countries to privatise their water services, with the strong support from international organisations, like the World Bank and the International Monetary Fund (IMF). Arguments are used such as: privatisation will increase the range of investments, and consumers will not waste water if they have to pay for it. In developing countries, privatisation of natural resources – not only water – often is a condition to securing a loan.

Ireland is no stranger to that process, as it already privatised some of its oil and gas. Ireland grouped water management powers, previously a local prerogative, under the responsibility of a single national entity, called ‘Irish Water’. Furthermore, it introduced water charges. This caused a strong public outrage among the usually passive Irish people. Street protests were organised and nonviolent resistance to the installation of water meters was coordinated, until water charges were repealed. Nevertheless, the path to privatisation of water in Ireland is still open, and the locals fear a return of privatisation plan on the table in the years to come.

As it already happened in other places, it is certain that the slightest possibility for private companies to get access to water management will be used by them at the fullest. As McGee remarks, “*companies proclaim water the next oil in a rush to turn resources into profit—Mammoth companies are trying to collect water that all life needs and charge for it as they would for other natural resources*” (McGee, 2014).

This paper starts with explaining the issue at stake by providing a general background on the issue, especially referring to movements that fight for water as a basic human right. Next, the paper will review the methodology used for the research.

Then, it will examine a historical campaign analysis around water, to learn from the lessons of the past, which will begin with an overview of the importance of water in Europe, and the actions undertaken by the European Union to protect its standards and quality. We will also use past and current events in other countries around the world to learn from them. Three countries and one city will be examined, i.e., Senegal, England, France and the city of Cochabamba in Bolivia. Each country has had different approaches towards privatisation, and many of these features can be learned from and will be summarized to analyze what lessons can be learned therefrom.

Following the historical campaign analysis, a study of the environment surrounding water in Ireland will be made. Starting with a background to the situation in Ireland, and the developments leading thereto, as well as some explanations on the legal framework, the actors at stake, and the water infrastructure used in the country.

Finally, results from the research made will be detailed, and recommendations will be provided to Sli na Bande.

Problem Statement

This project was introduced by Sli na Bande, a sustainable living project and a response to the deteriorating environmental conditions of this planet. Sli na Bande aims to create opportunities for people to engage with themselves and their environment differently.

Sli na Bande has a close connection with water. Its representatives took part in the Irish Water demonstration in 2014, not due to a lack of will to pay for water, as every service needs financing, but to protest the privatisation of water as a resource in Ireland by big corporations. Sli na bande saw in the wake of neoliberalism political theories, how climate change affected water supplies in the world, and Sli na Bande recognized that these supplies were in danger. To avert the danger, Sli na Bande decided to privately fund a thesis project from *Vlerick Business School*, Belgium, to research the water crisis in Ireland and globally, and predict the consequences of privatisation of water in Ireland.

Privatisation of public goods and services has led many countries to lose their control over important natural resources. A private company can unilaterally decide to significantly increase the financial burden of the consumers of the privatised good. As a result, consumers do not have any choice but to comply, since the now privately managed resources are widely consumed. Ireland faces similar issues with the privatisation of some of its other natural resources is no exception as it has already privatised some of its natural resources, like oil and gas.

This project has been inspired by the need for a response to the ecological challenges that our planet and our communities face because of climate change. It is based on the assumption that Homo Sapiens are an emergent property of an existing well-balanced ecosystem that needs to be respected and appropriately managed. Humans need the ecosystem to remain balanced for their survival as a species along with most other species on the planet.

This paper does not address the issue of man-made or naturally occurring climate change. This paper is, on the other hand, motivated by a desire to contribute to a response to the measurable deteriorating environmental conditions with particular emphasis on water supplies and its distribution.

Economics are a reflection of our value systems. It determines how we value one thing in relation to another, and these values are reflected in trade practices. This project attempts to charter the values that inform our choices today and the required shift of power from the hands of a few to workable systems of local government.

This project finds nonmarket strategies for Sli na Bande to act upon and implement in order to raise awareness of the population on the issue of water privatisation and to put pressure on the politics to ultimately obtain from the government that it organizes a referendum to enshrine water as a public good in the Constitution of Ireland.

The saying ‘water is the next oil’ reflects the economical emphasis brought to it in the last decades (Zabarenko, 2009). This paper aims to switch the perspective, to reach a globally shared thought that ‘water does not belong to corporations and profit should not be made from it’.

Methodology

This project's objectives are to deliver an informational package about the current situation related to water in Ireland and the developments leading to it, and to provide recommendations and a strategy on how to raise awareness on the water issue in Ireland, to ultimately avoid it being privatised. Accordingly, is important to go beyond the usual commercial aspects, towards more social and political actors.

Therefore, we decided to adopt a non-market strategy approach. According to the Financial Times, *“a non-market strategy is a way to pursue strategic goals through political and social leverage. Non-market strategy helps groups gain soft power and influence and use them to their competitive advantage”*. Dylan Minor also adds that *“this includes both public politics strategies (e.g., lobbying and engaging with regulators) and private politics strategies (e.g., engaging with activists)”* (Minor, 2015).

The research realised for the sake of this project is an applied one. An applied research *“aims at finding a solution for an immediate problem facing a society, or an industrial/business organisation, whereas fundamental research is mainly concerned with generalisations and with the formulation of a theory”* (Kothari, 2008). Bajpai (2011) adds that *“applied research is considered to be non-systematic inquiry and it is usually launched by a company, agency or an individual in order to address a specific problem”* (Bajpai, 2011). This thesis focusses on Ireland (and broader, on Europe), and the comparison of the situation in Ireland with other countries is made to better understand the issues incurred.

The purpose of the project is to find solutions in the form of strategies to apply to a problem, as well as providing a complete and detailed description of the current situation and its evolution, without limiting the scope of the research. As such, a qualitative research is conducted, to bring the project to successful conclusion (Collis & Hussey, 2003; Miles & Huberman, 1994).

An informational package

This project and the non-market strategy approach adopted inform Sli na Bande on the current situation and the developments leading to it, as well as who the relevant actors are, what is their

implication and their role in the water issue, as well as where they act and how to contact them. Furthermore, comparison with situation in other countries are made.

A strategy to apply

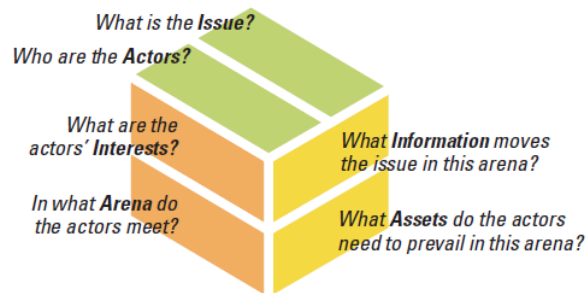
The other goal of the project is to provide Sli na Bande with recommendations drawn from conclusions made based on the informational package and the actions already taken. The conclusions are discussed using the nonmarket strategy framework. Recommendations include details on the relevant actors to contact, and the right arenas to move into to achieve the objectives of the project. They specify how to frame the issue when contacting the actors, to maximize their awareness and willingness to take part to the actions. They also inform Sli na Bande on the different links between the actors having a role and their arenas, and alliances that could be made in order to reach its goals (Baron, Neale & Rao, 2016). To achieve the results, a double objective is assessed, following a non-market approach in two steps.

The environment

The first step consists in mapping the environment surrounding the issues at stake in the project.

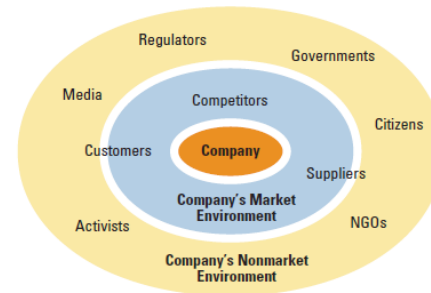
According to Baron, the nonmarket environment consists of *“the social, political, and legal arrangements that structure interactions among companies and their public”* (Baron, 1995, p. 73).

It is through the (IA)³-Framework, developed by Bach and Allen, that this environment is appraised (Bach & Allen, 2010). In order to do so, it is important to build the framework around the analysis of issues, actors, interests, arenas, information and assets. All of this is then used in the second step, to be incorporated in a nonmarket strategy.



THE NONMARKET ENVIRONMENT OF BUSINESS

While nonmarket factors are often viewed as external to the core business, they shape the environment in which a company operates.



The issue is framed mainly by talking with Sli na Bande. It is the best way to know exactly what is expected and to start tackling how to get to the expected results. An analysis of the public outrage on the climate change debacle is also a good way of grasping the issue.

The actors can be roughly classified in the following categories: NGOs, media, activists, citizens, academics, regulators, and governments/politicians. It is crucial to try and reach an important number of them in order to know who actually cares about the issue and who might have ideological stakes therein (Baron & Diermeier, 2007). It is also important to assess if there are organised groups among them, keeping in mind that “*organised groups are often more powerful than unorganised [people]*” (Bach & Allen, 2010, p.43).

Once the relevant actors are known, it is essential to understand what their interests are, what motivates them and what they want to achieve. Thus, contacts with the actors is critical. Through different means of communication (email, phone, interview, ...), information is collected to understand them better, and to discover if everyone in the same group thinks alike, or if disparities show up. This allows us to draw a strategic map, crucial to identify possible alliances that should be made to reach Sli na Bande’s goal.

Depending on the arena where the actors meet, methods of raising concerns largely differ. In the era of fast information, the internet, and especially the social media is a place where all these actors can meet. Emails are a common mean of communication, with around 3,2 million emails sent every second all over the globe, according to 2018 numbers found on Statista. However, as was realised throughout the project, emails are not the best way to obtain answers. Of course, more conventional occurrences, like lectures, speeches, debates on television or on the radio, or even in the street are

also relevant. Assessment of the relevant arenas is thus required to try and have the greatest impact to reach most of the actors.

In a nonmarket approach, the currency is information, and not money (Bach & Allen, p. 46), and it differs depending on the arena where the issue is resolved. Based on the public outrage caused by the issue at stake, and its political response, it is important to analyze the public opinion, political and regulatory developments in order to assess the right type of information to solve the issue in the relevant arena.

Finally, the actors' other relevant assets are examined, i.e., their willingness to answer to questions, influence and reputation, contact network, ability to rally – or disperse -, etc., as all this also impacts the development of a strategy to solve an issue in an arena.

The strategy

The second step consists in finding nonmarket strategies to implement.

Based on our conclusion from the nonmarket environment mapping, we recommend additional actions and improvements to be initiated by Sli na Bande, activists, and other groups that would ally together (Baron, 2003). For these recommendations, we base ourselves on the three-dimensional nonmarket strategy framework. The dimensions are the arenas, the alliances and the framing.



Moving the issue solving to the right arena is crucial to see the project successful. Therefore, guidance is made to Sli na Bande to understand which arena will have the most impact for the matter at stake.

This project also recommends some strategic alliances to Sli na Bande, with various relevant actors that could help to achieve the objectives. The alliances are advised based on the input the parties could bring. Alliances with multiple parties at once can be recommended.

Finally, to communicate in these arenas, and as a message can be conveyed and understood in many different ways, it is important to know how to frame the issue in the different arenas. That is, to advise Sli na Bande on the way it could deliver its messages according to what actor it speaks to and in what arena.

Chapter I - The necessity of water around the globe

Section 1 - Water and its threats

Although we may celebrate each year the international World Water Day on the 22nd of March, this vital resource for every human being is reaching a critical point in history. Water is present everywhere and covers 71% of the earth's surface (Gleick, 1993). From the total percentage of water on this planet, 97% is salt water found in the oceans while less than 3% is considered to be freshwater. From those 3%, not all the water can easily be accessed. To narrow it down, 2% is frozen and thus found in icebergs and snow, 0.5% to 0.75% is groundwater found in the soil and only 0.01% is surface water (in lakes, swamps or rivers) (Castelo, 2018). Those low indicators project the stress on water into the center of debates about human rights, energy, food production, climate change, socio-economic development, ecosystems, etcetera.

Water is circulating in a closed hydrological cycle; therefore, the freshwater resource is scarce and limited. The resource is vulnerable for considerable changes, climate change being one of them. Through observational records and climate projections, it is possible to predict the consequences of climate change on the water. Water being linked to many other considerable elements in this world, its impact on human societies and ecosystems cannot be minimized or neglected.

Global warming, due to increasing greenhouse gases, plays a role in different aspects of water. An example of such an aspect is the change in precipitation patterns, which consequences are twofold. The first consequence lies in extreme rain falls in some regions of the world. This causes floods and major damages to the water infrastructure of a country. Floods destroy entire (natural) habitats, crops and if taking place in an urban area it can lead to possible human losses, disruption of settlements and high infrastructural costs. Appendix I reflects examples of *“possible impacts of climate change due to changes in extreme precipitation-related weather and climate events, based on projections to the mid- to late 21st century”* (Bates, 2008).

The opposite is also true; precipitation changes can lead to severe droughts and no rainfall, as experienced worldwide during the summer of 2018. Australia for example, experienced its hottest summer facing extreme weather conditions. This led to unprecedented catastrophic events for

farmers; failing crops, severe water shortages and the inability to feed the livestock ("New South Wales drought now affects entire state", 2018). Drought is affected by high atmospheric pressure, therefore the Australian government implied that the droughts were linked to human-induced climate change ("New South Wales drought now affects entire state", 2018). A solid decrease of water resources will likely impact many semi-arid and arid areas such as western USA, southern Africa, etc. (Bates, 2008). According to the Convention to Combat Desertification from the United Nations, those areas will displace between 24 million and 700 million people with the existing climate change scenario ("United Nations: Climate Change | UN-Water").

Another effect caused by drought combined with the growth of the population (non-climatic factor) is water scarcity, representing an extra challenge of the 21st century. Due to a growing population, it is expected that by 2050 the demand for water will increase by 50% ("UNCCD: Land and Drought"). In order to limit the impact of water scarcity, it is necessary that all the stakeholders actively work together (including water users and providers). The agriculture and the industry stand for 90% of the total annual water consumption and an increase in meat consumption as manufacturing might happen due to economic growth (Vorosmarty, 2000). By managing the demand and treating water as a scarce resource, drought, floods and water scarcity can be kept under control. To succeed, national drought policies, early warning systems, drought vulnerability systems and drought risk mitigation measures could be possible solutions ("UNCCD: Land and Drought").

However, serious questions can be raised concerning water management and water infrastructure of countries around the world. Currently, some countries cannot cope with today's climate variability (heavy rain falls or drought). If the climate predictions are correct, current water management practices might not be strong enough to deal with the impacts of climate change on water (Bates, 2008). The technical paper of the Intergovernmental Panel on Climate Change suggests that countries should *"improve the incorporation of information about current climate variability into water-related management in order to assist adaptation to longer-term climate change aspects"* (Bates, 2008). Therefore, adapting the water management and infrastructure of countries can be considered as a primer on coping with climate change (Matthews & Le Quesne, 2009). Thus, in order to tackle the problems mentioned above – precipitation changes and water

scarcity – the water management and infrastructure worldwide should be analyzed, modified or built accordingly. Taking the monetary costs into account (but also the societal and environmental costs), one should not forget the interest of different parties involved in this infrastructure, which may not be an easy task to fulfill (Bates, 2008).

Another major impact of climate change on water - the melting of the icecaps - produces a cascade of effects. The rise in sea level and the expansion of the oceans have five key contributors; the Greenland and Antarctic ice sheets, mountain glaciers, land water storage and ocean thermal expansion (Golledge, et al., 2019). It is difficult to predict with certainty what effect the melting ice caps will have on the planet, especially because many different scenarios could happen. A recent study about the Greenland and Antarctic ice sheets declared that the consequences of the melting ice sheets could be much worse than previously predicted. In preceding studies, the icecaps were not always taken into account due to the difficulty to accurately simulate ice sheet melting in global climate models (Harvey, 2019). The latest study has also shown that the Atlantic meridional overturning circulation (AMOC), known as a huge ocean current distributing heat around the world from the tropics till the Arctic, can be affected negatively by meltwater (Harvey, 2019). The freshwater melting into the ocean might slow down the marine current and develop changing climate patterns (warming up or cooling down of regions).

Additionally, the rising sea level will in turn cause saline water intrusion into groundwater (Vorosmarty, 2000). Knowing that half of the total world's population depend on groundwater, the availability of freshwater from groundwater will decrease (Vorosmarty, 2000). Apart from having a lower availability in freshwater, the intrusion of saltwater into freshwater makes it problematic for raising crops. In areas such as the Nile Delta in Egypt for instance - where almost no other arable land is available - the consequences of salt water intrusion combined with erosion could be dramatic (Glick, 2017). Not to forget that apart from the melting icecaps, the rising sea levels and the changing climate, that the wildlife and the survival of the species is endangered. The polar bear for example was classified as 'threatened' in 2008 by the United States' Endangered Species list and as 'vulnerable' by the WWF (WWF, 2012). By losing its habitat and hunting territory, polar bears might not survive the coming decades. A shrinking habitat causes polar bears to go away from their usual hunting territory and to enter in conflict with local communities such as the Inuit,

sometimes leading to accidents (Whitaker, 2018). Appendix II and III give a visual representation by the NASA of the Arctic sea ice. Appendix II in 1978 shows a higher presence of ice compared to appendix III in 2018. In only 40 years, a considerable part of the Arctic already shrunk and melted.

In addition to the burning of fossil fuels and the accumulation of greenhouse gases melting the icecaps and raising the sea levels, climate change on freshwater also has an impact on the water quality, water timing and water quantity (or volume) (Matthews & Le Quesne, 2009). Since those three elements are interconnected, it is expected to lead to a decrease in food security, availability, stability and utilization (Bates, 2008). Since the agricultural revolution started in 10,000 BC, the human species decided to evolve from a hunter-gatherer lifestyle towards a sedentary way of living (Harari, 2015). This path included both advantages and disadvantages. Bigger portions of food could be produced, more people could be fed, and an increase in population followed (Harari, 2015). However, by sticking to one place, it made the human species highly dependent on the weather conditions and yearly harvests. Until today, water continues to play an essential role in the provision of food around the world.

Section 2 - Water as a human right

Changing precipitation patterns, floods, droughts, water scarcity, increase in water demand, bad water infrastructure and management, melting ice caps, rising sea levels, extinction of species, global warming or food insecurity are all elements giving us only a small glimpse into the water issues of this century. One issue quickly leading to many others, made institutions react. The Sustainable Development Goals (SDGs), implemented in January 2016 by the United Nations General Assembly, represent a universal call to all the countries in order to actively reach the 17 global goals set (United Nations Development Program, 2019). Two SDGs are entirely dedicated to water; “clean water and sanitation” and “life below the water”. Clean water and sanitation focuses on safe and affordable drinking water, water scarcity, sanitation services, desertification and drought, etc. Life below water mainly focuses on sustainably managing and protecting oceans, acidification, pollution, conservation, implementing international laws, etc. Since those goals are not binding for any country, they might be difficult to achieve by the time given. Besides the

climatic pressures water is facing, questions and debates arise whether water is a human right or a commodity. In 2010, water and sanitation were considered as a human right by the United Nations. The resolution does not mean that it is prohibited to charge for water, but that *ability to pay does not limit access* (Hosford, 2014). In Europe however, water is not considered as a human right. Privatisation of water and the use of it as a commodity, does exist.

Chapter II - Water in Europe

Section 1 - Status and quality of the water

Annually, 44.7 billion m³ of water is treated and delivered by the European water services (EurEau, 2019). Although the EU Directives on water helped to improve and stabilize the water quality in Europe, the vital resource is still facing challenges. The report “European waters – assessment of status and pressures 2018” based on the Water Framework Directive (WFD), reflects the current status of EU waters. A requirement of the WFD, are the River Basin Management Plans (RBMP) aiming to improve and protect the EU waters. The assessment presents the evaluations of the first cycle of the RBMP, between 2009 and 2015. The report concludes that in Europe, 40% of the surface bodies achieved a good ecological status, while 38% are in good chemical status (EurEau, 2019). In other words, around 60% of the European lakes, rivers and wetlands are not considered as healthy.

Appendix IV illustrates the chemical status per river basin district (RBD) with uPBTs. The chemicals behind uPBTs are mercury, brominated diphenyl ethers (pBDE), tributyltin and certain polycyclic aromatic hydrocarbons (PAHs) (European Environment Agency, 2018). Since mercury is the most present chemical in rivers due to atmospheric deposition and discharges from urban waste water treatment plants, if the uPBTs would not be taken into account, only 3% of the surface water bodies would be considered as chemical (European Environment Agency, 2018). As appendix V illustrate, reducing the propagation of mercury is key to reduce the chemicals and achieve the goals set by the directives on water.

Appendix VI illustrates the number of member states, water bodies and the total length or area reported by the EU member states themselves. This account for a total of 13 400 groundwater bodies and 111 000 surface water (80% rivers, 16% lakes and 4% coastal/transitional waters) (European Environment Agency, 2018). These high numbers reflect again the complexity of the environmental challenges faced worldwide, and by the EU in particular. Having healthy surface bodies and groundwater require a solid implementation of the WFD and regular evaluations and check-ups in order to control if the water policies are respected by the member states.

The surface waters score badly, but groundwaters are doing generally good in Europe; 74% of the groundwater area is considered as having a good chemical status while 89% achieved good quantitative status (European Environment Agency, 2018). The biggest pressures on groundwater refraining to achieve a high score in the chemical status, are pollution from nitrates and pesticides as a consequence from agriculture. Appendix VII reflects the river basin groundwater chemical status in Europe. When compared to the map showing the chemical status per river basin district (RBD) with uPBTs, it shows there is a high concentration of chemicals in central Europe. Condensed areas such as Belgium, the Netherlands, the south of the UK or Germany suffer the most from pollution and chemicals infiltrating the surface water bodies and the groundwater.

Therefore, despite the Water Framework Directive (WFD) implemented by the EU in 2000, the World Wild Fund (WWF) launched the ‘#ProtectWater campaign’ in 2018. This campaign resulted in 375.386 people calling on the European Commission to act (WWF, 2019). As reflected in appendix VIII, the majority of the EU countries are using time exemptions in order to delay the implementation of the EU law on freshwater (WWF, 2018). The campaign advocates for a strengthening of the ongoing evaluation of the WFD, a correct implementation of the law, better integrated policies, a redirection of public funding from financing harmful practices and improvement of transparency and participation of the EU’s Member States (WWF, 2019). In addition, in order to face the consequences of climate change, long-term investments will have to be made concerning the aging water service infrastructure (EurEau, 2019).

Section 2 - Framing water ownership on a European level

Article 345 in the Treaty on the Functioning of the European Union (TFEA) and Art.17(1) of the Directive 2006/123/CE relative to the internal market reflect the position of Europe concerning the privatisation of water: neutral. Article 345 in the TFEA is the following; “*the Treaties shall in no way prejudice the rules in Member States governing the system of property ownership*” (The Member States, 2012). Art.17 of the Directive on services in the internal market states that the previous Article 16 *shall not apply to water distribution and supply services and waste water services* (European Parliament, Council of the European Union, 2006). Articles 16 and Article 17

of the Directive are available under appendix IX and X. However, the neutrality of Europe was heavily criticized after the financial crisis in 2008 affected countries such as Greece or Portugal unprecedentedly. During the bailout plan of Greece and Portugal, the European Commission was showing no neutrality towards the privatisation of water and included the privatisation of water as an obligation for their bailout (Chapelle, 2012). A letter sent by the European Commission confirms this explicitly as it is stated that the “*privatisation of public companies contributes to the reduction of public debt, as well as to the reduction of subsidies, other transfers or state guarantees to state-owned enterprises*” and “*The Commission believes that the privatisation of public utilities, including water supply firms, can deliver benefits to the society when carefully made*” (Giudice, 2012). The entire letter is available under appendix XI.

These events raised indignation across the civil society and led to the creation of organisations fighting against the privatisation of water. This has been the case for the ‘European Water Movement’, founded in 2012 and fighting for a recognition by the EU of water as a human right and as belonging to the commons (European Water Movement, 2019). The European Water Movement is an alliance between social movements, organisations, committees and unions (European Water Movement, 2019). The strategies used by the European Water Movement are threefold:

- Initiatives/Actions (national referendums, local petitions, European Citizens' Initiatives)
- EU Lobbying and legislations (EU legislations, monitoring European policies, connecting national level work with EU level work)
- Building the movement (communications, website, networking) (European Water Movement, 2019).

This (un)explicit push towards privatisation by the EU also gave birth to the first European Citizens Initiative on water called ‘Water and sanitation are a human right! Water is a public good, not a commodity!’, in 2012. This initiative was started and supported by the Right2Water Europe.

The Right2Water Europe is an alliance between citizens of different European Unions and representatives of public service trade unions such as the EPSU (European Federation of Public Service Unions). A European Citizens Initiative is a democratic participatory tool to suggest legal

adaptations on which the European Commission has a power on (Directorate-General for Communication (European Commission), 2015). The conditions are that it has to be started by at least 7 EU citizens living in 7 different Member States being able to collect at least one million signatures about the matter they are fighting for (Directorate-General for Communication (European Commission), 2015). If the requirements are fulfilled, the initiative is examined by the Commission, a meeting with the organizers is organised, the possibility to present the initiative at a public hearing in the European Parliament and a formal response by the Commission on what action it will propose (and in case, the reasons of not doing it) (Directorate-General for Communication (European Commission), 2015). The Right2Water Europe's initiative was the first initiative ever to reach more than one million signatures (1,659,543 in total) and is considered as a successful initiative by the European Commission.

On the 19th of March 2014, the Commission responded positively in a press release on how the water matter could be improved in the EU, besides being the biggest donator yearly (1.5 billion euros) for Water Supply, Sanitation and Hygiene (WASH) programs in developing countries (European Commission, 2014). The response about the European Commission's actions is exactly stated as follows:

- step up efforts towards full implementation of EU water legislation by Member States;
- launch an EU-wide public consultation on the Drinking Water Directive to assess the need for improvements and how they could be achieved;
- improve information for citizens by further developing streamlined and more transparent data management and dissemination for urban wastewater and drinking water;
- explore the idea of benchmarking water quality;
- promote structured dialogue between stakeholders on transparency in the water sector;
- co-operate with existing initiatives to provide a wider set of benchmarks for water services, improving the transparency and accountability of water services providers by giving citizens access to comparable data on key economic and quality indicators;
- stimulate innovative approaches for development assistance (e.g. support for partnerships between water operators and for public-public partnerships) and promote best practices between Member States (e.g. on solidarity instruments);

- advocate universal access to safe drinking water and sanitation as a priority area for post-2015 Sustainable Development Goals;
- finally, invite the Member States, acting within their own competences, to take account of the concerns raised by citizens through this initiative and encourage them to step up their efforts to guarantee the provision of safe, clean and affordable water to all (European Commission, 2014).

Parts of the demands have been addressed by the Commission, however, the main goal of having water recognized as a human right and thus not as a commodity by the EU, was not reached. Right2Water and other organisations want water enwritten as a human right in all the legal water policies or water directives, such as the Water Framework Directive or the Drinking Water Directive (Right2Water, 2019).

2.1. Water Framework Directive

The Water Framework Directive 2000/60/EC (WFD) was established and adopted in the year 2000, as a response to the deteriorating quality of the EU waters (European Commission, 2016). The WFD is the central key of the environmental European legislation. The directive aims to protect and manage water based on natural rivers basins (geographical and hydrological formations) (European Commission, 2010). This means that national or political boundaries are not taken into account, and that all the Member States should cooperate together to improve all European waters.

As mentioned in chapter 2.1. Status and quality of the water, many countries make use of time exemptions to delay the correct implementation and the end goals that have to be reached by the WFD. These exemptions can delay the environmental objectives of the WFD by twelve years (Boeuf, Fritsch, & Martin-Ortega, 2016). The problems concerning the correct implementation of the WFD together with its exemptions got criticized by stakeholders, academics, and even by the European Commission itself (Boeuf, Fritsch, & Martin-Ortega, 2016). In order to achieve Europe's 2020 strategy for economic growth and a greener environment, the incorrect implementation of directives related to the environment, such as the WFD, are problematic (European Commission, 2017).

2.2. Drinking Water Directive

The Drinking Water Directive 98/83/EC was established in 1998 to assure healthy water for the European population, with no risk of contamination or other disease related matters in the drinking water (European Commission, 2018). Following the European Citizens Initiative Right2Water, a proposal for the revision of the Drinking Water Directive was adopted in February 2018 (European Commission, 2019). The Right 2Water movement stated that ‘*EU institutions and Member States be obliged to ensure that all inhabitants enjoy the right to water and sanitation*’ and that ‘*the EU increase its efforts to achieve universal access to water and sanitation*’, which the Commission responded positively to and adapted.

Section 3 - The regulatory framework of water utility applied per country

According to the technical report “Assessment of cost recovery through water pricing” by the EEA (European Environment Agency), the legal water utility framework of a country impacts the structure of water pricing. The ‘classification matrix for institutional arrangements’ gives an overview of the four management types of water utility present in Europe.

Table 2.2 Classification matrix for institutional arrangements for water services, with indications of the countries where each type of management is dominant

	Direct management	Delegated management
Public management	<p><i>Direct public management</i></p> <p>Under this system, the responsible public entity is entirely in charge of services provision and their management. In the past, this system was by far the most widely adopted institutional arrangement in the EU.</p> <p>Countries: Denmark, Luxembourg, Sweden, Austria, Finland, Northern Ireland, Ireland</p>	<p><i>Delegated public management</i></p> <p>A management entity is appointed by the responsible public entity to execute the management tasks. Management entities usually remain the ownership of the public sector, although in the EU in some cases there is the possibility of a minor private shareholding.</p> <p>Countries: Portugal, Scotland, Greece, Italy, Germany, Netherlands, Belgium</p>
Private management	<p><i>Direct private management</i></p> <p>All management tasks, responsibilities and ownership of water utilities are placed in the hands of private operators, while public entities limit their activities to control and regulation. This system is in place in two EU states and it stems from a long tradition of direct private management (e.g. London).</p> <p>Countries: England and Wales</p>	<p><i>Delegated private management</i></p> <p>The responsible public entity appoints a private company for the management of tasks, on the basis of a time-bound contract in the form of lease or concession contract. In the two countries where this type of management is common, municipalities subcontract their duties to private companies. The ownership of the infrastructure remains in the hand of public authorities.</p> <p>Countries: France, Spain</p>

Source: Van Dijk and Schouten, in Techneau, 2007.

A distinction is made between public management and private management, and between direct management and delegated management. For example, countries such as Sweden or Luxembourg belong to the direct public management type. The definition given to the direct public management type is; *“under this system, the responsible public entity is entirely in charge of services provision and their management”* (European Environment Agency, 2013). In the case of Ireland, the country evolved since the establishment of Irish water to a delegated public management instead of a direct public management (EurEau, 2018).

Based on this matrix, the current situation of Europe tells that 48% of the population gets water provided by public management, 15% by public water companies, 20% by delegated private management and 1% by direct private management (European Environment Agency, 2013). While public water management has been the norm in the EU before, times have changed. In the 1990s, the privatisation of water spread rapidly across the world (Corporate Europe Observatory and Transnational Institute, 2014). The water utility of a whole country or a whole city (i.e., Paris) could be privatised.

In the last fifteen years however, an upcoming global wave of remunicipalisation and (re)nationalization of water utilities is present. Citizens started to realise that the privatisation of public services did not deliver its promises and that ‘the market’ was not always the best solution (Kishimoto, 2018). Under appendix XII, the water remunicipalisation tracker tells that water remunicipalisation is particularly present in Europe. Again, according to the remunicipalisation water tracker, 235 cities in 37 countries transitioned from a private management to a public control of the water services in the last 15 years (Kishimoto & Gendall, 2015). The techniques used to go from privatisation to public control vary. Contracts that expired are the main way to de-privatise, followed by contract terminations, withdrawal or shares sold by private operators and decisions to remunicipalise (Kishimoto, Lobina & Petitjean, 2015). In the case of England and Wales, the argument to continue evolving under a private direct management is the argument of investment and clean water. Due to highly polluted rivers and beaches, the U.K. was known in the 50’s and the following decades as the ‘dirty man of Europe’ (Smith, 2018). The EU regulations on water pushed states or private companies to invest millions of euros in the reduction of pollution. Switching to a privately-owned water sector in 1989 was a pragmatic choice by England and Wales,

since the state had not enough money to invest in water and to be in regulation with the European directives (Tipper, Shields, & Elliott, 2018). The argument of investment and clean water is built upon the fact that the U.K. should not go backwards (i.e. direct public management) and continue to build on the progress made the last years, or as mentioned by the author; *“to further improve our rivers and beaches we need real investment supported by smart and efficient regulation, not dogma”* (Smith, 2018).

As much as an European perspective is interesting, it is also important to turn to more concrete situations concerning privatisation of water that happened in some countries and are important to draw lessons from.

Chapter III - Situation in other countries

In this chapter, we describe four case studies, in order to understand the possible impacts that privatisation has on water services. The first case study is Senegal, that has water services partly privatised, where that privatisation can be considered a success as it improved the life of many people. Then, England, having fully privatised water services and is currently experiencing a social wave to return water services in public hands. Thirdly, France, that had largely privatised water services but, since more than a decade, is experiencing many remunicipalisation throughout the country. Finally, the case of Cochabamba (Bolivia) is examined, where privatisation projects lead to violent protests from the people.

Each case study contains a history of the developments leading to privatisation (or not), the situation of the water services once privatised, and its current situation. One has to keep in mind that, even when considered successful, the morality and ethic of privatising water services is put in question, through the fear of potential lunatic management that could lead to some prejudice to the people.

Section 1 – Senegal

1.1. History

Immediately after recovering its independence in 1960, water urban supply is put by a public-private partnership (PPP) (lease contract) in the hands of the *Compagnie Générale des Eaux du Sénégal*, a subsidiary of the French water company. However, that PPP produced little progress in service delivery and management (Bayliss, 2001).

This will last until 1971, when the President Léopold Senghor decides to nationalize the water company by creating the *Société Nationale d'Exploitation des Eaux du Sénégal* (SONEES). The SONEES was responsible for operations, maintenance and restoration of the urban water supply sector and the government was in charge of reviewing tariffs twice a year. Investments were made during a decade, however not really effective, due to bad planning and lack of maintenance.

More than twenty years later, in 1995, after seeing some reforms made in other countries and under strong advice from the World Bank and other international organisation, the Government of Senegal launched substantial reforms in the urban water sector to improve service delivery and increase storage, production and distribution of water, so a second PPP is put in place. Consequently, SONEES is dissolved and three companies are created to replace it: the state asset holding company, *Société Nationale des Eaux du Sénégal* (SONES), the privately-owned company holding a lease from the State, *Sénégalaise des Eaux* (SDE), and the publicly owned company responsible for wastewater management and stormwater drainage, *Office National de l'Assainissement du Sénégal* (ONAS). They still exist nowadays, and work as follows: the ownership of the assets belongs to SONES, that is also responsible for making investments in infrastructure and regulates the SDE. The SDE is in charge of operations, maintenance, billing and collection.

Many arguments were used by the government and the private company to justify the decision to privatise water services. First, the government acknowledged the necessity of heavy investments to improve the distribution and storage of water, and to satisfy the increasing demand for water services. Then, it was believed that the private sector would bring substantial efficiency gains. A simulation showed that, to make the sector self-sustaining, prices from 1996 to 2003 would need to increase by 5% per year without private participation, while only a 2.4% per year increase in price would be needed with private participation. Also, private participation was considered vital to guarantee real independence from the government and allow the service to put greater pressure on public bodies to pay their water bills (Boccanfuso, Estache & Savard, 2005).

The contract with the SDE expires in June this year, and uncertainty reigns on whether it will be prolonged or not. Last October, the Ministry of Hydraulics and Sanitation decided to attribute water management temporarily to the French group Suez, thus cutting the twenty-two years old relationship with the SDE (Takouleu, 2018). An appeal was filed by the SDE against the decision, which was cancelled due to lack of transparency, so things have to be decided again. Now, the SDE, part of the Groupe ERANOVE that own 57.8% thereof (*Sénégalaise des Eaux*, 2018), will assure service until the end of June, while waiting for a new decision from the Ministry to know who will be responsible for the water management starting July 2019.

1.2. Effect of privatisation

All in all, privatisation of the water in Senegal is globally considered a success (Vidal, 2015). The transaction of Senegalese water is described as an “*unqualified success, concluded on the first try and sustained over time with no major contractual or transparency issues arising*” (Leroy, Jammal, Gokgur and Kikeri, p. 2). The efficiency gains in Senegal water came from new investments and a tough, creative incentive structure built into the contract.

Consumers also had major gains because of increases in access to services and in the quantity supplied. Price effects were minimal because access to investment capital allowed expanded coverage with only moderate price increases (Leroy, Jammal, Gokgur and Kikeri, p. 3).

The Senegal water services project has been cited by the World Bank, UN HABITAT and other international agencies as a successful public-private partnership model for Sub-Saharan Africa. There were several key factors responsible for the success of the project, including an innovative incentivized “*contract structure, strong political will and flexibility in negotiations when necessary*” (Mohan, 2005, p. 2).

Between 1996 and 2017, the access rate to water services went from 80% to 98% in Dakar itself and on average climbed to 80% in the whole area under PPP management, reaching its access to water targets, and the number of clients more than doubled over the same period. The network performance increased with more than ten percentage points (80.46%) (Pezon, 2018). What is more, Senegal is one of only three countries in Africa where the household connection rate has grown by over 25%, behind Botswana (+52%) and ahead of Morocco (+25%), rising by + 33% between 1990 and 2015 (Unicef & WHO, 2015). In addition to that, water losses, mostly from leakages, dropped to less than 20 percent in 2006, from 32 percent in 1996. According to the World Bank, this decline translates to a savings equal to the water needs of 930,000 people (World Bank, 2007).

The question now is which organisation will manage water services in Senegal starting July 2019 – the two main choices being the SDE or Suez, but what is sure is that the privatisation model in place works so far, improving the quality of life of tens of thousands every year. Of course, a lot has yet to be made, as currently the main problems are found in interruptions of water during the day, quality of the water, and its pressure. Those are the things that should be improved during the

next contract period (Pezon, 2018). As per the sub-Saharan Africa, Senegal's level of connection to urban water services currently is one of the highest.

Section 2 - England

2.1. Pre-privatisation period

By the early 1800s, many water structures and services in the UK were raised, owned, and managed by private companies. After a general will about taking resources back into public hands spread through Europe, several regulations were introduced, the government took control of the water industry, with the responsibility for most water structures and sewerage systems delegated to local authorities in the early 1900s (Hukka & Katko, 2003; Bakker, 2005).

Later, in England, during the 1970s, the conservative government acknowledged that the water services needed to change in order to reach the increasing demand. It believed that integrated water service management was achievable by putting in place several vertically integrated regional monopolies, that would provide the full package behind water services; *“from extraction of raw water, delivery of processed water, to collection, treatment and discharge of wastewater and management of the quality and quantity of water resources”* (Ofwat, 2006, p.13).

Thus, after the Water Act 1973 was enacted, ten unitary regional water authorities (RWAs) were set up - in addition to the twenty-nine privately owned water supply companies already existing - one for each of the ten biggest rivers in England and Wales. For the area it covered, each of the RWA was responsible for every element of water management, among others: water supply, conservation, sanitation and development, sewage collection, treatment and disposition, prevention of pollution and environmental improvement, and flood protection. Due to conflict of interests inside the public authorities themselves, as they oversaw both water waste disposal and pollution regulation, problems arose, e.g., river pollution incidents, as the authorities did not want to self-regulate and self-prosecute (Lobina & Hall, 2001; van den Berg, 1997).

Only ten years later, after assessing that the RWAs did not meet the expectations –a lack of capital investments caused an increasing number of cases of pollution – and the start of prosecutions by the EU against the government, the Water Act 1983 was enacted. This Act modified the managerial

structure of the RWAs, decreased the importance of local authorities, and authorized corporations to behave more commercially. Despite this, a survey from 1985 showed that the pace of river basins quality decline exceeded the pace of river basins quality improvement. Furthermore, in 1984, the government came up with a water privatisation plan, that was welcomed with very strong public campaign against it, so it was put aside to prevent it affecting the upcoming elections. All those elements set the scene for privatisation of the water industry (Ofwat, 2006; Kinnersley, 1988).

2.2. Privatisation

After winning the elections for the third consecutive time, the Conservative Party, with Margaret Thatcher at its head, quickly brought the privatisation plan back and implemented it in England and Wales, while in Scotland and Northern Ireland water remained under public authority and still is nowadays (Giles & Plimmer, 2017). In 1989, the British Government fully privatised water and sewage utilities, while separating the regulatory and river management functions, e.g., flood protection and pollution oversight that would become the responsibility of a newly created structure, the National Rivers Authority (NRA). Thus, the newly ten privatised companies would have the functions of water supply and distribution, sewage disposal and sewerage (Ofwat, 2006).

Consequently, the ten RWAs were sold on the stock market at discount price, to secure political success. (Lobina & Hall, 2001). Simultaneously, three regulatory structures were put in place; the Drinking Water Inspectorate, that monitored water quality, the Environmental Agency (EA), that oversaw river and environmental pollution, and the Office of Water Services (OFWAT), the independent economic regulator for water and sewerage services, in charge of setting the maximum prices that the private companies can charge (Zumer, 2002; Dore, Kushner and Zumer, 2003; van den Berg, 1997).

Many were the justifications for privatisation put forward by the Conservatives. Mainly because of the alleged greater efficiency from the private sector and the bigger financial means to make investments – as much was needed to satisfy the EU requirements –, reasons like future decreasing prices and creation of competition were also invoked (Biswas, 2013; Dore *et al.*, 2003).

According to Thatcher, and following her beliefs that privatisation of resources was the key for England, - as she was also the instigator of other privatisation, e.g., British Telecom in 1984 and

British Gas in 1986 – privatisation was critical to “*reverse the corrosive and corrupting effects of socialism*”, and essential to “*reclaim territory for freedom*”, while its purpose was to guarantee “*the State’s power is reduced and the power of the people enhanced*” (Thatcher, 1993, 676).

Others argued that the claims of financial and operational efficiency differences between public and private sector were not backed by comparative studies or any relevant way. It was added that the real reason behind the privatisation of British natural resources was the neo-liberal policies promoted by the Conservatives, i.e., keeping intervention of the State and public financing as low as possible. Of course, since the water public authorities then in place could not borrow money to finance their operations, little could be done to improve water services and infrastructures (Lobina & Hall, 2001).

Framed as a necessity for the country and a benefit to the citizens, with an emphasis put on the inability of the public services to deliver as expected, the privatisation strategy moved in arenas like the Parliament to enact the Water Act 1989, then to the stock market to reach out to all interested parties, finding allies within the government (Thatcher contributing a lot to that) and academics, but also in the people, eager to see the quality of their water improve, and willing to make profit thanks to the discounts put on the shares when sold on the stock market.

Several perspectives can be found on the results of the privatisation. Financially, the amounts invested by the private companies were huge: £17 billion were invested during the six years following privatisation, compared to £9,3 billion invested by public authorities during the six years preceding the privatisation. By the end of 2004, it was more than £50 billion that were invested in assets and maintenance (van den Berg, 1997).

Efficiency-wise, feelings were mixed : some say that maintenance was enhanced, water quality improved greatly, as well as environmental impact and the ability to better manage supply and demand balance, though the explanation could be found not in the efficacy of private water companies but more in government policies, pushed by the EU regulations, and the rising public expectations (Ofwat, 2006). Others rant against the private companies, arguing that they became unpopular in a matter of years, with a fulminating public opinion, due to excessive pricing and profits, and overall mediocre performance. Indeed, less than ten years after privatisation the pre-tax profits of the water companies rose by 147%, while prices for consumers continued to increase, by 36% for water and 42% for sewerage. Even some usually strong defenders of the Tories were

not fans of the outcomes, like the media Daily Mail, publishing in 1994 a paper titling ‘The Great Water Robbery’, stating that *“In recent weeks the penny has been dropping that something has gone horrendously wrong with the privatisation of Britain's water industry, (...), in reality, a string of reports have confirmed the water industry has become the biggest rip-off in Britain”* (Lobina & Hall, 2001, p. 7).

2.3. A wave towards remunicipalisation

European-wise, there is room for much improvement for the United Kingdom. A report from EurEau, The European Federation of National Associations of Water Services published in 2018 described water services and management throughout Europe and showed numbers on four different elements. As per average residential water consumption (in liter per capita per day), UK is a bit above average at 139L compared to 130L. The same goes for the average price, the UK water pricing around 3.54 €/m³, while the European average is closer to 3.35 €/m³. However, the UK is below the average in terms of drinking water network length per capita (6.45m compared with 8.3m) and waste water network length per capita (6.02m compared to 7.02m). (EurEau, 2018)

Nowadays, England’s water industry consists of seventeen regional private companies, licensed monopolies owning all the assets. Investments and productivity greatly increased. Since privatisation, the private water companies invested more than £150 billion to provide better services and cleaner environment, and their productivity is 64 per cent higher than during public ownership. On the other hand, it is argued that those improvements happened because of the EU, whether it was public or private sector operating (Giles & Plimmer, 2017, Ford & Plimmer, February 2018).

Also, since 1989, the price of water has raised 40 per cent above inflation, generating a public outrage. In addition to that, more than one fifth of the water supply leaks in England and Wales, that is around 3.1 billion liters of water per day. It was shown that if all the leaks were plugged, enough water would be saved to supply 20 million more people every day (Ford & Plimmer, January 2018; Loughran, 2017; Biswas, 2013). Angering the public furthermore, the behavior of the private water companies, especially Thames Water, distributing all their profits to shareholders

and paying almost no taxes, while being charged with millions of pounds in fines for poor performance (Morris, 2018; Giles & Plimmer, 2017).

Studies have shown that at this pace, the UK will know a water shortage in 25 years, blaming the economic structure and the big corporations. Following the global movement aiming at taking back water and sewerage management under public control, that spreads across municipalities, region and countries, it has been a couple of years that the people, activists and media rallied together on different arenas – the street, the social media, etc. - and militate to renationalize water services, framing the issue as a life-or-death situation (Gupta, 2019; Carrington, 2019; Kishimoto, Lobina & Petitjean, 2015). Putting pressure on the politics, a survey made by the UK's Legatum Institute in October 2017 showed that 83 per cent of the respondents want the water services to go back into public hands (Morris 2018; Ford & Plimmer, February 2018). With the UK busy with Brexit at the moment, it seems that the debate about climate change and privatisation has been put aside, but it is expected to come right back as soon as the storm eases, especially now that the UK Parliament declared a climate emergency (Brown, 2019).

Section 3 – France

3.1. History: A sturdy privatisation

In France, private involvement in water goes back to before the French Revolution, when the Perrier brothers got a license to supply piped water in Paris in 1782. Not long after, the involvement of private companies in the supply of services normally provided by public bodies, called Private Sector Participation (PSP) spreads, as an answer to the increasing demand in water (Prasad, 2006; Prasad, 2007).

France is a particularly interesting case study, because it is home to the leading water multinationals worldwide. Depicting a complete picture of the landscape of water services and management however proves to be difficult, as there are more than 9,500 water providers and more than 13,000 sanitation providers throughout France. This is because, since 1828, water services are a prerogative of local authorities, that can decide to provide water themselves, to transfer the services to inter-communal bodies, or to delegate its management to private entities, under fixed-term

contracts – called concessions, making the private companies responsible for financing their investments (Laimé, 2007).

It is at that period that two well-known companies were created, that still exist today and became gradually the big multinationals they are. The *Compagnie Générale des Eaux* (now Veolia) and the *Lyonnaise des Eaux* (now Suez), founded respectively in 1853 and 1880 arrive at the right time to exploit development opportunities. Indeed, a few years earlier the ‘cantons’ (a geographical division, grouping several cities) were divided in 38,800 municipalities, thus weakening their financial power and making it easier for private companies to become indispensable (Laimé, 2007; Financial Times, 1999).

Whereas in the rest of Europe and North America, public bodies decided to take back water services, because of inefficiencies, high costs and corruption, France lets private operators develop. They were not untouched though, since due to concerns of disease outbreaks, high tariffs and few improvements made to the network as well as increasingly socialist town councils, some municipalities decided not to renew the concessions but to create local utilities. Thus, starting from the 20th century, and especially after World War I, numerous small private operators went bankrupt (Petitjean, 2009; Lobina & Hall, 2008, Gandy, 2006).

French private water companies managed to escape the nationalization wave thanks to the policy in place since the regime established after the Revolution: basically, the national government did not want to interfere with the attributions let to the municipalities on purpose (Dardenne, 2012).

The popularity of privatisation of water services started to rise again starting from the 1950s, thanks to ingenious new type of lease contracts, leaving behind the concessions. This new contract put the private companies in charge of operations and maintenance and left the investment responsibilities to the local authorities. Other explanations include the great number of municipalities, unable to finance by themselves, the increasing costs and price of water due to tighter quality regulations, and also corruption and bribes, the grant of a delegation contract often used as a way to transfer money to political parties (Petitjean, 2009; Ofwat, 2006).

The 70s and 80s marked a period of mass privatisation, even Paris water, under public management since the bankruptcy of the Perrier’s company in 1788, was finally transferred to Veolia and Suez in 1985 by the then conservative mayor under 25 years affermage contract (Lime, 2015; Dardenne,

2012). In France in general, the government, led by Chirac transferred to private hands twenty-two major companies, while the municipalities, whether led by conservatives or socialist, kept privatising their resources (Chris, 2017; Brauning, 2015; Megginson, 2005).

The economic model used by Suez and Veolia, sold as a way to improve already existing water utilities in wealthy countries, and as an opportunity to offer access to quality water while lightening the financial burden in developing countries, was replicated almost everywhere in the world, leading to numerous water privatisation processes in many countries (both are currently active in around hundred countries on five continents, supplying millions of consumers). There was no real place to debate the matter, as most of the times the public authorities negotiated directly with the private companies. The latter found strong allies in national and local governments, private donors, as well as the people, eager to see access to and quality of the water improved. A decisive ally for them was found in the World Bank and other development banks, that promoted privatisations, often forcing it on the countries as condition to grant a loan (Rapid Transition Alliance, 2019; Hall & Lobina, 2007).

3.2. A bumpy evolution

The popularity and magnitude of water privatisation in France is quite bumpy, knowing impressive ups and downs. Spreading quite fast in the early years, it plunged in the 1900s due to municipalities not renewing concessions contracts. However, it started to grow again, and in 1936, around 17% of the French population received its water from private companies. This number kept rising throughout the 20th century, reaching 32% of the population supplied by private companies in 1954, then over 50% in 1975. By the beginning of the 21st century, it went from 70% to 80% in a couple of years, reaching an all-time high (Lime, 2015; Dardenne, 2012).

Even considering the simmering turmoil made by the remunicipalisation wave (see *infra*), the part of water services in public hands stayed low, providing water to 29% of the population in 2008 according to Statista, with the three big French companies, Veolia, Suez and Saur respectively supplying 39%, 19% and 11% of the population to lower to 21% in 2009 (Bauby, 2009).

By 2010, mainly due to Paris remunicipalising its water management and influencing many others, water services in public hands started to grow. In 2013, 34% of the population was supplied in

water by public utilities. Since 2014, this number rose to 40%, and it keeps growing, percent by percent every year. France stays one of the countries with the highest rate of privatisation (60%), whereas this number is estimated to be around 1% for the rest of the world (Monin, 2018; Da Costa et al, 2015; De Clerq, 2014).

3.3. Movement of remunicipalisation

As the privatisation of water spread in France, so were cases of bribes or blatant corruption. Allied together to prevent further instances, council-commissioned audits, courts and citizen movements managed to move the issue on to the public scene, leading the legislator to enact in 1993 the Law No. 93-122 on the prevention of corruption and transparency in economic life and public procedures, so-called “loi Sapin”, after the one who introduced it, Michel Sapin, to prevent corruption and promote transparency in economic life and public procedures. In practice, this law *“required competitive awarding of contracts, prohibited “entry fees” and any form of payment or service provision outside the contract’s purpose, capped the duration of contracts to 20 years (with exceptions), limited the use of “additional clauses” and set reporting obligations, among others”* (Lime, 2015, p. 60).

However, it seems that this legislative action came too late, as the idea of remunicipalisation strengthened. In July 1997, a first group of 21 small communities (Durance-Luberon) decided not to renew the delegation contract, and to take water management back to public hands. In 2001, the first city with more than 100,000 inhabitants, Grenoble, does the same, after citizen movements and local environmentalists managed to get the city to cancel the delegation contract with Suez. Since then, it seems that prices decreased while quality service improved (Petitjean, 2009).

In 2010, a big blow hit Suez and Veolia, who had shared water supply in Paris for 25 years. Due to financial inconsistencies and to poor and overpriced service, the Mayor and the municipal government decided not to renew the contracts with the two multinationals, and to put water services under local control. The record a year after seemed encouraging, as efficiency savings of EUR 35 million were made, allowing to decrease by 8% the bill of the Parisians. The Paris case was a signal for cities in France and all around the world and accelerated the rate at which remunicipalisation was going (Rapid Transition Alliance, 2019; Dardenne, 2012). Now, according

to Antoine Frérot, CEO of Veolia local authorities in France and globally negotiate fiercely to reduce prices, using remunicipalisation as a threat: “*whenever I visited a prospect around the world, and it must be the same for our peer (Suez), they would ask me why they would do business with me if even the French capital has no confidence in the French water firms*” (De Clerq, 2014).

Globally, the justifications to remunicipalise water services can be found in the behaviour of political and economic actors, i.a., inability of private water companies to supply affordable and of decent quality water, under-investment, overpricing, or lack of transparency. For example, in 2004, a study showed that average bill for water supplied privately was 16.6% higher than water supplied publicly. More recently, in 2018, the *Cour des comptes* found that water is 10% cheaper in cities that publicly manage water services (Monin, 2018; Chong et al., 2006).

Solutions found in remunicipalisation include costs cutting, quality of the service improvement, operational and social control enhancement, as resources used to reward shareholders are reinvested in the public service. Not only this, but at the era of global warming and climate change, factors like sustainable development and waste reduction are also taken into account. (TNI, 2014). Some even argue that water should be made a human right and a public good, and that all the remunicipalisation cases are “*a promising example of the power of people and the public sector to take on neoliberal forces of privatisation, and to improve the provision of basic services for all*” (Rapid Transition Alliance, 2019).

Others argue that privatisation stays the best solution, as the budget of the local authorities is smaller than private means, and the technical and managerial knowledge acquired by private companies after centuries of privatisation will make it hard, if not impossible for public authorities to catch up (Petitjean, 2009).

The remunicipalisation wave does not seem to tire at the moment, as currently one region (Ile-de-France, pop. 10 million, excluding Paris, already remunicipalised) and four cities (Lille, pop. 230,000; Toulouse, pop. 470,000; Lyon, pop. 510,000; and Marseille, pop. 860,000) are planning to bring water services under public hands as soon as the contracts with the private companies expire. Even cities that had never known public water management, like Rennes and Nice remunicipalised water in 2013. At the world scale, instances of remunicipalisation grow exponentially, from only two instances in two countries at the turn of millennium to more than two-hundred-thirty instances in thirty-seven countries by 2015. Amongst those cases, a majority

happened in France, where 94 cities took the leap, especially after the Paris case (Rapid Transition Alliance, 2019, Lime, 2015).

As the aforementioned current situation of the UK described by EurEau, France still has a lot of room for improvement concerning some water services number. Indeed, France is higher than the European average as per average residential consumption, at 143 litres per day per capita, compared to 130 litres per day per capita but also at pricing, the Frenchman paying on average 3.92 €/m³, while the European pays on average 3.4€/m³. The drinking water network length per capita is quite impressive, at 15m, while the European average is around 8m, whereas the French waste water network is a meter shorter than the European 7 meters (EurEau, 2018).

Nonmarket strategies are critical for the movement of remunicipalisation. Different framings are used, such as tiredness of excessive liberalism, lack of trust in economic actors, success of previously made remunicipalisation, need to change for the climate and the planet, will for more engaged political actors, and others. The issue is moved to various arenas, mainly local governments and protests, but also courts, Parliaments and the international media. As mentioned before, a website is specially dedicated to keeping track of the number of municipalities, regions and countries that managed to achieve remunicipalisation of water. The key to success resides in alliances made. Broad-based public campaigns with citizens movements and NGOs are of course crucial, but the dynamic engagement of politicians in the process is critical, as public control means stronger public accountability. Furthermore, resourceful allies can be found in actors that remunicipalised water already. For example, Paris and Grenoble have been helping other local governments in France and around the world to successfully finish the process, teaching from experience. All in all, it seems that the best way to ensure water protection and prevent against potential abuse is to enshrine water as a public good and a human right into the constitution of the country (Rapid Transition Alliance, 2019; Lime, 2015).

Section 4 – Cochabamba (Bolivia)

4.1. Pre-Water War period

The early 1980s marked the return of Bolivia to a democratic regime, coming from almost two decades of military regime, and its economy was disastrous. The World Bank and the International Monetary Fund (IMF) agreed to help financially by giving loans. However, these loans were granted providing that heavy conditions were followed, called ‘structural adjustments’, e.g., lowering labor rights, reducing public spending, and especially opening markets to foreign investors and privatising public enterprises (Pezon & Breuil, 2012). This process supervised by the World Bank was angrily called ‘neoliberalism’ and was enthusiastically implemented by the country. Between 1995 and 1996, five of the largest public enterprises were privatised: the phone, the national airline, the electricity, the oil and the railway were sold to various private actors. Reports showed afterwards that all those privatisations had negative consequences e.g., electricity rates soared and the railroad was dismantled and sold for parts (Shultz, 2003, Finnegan, 2002).

Later, in 1997, it was the turn for water to be sold to foreign investors, as the government asked the World Bank for a loan to enhance water services in the biggest cities, like Cochabamba, that was given in exchange for the privatisation thereof. Thus, in 1999, the government ceded Cochabamba’s public water company (SEMAPA), without any public discussion, to Aguas del Tunari, subsidiary of the multinational Bechtel (Lopez, 2015; Gomez & Terhost, 2005).

The contract signed with the private company clearly shows the weak bargaining position of the country, as the former was the only company willing to invest in Cochabamba’s water. This was a \$ 2,5 billion, 40 years contract, granting to the private company exclusive rights on all water in the community network and all smaller systems in the area, with a minimum 15% annual return on the investment. The company was also granted the right to install meters to all water systems, even the wells built by small cooperatives, and the residents could be forced to pay for the installation. All this was made legal by quickly enacting a new water law (Law 2029). Many considered that this amounted to a monopoly over all the water in the area (Finnegan, 2002).

The reasons invoked to privatise was to enhance market development and performance in a known corrupt area. Pro-privatisation argument in developing countries include the inability of public authorities to correctly finance public services, unlike private corporations, to improve the lives of

the people. Rates in privatised business usually increased, to satisfy the will for corporations to make profits, but that increase also serves the people, as they would use water more efficiently without wasting it, especially given the water shortages in Bolivia.

As the news of this deal started to spread, FEDECOR, an organisation composed of engineers and environmentalists was the first to react, calling on the President and politicians for explanations, followed quickly by district associations, peasant farmers, trade unions and water cooperatives. Together they allied, forming a group called the Coordination for the Defense of Water and Life (Coordinadora) (Finnegan, 2002).

4.2. The Water War

As feared by the residents, it only took a couple of months for the private company to raise water prices and charging people collecting rainwater, required by the mayor to finance the construction of a dam, although considered by the World Bank as economically unattractive. Rates increased by an enormous average of 43%, with some bills doubling, amounting for some to a quarter of the monthly income. This made business owners and middle-class households join the protests. (Ferranti, 2004; McKenzie & Mookherjee, 2003).

This was clearly an indelicate move from the private company. Explanation for this can be found in the fact that the executives in charge of the projects were engineers that did not have social and marketing formation, not knowing the Bolivian culture and its public. This is depicted from the reaction to the protests of the private company manager, that simply said that if residents could not pay their bills, they would not be served water anymore (Finnegan, 2002).

The protests continued to gather supporters from many backgrounds: shop and street vendors, student from the city's university, retired people, and the most abundant and fiercest was the growing population of homeless children. The protests quickly became violent, opposing the people to the army and the police force, respectively using rocks and Molotov cocktails against rubber bullets and tear gas. Realizing the movement could not be stopped that way, the government answered by sending a delegation to discuss with the Coordinadora, leading the protest movement. By the end of February, the increase in rates were abandoned, but this was little compared to the requests the movement demanded, so it kept going, asking the private company to leave the

country, the government to dismiss the Law 2029 and SEMAPA to be taken back in public hands. The government did not want to meet those inquiries, as breaking the contract would destroy the credibility of the country and any possibility of private company investing in the country anymore, as happened in Argentina (Gomez & Terhost, 2005).

Martial law was decreed on April 8, meaning some constitutional rights were put aside and mass arrests were authorized. The government tried to belittle the credibility of the movement, framing it as a conspiracy led by narcos, given that coca leaves laborers took part in the protest. Things accelerated in a matter of days when, while tens of thousands were marching in the streets, holding the city's main plaza, a 17 year-old student got shot in the face, dying instantly (the man killing him would be acquitted by a military tribunal a year later and was promoted to major soon after). This event caused an outrage amongst the protesters who became fiercer than ever (Finnegan, 2002).

On April 11, the government capitulated and negotiated with the Coordinadora to cancel the privatisation, and the private company fled the country. SEMAPA went back to public hands, with members of the Coordinadora joining the temporary board, thus being able to take part in the decisions making, though the disruptive behavior of local authorities, not cooperating at all did not allow for any significant change. Finally, the Law 2029, representing for the Bolivian people everything unethical with neoliberalism – no consideration for equity, inclination for foreign interests instead of national's, exclusion of the state involvement – would be repelled, after the government held a referendum where 97% of respondents declared not wanting privatisation and a new law drafted (Law 2066), that would however take years to be implemented, given the Bolivian system (Gomez & Terhost, 2005; Asseis, 2003).

4.3. Post-War period: what changed?

After the Water War, things did not go as smooth as expected by the Coordinadora. Although they had seats at the Board of SEMAPA and corruption was reduced, still, because of obstruction from politics, poor finances and heavy conditions imposed by financial institutions, change was stalling. A few years later, the poor population still had to pay several times rates for water what the richer, connected to the network, had to pay. (Finnegan, 2002).

In 2008, public management of the water was stamped as poorly efficient, with water shortage, accounting mistakes, price increase, and a lack of international financial help. In 2009, Bolivia created a new Constitution, enshrining a fundamental right to water therein, considering it as a common public good, and not a commercial commodity to be taken advantage of, and a year later the UN announced a resolution acknowledging the basic human rights to water (Lopez, 2015).

The conclusion of the events for Bolivia itself is not positive. Even if, seeing the Water War conclusion, La Paz, another city wherein water was privatised also rebelled against the private company managing the water, Suez, making them leave the city. In 2015, due to corruption and politics, still half the population of Cochabamba does not have access to public water and survives by either buying their water or from cooperative wells. Fifteen years after the Water War, at national and local degree, water management crisis exists. However, the conclusion is brighter for the rest of the world. The events that happened at the beginning of the millennium greatly inspired many around the world, struggling to restore their natural resources from privatisation giants.

Section 5 – Lessons Learned

As mentioned already, to achieve the goal of this project, recommendations will be made using the nonmarket strategy frameworks (see chapter methodology), i.e., knowing how to frame the issue to make it more salient to relevant actors, assessing in which arenas the issue should be moved and gathering important allies that can help get the project through. Thus, in this section, we will examine the nonmarket strategies used in the different countries discussed above, whether to privatise or remunicipalise water, to try and take elements that can be applied in our case in Ireland.

The Senegalese government and the private company used different framings to justify privatisation of the water services. Financially first, the government claimed that heavy investments were required to improve the distribution and storage of water, and to satisfy the increasing demand for water services. It also argued that the private sector would bring substantial efficiency gains, using a simulation showing that, prices from 1996 to 2003 would need to increase by 5% per year without private participation against 2.4% with it to make the sector self-sustaining. The deal happened mainly behind the scenes, as the President has enough power to carry it alone.

In England, the Conservative Party with Thatcher at its head, also used various framings to make the people accept the privatisation, mainly arguing that it was essential for the country and an amazing opportunity for the people, as efficiency would improve, more investments would be made, prices would decrease and competition would rise. The issue moved to the Parliament, to enact the Water Act 1989, implementing the privatisation, and to the stock market to reach out to all interested parties. Thatcher found many allies, not only from within the government but also from the public that was promised an increase in water access and quality.

After reports were published, showing that the effects of privatisation were not as expected, and following the global movement aiming at taking back water under public hands, people, activists, environmentalists and media allied together, moving the remunicipalisation issue to different arenas, like the street and the social media, and framing this issue as a life or death situation. Results from a survey published in October 2017, showing that 83% of the respondents want water services to be put under public control are putting some pressure on the shoulders of the politics.

The nonmarket strategy used by the French multinationals was highly efficient. Framed as a way to improve already existing water utilities in wealthy countries, and as an opportunity to offer the people access to quality water while lightening the financial burden in developing countries, the economic model used by Suez and Veolia was replicated almost everywhere in the world, leading to numerous water privatisation processes in many countries (each are currently active in around hundred countries on five continents, supplying millions of consumers). There was no real arena to debate the matter, as most of the times the public authorities negotiated directly with the private companies. The latter found strong allies in national and local governments, private donors, as well as the people, eager to see access to and quality of the water improved. A decisive ally for them was found in the World Bank and other development banks, that promoted privatisations, often forcing it on the countries as condition to grant a loan (Rapid Transition Alliance, 2019; Hall & Lobina, 2007).

In the last two decades, nonmarket strategies have been critical for the movement of remunicipalisation. The issue is moved to various arenas, mainly local governments and protests, but also courts, Parliaments and the international media. As mentioned before, a website is specially dedicated to keeping track of the number of municipalities, regions and countries that managed to achieve remunicipalisation of water. Different framings are used, such as tiredness of

excessive liberalism, lack of trust in economic actors, success of previously made remunicipalisation, need to change for the climate and the planet, will for more engaged political actors, and others. The key to success resides in alliances made. Broad-based public campaigns with citizens movements and NGOs are of course crucial, but the dynamic engagement of politicians in the process is critical, as public control means stronger public accountability. Furthermore, France showed us that resourceful allies can be found in actors that remunicipalised water already, like Paris and Grenoble providing advice to communities that want to remunicipalise water.

Finally, to understand how the Cochabamba Water War was framed is pretty easy, as it is well summarized by the words of Oscar Olivera, representative of the Coordinadora: *“for many people this struggle means the reclaiming of their water as a fundamental resource, but also the reclaiming of their dignity, confidence, and capacity to organize and shape their own future themselves”*. This was a protest against the neoliberal development strategy. Two big alliances were opposing during those few months. On the one hand, the government, using military and police forces, and the private company. On the other hand, several hundreds of thousands of protesters, composed of engineers, environmentalists, peasants, district associations, trade unions, local businesses, water cooperatives, shop and street vendors, students, and many homeless children, all having one goal: reversing the betrayal from the government by putting water back into public hands. The arena where the issue was moved is without a doubt the street, as people marched and fought in them for months. Many weapons were used during the conflict, whether violent (rubber bullet and batons against Molotov cocktails and bricks) or not (surveys within the movement, debates and reunions) that pressured the authorities to try and resolve it, ultimately making them capitulate.

Those case studies show us that participation via social dissatisfaction and active involvement from relevant actors can lead to fundamental transformations. All in all, it seems that the best way to ensure water protection and prevent against potential abuse is to enshrine water as a public good and a human right into the constitution of the country. For the sake of this project, it seems to us that France has the most interesting events that we can learn from, and from which we can derive conclusions to make recommendations to Sli na Bande. We will now examine the specific situation of Ireland.

Chapter IV - Water in Ireland

Section 1 - Situational context

With a total population of 4,800,000 inhabitants, Ireland is the only country in the EU without domestic water charges (EurEau, 2018). However, the Irish water crisis from the past has proven that this free of charge environment can easily be destabilized. As mentioned in section 3 ‘the regulatory framework of water utility applied per country’, the water management model of Ireland has known a recent transition from a direct public management towards a delegated public management. This transition is directly linked to the Irish water crisis faced in 2014. Around 82% of the Irish population uses public drinking water and waste water services furnished by Irish Water (Department of Housing, Planning and Local Government, 2019). Another 12% receives their drinking water from private wells and small private supplies (Department of Housing, Planning and Local Government, 2019). The remaining 6% get it from group water schemes (run by local communities) (Department of Housing, Planning and Local Government, 2019).

Section 2 - Privatisation

2.1. Privatisation of the natural resources oil and gas

2.1.1. Gas supplier company

Following the agreement of the bailout by the Troika, Ireland was forced to privatise state services in order to escape its debts. The national supplier of gas and electricity, Bord Gais Energy, was no exception to the rule. In March 2014, the state-owned company was sold to Britain’s Centrica and consortium partners iCON Infrastructure and Brookfield Renewable Energy for €1.1 billion (Ryan, 2014). The 445-megawatt Whitegate power station which was only build in December 2010 by Bord Gais at a cost price of €150 million accounting for 445.000 customers, was also included in the deal (Money Guide Ireland, 2014). The general opinion was that the deal should not have gone through at such a low bid, the government hoping to sell it for at least €1.4 billion (Aglionby, 2014). A bargain for Centrica, and a loss for Ireland. While there were no significant movements or protests coming from the Irish citizens about the Bord Gas sell-off in particular, the people’s mind

burst out during the Right2Water movement happening at the same time in 2014. Irish citizens felt that the government was giving away Ireland's natural resources for 'free' to big corporations (Hearne, 2015).

2.1.2. Oil and gas explorations

After awarding an offshore exploration license to the Marathon Oil Corporation, the oil and gas explorations in the Irish waters effectively started in 1970 (SIPTU Oil & Gas Review Group, 2011). It is three years later that a commercial finding is declared by the Marathon company, resulting in a higher job creation although still limited compared to the value of oil today. The year 1975 stands for a turning point in the oil and gas explorations of the Irish waters. Justin Keating, the Minister for Industry and Commerce at that time, introduced the first substantial legislation on the use of Ireland's oil and gas reserves (Houses of the Oireachtas, 2012). The legislation gave the government a 50% stake by right of viable oil and gas discoveries, production royalties between 8% to 16% and corporation tax at a rate of 50% (Houses of the Oireachtas, 2012). The aim of this legislation was to protect the Irish population from giving away the country's resources and to ensure that the oil and gas explorations also benefits them.

Unfortunately, the royalties and the state participation were abolished in 1987 (Department of Communications, Climate Action and Environment, 2019). Furthermore, in order to attract foreign investments, this legislation was revised again in 1992 by the Minister for finance Bertie Ahern (SIPTU Oil & Gas Review Group, 2011). The corporation tax got reduced from 50% to 25%, standing for the lowest tax rate in the world (Bock, 2008). The overview below illustrates a comparison between the legislation on oil and gas explorations of Ireland today and Norway as a benchmark:

	IRELAND	NORWAY
ROYALTIES	0%	51.5%
CORPORATION TAX	25%	78%
SHARED OWNERSHIP	0%	50%

Appendix XIII, based on a study of 45 international petroleum systems in 2007, reflects how low the return is for Ireland on oil and gas explorations compared to other countries (Shell To Sea, 2011). Based on those two elements, it becomes clear that Ireland is not the most adequate country in terms of making the best deals. In order to fight this governmental injustice, Shell2Sea is a social movement that has arisen locally in the years 2000. The aim of the organisation's campaigns is mainly to renegotiate the terms of the oil and gas legislation and to make sure that any exploration is performed in a safe way without health, safety or environmental risks particularly focusing on the Corrib gas project (Shell To Sea, 2019).

Books, leaflets, posters or films are used as materials to campaign and to raise public awareness. Besides that, real-life actions are also taken regularly and sometimes ending in violence. No considerable mass movements were involved during the campaigns, only on a smaller scale. In the end, Ireland has known only four successful commercial discoveries of oil and gas and another fourteen that are still being assessed (SIPTU Oil & Gas Review Group, 2011). A complete overview of the different oil and gas finds in Ireland is available under appendix XIV.

A different campaign, 'Keep It in the Ground' – born from an anti-fossil fuel protest movement spread across the world - resulted in the creation of an Irish Bill in 2017 in order to *“prohibit the issuing, renewal, reinstatement, or extension of any license or other exploitation rights for the exploration, extraction, production or prospecting of all forms of petroleum onshore or offshore and to provide for related matters”* (Houses of the Oireachtas, 2017). This Bill is supported by TD Brid Smith and if passed, will make Ireland the fifth country in the world to ban fossil fuel exploration and will stop the issuance of new licenses (People Before Profit, 2019). According to the Irish government, the bill is 'unworkable' and will force Ireland to rely on oil and gas from abroad (Finn, 2019). While ignoring the reality of climate change and looking at the numbers 'benefitting' the Irish population, this statement can seriously be questioned. However, only the future will tell what will happen with the oil and gas explorations in Ireland.

2.2. The Irish Water crisis

After the financial crisis of 2008, Ireland suffered from unemployment, colossal debts, housing and healthcare issues. The Troika (European Commission, European Central Bank and the International

Monetary Fund) decided that, in order to pay back Ireland's debts, selling its state assets would be a condition of the bailout. These 'terms and conditions' also occurred, as mentioned previously, to Portugal and Greece. Finally, in 2010, Ireland's governing party Fianna Fail agrees with the Troika to introduce water charges as a part of the bailout Memorandum under the new state body 'Irish Water' (Hearne, 2015). It was a 'consequence' of the water funding that got reduced by 65% between 2008 and 2013, the introduction of water charges would have helped the Irish government in maintaining the water infrastructure and in the protection of water (Murphy, 2019). The Irish population suffered greatly during the financial crisis due to the lash back of neo-liberalism, capitalism and the ongoing austerity program; additional taxes such as the property tax and 'the household charge' were introduced. This led to the creation of the 'Campaign Against Home and Water Taxes' (CAHWT) in November 2011, which became Ireland's most significant protest movement at that time (Murphy, 2019).

The tactic used by that campaign was mainly to boycott with a huge number of people the registration process of the property tax, combined with massive protest movements on the streets, political pressure, industrial action and civil disobedience (Irish Election Literature, 2013). An example of a leaflet by the CAHWT calling for action is available under appendix XV. In order to work, the boycott of the property tax must be completed by a large amount of people boycotting on the long term, and not giving in on the threats by the government of possible fines faced in case of non-payment (Irish Election Literature, 2013). Therefore, a type of 'propaganda' was used in order to motivate the people to continue boycotting the property tax, as illustrated in appendix XVI.

The campaign was mostly politically supported by left wing parties (the United Left Alliance) or independent TDs such as Joe Higgins, John Halligan, Joan Collins, Luke 'Ming' Flanagan, Richard Boyd-Barrett, Mick Wallace, Clare Daly or Seamus Healy (Irish Election Literature, 2013). The focus of the CAHWT was mainly on the property tax and less to none on the water charges. Nevertheless, the CAHWT campaign together with the 'Ballyhea Says No' campaign (anti-austerity) allowed the creation of hubs for activists, leading to a growing organisation, opposition and awareness among the population (Murphy, 2019). According to the Workers Solidarity Movement *"the water charges will only be defeated if a campaign of mass participation can be built. More people will need to be involved than even at the high points of the campaign against*

the household tax. People will need to be prepared to, not only boycott the charge, but obstruct the installation of water meters and to sabotage ones that have already been installed” (Workers Solidarity Movement, 2013). This is exactly what happened, but under a different movement.

Rumors of privatising the water in Ireland and its potential threats started to go around when in 2013, the 34 local authorities responsible for the water and waste water services were brought together under one provider, the semi-state company Irish Water (Hearne, 2015). However, Irish Water is a subsidiary of the previously state-owned company Bord Gáis Éireann, which got partially privatised in 2014 and is known today under the name Ervia (McLysaght, 2012). This was put under a legal framework when the Water Services Act 2013 was enacted by law on the 20th of March 2013. According to the wording of the bill, the Water Services Act 2013 is *“to make provision in relation to the installation and maintenance of water meters in dwellings; for that purpose to provide for the formation of a subsidiary company by Bord Gáis Éireann and the performance of certain functions under the Water Services Act 2007 by Bord Gáis Éireann and that subsidiary company [...]”* (Houses of the Oireachtas, 2013).

The Water Services Act was closely followed by another one in December. The Water Services (No. 2) Act 2013 got enacted by law in a blink of an eye: it passed all the stages of the Seanad Éireann and the Dáil Éireann in less than one month. The second act goes as follows: *“to make provision for, and in relation to, the imposition of charges by Irish Water in respect of the provision by Irish Water of water services; to provide for the transfer, in part, of the functions of water services authorities under the Water Services Act 2007 to Irish Water; [...]”* (Houses of the Oireachtas, 2013). The main reason given to the rush of the Bill through the stages of the Oireachtas is that local municipalities did not have the funding anymore to manage the water services and would otherwise have gotten the full responsibility of managing it (Houses of the Oireachtas, 2013).

Step by step, the privatisation of water services and the implementation of water charges were getting real and impacting the Irish as a public outcry. The straw that broke the camel’s back was in 2014, when the amount paid to consultants and the price of the water charges was revealed; €85 million for consultants and €278 of charges per regular household (Carroll, 2014). After having

faced the most severe economic and social conditions, the question from external observers or academics - 'why are the Irish not protesting' - could not be asked anymore. Due to the previous years of local and national mobilization to raise awareness, people were finally willing to take over and felt that 'the people have the power' (Hearne, 2015). This thought was confirmed by the installation of the first water meters. At the arrival of contractors in order to install the water meters near an estate, people all over Ireland protested by blocking the installations of water meters by all means (Cork Independent, 2014). Meanwhile, the biggest movement against water charges in Ireland started to erupt: the Right2Water movement.

The movement mainly claimed at first the abolishment of the water charges. Today, Right2Water is mostly advocating for a recognition of water as a human right and supports firmly the introduction of the bill about public water ownership (Right2Water, 2014). Right2Water was composed and supported by five trade unions (Unite, Mandate, CWU, CPSU and OPATSI) as well as the parties Sinn Fein, People Before Profit, the Anti-Austerity Alliance, the Workers' Party, the Communist Party of Ireland, independent public representatives and the community-based Spectacle of Defiance and Hope (Finn, 2014).

Due to the awareness raised by previous movements and a more extensive support, the Right2Water movement was able to mobilize large scale protests extending those of the CAHWT protests. The first day of action took place in Dublin on the 11th of October 2014; while organizers expected 10.000 people, 80.000 people joined the protest (Brophy, 2015). This gave the opportunity to capture the emotions of the citizens felt back then, expressed as follows:

"I feel that it's leading towards people committing suicide. People just are in such a dark place and each cut is hitting those with the least. It feels as though our government don't care about the people at all"

"Can't take any more. There are days I don't eat so that I can pay the bills and my kids don't realise that we haven't got money to buy stuff" (Hearne, 2015).

The message towards the Irish government was clear: enough is enough. The population could not continue that way and radical change was necessary. According to an online survey, the three main reasons for protesting during the Irish Water crisis were first of all that austerity went too far,

secondly to go against the privatisation of water and thirdly to go against the water charges (Hearne, 2015). While the protests continued not only in Dublin, but locally all over Ireland, the government took a huge step back concerning the water charges. The government offered a 'water conservation grant' of maximum €100 a year in order to reduce the 'burden of the water charges on working families' (Hosford, 2014). The condition to get the grant was that your household had to be registered with Irish Water, knowing that out of protest one million or 2/3 of the households did not register by that time yet (Citizens Information, 2019). The grant was clearly a strategy in order to encourage the people to register for Irish Water. This made place for more anger among the population, which was reflected on the first of November 2014, when an estimated 100.000 to 200.000 people gathered on the streets around Ireland (Power, Haynes, & Devereux, 2016). People felt that the government betrayed them by giving away Ireland's natural resources to the '1%' or the 'golden circle', and also experienced a situation of corporate enslavement (Hearne, 2015).

According to a survey taken in December 2014, 74% of its respondents stated that if a referendum took place, they would vote for Irish Water to remain in public ownership (Power, Haynes, & Devereux, 2016). The role of the internet and social media in particular played a huge part in the different protests in Ireland. According to that same survey, 82.6% of the respondents were informed by the protest actions through social media while only 6.4% got informed through traditional media outlets (Hearne, 2015). A reason could be that the media was biased in a way. The protests were usually pictured as negative by the media, or even violent in some cases.

Overall, the Irish Right2Water movement was a huge success and was able to represent the strongest social movement since the independence of Ireland in 1921 by actions on a local scale with the water meter protests and on a national level with five demonstrations (Hearne, 2015). The following years, protests were still going on, but the turning point of the movement happened during the years 2014 and 2015. About the privatisation of water itself, which is still an existing threat, the most optimal and secured way to be certain that water will not be privatised is to have it protected in the Irish Constitution. Together with the Right2Water organisation, the Thirty-fifth Amendment of the Constitution (Water in Public Ownership) (No. 2) Bill 2016 was introduced by Deputy Joan Collins in 2016. The water charges were entirely abolished in 2017 when the Oireachtas committee accepted a report of the Dáil (96 votes to 48) (O'Halloran, 2017).

Section 3 - The Bill

Following the 2016 general elections, the Thirty-fifth Amendment of the Constitution (Water in Public Ownership) (No. 2) Bill 2016 was signed by 29 TDs and introduced by TD Joan Collins to the House on the 25th of May 2016 (Houses of the Oireachtas, 2016). The final purpose of the Bill is to have it amended in the Irish Constitution in order to be certain that the privatisation of water will not take place. The Bill completed the second stage of the Dáil Éireann and is now stuck at its third stage since the 9th of November 2016. At the third stage or the so-called committee stage, the Bill is examined section by section whereas amendments may be created (Houses of the Oireachtas, 2016). The main reason that the Bill is not proceeding to the other stages of the Dáil Éireann and the Seanad Éireann is, according to the opposition and the government, because of the wording.

The wording of the proposed Bill is as follows: *“The Government shall be collectively responsible for the protection, management and maintenance of the public water system. The Government shall ensure in the public interest that this resource remains in public ownership and management”* (Houses of the Oireachtas, 2016). The main problem of the wording would lie in the concrete legal definition of *‘the water system, the public water system, where public ownership stops and where private and group ownership start’* (Houses of the Oireachtas, 2018). Adding to that, the government claims that the wording of the Bill can be interpreted in different manners with no certainty on how the interpretation will be done. During the Select Committee on Housing, Planning and Local Government debate on the 22nd of March 2018, the Minister for Housing, Planning and Local Government, Deputy Eoghan Murphy, claimed that *“My predecessor in this Department observed that during the Second Stage debate there was a common view on all sides of the House that the State should own the vital public service that is water. Deputy Joan Collins observed at that time that the public at large holds this view. I share both perspectives. I reiterate that I remain strongly committed to working with the committee to advance an appropriate constitutional amendment”* (Houses of the Oireachtas, 2018).

While the Minister may seem to support the bill in words, his actions taken to actually support it prove the opposite. During that debate and the interview with Joan Collins, the TD mentioned that a letter in order to meet was not answered, and that meetings got cancelled or postponed. This

results in an eternal delay and postponement of the Bill by the government, which is clearly reflected in the time - two years and a half - the Bill has been stuck at the third stage of the Dáil. As mentioned above concerning the Water Services (No. 2) Act 2013, when it came to pass the Bill in order to make Irish Water a semi-state company, it took less than one month to succeed. When the government wants something that plays in their best interest, it takes no time. When it comes to a Bill about public water ownership, giving the government no place to move or to take potential future decisions on the privatisation of water, it takes ages to process. As mentioned during the interview, in order for the Bill to arrive at the fourth stage of the Dáil, there must be an agreement by a majority. This majority is currently held by the two centre-right parties Fianna Fail and Fine Gael. Minister Eoghan Murphy being part of Fine Gael, is able to play a role in influencing other parties about public water ownership such as Fianna Fail.

So, what is next? On the 19th of June 2019, a meeting together with the department officials took place in order to discuss the wording of the bill. The meeting also allowed all the different opinion parties to have a clarification about the Attorney General's position on the wording of the bill. It seems that the Attorney General, which is only in direct contact with the government itself, is not convinced by the wording of TD Joan Collins nor the one of the Minister Eoghan Murphy. We have already contacted relevant parties for a follow-up of the situation.

Section 4 - Mapping out of the actors

4.1. Regulators

In July 2013, Irish Water was incorporated under the Water Services Act 2013, a legislation transposing EU directives into Irish law, taking under one national service provider the responsibilities of water and wastewater services of the 31 local authorities. Irish Water is responsible for the production, distribution and monitoring of drinking water from over 900 public water supplies. Where a public supply is not in place, a home or premises may be supplied by a group water scheme, a small private supply (both under the responsibility of local authorities), or a private well.

Irish Water is regulated by the Commission for Regulation of Utilities (CRU) and the Environmental Protection Agency (EPA).

4.1.1. Commission for Regulation of Utilities (CRU)

The CRU is the independent energy and water regulator in Ireland, and has a wide range of economic, customer protection and safety responsibilities therein. Its mission is to protect the public interest in water, energy and energy safety. Policy for this area is the responsibility of the Minister for Housing, Planning, Community and Local Government.

It is thus the economic regulator for the public water and wastewater sector, covering the services provided by Irish Water, meaning it decides the budgets and approves investments, and examines disputes between Irish Water and its customers. It protects the interests of the customers by monitoring the performance of Irish Water in delivering services.

The CRU is guided by four strategic priorities for the period 2019-2021, that will sit alongside the core activities undertaken, to protect the public interest and to deliver sustainable low-carbon solutions with well-regulated markets and networks, ensure compliance and accountability through best regulatory practice, develop effective communications to support customers and the regulatory process, and foster and maintain a high-performance culture and organisation to achieve their vision, mainly a sustainable, reliable and efficient future for energy and water.

4.1.2 Environmental Protection Agency (EPA)

The EPA is the environmental regulator, setting standards and enforcing compliance with EU and national regulations for wastewater and water supply. Under the Drinking Water Regulations, the EPA is provided with supervisory powers for public water supplies. Regarding Irish Water, it supervises and can direct Irish Water to improve drinking water management and quality and sewerage treatment.

The EPA regularly publishes water treatment manuals and advice to provide practical guidance to water suppliers. Following the regulations, Irish Water must warn the EPA of any drinking quality failures or risk to public health from a public water supply.

As a way to keep supervising the performance of the water provider and the quality of water services, the EPA does audits of drinking water supplies. After the report on the audit is done, and if problems are found, the EPA requires Irish Water to take appropriate actions, and organizes follow up on these actions.

4.2. Organisations

Organisations, e.g., NGOs or citizen movement are an important factor to take into account when discussing nonmarket environment. Often aiming at improving how things are done, questioning the status quo, they have the advantage of being a structure that has more capabilities than ordinary citizens. Active on social media, organizing conferences, they can reach many people almost instantly to inform them on the latest news, information that they get from their extensive network. Furthermore, these organisations will often work together with likewise entities, thus extending their potential. However, it can happen that they restrain themselves and end up losing the organised structure they once had, e.g., by letting opportunities to grow go by without exploiting them.

4.2.1. Right2Water

The Right2Water campaign was born at the premises of the Irish Water crisis and started with a petition aiming to collect 50,000 signatures (which they achieved). It was launched by activists, citizens, community groups, political parties/individuals and trade unions, calling for the government to recognize and legislate for water as a public good.

It states that provision of sufficient water and sanitation is an essential public service and a human right recognized by the United Nations, stating that it “*recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights*” (UN Resolution 64/292, July 2010).

The Right2Water movement played an essential role during the Irish Water crisis, mainly by organizing street protests, gathering people through social media, to have the water charges abolished. It clearly was one of the reasons the movement became so big. It argued that water

charges would discriminate against working people and the unemployed in favor of the wealthy, and that the charges are but another tax taking vital money out of the Irish economy and out of the pockets of people. Furthermore, it argued that the public water system is paid for through general taxation (Hearne, 2015).

As all citizens need clean drinking water and quality sanitation, Right2Water adds that water should be freely available to all regardless of wealth or income. Their intention is to raise awareness on this critical issue and ensuring that the water charges stay in the mind of the people, that they do not forget what happened. It is now campaigning to have a referendum organised, to enshrine in the Constitution water as a human right and a public good.

4.2.2. SWAN

The Sustainable Water Network (SWAN) is composed of twenty-five national and local Irish leading environmental groups working as one to defend and protect water in Ireland through the application of the Water Framework Directive, adopted by the EU. SWAN develops relations at local and national level. The network's endeavors participate a lot to protect the rivers, lakes, coastal and ground waters in Ireland.

Its mission is also to raise awareness on ecologically sustainable management of all the water resources by promoting active involvement of environmental structures. When contacting NGOs for information concerning water in Ireland, most of them will refer to SWAN, its network and its involvement in this cause.

Active on social media, and according to their Facebook page, SWAN is *“a growing grassroots network of people who are concerned about the increase in structural inequalities in Irish society, the attacks on basic services and supports that the welfare state has traditionally provided people and the increasing privatisation of our once public services. SWAN Ireland wants to build alliances with all social workers, social care workers, students, academics, carers, service users, welfare claimants, activists, trade unionists, community workers and care workers, in order to fight for a just society that values people and solidarity at its core.”*

4.2.3. Environmental Pillar

Environmental Pillar is an organisation created in 2009, composed with twenty-six national independent environmental NGOs (some being also members of SWAN, e.g., Friends of the Earth, Irish Wildlife Trust), working jointly to depict the views of the environmental field in Ireland. Its aim is to develop regulations that promote sustainable development and offer a path to the government and social allies to engage with the environmental sector. Its means to work is through social media, environmental campaign and lobbying.

It believes that the well-being or society in Ireland is affected by the “*preservation of the overall productivity, health and long-term sustainability of the eco-systems and environmental services*”, those services including clean water.

Considered as defining challenges of this time, some of its main areas of focus include climate change and water. They believe that public involvement in water services and management is needed if a new sustainable water management way is to be adopted. As such, it strongly supports the UN Sustainable Development Goals. Furthermore, it is an organisation officially approved by the Department of Communications, Climate Action and Environment.

4.2.4. Stop Climate Chaos

Stop Climate Chaos was created in 2007, bringing together more than thirty civil society organisations. It campaigns to make sure that Ireland participates in reducing its impact on climate change, dealing with its causes and consequences on the environment and people in Ireland and abroad.

It encourages every climate action that follows values like human right, social justice, equality, natural environment. Stop Climate Chaos developed strategic objectives to be achieved by 2022, including lobbying the government to take policies that reflect the engagements of the public, and nurturing the climate movement. Furthermore, it believes in the role of everyone to make a change. Thus, it tries to mobilize the Irish public to take personal and political action and help them in their endeavors.

4.3. Politicians

Politicians are at the core of the decision-making process, ultimately taking the decisions. They seem difficult to reach out to, appearing to be quite busy, moving to different arenas like political debates, media, television and so forth. Ironically, it seems that the best moment to contact politicians and get information on a matter is when the elections are coming.

Making sure they are doing what is right, and what they were elected for is thus a continuous work. Knowing who to influence and at what level, whether European, national, regional or local is crucial to not scatter too broadly and focus the pressure on critical points.

During the water crisis, political behavior evolved quite separately. Whereas some politicians strongly recommended the water charges to be respected, calling on the protests to stop, others joined the movement, obstructed the installation of the water meter, sometimes ending up in jail for that.

Theoretically, politicians are expected to make decisions for the greater good, that will improve the situation of the country and the people. Whereas supposedly they pay attention to everyone, in practice however they will often just care about their constituency, craving to be re-elected. Just a glance at all the public scandal is enough to realise that.

It seems however that, by continuously contacting them through different means, e.g., phone, emails, post, social media, public calling, one can eventually get them to spare a few minutes to answer to some citizen concerns. As proof of that, we had the pleasure to go to Leinster House and meet two TDs, Joan Collins and Thomas Pringle (both independent) and interview them (see appendix XVII).

4.4. Activists

According to the Cambridge Dictionary, an activist is “*a person who believes strongly in political or social change and takes part in activities such as public protests to try to make this happen*”. Considered as in-between citizens and NGOs, actively working towards change, though being quite unorganised, activists are essential to bring more people to defend the cause. One has to start somewhere, and activists often help NGOs prune the gross job. Activists’ work is important for the

development of an awareness from the people. Like the NGOs, with which they should work closely, they can help bring a structure in the often unorganised mass of citizens.

A big advantage of activists is their abilities to move towards almost any arena: traditional and social media, television, Parliament, courts, and so forth. Activists can eventually rally people that would identify to their values, sometimes even becoming symbols of struggles, like Oscar Olivera in Cochabamba during the Water War (see *supra*).

Even though some believe that activists and citizens are not powerful and not worth caring about, history shows that citizens and activists movement can greatly impact the business as usual of governments and companies. The best example is, as we have seen earlier, the results of the Water War in Bolivia. It does not have to come to violence like in that case, for instance, concerning Nike, a group of activists held Nike to explain its behavior on clothes labor practices overseas.

As for the Irish Water crisis, activists created many social media groups, informing citizens of the advancement of the movement, and rallied people in local meetings into actively doing something, which led to blocking roads and streets, as contractors were coming.

4.5. Citizens

Contrarily to companies and NGOs, citizens tend to be wholly unorganised and usually have diverging interests and opinions. According to Bach, “*this makes them ordinarily one of the weakest groups in a political controversy despite always being by far the largest group*” (Bach, 2010, p.5). Even though it may take some time, once one achieves rallying the mass and creating a popular movement, it can soon transform into an unstoppable wave, easing only when changes are introduced.

As per the Irish Water crisis, it took some weeks and many thousands of people from all backgrounds and level to get ideas about protesting, then to take the decision to protest, to make the final leap and actively protest. Thanks to the support of activists and NGOs and their resources, Irish citizens managed to organize themselves, eventually leading to the water charges abolished.

Nowadays the movement greatly deflated, and the TDs that introduced the Bill know that the job is not over, and that water charges could come back as well as the threat of privatisation and are thus hoping for the establishment to stumble in order to reanimate the fierce movement.

4.6. Media

The media are an important actor in relaying information from and to every sphere of the society. Depending on the wording used, an article can exacerbate or alleviate the feelings of the population. Still, in today's modern society, with the information being almost instantly available, traditional media face a decline in the monopoly of information spreading they had once. For instance, as mentioned before, during the Irish Water crisis, a survey was made, wherein 82.6% of respondents were informed about the protests' developments from social media, whereas only 6.4% were informed from traditional media. This shows that social media is not a negligible arena to move towards.

In Ireland, media prove to be quite partial and in favor of the traditional political parties (Fianna Fail, Fine Gael, Labour). This happened during the Irish Water crisis, where the media was accused of failing to stay objective, constantly belittled the actions taken by the people, calling on them to stop and focusing on the actions of small group of demonstrators, for instance blocking traffic in Dublin (Hearne, 2015).

4.7. Academics

Analysis of academics' work is relevant when looking for new strategies to implement. It can be a compilation and description of events that happened in the past or a subjective analysis based on the opinions and beliefs of the researcher, or both. Understanding the past is critical to shape a better future.

Available in lectures, academic journals, libraries and, more conveniently, online, finding trustworthy publications can sometimes prove to be difficult, but can reveal to be an endless source of knowledge.

As such, a detailed study of the Irish Water crisis, like Dr. Rory Hearne published in 2015 can help to realise the scale and the mindset of the movement as well as design relevant strategies to implement in the future, to maybe achieve the goal faster than planned.

Section 5 - Water infrastructure in Ireland

Water and wastewater infrastructure in Ireland are widely considered as poor - some even saying in a third world state - mainly because the current network has been in place for way too long, and because of the huge amount of water that is lost every day due to leakage. Water and flooding infrastructures were evaluated and given a 'C' grade, i.e., it is inadequately maintained, unable to meet peak demand and requires considerable investments (Goodbody, 2018; Allen, 2018).

Most of the network dates from before World War I and is in great need of rejuvenation. A survey made with engineers shows that only one out of five believes the systems are in good condition. As reported by the EPA, it seems that the health of a big part of the people is at risk because of the lack of investment. It has thus demanded Irish Water to improve this issue, which they did, but considerably slower than what was required. Irish Water uses the excuse that progress is so due to complex conditions, planning and others (The Irish Times, 2018).

What is even more amazing is to read the concerns about water leakage throughout the country, knowing the water shortage that happened last year during the hottest summer since decades, or the thousands of citizens without water after storm Emma went through. Water's leakage in Ireland is the highest in Western Europe, mainly due to the age of the network, the annual temperature range and bad assessment of needed pressure (Kennedy, 2018). In 2015, each day, it was about 800 million litres of water lost due to leakage, i.e., 49% nationally of the water put in the pipes. Even though it improved in 2016, with 'only' 732 million litres wasted each day, thanks to the investment made by Irish Water, and its objectives for 2021 including reducing network leakage to below 38%, still, more water was wasted in 2018, with around 761 million litres every day. This means that, still today, Irish Water sends to the network twice as much water as is really needed (Kennedy, 2018; Flaherty, 2015).

It is not pleasant to realise that Irish Water seems to not care for the leakage, knowing that the CRU announced that Irish Water has increased the expected budget – to be approved by the former - for the period 2017-2021, from €3,59bn to €3.76bn. This is because it has plans to extract water from the Shannon river and transport it to Dublin to face the increasing demand, costing a huge amount of money. Some believe that this does not make any sense, as this just means that more water will leak, and that focus should be done on repairing and improving current network.

Irish Water countered, saying that the demand cannot be met by only fixing leaks, that is it a step in the projects but not the answer, and that an operation was under way to replace existing pipes, though at a maximum rate of 1% of the infrastructure per year. That is ridiculously low, especially when compared to other countries in Europe, e.g., London reduced water leakage by 30% in less than six years, while Scotland reduced it by 55% in ten years (Melia, 2018; Lee, 2018; Allen, 2018). Recently, Irish Water announced that around €18bn is required to ameliorate the infrastructure – supply systems and wastewater facilities included – in order to achieve an ideal level (O’Sullivan, 2018).

Interestingly, it seems that the Irish people are more efficient than Irish Water when it comes to damming the leakage. As such, *“once householders are notified about leaks on their properties their response is outstanding: Irish Water has repaired 8 per cent of the leaks identified; householders themselves have repaired 36 per cent, despite no financial incentive to do so. Household leakage was cut by almost 40 million litres in just two years: the target was 11 million in 39 years.”* (Kennedy, 2018).

Chapter V - Results

1. Neutral Europe?

While the European Union claims to have a neutral position towards privatisation, our research and findings tell a different story. In at least four European countries – Greece, Portugal, UK and Ireland – the EU has forced or advised countries to privatise its public assets. In the case of Senegal, IMF and WHO have also advised to privatise Senegal's water services, which is indicative of the impact of international institutions and continent-specific institutions in the country-wide privatisation.

Linked to the Right2Water movement, reacting to those institutions as a citizen of the world is a must. This is exactly what the supporters of the European Right2Water did, and partially succeeded. The needs and wants of the European citizens concerning the protection and anti-privatisation of water were partially heard during this European Citizen Initiative. Since water is not recognized as a basic human right yet, a perpetual pressure on the EU must continue in order to avoid other cases of forced privatisation. Institutions in Ireland playing a direct role on European institutions such as the EPA, are an ally in this matter.

2. The people have the power to put pressure on governments

As TD Thomas Pringle mentioned during the interview (see appendix XVII), it is not in the streets that final decisions are taken, but at Leinster house. The historical campaign analysis of Europe, the four cases of water privatisation in the countries Senegal, Colombia, UK and France, and the Irish Water crisis confirm, however, that the people have the power to put pressurize their democratically elected governments. Even if decisions have been legislated and are being implemented, there is a possibility to change that collectively. Mass movements (Right2Water, Coordination for the Defense of Water and Life, ...) have proven their impact on governmental institutions in history by showing strength through collective action. This is especially true in countries with democratically elected governments. Besides that, the people are willing to take action as well. This has been proven in the findings of the Irish Water reparations by its citizens.

The power of the mass is directly linked to another aspect mentioned during the interview with TDs Joan Collins and Thomas Pringle. In order to have a national impact, (Irish) citizens can locally pressurize politicians by means of mails, phone calls, etc. Sli na Bande implemented this pressure by sending regular letters to politicians concerning the privatisation of water. While some politicians indeed replied, it was not a majority. We conclude that if individuals cooperate in an organised manner, positive results can be achieved. For such a movement to occur, the two important factors are knowledge and availability of information. If people are not aware, mass movements cannot be generated and ultimately changes will not occur. Lack of information can also generate dangerous outcomes as will be explained later.

3. Lack of cooperation between concerned citizens, political parties and organisations

While mapping out the environment of actors influencing water or water privatisation in Ireland, certain findings have come to light. In total, eleven organisations that are or could be related to water or protesting water privatisation were contacted: Social Justice Ireland, Forsa Trade Union, Friends of the Earth, Trocaire, Not Here Not Anywhere, Financial Justice Ireland, Sustainable Water Network (SWAN), Environmental Protection Agency (EPA), Environmental Pillar, Stop Climate Chaos and Right2Water. Three organisations answered that they could not help in the research because they were not working on the topic and forwarded us to SWAN or others. Another three gave a promising reply but did not follow up with another response. SWAN, the ‘main organisation’ which was recommended by other organisations, refused after several mails and calls to grant us 5 minutes of their time because they were ‘too busy’, as shown in appendix XX. Even if every organisation has its own way of allocating time, it makes one wonder about their lack of response to information seekers, while obviously fighting for the same cause. In our case, these situations not only happened with organisations, but also with activists and academics.

While political parties seem better organised at first sight, they were not any better with replying to emails. Before the local and European elections in Ireland, which took place on the 24th of May, nine candidates from the local elections of County Wicklow as well as sixteen potential MEPs were contacted. The objective was to ask for their opinion about water privatisation in Ireland, and, to

vote accordingly. Only four out of nine local candidates and seven out of sixteen MEPs gave a concrete reply which reflected their opinion. One should not forget that a potential vote could have been given to a favorable reply.

Following the advancement of the Thirty-fifth Amendment of the Constitution (Water in Public Ownership) (No. 2) Bill 2016, the twenty-nine TDs that signed the Bill were contacted as well. Out of the twenty-nine, four replied. We assume it was because they were busy with the elections. Luckily, we still got the immense opportunity to meet the TDs Joan Collins and Thomas Pringle through another mean.

The low ‘participation rate’ for the research indicates a clear lack of cooperation and communication between politicians, concerned citizens and organisations aiming for the same goal.

4. The politicians have the last word

Throughout this report it was shown that citizens, activists, organisations, media and companies can impact policymaking by putting pressure or funding projects to obtain the change they want. However, as was confirmed by Thomas Pringle TD during his interview (see appendix XVII), ultimately the change is made in the Parliament. If the government is greedy or disinclined to make changes happen, then the issue cannot be resolved anymore. A technique that seems to be used by politicians around the world is to stifle the changes to reintroduce them later. The Irish Water crisis grew with people carried by feelings against the stripping of natural resources, against water charges and against privatisation of water. Ultimately, water charges were repealed, but only for a certain period of time. Furthermore, no guarantees were given that disallowed privatisation of water in the future. Thus, by revoking water charges, it can be assumed that the government might have wanted to appease public outrage only to try again later, in hopes that no such movement would rise again. If this was untrue, we strongly believe that the Bill for water in public ownership would not be stuck at third stage since November 2016. It is however certain that public opinion matters, and that mass mobilization can put the required pressure for the politicians to act according to the people’s will.

Realising the importance of politicians as stakeholders, we decided to email some local politicians to collect their opinion on the issue of water privatisation in Ireland. Thus, before the elections took place in May, we sent emails to local Irish (in Co. Wicklow, as it is the locality of Sli na Bande) and European candidates, and to national TDs. The overview of the contacts taken, and the answers received are available in Appendixes XVIII and XIX. Sadly, we quickly came to realise that the issue did not seem important enough for many politicians, despite the upcoming elections. Many did not answer at all, some denied it or gave generic answers, such as “water is important” or that “there is no attempt to privatise it at the moment”. Very few seemed to engage in actively defending water in Ireland.

Fortunately, we had the chance to interview Joan Collins TD and Thomas Pringle TD, two of the twenty-nine TDs that introduced the Bill for public ownership of water resources. This meeting greatly helped us understand their state of mind, and the importance of the task. They informed us that it is a constant job to try and get the meetings on the wording of the Bill, to get the approval of other TDs, and to ultimately push it through the Dáil. This, however, gives us hope, as we realise that a lot is happening behind the scenes, and that some people are fiercely involved to see this Bill through.

5. The strength of social media

In this era of communication, fast information became quite mainstream. We are now able to know in a matter of seconds what is happening at the other side of the world. With this, and the widespread use of social media, it has never been easier to create groups of people, to inform them and, if needed, to coordinate and lead them into taking action. During the Irish Water crisis, hundreds of groups were created on social media by activists to widen the visibility of the campaign, as it was misrepresented by the biased traditional media. A survey conducted in 2015 showed that 82.6% of the respondents declared being mostly informed of the developments of the campaign through social media, while only 6.4% were through traditional media.

Nowadays, for anyone who wants to make his opinions known and rally people sharing them, the use of social media is a must. Even very locally, interested groups are formed. For instance, the group ‘Green Greystones’ on Facebook, composed of more than 500 members, describes itself as

a group *“promoting climate action, sustainability, biodiversity, just transition & community resilience in Greystones and surrounding areas. All welcome to join who are interested in joining forces to campaign, educate, lobby, create community and take action of all kinds. Let's build a better world, starting in our own town. Together we can try to create an aware, awake, just & resilient community in Greystones in the face of the massive threats to life on this planet which we face.”* Many other groups exist for other communities, which shows the growing involvement of the Irish people and the importance of social media in raising the awareness of the mass.

6. A rising awareness and its impact

A striking feature of the last few years in Ireland is the increasing awareness of the civil society to the action of the politics and the corporations. Awareness is essential for citizens to do their part. Indeed, if no one is aware that the government is trying to do something that is not in the best interest of the people and there is no reaction against that, the government will feel no pressure and will keep its insidious behaviour. This happened in Ireland, when the Bill that introduced the water charges went through all the legislative stages in less than a month, keeping in mind that the Bill on water under public ownership is stuck at third stage since November 2016. Many TDs claimed that the process was going too fast, arguing they had no time to thoroughly review the meaning and implications of that Bill.

By raising awareness, people will start getting interested in the matter, will be more eager to question the acts of the people they elected and to actively try to influence the decision makers. There are many ways in place to raise awareness of the people. An interesting one we discovered during our research is the registered charity *‘Cool Planet Experience’* (CPE), organizing interactive exhibition and touring workshops to educate children and companies, and involve the country in the story of climate change. CPE’s mission is to raise the awareness of and to motivate the Irish people to take climate action.

We also went to a meeting on April 30, organised by *Financial Justice Ireland*, called *‘Making Them Listen’*, aiming to raise the consciousness of people, where we could hear speakers from various NGOs and trade unions, explaining to the people the actions they were taking to act on

climate change, but also advice on how to lobby the candidates before the elections, to make sure the peoples' concerns were heard.

More locally, the *Green Greystones* group already mentioned organised some days ago a screening of parts of a conference on climate change, in order to involve people on a more local level, where different changes can be made.

Considered for a long time as a passive population, including during the privatisation of oil and gas, the Irish people woke up when the government decided to implement the water charges. Since then, many people decided to engage themselves in various climate actions. However, some, including politicians like Joan Collins TD and Thomas Pringle TD fear that the movement eased too much, and that most of the interested parties went back to inaction. They keep hope that, in case the government slips, people will once again show how fierce they can be.

Chapter VI - Recommendations

1. Political Strategy

Our first recommendation is a short-term strategy that will allow Sli na Bande to develop relationships with active members of the political life concerning water. Those relationships will then be used through the next recommendations, to become a sort of middleman between politicians, citizens and organisations. This strategy is divided in three, each part needing a different approach to maximize the results.

The first part is local and concerns the elected members of Wicklow in the Wicklow County Council. The six seats are now filled with Shay Cullen (Fine Gael), John Snell (Independent), Gail Dunne (Fianna Fáil), Paul O'Brien (Labour Party), Irene Winters (Fine Gael), and Mary Kavanagh (Independent). Before the elections, emails were sent to them, asking what their opinions were on the topic of water privatisation, what they were doing and what their plans for the future of privatisation were. The emails sent and the answers received are available in appendix XIX.

Basically, four of the now elected councilors did not reply to the email. Only Shay Cullen and Mary Kavanagh replied, assuring us that they adopt a strong position against any attempt to privatise water, claiming they would do everything they could to “*ensure that water remains in state ownership in perpetuity*” for Mary Kavanagh, while Shay Cullen even said he would “*pass on the email to the TD to make them aware of [our] concerns*”.

Thus, we recommend contacting the local councilors to try and obtain from all of them engagement of their support against any future potential attempts to privatise. To do so, we believe the most effective way is to ask for meetings and go and meet them in person in their offices, to discuss with them about their views on the matter. It would be wise to frame the issue as a local issue, as local politicians are more inclined to engage themselves after bonding with people who might vote for them. It is important to particularly insist on the Fine Gael and the Fianna Fail councilors, as the Parties seem to both be openly against protecting water in the Constitution.

The second part stemmed from the interview we had with Joan Collins TD and Thomas Pringle TD. We suggest Sli na Bande to try and nurture the link created then. The next step is to keep being

informed on what is happening behind the scenes concerning the Bill on water in public ownership. There is a meeting scheduled on June 19, between Joan Collins' legal team and Eoghan Murphy's department officers, to discuss their views on the wording of the Bill and how to try and reach an agreement that would satisfy their will to enshrine water as a public good in the Irish Constitution. Then, regular emails can be sent to ask about developments in the process. Further interviews could also be scheduled to maintain the relationship further in time.

The issue can be framed as a necessity for the people, a view that is shared by the TDs that introduced the Bill, and as a way for a concerned citizen to support Collins and Pringle in their endeavors to protect water.

The last part of the strategy concerns the parties opposed to Collins' Bill. It is important to reach out to Séamus Woulfe, the Attorney General and Eoghan Murphy TD, the Minister for Housing, Planning and Local Government to ask about their opinion on the matter and why they are not accepting the wording of the Bill introduced by Joan Collins. Through emails, the issue could be framed following what we learnt during the interview to call on them to answer, e.g., the Minister does not like the wording of the Bill and wants to amend it with another wording, which, according to Joan Collins and Thomas Pringle would be meaningless. Strong alliances could thus be made with Collins and Pringle, using their opinions as a spearhead in order to get Woulfe and Murphy's mindsets. Requests for meetings should be made, with the argument that Sli na Bande would like to have the opinion of the establishment.

The first steps of this strategy were already implemented during the project, by sending letters to politicians and organizing an interview with the TDs and there are many opportunities now to create and strengthen relations with the relevant political figures.

2. Social Strategy

Mid-term strategy

The knowledge and insights gained from regular meetings with politicians is an opportunity to expand and share this knowledge with other citizens. As mentioned before, knowledge is power, and awareness can make things move. In order to use this exclusive political perspective, joining a

local, a national or a European organisation is recommended. While raising political awareness, this will create a link between the political world and the one of activists. Depending on which scale an impact wants to be made, there are 3 possibilities: local, national and European.

On a local level, joining the Facebook group ‘Green Greystones’ puts you in direct contact with more than 500 members actively engaged in climate issues and other environmental topics. The group connects citizens living nearby the area of Newtownmountkennedy. Joining the group will give access to the various daily posts published by the members as their responses. In addition, all the future events, protests or conferences are as well published in the group. This source of local information allows to be up to date with what happens around and nearby you. As proven during the ‘Fridays For Future’-protest for climate change, actively participating to events and gatherings offers the opportunity to network. During the protest, we met by chance Mrs. Jody Neary. Due to this encountering, we had the opportunity to meet the TDs Joan Collins and Thomas Pringle. Participating actively to events, talking with other people about water privatisation and this project can lead to interesting surprises not far from home.

However, the Facebook group is more a source of information than a local organisation. Going to Cool Planet Experience at Powerscourt Estate and talk to the people working there might provide insights or other contacts as well. The aim is to build a local network and perhaps create ‘water awareness days’ at Sli na Bande itself. Meeting people, participating in events or organizing them, is key.

On a more national level, organisations such as Financial Justice Ireland offer the opportunity to share a message on a broader level through their ‘Make Them Listen’-conferences. Since those conferences are happening all over Ireland, it will allow to come out of the local zone and elevate to a national space. Not only acting as a listener, but indeed as a speaker at the conference. Talking about this project or the various insights about water privatisation gained through it by sharing its opinion and the behind the scenes of the politicians, are various ways to get the message across. It is important to keep talking about the issue for people not to ‘go back to sleep’ after, for example, the water charges have been abolished. Based on the growing impact and connections build of Sli Na Bande as an independent organisation, a ‘real’ organisation proactive in water protection, can be formed.

This official Sli na Bande organisation gives access to the last stage of the threefold ‘scales of impact’: the European level. The European Movement – mentioned above in the chapter about Europe – gives the opportunity to organisations with the same vision and mission to join the movement. Any organisation can apply by signing their manifesto and fulfilling their commitment form. If accepted, the organisation will appear on the members page and will actively participate to working groups. By being part of this movement, the organisation fulfils its final form by having evolved from a local, to a national to a European level.

3. Community Strategy

Long-term strategy

With reference to the lack of cooperation and communication between concerned citizens, political parties and organisations that are against the privatisation of water, forming a cooperative triangle would improve the status of the problem. This will allow the creation of an organised, structured and threefold entity being able to strategically put pressure on the right parties in order to, for example, make the Bill go through. The historical campaign analysis of Colombia supports this vision *“Together they allied, forming a group called the Coordination for the Defense of Water and Life”*. This hub will raise awareness under the population and generate empowerment, if nobody knows something scandalous is happening behind the scenes, no pressure will reach the government. When the government can do something without people noticing, in order to maintain a social balance, it’s the first thing they will do. A hub is created on the long-term and will build upon the political alliances made on the short-term. The connections made during the mid-term strategy will allow the last part of the triangle to be completed.

4. Extra recommendations as legacy of the project

4.1. Nature & Exploration-day

Organize “green classes” in partnership with local schools at the facility of Sli na Bande. The topic of the day can focus on climate change and water. Since Sli na Bande is a sustainable

living project providing itself in rainwater and electricity, this property has many appealing aspects to raise awareness in a fun way to children. Due to the size of the yoga chalet and the people it can fit, it can be used as the ‘headquarter’ of the nature & exploration-day. At the yoga chalet, videos can be shown, classes can be taught, activities can be performed, etc. Outside, the variety of animals and the whole domain (eventually forest walk) can be used for a more active activity by taking a tour around. Sli na Bande’s experience of yearly hosting schools can play in its favor to be allowed to host the nature & exploration-day and to form alliances with other communities such as the Cool Planet Experience. An optimization of the website or a division of the homepage in for example ‘NEX-day’ or ‘The Way of the Goddess’ is recommended. An inspiration of the design could be the website of Cool Planet Experience, showing a colorful kid-friendly platform.

4.2. Game Board

Ally with volunteers to develop the game board and frame it as a ‘voluntary project involved in climate change and water protection’. To find the adequate volunteers, a call for volunteers can be made by using social media, the Green Greystones group or even by contacting Irish or Belgian voluntary organisations. Given the – sometimes – negative previous experiences faced by Sli na Bande towards volunteers, we highly recommend getting in touch with an organisation specialized in volunteering. An example of such a Belgian organisation is the ‘Service Volontaire International’ (SVI). The SVI functions as the middle-man in connecting voluntary projects and volunteers. Following the principle, the volunteers pay their transports costs and a small fee (usually between 200 and 300 euros) to be able to participate to the project they have selected. This already shows a motivation of the candidate(s).

Conclusion

As a consequence of global warming, species around the globe suffer daily from environmental threats related to water such as changing precipitation patterns, floods, droughts, food insecurity, etc. The growing human population will logically engender a higher demand and consumption of water. Since freshwater is a scarce and limited resource vital to survive, it is considered as ‘the new oil’ of the 21st century. Being able to put your hands on this resource and to control it, gives significant – if not all – power to a particular entity. Water is the essence of life and therefore considered by the United Nations as a human right. On the other hand, water is not recognized as a human right by the European Commission. Recognizing it as such would lead to an impossibility of privatising water and, during the bailouts of Greece, Portugal or Ireland, Europe forced those countries to privatise their public assets. While Europe claims to be neutral towards the privatisation of water, reality tells us something different. This form of injustice gave birth to movements fighting against privatisation, and the privatisation of water in particular. The Right2Water movement and the European Water movement both played a role in the step towards a recognition of water as a human right in Europe. Although all the targets have not been met yet, progress is being made due to the existence and daily dedication of those movements.

The historical campaign analysis of the UK, France, Senegal and Bolivia illustrate four different cases of water privatisation, the consequences of it and the reaction by the public. It may be concluded that depending on the continent and the system of government in place (democracy or dictatorship), reactions and adaptations towards the privatisation of water are divergent. While France surfs on a peaceful vague of remunicipalisation of the water utilities, Bolivia encountered a violent and bloody opposition. In the UK, privatisation was welcomed with open arms and Senegal has increased the provision of water to its people. Although the privatisation of water might have increased the water quality of the UK and Senegal, it might not be forgotten how powerful the privatisation of water can be. As mentioned previously, water is life and needed by everybody. Privatisation does not equal a better service, and, gives the power to an entity to entirely shut down the supply of water if wanted. Whoever owns it, will be driven by the desire of profit rather than catering to the needs of people. Turning such a basic necessity into a commodity is immoral and unjust, this is also the reason why France is taking back its water. While some

countries and citizens realise the real threats of privatisation, it is a continuous fight. This fight against privatisation also happened, and is still happening, in Ireland.

Ireland was not unaffected by the global financial crisis of 2008 and decided to introduce water charges in order to repay its debts. While Ireland was the only country in Europe to supply water free of charge, the creation of a semi state-owned company - Irish Water - raised indignation amongst the Irish citizens. Apart from the financial aspect of water charges, people were mostly concerned that the implementation of the charges, meters and Irish Water would be a pass towards the complete privatisation of water in Ireland. This reflects that, although the Irish did not protest in the past, they finally did when the situation became critical. Due to effective mass movements in the streets of Dublin in 2014, the people succeeded in making the government take some steps back. This illustrates the power of mass movements. Also, when the government want something, they will put everything in place to reach it as fast as possible. This was reflected in the time needed for the Bill on Water Services to go through all the different stages of the Dáil. The fact that the Bill on public water ownership hit a wall erected by the government in order to avoid a referendum of water in public ownership, show that the government does not want water to be protected and thus privatised. Also, by taking a long time to make the Bill go through the different stages, it results in the people forgetting about the indignation during the Irish Water crisis. They also want to make sure that the mass movement that resulted in many water campaigners being elected to the Dáil is not reignited and given something to campaign about.

In the end, the situation is more critical than expected, on an Irish level or on a global level. Especially if people are not aware of what is happening behind the scenes, it becomes impossible without mass movements to change things. Therefore, it is important as a citizen or as a politician to raise your voice once you meet an injustice committed towards the people. By spreading the word, more people will be empowered on such sensitive topics.

Appendices

Appendix I - Examples of possible impacts of climate change due to changes in extreme precipitation-related weather

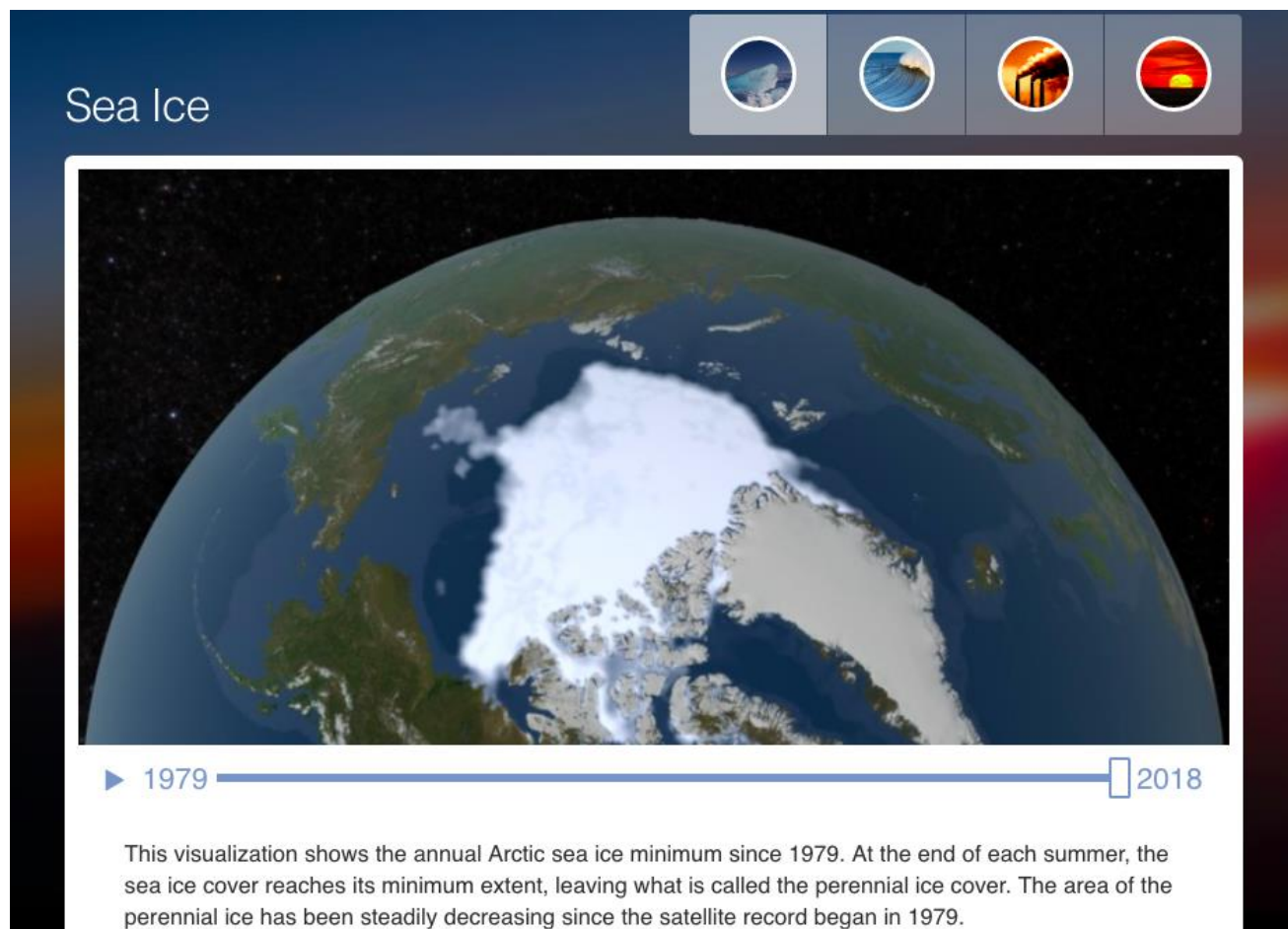
Table 3.2: Examples of possible impacts of climate change due to changes in extreme precipitation-related weather and climate events, based on projections to the mid- to late 21st century. These do not take into account any changes or developments in adaptive capacity. The likelihood estimates in column 2 relate to the phenomena listed in column 1. The direction of trend and likelihood of phenomena are for IPCC SRES projections of climate change. [WGI Table SPM-2; WGII Table SPM-2]

Phenomenon ^a and direction of trend	Likelihood of future trends based on projections for 21st century using SRES scenarios	Examples of major projected impacts by sector			
		Agriculture, forestry and ecosystems [4.4, 5.4]	Water resources [3.4]	Human health [8.2]	Industry, settlements and society [7.4]
Heavy precipitation events: frequency increases over most areas	Very likely	Damage to crops; soil erosion; inability to cultivate land due to waterlogging of soils	Adverse effects on quality of surface and groundwater; contamination of water supply; water scarcity may be relieved	Increased risk of deaths, injuries and infectious, respiratory and skin diseases	Disruption of settlements, commerce, transport and societies due to flooding; pressures on urban and rural infrastructures; loss of property
Area affected by drought increases	Likely	Land degradation, lower yields/crop damage and failure; increased livestock deaths; increased risk of wildfire	More widespread water stress	Increased risk of food and water shortage; increased risk of malnutrition; increased risk of water- and food-borne diseases	Water shortages for settlements, industry and societies; reduced hydropower generation potentials; potential for population migration
Intense tropical cyclone activity increases	Likely	Damage to crops; windthrow (uprooting) of trees; damage to coral reefs	Power outages causing disruption of public water supply	Increased risk of deaths, injuries, water- and food-borne diseases; post-traumatic stress disorders	Disruption by flood and high winds; withdrawal of risk coverage in vulnerable areas by private insurers; potential for population migrations; loss of property

Appendix II – Sea Ice in 1979 captured by the NASA

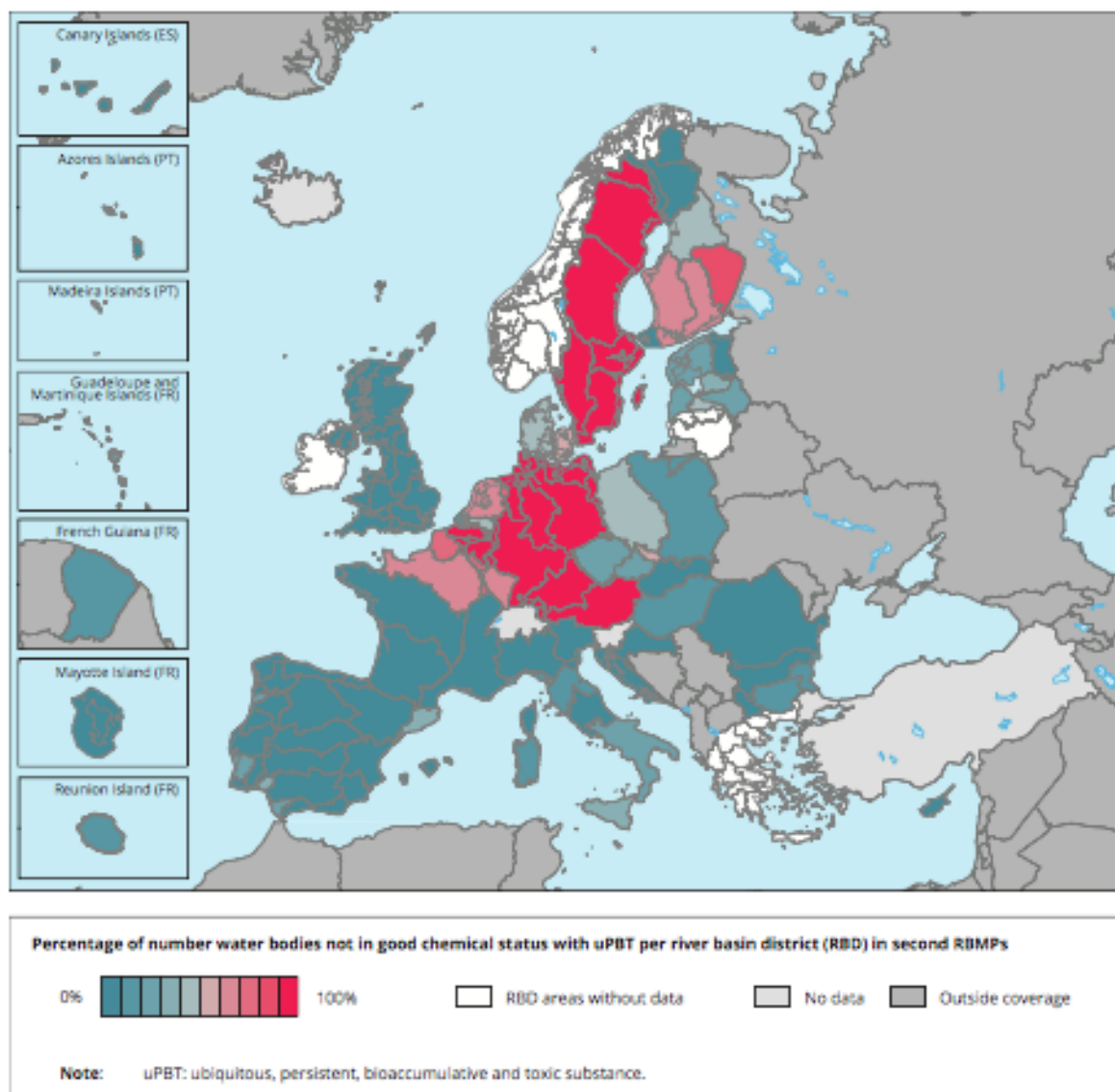


Appendix III – Sea Ice in 2018 captured by the NASA



Appendix IV – Chemical status per RBD with uPBTs in Europe

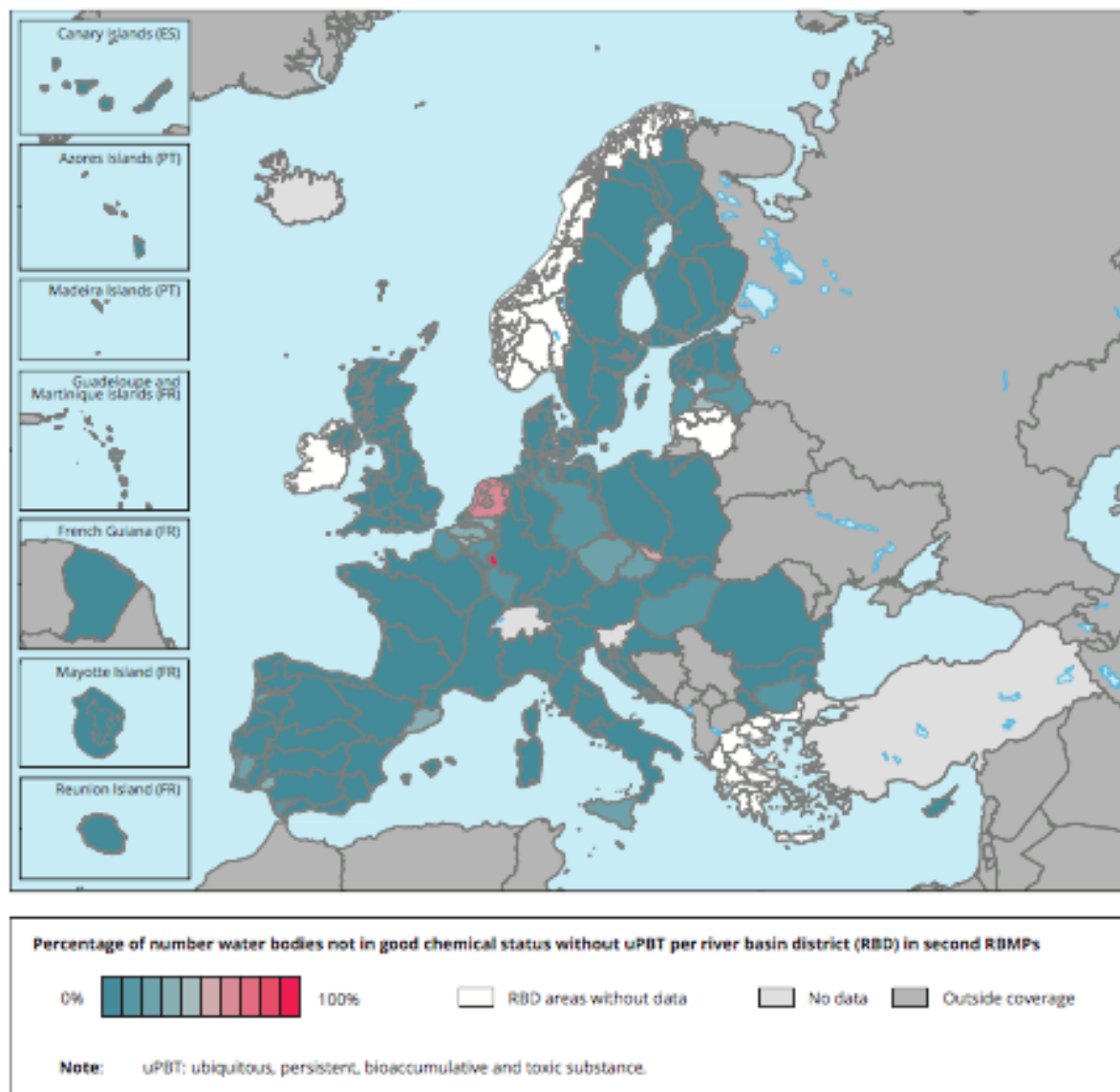
Map 3.1a Chemical status per RBD with uPBTs



Source: Results are based on the WISE-SoW database including data from 24 Member States (EU-28 except Greece, Ireland, Lithuania and Slovenia). *Surface water bodies: Chemical status with and without uPBT maps, by RBD.*

Appendix V – Chemical status per RBD without uPBTs in Europe

Map 3.1b Chemical status per RBD without uPBTs



Source: Results are based on the WISE-SoW database including data from 24 Member States (EU-28 except Greece, Ireland, Lithuania and Slovenia). Surface water bodies: Chemical status with and without uPBT maps, by RBD.

Appendix VI – Number of Member States, RBDs, water bodies, and length or area, per water category

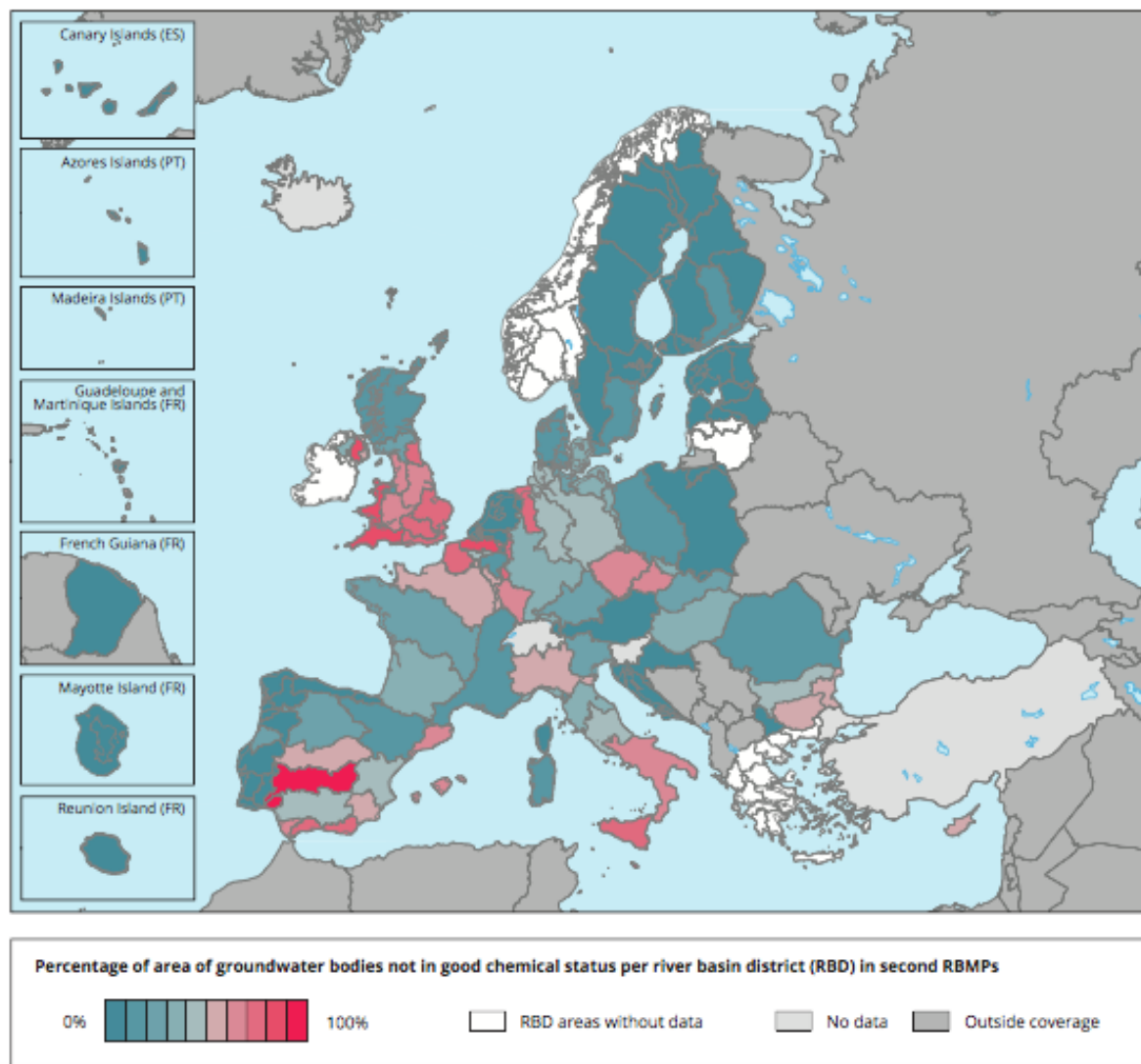
Table 1.1 Number of Member States, RBDs, water bodies, and length or area, per water category

Category	Member States	Number of water bodies	Total length or area	Average length/area
Groundwater	25	13 411	4.3 million km ²	323 km ²
Rivers	25	89 234	1.2 million km	13.1 km
Lakes	23	18 165	81 800 km ²	4.5 km ²
Transitional waters	14	782	14 600 km ²	19 km ²
Coastal waters	20	2 835	290 000 km ²	102 km ²
Territorial waters	7	46	214 000 km ²	13 400 km ²

Source: Results are based on the WISE-SoW database including data from 25 Member States (the 28 EU Member States (EU-28 except Greece, Ireland and Lithuania)). [Groundwater bodies: Number and Size](#) and [Surface water bodies: Number and Size](#).

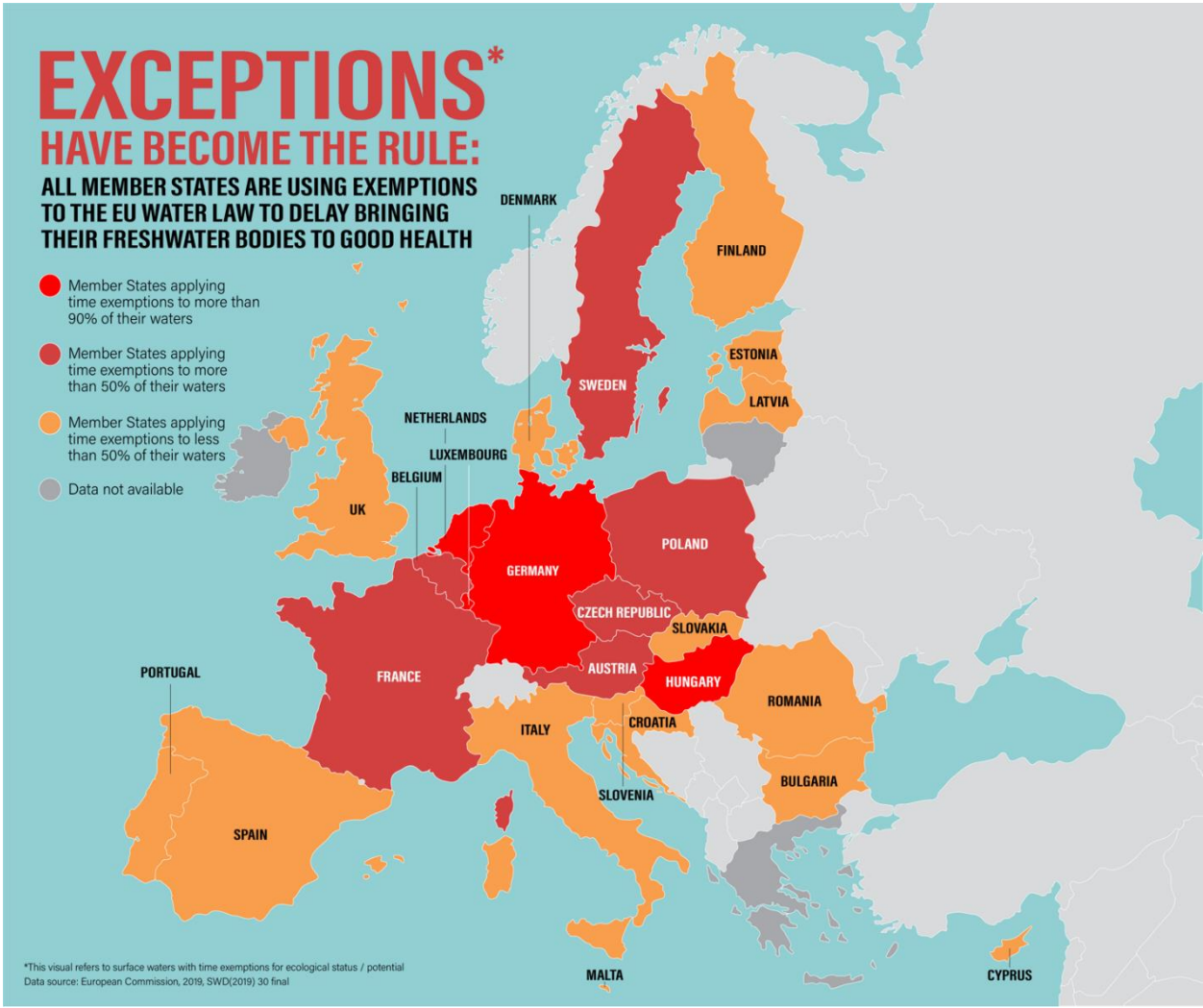
Appendix VII – River basing groundwater chemical status in Europe

Map 4.1 River basin groundwater chemical status



Source: Results are based on the WISE-SoW database including data from 24 Member States (EU-28 except Greece, Ireland, Lithuania and Slovenia). Groundwater bodies failing to achieve good status, by RBD.

Appendix VIII – Time exemptions used by EU countries for the implementation of the WFD



Appendix IX – Article 16 of the Directive on services in the internal market states

CHAPTER IV

FREE MOVEMENT OF SERVICES

SECTION 1

Freedom to provide services and related derogations

Article 16

Freedom to provide services

1. Member States shall respect the right of providers to provide services in a Member State other than that in which they are established.

The Member State in which the service is provided shall ensure free access to and free exercise of a service activity within its territory.

Member States shall not make access to or exercise of a service activity in their territory subject to compliance with any requirements which do not respect the following principles:

- (a) non-discrimination: the requirement may be neither directly nor indirectly discriminatory with regard to nationality or, in the case of legal persons, with regard to the Member State in which they are established;
- (b) necessity: the requirement must be justified for reasons of public policy, public security, public health or the protection of the environment;
- (c) proportionality: the requirement must be suitable for attaining the objective pursued, and must not go beyond what is necessary to attain that objective.

2. Member States may not restrict the freedom to provide services in the case of a provider established in another Member State by imposing any of the following requirements:

- (a) an obligation on the provider to have an establishment in their territory;
- (b) an obligation on the provider to obtain an authorisation from their competent authorities including entry in a register or registration with a professional body or association in their territory, except where provided for in this Directive or other instruments of Community law;
- (c) a ban on the provider setting up a certain form or type of infrastructure in their territory, including an office or chambers, which the provider needs in order to supply the services in question;
- (d) the application of specific contractual arrangements between the provider and the recipient which prevent or restrict service provision by the self-employed;
- (e) an obligation on the provider to possess an identity document issued by its competent authorities specific to the exercise of a service activity;
- (f) requirements, except for those necessary for health and safety at work, which affect the use of equipment and material which are an integral part of the service provided;
- (g) restrictions on the freedom to provide the services referred to in Article 19.

3. The Member State to which the provider moves shall not be prevented from imposing requirements with regard to the provision of a service activity, where they are justified for reasons of public policy, public security, public health or the protection of the environment and in accordance with paragraph 1. Nor shall that Member State be prevented from applying, in accordance with Community law, its rules on employment conditions, including those laid down in collective agreements.

4. By 28 December 2011 the Commission shall, after consultation of the Member States and the social partners at Community level, submit to the European Parliament and the Council a report on the application of this Article, in which it shall consider the need to propose harmonisation measures regarding service activities covered by this Directive.

Appendix X - Article 17 of the Directive on services in the internal market states

Article 17

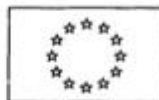
Additional derogations from the freedom to provide services

Article 16 shall not apply to:

- 1) services of general economic interest which are provided in another Member State, inter alia:
 - (a) in the postal sector, services covered by Directive 97/67/EC of the European Parliament and of the Council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service ⁽¹⁾;
 - (b) in the electricity sector, services covered by Directive 2003/54/EC ⁽²⁾ of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity;
 - (c) in the gas sector, services covered by Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas ⁽³⁾;
 - (d) water distribution and supply services and waste water services;
 - (e) treatment of waste;

Appendix XI – Letter of the European Commission

Ref. Ares(2012)1125135 - 26/09/2012



EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS
Economies of the Member States II
Greece

Brussels, 26 September 2012
GG D(2012) Ares

Dear Mrs Zanzanini,

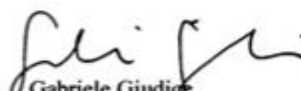
Thank you for your letter related to the water privatisation of various countries.

As you know, privatisation of public companies contributes to the reduction of public debt, as well as to the reduction of subsidies, other transfers or state guarantees to state-owned enterprises. It also has the potential of increasing the efficiency of companies and, by extension, the competitiveness of the economy as a whole, while attracting foreign direct investment.

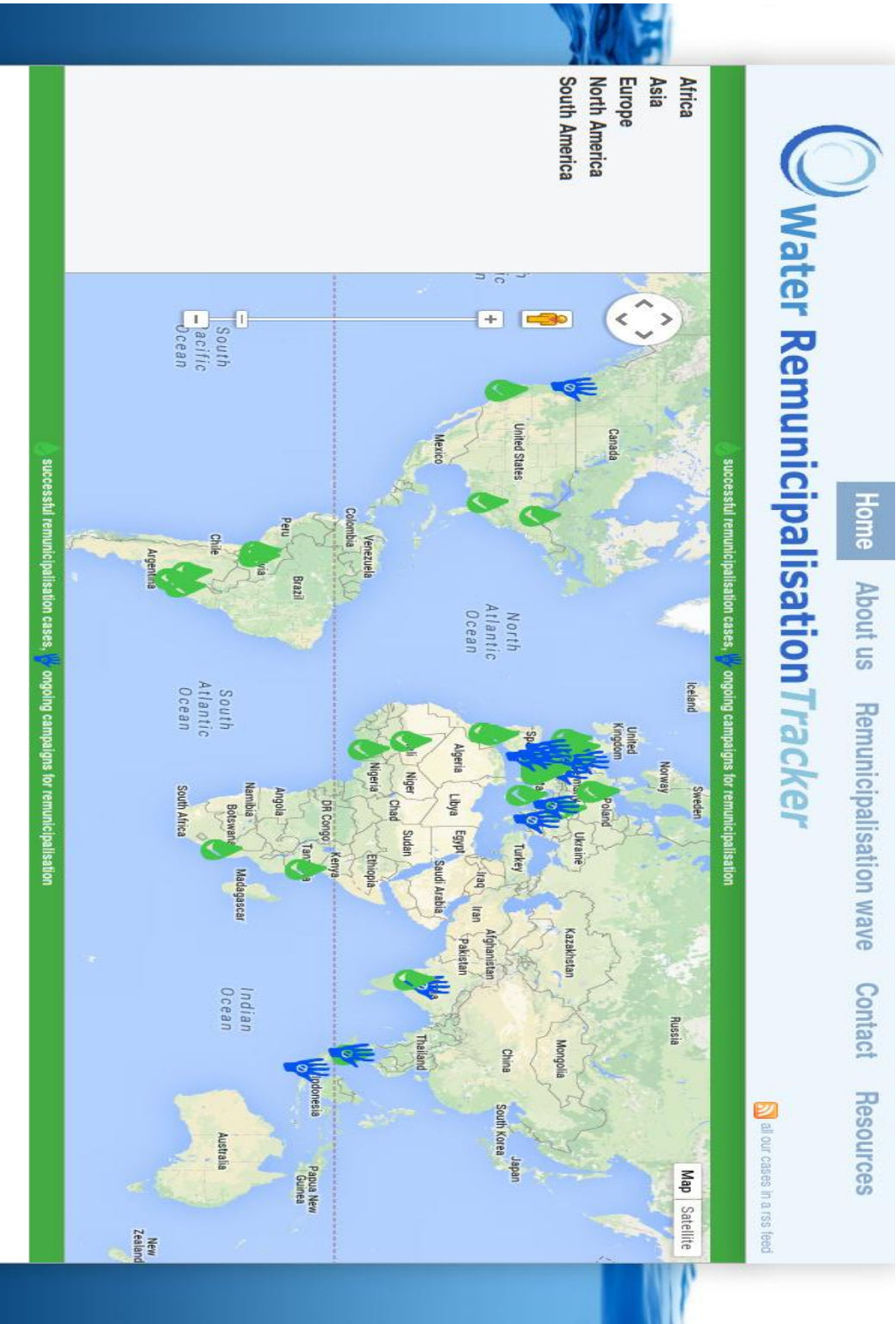
The Commission believes that the privatisation of public utilities, including water supply firms, can deliver benefits to the society when carefully made. To this end, privatisation should take place once the appropriate regulatory framework has been prepared to avoid abuses by private monopolies. At the same time, public access to basic goods must be ensured. This is why it is important to find a balance between equal and fair access to public utilities (water, gas, electricity), good quality of services and a financially sustainable supply.

The Commission will check that the privatisation process of water companies guarantees full access to water for all citizens.

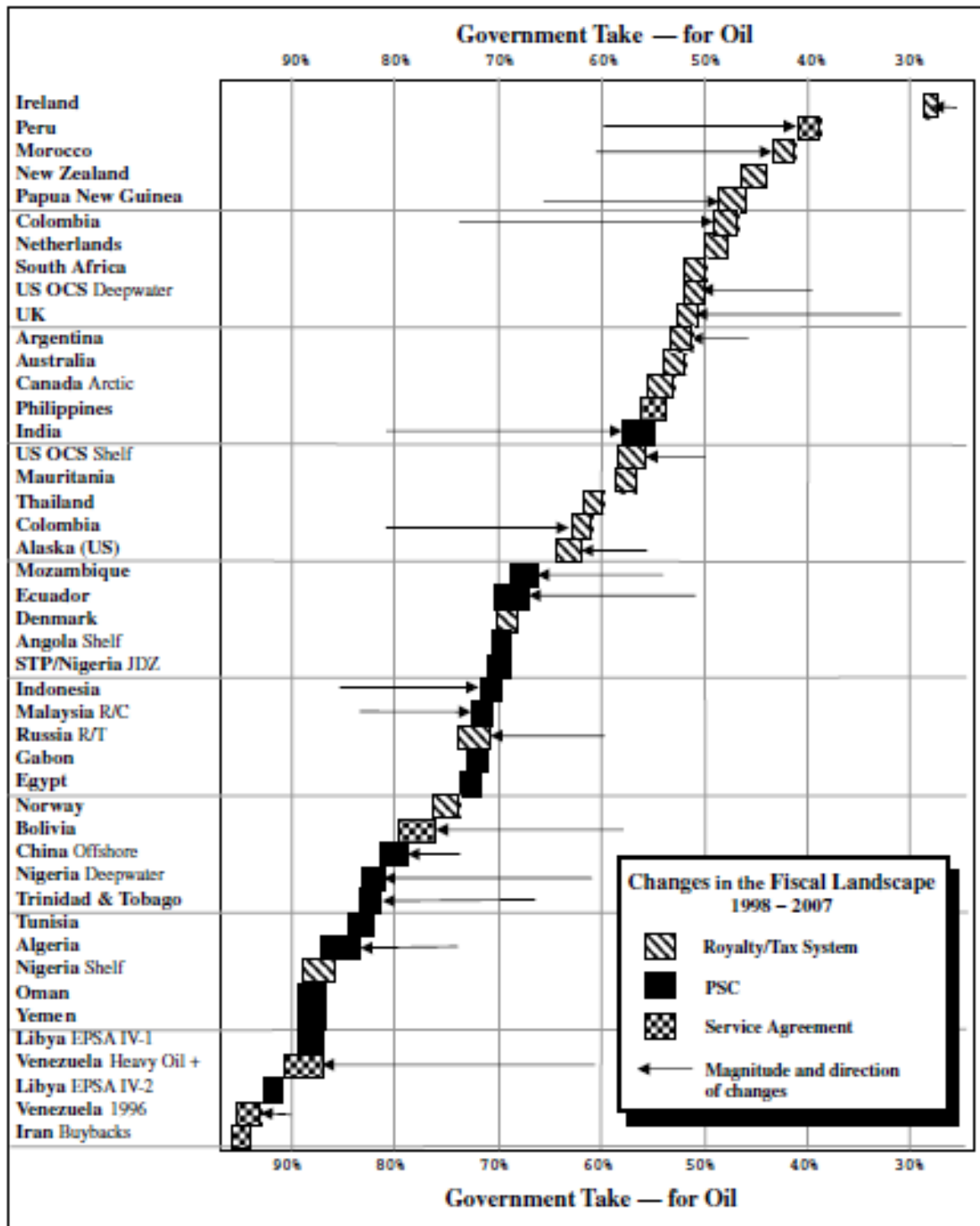
Yours sincerely,


Gabriele Giudice
Head of Unit
Country desk Greece.

Appendix XII – Water Remunicipalisation tracker around the world



Appendix XIII – Government take for oil in 45 different countries



Appendix XIV – Chart of oil and gas finds in the Irish waters

Chart of Oil and Gas finds

While only four discoveries offshore Ireland have so far been declared commercial, another fourteen are still being assessed. The table issued in April 2011 details the 18 significant hydrocarbon onshore and offshore discoveries.

Discovery Name	Hydrocarbon Type	Status	Current Operator	Discovery Year	Discovery Well	Original Well Operator	Area
Bandon	Oil	Under assessment	Serica Energy	2009	27/4-1,1z	Serica Energy	Slyne Basin
Hook Head	Oil	Under assessment	Providence Resources	2007 (Initially identified 1971)	50/11-3	Providence Resources	North Celtic Sea Basin
Schull	Gas	Under assessment	Island Oil and Gas	2007 (Initially identified 1967)	57/2-3	Island Oil and Gas	North Celtic Sea Basin
Old Head of Kinsale	Gas	Under assessment	Island Oil and Gas	2006	49/23-1	Island Oil and Gas	North Celtic Sea Basin
Dooish	Gas Condensate	Under assessment	Shell	2002	12/2-1	Enterprise Energy Ireland	Rockall Basin
Corrib	Gas	Undergoing development	Shell	1996	18/20-1	Enterprise Oil	Slyne Basin
Ballycotton	Gas	In production	PSE Kinsale Energy	1989	48/20-2	Marathon	North Celtic Sea Basin
Dunmore	Oil	Under assessment	Providence Resources	1985	50/6-1	Gulf	North Celtic Sea Basin
Galley Head	Gas	Under assessment	Lansdowne Oil and Gas	1985	48/18-1	BP	North Celtic Sea Basin
Helvick	Oil	Under assessment	Providence Resources	1983	49/9-2	Gulf	North Celtic Sea Basin
Spanish Point	Gas Condensate	Under assessment	Providence Resources	1981	35/8-2	Phillips	Porcupine Basin
Connemara	Oil	Under assessment	Island Oil and Gas	1979	26/28-1	BP	Porcupine Basin
Burren	Oil	Under assessment	Providence Resources	1978	35/8-1	Phillips	Porcupine Basin
Ardmore	Gas	Under assessment	Providence Resources	1974	49/14-1	Marathon	North Celtic Sea Basin
Barryroe	Oil	Under assessment	Lansdowne Oil and Gas	1973	48/24-1	Esso	North Celtic Sea Basin
Seven Heads	Gas	In production	PSE Seven Heads	1973	48/24-1	Esso	North Celtic Sea Basin
Kinsale Head	Gas	In production	PSE Kinsale Energy	1971	48/25-2	Marathon	North Celtic Sea Basin
Dowra	Gas	Under assessment and under application		1963	Dowra-1	Ambassador Irish Oil Company	Onshore NW Carboniferous Basin

Appendix XV – Example of a leaflet

Don't sign up for more austerity

BOYCOTT PROPERTY FORMS

Mobilise to Put them Under Pressure

The Government call it a Property Tax but it's really a tax on the family home and once they get the foot in the door with this tax it will only rise. Along with the water tax (which comes in next year) households will be hit with bills of 1,000 euro a year and more before too long.

Five years of austerity have hammered ordinary people. No more. The Government must be stopped in their tracks on this one.

These robbers are planning to deduct the tax straight from wages, social welfare, pensions or farm payments if you refuse to sign up for it. It is a new income tax and a new social welfare cut all rolled into one!

And for what? Everybody knows that those who say that it will improve local services are lying. Everybody knows that they want the bondholders to be the winners once again.

But can it be fought? Can it be defeated?

YES. It's not just a fight against the Revenue, it's a fight against the Government. And this Government is weak. Both parties are on the back foot. Labour is particularly under pressure

and pressure should be piled on over this issue.

The first step should be for a huge number of people to boycott the registration process. Ignore the Revenue correspondence. Ignore the registration deadlines in May. Even if they threaten to double your property tax for refusing to register people should still boycott. Last year they threatened court cases and 2500 euro fines for the 662,000 households who boycotted the household charge. But they couldn't implement the penalties because the opposition was so large.

A massive boycott of the property tax forms will put the Government under real pressure. However, a boycott on its own is not enough because the Government have given the Revenue the power to deduct the tax from wages and social welfare on July 1st.

This means that the Government must be forced back - either on the property tax or on the threat to deduct.

How can this be done? Only by a massive protest movement. This means huge numbers on the street (see ad for national demo), it means political pressure, it means civil disobedience, it

means industrial action. In this way a blow can be struck against the property tax, against the plan to introduce a water tax and against the entire austerity agenda.

Such a movement will have to be built in communities and workplaces across the country. Thousands of volunteers are needed. Join the Campaign Against Household and Water Taxes (CAHWT) today.



NATIONAL PROTEST

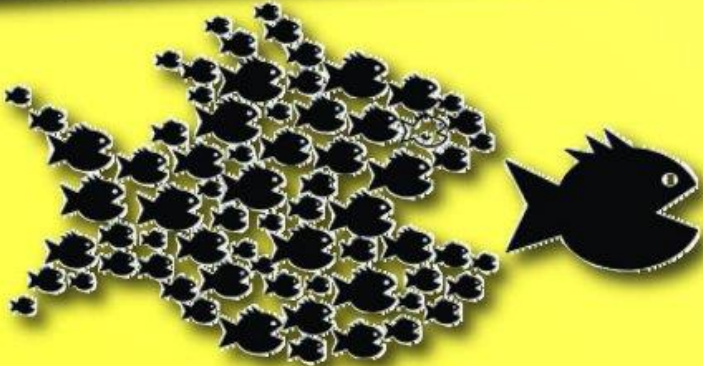
Saturday April 13
12:30pm Garden of
Remembrance Dublin
www.nohometax.com

CAMPAIGN AGAINST HOME & WATER TAXES

Appendix XVI – Example of a leaflet

We didn't register, we didn't pay
Now we can go all the way

**KEEP UP THE
BOYCOTT**



**DEFEAT THE
HOUSEHOLD TAX**

**PROTEST AT THE
FINE GAEIL ARD FHEIS**
Saturday 31st March, National Demonstration,
Assemble 1pm Parnell Square, Dublin.
Marching to the Convention Centre (North Wall Quay) for 2pm.

1890 98 98 00 / nohouseholdtax.org CAMPAIGN AGAINST
HOUSEHOLD & WATER TAXES

Appendix XVII: Transcription of the interview with TDs Joan Collins and Thomas Pringle

On Wednesday May 29, 2019, we had the opportunity to go to Leinster House to interview two TDs, Joan Collins and Thomas Pringle, thanks to the involvement of Jodie Neary, Parliamentary Adviser to Thomas Pringle TD.

I: Interviewers, SNB: Sli Na Bande, JC: Joan Collins, TP: Thomas Pringle, JN: Jodie Neary

SNB: I have a very close connection with water, I am in Ireland since 1982, married an Irishman and when we married our focus was to live environmentally-friendly and to know whether it was possible, as the awareness was not really present at the time, but we wanted to do that anyway. So we looked for land and found five acres, and the first thing we put in was a water cleaning system from which water comes out crystal clear, because to me, the water at the time (and that was before we knew about climate change) was not to be polluted and dumped into the sea. I thought it to be irresponsible. We also collect rainwater and clean it. So, the whole system on our land is operational and is a delight, as it encourages other wildlife.

When the Irish Water protests started, we were part of the demonstrations at the time, not because I do not want to pay for water, as I definitely want to pay for water, if it is a public service. However, I did not want it privatised, because what I saw happening in the world because of neoliberalism and climate change, I thought our water is in danger. I do not want Nestlé for instance to come and own our water. Then I asked myself “how do I contribute to that not happening?”. So, a friend of mine at Vlerick Business School suggested I used two students to help in my research. The students came to research the situation in Ireland, in the world, looking for what happened in countries that have privatised water, what are the hiccups with it, what did or did not work, what should or should not happen in Ireland.

For me, what particularly encourages me to keep working is that we have a great opportunity, because of climate change, to rethink how we use, distribute water, who has access to it, and to me it is really important that it stays in state ownership. Not so much that it cannot be privately managed, as I privately manage my rainwater, it is that the resource itself cannot be given over to corporations.

SNB: *So, you were the first one to produce a wording for a referendum, weren't you?*

TP: Yes, it starts to be a long time ago now. I think basically what you are looking for is information about the Bill, and where it is at now and if it's likely to go through. We will try to give you the background and then if you have questions, we will try to answer them as best we can.

JC: After the 2016 general elections, the big issues around water with huge demonstrations, water meters and all that, 29 TDs signed up to introduce this Bill into the Dáil (lower house of Irish legislature), thirty-fifth Amendment to the Constitution, (Water in Public Ownership). We passed to third stage in November 2016, then it has to go through the stages in the Dáil. Initially, the Minister that was in charge of the environment, Simon Coveney, was really reluctant to bring this

forth, saying that no one wanted to privatise water services. He moved on, and there is now more pressure on his successor Eoghan Murphy, to bring the Bill in.

That mainly came around the fact that they set up Irish Water, and the local authorities sort of succumbed to Irish Water, with a service level agreement up to 2026. So they were working with Irish Water and the government, because with the water meters gone now they are not going to be able to privatise at that level at this stage. That service level agreement was brought forward to 2021 so they have pressure because the workers (of local government, but dependent on Irish Water) won't go until they get a commitment that this referendum happens at this stage. So they're not going to even talk until this is brought into a referendum that our water remains in public ownership, because they don't want to go to private companies or potentially private companies. We are at third stage and the Minister has continuously said there are unattended consequences in the Bill, to do with the group water schemes. We have countered all that, in prelegislative discussions, and we asked the legal advisor at the time if we could introduce this and bring it into legislation to protect them.

There were resistances at a meeting in March 2017 about the Bill: the Fianna Fail spokesperson at the time, preferred that we put the Bill back by three months, pending the Minister and myself talk in the meantime, and we are now well over a year. The Bill nearly got back again in early April, where Eoin Ó Broin, (member of Sinn Féin in the Committee who co-sponsored the Bill) said that we were over a year, that it is ridiculous and that we have to move on this. The Minister has invited members who want to adapt it to a meeting that was set, but at the last minute he pulled out saying that two-third of the Committee had to seek an adjournment for it to be adjourned. We did not think they would have the numbers but they did, so it has been put off again. In the meantime, we are under pressure, we are happy with our wording, but the Minister wants us to bring in another wording. We are not happy with this wording at all, and the Minister has said that he would be prepared for his department officers to meet with our legal team, we had been trying to get that for a while, to try and push it along and they can't turn around and will cooperate. We have set the date for June 19, to meet up with department officers and our legal team and have an argument (debate) about the legislation, and what theirs protect and what doesn't protect and what ours protect and doesn't protect.

SNB: So that is fixed, this meeting is going to happen?

TP: Yes, as of now, they might adjourn it the day before, that's the way they have cooperated until now.

SNB: And why are they delaying the meeting?

JC: Because they want to leave it open as if the government falls tomorrow, everything falls, it nearly goes into a blackhole pending the new Parliament, and the whole process would have to be made again and go through all stages. They essentially don't want to put water under public ownership.

TP: Indeed, they don't want to protect it. Fine Gael are private sector that's their reason for being, and ultimately Fianna Fail are the same, but Fianna Fail are playing a game at the moment, they want to be all things to everybody until they get into power, and then, they become exactly like Fine Gael. Basically, Joan's Bill proposal means that the Government would have no room for maneuver at all and it would ultimately ever be a public good and a public rate and the State would have to protect it as such, and that's where the government have a problem. They don't want to

protect it; they want to be able to privatise it at some stage in the future. They say it's not going to be privatised so there is no need to protect it, where we say well why not protect it if it is not going to be privatised. So, the debate now is going round out like that, and ultimately the government could put forward a weaker wording and get Fianna Fail to accept it and that could be put forward then as a referendum, which might mean anything.

JC: And that would put us in a difficult position because we would possibly then be opposing a wording to appears to be keeping water in public ownership.

SNB: *Yes, and, I don't know about the legislation process, but is there a way, since we have an opportunity to rethink everything we do, to allow or make the Bill in such a way that corporations cannot get it but small private local initiatives might be possible? See, my major concern is that corporations get hold of it, so I am not particularly personally opposed about a group of people in a village producing a scheme to collect their rainwater. That would be a private enterprise event, but it would not take the water from anybody else, it would be just a way to responsibly use the water that is available.*

JC: Well, we already have the group schemes private, and there are some that are sort of semi-public?

TP: They're all private groups, it depends on the membership of the scheme, the people that are on the scheme, the responsible for the scheme. So, it's a private groups water scheme in that sense but they are totally funded by public and something like that as well.

SNB: *So, they are not really private?*

TP: No, they are not for profit organisations, they are not corporations or anything like that.

JC: And that's where the Minister and the government are wondering where does the public and private start and finish, that this is the unattended consequences of the Bill, that these water schemes could be a way for the government to take responsibility on all of the infrastructures and all this type of thing. As far as we were concerned, public water stops when there is an attempt to become private as such, and that it should not be an excuse to delay the Bill or pushing it back or trying to change the wording. See, what our Bill proposes is that it's kept into public protection, management, and maintenance of the public water system.

The government does not want that, they want to be much looser, they want the entity itself, whether it's Irish Water or the company should be protected, which is not what we want as a people is that water remains protected under public management so that it does not go to private hands. So, it's very very precise legislation. I would not be opposed to a suggestion coming from somewhere that could strengthen this, or maybe clarify some parts, but that proposed wording from the Minister just means nothing, really.

TP: And that's what they want to achieve. But what you (*to SNB*) are talking about, I don't know whether in a constitutional referendum you can distinguish between the type of private organisations. You were talking about Nestlé, and the government's view would be that Nestlé would do as good a job as the local organisations you mentioned, but on a national basis. So, I do not know if it could be finetuned by another legislation afterwards that could specify perhaps the types of organisations or companies that could avail of the services, without having been privatised as such.

SNB: So, if I understand you right, you blanket protect the water, which is what I particularly want as well, and then, in ordinary legislation, you finetune?

TP: Yes. And that's the way the Constitution should operate, like last week we had the referendum on divorce, where the terms of the divorce were set in the Constitution, so if it was ever going to change you had to have a constitutional referendum to change, so now that the Constitution says that divorce is allowed in Ireland, it doesn't set a time in it.

JC: And that's where we are arguing.

SNB: Well you definitely have my support, I imagine it's hard to do this. What I am interested in is big multinationals, as they are very aware of nonmarket strategies, by which they organize themselves to influence the market via nonmarket strategies, and it would be very easy to do that on water as well. I want to turn this thing around, how can we use nonmarket strategies to wake the public up so they can row behind the Bill, the way you are presenting it?

JC: Well, in 2016 there was a huge support to keep water in public ownership, and not to pay water charges, that should be paid by the State through taxes. But at the moment it (*Right2Water movement*) has gone out of boil, both in Ireland and in Europe in general, people think we have won, that's it. And yet we are trying to push through this Bill to have our water protected. The workers of Irish Water tried to launch a bit of a campaign during the elections, but it did not really take off. Climate change in general has just taken everyone's attention.

TP: The problem is that we have to be on the ball 24/7, whereas they only have to be on the ball once. It is not possible to keep a national movement going so long, especially when nothing seems to be happening.

SNB: *And particularly now that it is not coming from people's pocket anymore, so then everybody goes back to sleep. But it is more important than ever right now, because of climate change.*

TP: Well I'd say the movement did not dissolve in air, but it needs to be awoken.

JC: So, it would have to happen, a leak of statement made by government saying they secretly want to privatise and intend to keep this Bill on the borders. It would have to come out like that. Or if they start charging again. The government is supposed to propose a Bill this year, introducing a cap, that if you go above that cap you have to pay. An option to react to that would be meeting with the environmental groups and say they have to start making this an issue.

SNB: You also had that meeting on May 16, with the European Commission for climate change, I read most of it. I thought that was hopeful, as there is an awareness in Europe, they are aware that it has to be a just transition. That just transition, Ireland is less awake on that, and that could serve as an introduction to water. I am trying to find ways to influence and to support that Bill, because it is a great opportunity that we have at the moment, to rethink how we do with resources, and Ireland has a lot of resources. So, if I can help, I will.

I: *Thank you for that background talk, we now have more specific questions to ask you. The Bill is currently at stage three in the legislative process. What is needed to go to the next stage?*

JC: It needs to get the agreement by the Committee of the Dáil, by a majority. At the moment, majority is held between Fianna Fail and Fine Gael.

TP: The problem is that Fianna Fail aren't really opposition, they are pretending to be, for electoral purposes, so they are playing a game at the moment. They want to be seen as in favor of the Bill when actually they are not.

JC: For example, when we thought we had the third stage back on the agenda again at the Committee, we had an agreement with Fianna Fail to push it through, but Minister Murphy (*Minister for Housing, Planning and Local Government*) was able to influence them and had them call the meeting off, to which Fianna Fail agreed. But then they asked Murphy to walk in and explain his position about the Bill, and as soon as Murphy walked in, the Fianna Fail walked in with him. So, it depicts their position.

JN: They did that with our Bill (*Water in Public Ownership Bill No. 1*) as well, Fianna Fail abstained when Fine Gael came in, while they were voting against them up until then.

TP: They are always playing game. Fianna Fail are basically Fine Gael, there is no distinction between them. Unfortunately, to get anything through, you need Fianna Fail but they have no interest in that stake.

I: *So, just to be clear, for the current situation with the wording, is it Fianna Fail or Fine Gael that is against the Bill?*

TP: Fine Gael are completely against it, as they are in the government. Fianna Fail are pretending to be in favor of the wording, but they are voting against it. If you were to meet the Fianna Fail, they would tell you they are completely for it.

I: *What do you think you will do now? Do you have a strategy to try and push the Bill further? Are you going to try and convince Fianna Fail to vote in favor?*

TP: It is not especially about convincing them. I suppose that the fact that the workers have been doing business and negotiations with the government caused them to be close with the government. That's one problem. But Fianna Fail want to get into government and put the Bill out of the way, so they do not have to deal with it. I do not know how you can put pressure on Fianna Fail.

SNB: *Can you rephrase what are the workers saying against them?*

JC: The government is trying to get an agreement with the workers now to go and work with whatever water entity, it will not be Irish Water, they will probably change the name. The workers would be directly employed by them, but the workers are saying there is no way they are going to go into a private company, when they have their pension and all that as local authority workers. In many ways, we have a guide and a report for us in relation to the amount of work being contracted out now by Irish Water and we hope to have that in the next week or two, that might help us in later exposure of Irish Water, what the costs are, what is going on there etc. We have met with the unions, Right2Water, SIPTU and Fórsa, they are the unions that have represented the workers in Irish Water, to get them on board, so I will get back to them after we have this meeting with the department's officials on June 19.

TP: The problem in Ireland is that the media is part of the government, so they might not cover this objectively or at all, because it does not suit Fianna Fail and Fine Gael agenda. During the Irish Water crisis and the protests, the media were quite negative about them. One of your questions was: what can normal citizens do to help? And I honestly do not know. We are at a difficult stage, it is hard to keep a momentum with the protests that stopped, and the people thinking that nothing

is happening while we are trying to push the Bill through. It has to go to next stage to get resolved as well, but the problem is that Fine Gael do not want to resolve it and Fianna Fail are pretending they are willing to. So, we are stuck.

JN: And the government likes when it gets to this stage because it just deflates the movement.

I: *We would imagine that with the water charges abolished recently people would tend to easily forget the issue. We read that people were protesting not only to avoid privatisation but also because they do not want to pay the charges.*

JC: Well, people would go to courts and jails standing against water meters, including myself, because we knew that every meter that was installed would bring us closer to privatisation and that was a big issue on peoples' minds. Like Thomas was saying we reached a difficult stage, as interest went down. There are still some people very interested in it, but not to the broad sense that we need to put pressure on the government.

I: *In your opinion, how can citizens help in that issue, to support the bill or go against privatisation?*

TP: At this stage what they probably could do would be going to the Fianna Fail local TDs and members of Parliament and ask them what the situation is and why there is no progression. That would put pressure on them because we have seen it happening, being involved in other matters with them we know it can have an impact. You would have to be constant with that, lots of emails, phone calls, to different people, at the same time. It also has to be local. If someone from Dublin emails a TD from Cork, the latter is not going to care as he does not risk not being elected again.

I: *How long do you think it will still take for the Bill to go to the next stage?*

TP: The problem is that, at this stage, the government could fall at any time, and then when the new Parliament is established, the government could go back on the Bill at the stage it is now at and the Parliament could put it forward but it likely won't. The government knows that it will fall at the elections, so they might stall it until then.

SNB: *Is it then completely gone in that case?*

JC: Yes, it is. The Parliament would have to restart the whole process again. That is why it would be good if we could get some agreement on the wording that is more in line with our wording than theirs. If Fianna Fail goes against Fine Gael, they could just say that they launch the elections. Fianna Fail has the issue of privatisation of the water in their manifesto, but now they are using the wording of the Bill to keep it under the table.

SNB: *How do you keep your enthusiasm?*

JC: We cannot let them win! It is because it is necessary.

TP: Also, because in reality here (*Leinster House*) is where we make the change. Ultimately, protests in the streets happen in the streets, and here is where you make the changes. It would be great to coordinate the protests to drive the change, but it is not really possible.

SNB: What I am also worried about is, although very much in favor of the EU, there is a Directive that has been produced because of the Right2Water movement, and that is being scrutinized in

business schools, and I am thinking to myself that it is so because there are opportunities for private business, otherwise they would not do it.

I: So, as a summary, the Bill is now at third stage, you are trying to get it through. The next step is that meeting on June 19, to review the wording with the Committee.

JC: With the department officials, because they are saying that they have given the Bill to the Attorney General (AG), who is supposed to be concerned with our wording as well, but the AG's team is not happy with both wording, ours and the Minister's. So, it is sort of trying to get clarifications on what we want, what we need in the Bill to be satisfied with it and that it does protect our water, keeping it in public ownership. And what they want to do is get the actual body.

SNB: So, the AG is not happy with their wording either, but do you know what he wants?

JC: No, we don't, because he won't tell us what he wants. We can't have any contact with the AG, the AG can only have contacts with the government.

TP: It is a way of stalling.

I: As a last question, what is the motive behind your will of enshrining water under public ownership in the Constitution and not by law?

TP: Because only the people can change the Constitution.

Appendix XVIII: Letter sent to MEPs before the May elections and answers received

Letter sent

Dear,

As you may know from the past, water in Ireland has always been a sensitive topic. It is increasingly becoming a topic throughout Europe. Being our most valuable global resource, it is legitimate to see it protected in order to prevent any misuse and unfair usage. Therefore, I am concerned by the protection of water, and strongly oppose any privatisation of water.

Privatisation of water is an existing threat, as we have seen happening in other countries (i.e., the UK, currently a member of the EU). It does not bring any advantages, more the opposite. The privatisation of water is no guarantee to a good service.

Regarding the Irish position in my opinion, we need a referendum to have it written and thus protected by law in the Irish constitution. The Water Services Act 2014 does provide protections against water privatisation but it is argued that these protections are not sufficient as they can be removed by a simple amendment to the Bill. I am aware that there is currently a private members bill before the Oireachtas for debate and amendment proposing an amendment to the Constitution that water be kept in public ownership.

This type of proposed protection also needs to be extended throughout the European Union.

I would urge you to promote and support all measures on a European level that prevent the privatisation of water and its supply and treatment. The European Union has a vital role to play to ensure a collective approach towards the protection of water, including its uses, its treatment and its public national ownership. If the EU grants citizens' rights and protections through Regulations or Directives, they can be used to protect and if necessary, vindicate these rights against national governments who fail to properly provide and protect this vital resource.

I would like to know your opinion and specific actions you plan to take on this subject. If elected, would you play a part and improve positively the administration of water on a European level?

Please know that my vote in the European elections, and certainly the votes of many other citizens concerned by this important matter, will be based on your response and actions.

Thank you for your consideration.

Answers Received

Elected Candidates

Seán Kelly MEP (Fine Gael)	43a Upper Gladstone Street, Clonmel, Co. Tipperary, Ireland AND/OR Gortroe, Killarney, Co. Kerry	sean.kelly@europarl.europa.eu
NO REPLY		
Billy Kelleher TD (Fianna Fáil)	28a Ballyhooley Road, Dillon's Cross, Cork	billy.kelleher@oireachtas.ie
NO REPLY		
Mick Wallace TD (Independents4Change)	<u>DUBLIN OFFICE</u> Dáil Eireann, Leinster House, Kildare Street, Dublin 2 <u>WEXFORD OFFICE</u> Ferry carrig Park, Wexford Kildare Street, Dublin 2	mick.wallace@oireachtas.ie
NO REPLY		
Grace O'Sullivan (Green Party senator)	Leinster House Kildare Street Dublin 2 AND/OR 31, Crobally Heights, Tramore, Co. Waterford X91 HR64	grace.osullivan@oireachtas.ie
Many thanks for getting in touch about that issue. Grace is a strong supporter of water rights and keeping water in public ownership. She has pushed the constitutional amendment bill at the Joint Oireachtas Housing and Planning Committee and the Green Party were the first party to call for the constitutional protection for water. In Europe Grace will pursue the lead of the European Greens, who have been the leading voice for water rights in the European Parliament, and NGOs such as Food and Water Europe, who have done very valuable work in the area. Grace supports the Citizens Initiative in this area and will work to see it become law in the EU.		
Deirdre Clune MEP (Fine Gael)	74 South Mall, Cork	deirdre.clune@europarl.europa.eu
Just recently (March 2019) the European Parliament voted in favour of an update of the rules to increase consumer confidence and encourage the drinking of tap water. MEPs call on EU countries to “promote universal access” to clean water for everyone, especially vulnerable groups with no or only limited access.		

The new legislation aims to further increase tap water quality by tightening the maximum limits for certain pollutants such as lead (to be reduced by half), or harmful bacteria and introduces new caps for the most polluting substances found in tap water. Levels of microplastics will also be monitored. The new rules would also increase transparency and provide consumers better access to information.

Drinking tap water is cheap and environmentally friendly and we want measures such as installing free fountains in public places - including shopping centres and airports - where feasible and encouraging the provision of tap water in restaurants.

The Right2Water citizens' Initiative gathered more than 1.8 million signatures, which shows how strongly Europeans feel about drinking water. Public consultation has shown they feel insecure about the quality of tap water when travelling in other EU countries, although compliance rates are high. They also wish to receive more up-to-date information on the quality of drinking water.

Non-elected Candidates

Andrew Doyle TD (Fine Gael)	Agriculture Kildare Dublin 2	House Street	andrew.doyle@oir.ie
NO REPLY			
Malcolm Byrne (Fianna Fáil)	14 The Chase, Ramsgate Village, Gorey, County Wexford		malcolmbyrne@hotmail.com malcolm@malcolmbyrne.eu
<p>Thanks for your email and I share your view that water is a vital resource.</p> <p>I am a strong supporter of the public ownership of water and believe that principle should be enshrined in our constitution.</p> <p>Provision of water services is an issue for each member state but at EU level, I would support measures to assist in ensuring access to clean running water for all EU citizens and as part of overseas aid packages, to those in the developing world.</p>			
Liadh Ní Riada (Sinn Féin)	6 St Patrick's Quay, Montenotte, Cork		liadh@sinnfein.ie
<p>The Irish people demonstrated in their hundreds of thousands that clean tap water is a fundamental right to be provided by the state - not a commodity to be sold and purchased.</p> <p>The EU agenda of charges and privatisation must be put to an end once and for all. The Sinn Féin team of MEPs have been working hard to ensure subsidiarity on water management and to consolidate Ireland's derogation on domestic water charges. Next year the Water Framework Directives will be recast - it is vital that Sinn Féin MEPs are re-elected to ensure that this derogation from domestic water charges is copper fastened.</p> <p>The European Commission is taking enforcement proceedings against the Irish government for its failure to invest in waste water treatment. If penalties and fees are to be avoided adequate investment is needed.</p>			

In the past five years, Sinn Féin MEPs have:

- Ensured Ireland used its ability to opt out of domestic metered water charges
- Authored report calling for human right to water to be recognised in law.

If re-elected, I along with my Sinn Féin colleagues will fight to:

- Ensure that the EU fully implement the demands of the European Citizen's Initiative Right2Water and put an end to privatisation agenda, particularly in relation to water management.
- Copper fasten the derogation to domestic water charges in Art. 9.4 in the Water Framework Directive, ensuring that the Irish state can make its own decision on the matter.
- Ensure high quality drinking water for all by investing in water treatment infrastructure.
- Introduce greater transparency so that we do not have a repeat of Commissioner Vella's political interference in how Ireland decided to manage its water.

Sheila Nunan (Labour)

The Labour Party
Sheila Nunan

sheila@sheilanunan.ie

11 Hume Street,
Dublin 2, Ireland

NO REPLY

Adrienne Wallace
(Solidarity/People Before Profit)

34, Mac Gamhna,
Greenlane, Co. Carlow

awallace120@yahoo.com

NO REPLY

Jan Van de Ven (Direct Democracy Ireland)

Jan Van De Ven, of 21
Chapelwood,
Kilmuckridge (Gorey),
Co. Wexford

press@janvandeven.ie
info@janvandeven.ie

For me water is a human right.

It should free and absolutely pure.

I am campaigning to increase Irish sovereignty with Citizen Initiated Referendum (CIR). With CIR We Can Stop Water Fluoridation and Protect Irish Water from Privatisation - The research says that Hydrofluosilicic acid (HFSA) is a neuro toxin. With Citizen Initiated Referendum you could stop water fluoridation and put Irish water into public ownership.

Peter O'Loughlin (Identity Ireland)

18, O'Brien Street,
Mallow, Cork

NO REPLY

Breda Gardner (Independent Kilkenny county councillor)	KILKENNY CLINIC Insight Natural Health Centre 15 Upper Patrick St Kilkenny Next door to TC Tyres AND/OR Hillview House, Cloghabrody, Thomastown, Co. Kilkenny R95 Y9C7	bredakkcc@gmail.com
I support public ownership of water. My manifesto is here. http://www.backingbreda.com/manifesto-europe.html Apologies for the short reply but as you can imagine I am flat out at the moment.		
Diarmuid O'Flynn (Independent, anti-bailout campaigner)	Shinanagh, Ballyhea, Charleville, Co. Cork	diarmuid.oflynn@ep.europa.eu
NO REPLY		
Liam Minehan (Independent, farmer)	Knigh, Nenagh, Co. Tipperary E45 E427	
NO REPLY		
Walter Ryan Purcell (Independent, tour operator)	Spring Lodge Woodlawn Road Killarney Kerry Republic of Ireland	walter@walterswaytours.com
NO REPLY		
Theresa Heaney (Independent, homemaker)	'Deodatus', Maryboro, Timoleague, Co. Cork	
NO REPLY		
Paddy Fitzgerald (Independent, retired farmer)	Loughloher, Cahir, Co. Tipperary	
NO REPLY		
Dolores Cahill (Independent/Ireland Freedom to Prosper)	Lisbalting, Kilsheelan, Clonmel, Co. Tipperary	dolores.cahill@irexitfreedom.ie
NO REPLY		
Maurice Sexton (Independent, scientist)	Maurice Joseph Sexton, of 56A, South Terrace Court (East Block), South Terrace, Brook Square, Cork City	

NO REPLY		
Allan Brennan (Independent, manager)	project	9 Mountain View Park, Rathdown Road, Greystones, Co. Wicklow Eircode A63 KX88
<p>I got your letter today - thanks. Let me get straight into it - I would never agree with the privatisation of any countries water supply and particularly our own Irish water supply. I also believe that the flouride in the water needs to be removed. Our Government have failed us in this regard.</p> <p>With regards to the environment in general, my favourite pastime is bringing the children out to the mountains and beaches for picnicks and again I will support any and all measures that promote the protection of our environment.</p> <p>Lastly, I believe that one of nature's biggest threats that has 100% gone un-monitored is the threat from the microwave frequencies. When I say microwave frequencies I am talking about the mobile phone and wireless industry - 2G, 3G, 4G, 5G & Wi-Fi etc. - all of these frequencies kill plants and insects.</p> <p>But in Ireland no-one is taking any measurements of the damage. That needs to change.</p>		
Colleen Worthington (Independent, homemaker)		Colleen Worthington, of Hawthorn, Lehenaghmore, Togher, Cork. T12 WR5X colleen.hawkins@gmail.com
NO REPLY		
Peter Madden (Independent, environmental educator)		Main Street, Roscrea, County Tipperary
NO REPLY		

Appendix XIX: Letter sent to local candidates before the May elections and answers received

Letter sent

Dear,

As you may know from the past, water in Ireland has always been a sensitive topic. Being our most valuable global resource, it is legitimate to see it protected in order to prevent any misuse and unfair usage. Therefore, I am concerned by the protection of water, and strongly oppose any possible steps that might make any potential privatisation possible.

Privatisation of water is an existing threat, as we have seen happening in other countries (i.e., the UK). It does not bring any advantages, more the opposite. The privatisation of water is no guarantee to a good service. In my opinion, we need a referendum to have it written and thus protected by law in the Irish constitution.

The wording in the Water Services Act 2014 does provide protections against water privatisation but is argued that these protections are not sufficient as these same protections can be removed by an amendment to the Bill – this would not be put to a national vote, and therein lies the vulnerability.

I am aware that there is currently a private members bill before the Oireachtas for debate and amendment regarding the issue, proposed by Joan Collins TD, proposing an amendment to the Constitution that water be kept in public ownership. I would urge you to support this Bill, once properly worded to prevent unintended consequences for private and group water schemes.

I am aware that you have a lot on your plate, but I would like to know your opinion and specific actions you plan to take on this subject. If elected, would you play a part and improve positively the administration of water?

Please know that my vote, and certainly the votes of many other citizens concerned by this important matter, will be based on your response and actions.

Thank you for your consideration.

Sincerely,

Answers Received

Elected Candidates

Cllr. Irene Winters (Fine Gael)	23 Wicklow Heights Court Wicklow A67 X291.	irenewinters@eircom.net
NO REPLY		
Cllr. Shay Cullen (Fine Gael)	The Crosses Ballinahinch Newtownmountkennedy Co. Wicklow.	shaycullen2014@gmail.com
Thank you for your email, I'm totally against the privatisation of water and as a councillor would do all I could to stop that and will pass on your email to our TD's to make them aware of your concerns. Kind regards Shay		
Cllr. Gail Dunne (Fianna Fáil)	9 St Mantans Road, Wicklow Town, County Wicklow	GDunne@wicklowcoco.ie
NO REPLY		
Paul O'Brien (Labour)	13 Glenkeen, Redcross, Co Wicklow	paulobrien78@yahoo.com
NO REPLY		
Cllr. John Snell (Independent)	81 Seaview Heights, Rathnew, Co. Wicklow	JSnell@wicklowcoco.ie
NO REPLY		
Cllr. Mary Kavanagh (Independent)	58 Seafield, Wicklow Town, Co. Wicklow	MKavanagh@wicklowcoco.ie
I can assure you, I will have no problem supporting any bill that is against the privatisation of our state water supply. As you say, the wording of the bill is critical. We must ensure that our water remains in state ownership in perpetuity.		

Non-elected Candidates

Anne Gregory (Fianna Fáil)	Kilmurry, Newtownmountkennedy, Co. Comté de Wicklow	
NO REPLY		
Muireann Dalton (Sinn Féin)	Season park, New town mount Kennedy, Co.Wicklow.	muireanndalton72@gmail.com
I will absolutely support Joan on this bill, I was a water warrior during the right2water campaign and was a lead organiser of the March in bray, where I did my first political speech as a trade union woman and a strong sinn féin woman I will continue pushing and promoting for the ownership of		

water to be enshrined into the constitution. From the river to the sea Irish water will be free. I will not stop campaigning locally and nationally until this happens.

Regards,
Muireann

Daire Fitzgerald
(Independent)

Contact details not found

Appendix XX: Emails with SWAN

We contacted SWAN Ireland as many organisations advised us to do so. However, we were disappointed to hear they had no time and no will to talk to us. Here is a transcript of the emails we exchanged.

May 3, 2019

Dear SWAN,

We are students coming from the Vlerick Business School in Belgium, working in connection with Slí Na Bandé (a sustainable living project) on our thesis related to the possible use and misuse of our most valuable global resource i.e., **water**. Thus, we are trying to find different ways, on both the national and local scale, to prevent the unfair usage of drinking water.

From your website we seem to have understood that you are concerned as well by this matter. Therefore, we are wondering what you are **specifically doing now** on the matter, and what would your plans be for the **future**. We would also like to know if it would be possible to organize an **interview** with a representative of yours. Feel free to send us any documents related to this topic.

We are looking forward to hearing from you,

Charlotte and Guillaume – for Slí Na Bandé

May 23, 2019

Good afternoon Charlotte and Guillaume,

Thank you very much for your emails / phone calls and my sincere apologies for not responding to you sooner.

As I explained to Guillaume I was waiting to speak with my Manager before I could revert back to you. Firstly, we really do appreciate you contacting SWAN in relation to your thesis which is on a very interesting subject.

I had a meeting with Sinead today re the specifics of your request, what you are looking for etc., and then we also had at SWAN's workload at the present. It quickly became apparent that the deadline required for this project is probably outside what we feel we could actually provide at present. We are very stretched at the moment and are involved in a number of projects which all their own deadlines rapidly approaching as well. So, it is with a very heart that we have to say that SWAN won't be in a position to help you with your research at the present time. We are very sorry for the disappointment our decision will cause and regret that we can't facilitate your request.

On behalf of all the staff at SWAN we would like to wish you all the best with your research and with your studies.

Best regards,

Suzanne

May 24, 2019

Dear Suzanne,

Many thanks for taking the time to reply, we appreciate you are very busy. As you can imagine, we are very disappointed to read that you will not facilitate our request. We have contacted a lot of Irish environmental NGOs, all of them sending us back to you, assuring us you would be of great help for such an important matter in Ireland.

A part of our thesis consists in mapping the environment concerning water in Ireland, i.e., describing the actors having a part. Thus, we interview politicians, activists, media etc. We know that NGOs are essential in this area, and one of the very few actors who have no vested political or financial interest. We feel it is very important to take SWAN's input into account in our work. We hope to describe the state of mind of NGOs in our report, which is why SWAN not answering leaves us with incomplete data that we will have to implement anyway.

Given SWAN's vital work in this area, it is apparent to us that not including information, data/ input/ actions/ reports from SWAN will result in a project that will not accurately reflect the situation.

Thus, could you kindly ask your manager if she could spare only 20 minutes of her time to have a call with us to answer some of our questions, or if there is anyone else that might have the time, as we appreciate that you have a lot of ongoing project. It would be vital for the successful completion of our thesis! Also, if you have any reports, documents or archives that we can access so that we can provide proper representation of SWAN's work in this area, please do tell us.

Best regards,

Charlotte and Guillaume

May 27, 2019

Dear Charlotte and Guillaume,

Thank you for your email of 24th May. While I do understand that you would like to speak with my manager, Sinead O'Brien, she is away from the office all this week.

As per my previous email to you, we are currently very stretched with impending deadlines and a very heavy workload. I don't see that situation changing soon and therefore our resources are very limited a present. So, I'm sorry but while we would like to facilitate your request we are not currently unable to at the present time.

With that in mind I have included some links to our website which I hope you might find of some use to you.

- A link to our site map: <http://www.swanireland.ie/sitemap>
- A link to the SWAN archives: <http://www.swanireland.ie/resources/swan-archive>

Once again, sincere apologies that we can't help you out at the current time but please accept our best wishes for your studies.

Best regards,

Suzanne

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