

**Corporatising Water and Wastewater
Services in Scotland: Governance,
Regulation and Operations**

A thesis submitted by Tommy Kane

**For the degree of Doctor of
Philosophy**

**Faculty of Humanities and Social
Sciences**

**University of Strathclyde
Revised and Final Submission
(Originally Submitted March 2016)**

Declaration of Authors Rights

This thesis is the result of the author's original research. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.

The copyright of this thesis belongs to the author under the terms of the United Kingdom Copyright Acts as qualified by University of Strathclyde Regulation 3.50. Due acknowledgement must always be made of the use of any material contained in, or derived from, this thesis.

Signed:

Date:

Abstract

This thesis examines the provision of Scotland's Water and Wastewater Services (WWS) and considers how regulation, governance and operations have changed since the turn of the century. The adoption and implementation of a policy framework which affords a key role to private sector participation in a formally public utility is a central focus of this thesis. The analysis developed below of the politics of water locates the Scottish case firmly within wider global processes: this involves studying the transmission of policy ideas from supra-national agencies to the Scottish national level, and the actors within these policy networks. Neoliberal globalisation provides some of the conceptual framing of this research, and the empirical substance of the thesis is drawn from fieldwork conducted at the United Nations (UN), European Union (EU), UK and Scottish levels. The research argues that the increasing corporatisation of WWS in Scotland observed over the span of this research is possible due to a specific configuration of structures and agents. EU directives, devolution and marketisation provide some of the structural conditions for water policy making. Epistemic water communities, comprising think tanks, policy entrepreneurs and regulators are key agents identified in this research promoting corporatisation. This thesis argues that corporatisation is steadily eroding the public nature of Scotland's water system.

Table of Contents

Abstract.....	2
Acknowledgments.....	7
Abbreviations.....	11
CHAPTER 1 – Introducing Scotland’s Water and Wastewater Services.....	13
CHAPTER 2 –The Global Water Problem(s): Opportunities Arising.....	20
Water crises in context.....	21
Interlocks, Networks and Alliances–Dominant Interests Influencing WWS Policy..	26
TNC Lobbying.....	34
Neoliberal Water Governance: Brief Review.....	38
Distributing Governance: Separating Politics from WWS.....	42
Cost Recovery.....	44
Institutional Change(s) and the enablement of Private Sector Supply.....	46
Blue Gold: The Business of WWS and the steady stream of Profits.....	50
Growing Private Participation: The European experience.....	52
Alternative Narratives: Social Solidarity – Not Private Profit.....	55
Crisis responses: Challenges to the Water Policy Consensus.....	61
CHAPTER 3 – The Changing Face of Scotland’s WWS.....	64
WWS Today: Politics Hollowed Out?.....	66
Water and Wastewater Services in Scotland: A very Brief History.....	68
Paddling Against the Tide? Privatisation and the Strathclyde Referendum.....	72
After the Referendum: Corporatisation by Stealth.....	74
Since the Scottish Parliament: Increasing or reducing public control, openness and transparency of WWS?.....	75
The EU in Scotland: A Driver for Change?.....	81
Changing WWS in Scotland – A Work in Progress?.....	84
The Story so Far: Authorised Accounts of Scottish WWS.....	89
CHAPTER 4 – Globalisation, Neoliberalism and Governance: Making sense of the Water Policy Cycle.....	91

Considering Globalisation and Neoliberalism.....	92
Market Environmentalism.....	101
Privatisation, Its various guises and its centrality to neo-liberalism.....	104
Privatisation Watered down: Corporatisation in Theory and Practice.....	106
New Modes of Governance: Taking the Politics out of Policy?.....	111
Governing and Regulating the Reshaped State.....	115
Publicness.....	121
Structure, Agency and Policy Activism: Making Ideas Real.....	124
The Production of Ideas and the Shaping of Policy.....	129
Charting the water-course: some markers to navigate this thesis.....	135
CHAPTER 5: Methods.....	136
People, Processes and Numbers.....	136
Gathering Data: Interviews, Ethnography and Accounts.....	139
Research Redesign: Freedom of Information and Rules of Engagement.....	144
Researching the Powerful.....	151
Public Affairs, Public Sociology and the Public Interest: Research as Partisanship?.....	157
CHAPTER 6: Purposeful Regulation: The Water Industry Commission for Scotland.....	164
Separating Scottish Politics from Governance of WWS.....	178
The Political Economy of Regulation- Introducing the WICS.....	167
Strategic Review of Charges: Trade Offs and Constructive Tensions.....	169
Rising Tides: Meeting the Sustainable Development Agenda.....	174
Cryptosporidium.....	177
Purposeful Regulation, Marketisation and Competition.....	180
The WICS and Thought Leadership: Setting the Policy Agenda's?.....	184
Purposeful Regulation: The Case of 'Project Checkers'.....	186
Insider Politics? Influence and Change in Scotland's Water Sector?.....	193
CHAPTER 7: Scottish Water: A Model of Corporatisation.....	196
Applying Marketised Characteristics: Reducing Cost and 'Out-Performance'.....	198

Bonuses, High Wages and Job Losses – Corporatised Incentivisation?	201
Paying for WWS: Charges not Taxation	206
Private Sector Participation	208
Commercialisation	209
Negative Externalities: The Case of External Sewer Flooding	213
Protecting Reputation and Applying Corporate Social Responsibility	216
Reputational Steering Group	223
Conclusions	225
CHAPTER 8: PFI and the Treatment of Scottish Waste Water	227
PFI Reshaping Policy Delivery in Scotland	227
PFI in Wastewater Treatment in Scotland	231
PFI: A Risky Business?	234
PFI, The OPA and Reputational Risk	236
Partnership Problems? Performance and Outcomes under PFI	237
Seafield and Dalmuir: PFI serving the Public Interest?	242
Odorous Impact: Creating a Stink	246
Odour and the Tension between Public and Private Interests: Defaults and Defects at Seafield	247
The Case of Dalmuir, the SRC and the OPA	251
“Fuss over nothing?” PR at Seafield	254
PFI: Reflecting Dominant position’s?	257
CHAPTER 9: Conclusions	259
The Politics of Water	263
A Public and Commercial Utility: Feasible and Serving Public Ends?	266
Private Good, Public Bad?	269
Economic Regulation	270
Future Research	271
Policy Recommendations	273
Conclusion	278
Bibliography	280

List of Interviews.....	333
Field Work Notes.....	334
Appendix A.....	335
Appendix B.....	347

Acknowledgements

There was a time; it seems like a lifetime ago now, that not too many people would have seen this coming. A rascal at school and even more so just after school I made a living working in local open air markets, factories and building sites, though as one of those leaving school in Thatcher's Britain I also had the occasional spell having to depend on a giro cheque for sustenance. Getting to where I am now is dependent on a lot of people to whom I owe huge debt of gratitude. This may take longer than the usual format, but please allow me this indulgence.

At the beginning of this PhD, that also seems like an eternity ago! I remember someone telling me to get it done quickly as life sometime can get in the way of finishing. Over 9 years later I can't help but agree with that wise counsel. Thanks to David Miller for that forewarning and for his encouragement in the initial stages of my PhD. I now know he was right from the rich and sometimes challenging life experiences that I have had during my PhD.

Testament to that are the family illness(es), departmental closures, employment changes and my wider activism encompassing my community, cycling and filmmaking in Cuba with my great pals Messrs Broon and Findlay, UN committees as part of my International water political activism as well as much more local political activity that saw me end up, alongside my aforementioned friend Neil Findlay, in the Scottish Parliament and with that a focused involvement in many campaigns and issues that are too numerous to name here.

Proving the point more than anything however, is my life as a parent: it is the most important job I have ever done and I have been acutely aware that my role as a Dad should not be compromised during my PhD journey. When I see Caitlin and Dominic now as the thoroughly decent, talented, thoughtful, caring and humane young people that they are I take some comfort that I, alongside my beautiful wife Diane, have achieved that objective.

The first couple of years of the Department of Sociology were heady and full of hope that we could help change the world. I want to thank those who helped drive that

optimism, Patricia McCafferty, Idress Ahmed, Claire Harkins, Theresa Martinez, Colin Clark, Andy Higgison, Lucy Brown and the very many others in the Department at that time. I also want to thank my Addiewell pals, Alan and Rebecca Broon (got there eventually Broon!), Penty and Caroline McDowell, Alan Connelly, Colin Russell, Gavin and Denise Wallace, James and Theresa Kane, Allan and Lisa Fleming, Jamie and Gwen Gillies for the normality and laughs enjoyed long before and during the PhD and for not ripping me too much.

There are two very special people from the original Strathclyde line-up that I owe a special thanks to. Kyle Mitchell has been with me every step of the way supporting, cajoling and encouraging. However, our friendship has long outstripped the 'elephant', I am proud to say that he is one of my (and my family's) dearest and most special friends and I look forward to a lifetime of laughs, wine and fine food with him, Zena and the wider Mitchell clan. Will Dinan stuck by myself and Kyle when the Department of Sociology closed down and even when he left Strathclyde for UWS and now Stirling. He was there for me in a way that no other person or part of the institution was. He is quite simply a gem that the academic world should be proud of. Without his selflessness, time and effort, his always wise and intelligent guidance and support I can honestly say that I would not have completed this PhD. I am also proud to call him a friend and look forward to a lifetime of friendship with him.

As noted Halfway through this I ended up in gainful employment alongside another of my great friends, Neil Findlay. Ending up in the Parliament was inadvertent for both of us and I'm proud of the rich and varied work that both of us have done since Neil was unexpectedly elected. However, he is my employer as well as pal and I owe a huge debt of gratitude to him as my employer for the support he has given me. He has never complained about my time sometimes being taken up with PhD commitments and has afforded me the space required to finally get over the line. I could not have wished for a better employer in supporting me in these past few years. Of course I know that he is the employer and person he is because of the people around him, including his wife and my pal, the exceptional Fiona. Likewise my wonderful colleagues, Marion Kirk, Frank Toner and latterly Andrew McGuire who have shown patience above the call of duty, even Frank who is still not convinced that a PhD goes beyond simple copy and paste!

I also a great deal thanks to my wider family. All my Grans and Granda's Aunties and Uncles, notably the Addiewell contingent including my late great Auntie Rachel, Uncle Billy and Theresa and Uncle Pat and Auntie Celina for helping me become the person I am today. I want to give special thanks to my wonderful Mother in Law, Margaret Owens¹, for her love, help and practical support she has given all of us over the years. She quite simply epitomises decency and commitment to her family, likewise my Brother in Law Brian Smillie who has been there for me throughout.

More special thanks to my Mum and Dad after all without their input there would be nothing at all produced by me, let alone a PhD! Thanks to them for believing in me. I am as pleased for them as I am for myself that I have finished this. This is for them as much as it is for me. They were always clear that education was key to progress – and I'm pleased to say the message finally got through! Thanks to them also for all the practical support, lifts for weans to fitba and swimming and from late night trains from Glasgow and Edinburgh!

I have, of course, saved my extra special thanks to my (extremely) patient wife Diane and my kids Caitlin and Dominic. I embarked on my educational journey, after redundancy from Continental Tyres, in 1999. This journey took in night school, full time college, undergraduate, postgraduate Masters and finally PhD study. It is safe to say that without Diane I would not have even thought about this, let alone doing it, it was her encouragement to realise my potential, no matter the impact on her that made any of this possible. During my PhD and earlier study it was her unswerving love, her emotional and practical support her chastisement when necessary (often) her incredible patience way beyond the call of duty (albeit it was wearing thin near the end!) that carried me through this and for that I can never repay. Likewise my children have literally never known me not be studying in some way nevertheless I thank them for their love and their patience though the years, though I think it's went beyond patience and became just a way of life to them. In some ways, ultimately I owe it all to

¹ Margaret took ill on the day before my submission. It is to my eternal regret that she died before reading this acknowledgement and that she never saw me finally finish my PhD. She was a wonderful mother in law and always gave unstinting love and support to me and Diane and she will be forever in our hearts and minds.

them, as it was their birth(s) that motivated me to understand the world better so that I could explain it to them and it was them who made me want to be the best that I could be and to offer them a good example. I hope with this and other stuff that I have achieved that.

Here's to the Post Doc! Only kidding Diane.....!!!

Abbreviations

- (BIAC) Business and Advisory Committee
- (CBI) Confederation of British Industry
- (CSR) Corporate Social Responsibility
- (DFID) Department for International Development
- (DWQR) Drinking Water Quality Regulator
- (EIB) European Bank for Reconstruction and Development
- (EU) European Union
- (EBRD) European Bank for Reconstruction and Development
- (EWP) European Water Partnership
- (FOI) Freedom of Information
- (FOISA) Freedom of Information Scotland Act
- (GWP) Global Water Partnership
- (IEA) Institute of Economic Affairs
- (IFI) International Financial Institution
- (IMF) International Monetary Fund
- (IPCC) International Panel for Climate Change
- (LLRA) Leith Links Residents Association
- (OSIC) Office of the Scottish Information Commissioner
- (OPA) Overall Performance Assessment
- (PFI) Private Finance Initiative
- (PSIRU) Public Services International Research Unit
- (PPP) Public Private Partnership
- (PR) Public Relations
- (OECD) The Organisation for Economic Co-operation and Development
- (OFWAT) The Water Services Regulation Authority for England
- (Q&S) Quality and Standards

(RSG) Reputational Steering Group
(SEPA) Scottish Environmental Protection Agency
(SFT) Scottish Futures Trust
(STW) Stirling Water
(SWS) Scottish Water Solutions
(SWBS) Scottish Water Business Stream
(SPICE) Scottish Parliament Information Centre
(SRC) Strategic Review of Charges
(TNC) Transnational Corporation
(TOR) Terms of Reference
(UN) United Nations
(UNDP) The United Nations Development Programme
(UNESCO) United Nations Educational, Scientific and Cultural Organization
(UNWWAP) United Nations World Water Assessment Programme
(WHO) World Health Organisation
(WTW) Water Treatment Works
(WWTW's) Waste Water Treatment Works
(WWS) Water and Wastewater Services
(WIC) Water Industry Commissioner
(WICS) Water Industry Commission Scotland
(WRC) Water Research Council
(WWC) World Water Council
(WWF) World Water Forum

Chapter 1: Introducing Scotland's Water and Wastewater Services

The world currently faces a series of water crises. In the midst of these crises are intensifying and relentless policy debates, concerned with seeking solutions to the lack of universal access to provision of water and its accompanying services such as safe and clean wastewater disposal. Scotland has not been unaffected by these global debates nor is it immune from related global processes, not least the entry of the private sector who increasingly provide Water and Wastewater Services (WWS) across the world. This penetration of the private sector mirrors the ideas of many policy agenda setters who argue that marketised principles should underpin all policy solutions to the water problematic. The following chapters examine how Scotland has adopted and embraced key ideas promoted by key global policy actors.

The provision of Scotland's WWS, its regulation, governance and operations and the political context in which it is situated will make up the bulk of this thesis. This encompasses a consideration of the legislative enabling programme that has led to the current model and its governance and regulatory framework. This thesis will also address the ethos underpinning WWS and the operational effectiveness of Scottish Water, the national utility charged with providing WWS in Scotland. This account of Scotland's WWS sector is primarily based on original empirical research conducted between 2007 and 2012.

I hope to provide an analysis of the emergence of the current WWS model in Scotland. Since the formation of Scottish Water in 2002 some research has been conducted on different component parts of WWS in Scotland. These include a consideration of evolving governance, the drivers for that change and the consequent commercial approach (Kane and Mitchell 2008, Kane and Mitchell 2010, Kane and Russell 2007, Kane 2013). The establishment and role of the economic regulator the Water Industry Commission for Scotland (WICS) and its predecessor the Water Industry Commissioner for Scotland (WIC) has received some attention (Armstrong, 2006, 2007, Baietti 2006, Cooper et al 2006, Findlay 2004, Lobina and Terhorst 2005, Kane and Mitchell 2008, Kane and Russell 2007, Kane 2013), as has the wider politics of water and contemporary policy development (Kane and Mitchell 2010, Kane 2013), the pricing of

WWS (Sawkins and Dickie, 2002, 2005, 2007), accounting and charging models (Cuthbert & Cuthbert 2006a, 2006b, 2007a), the use of the Private Finance Initiative (PFI) to underpin investment in water infrastructure (Cuthbert & Cuthbert 2007b, Hendry 2001, Kane & Mitchell 2010, Kane 2013), the work of the Joint Venture Scottish Water Solutions (SWS) (Cuthbert & Cuthbert 2007c), the history of WWS provision in Scotland over the past two centuries (Cumming, 1980, Gow 1996, Pitkethly 1980), Scottish Water communications strategies (Dinan et al 2003) and the impact of the Water Framework Directive (WFD) and River Basin Management Plans (Iornis 2008).

However, there has been no detailed study examining water governance and its impact on the operations of WWS in Scotland. There is little by way of in-depth assessment of negative externalities or the management of problematic issues by official stakeholders either. Indeed, evidence from this thesis suggests that official accounts offer only a partial account of operations, particularly where operational failures occur or where there are political sensitivities around performance. This thesis intends to redress some of these gaps in knowledge and evaluate both the failings and successes within the current Scottish WWS model.

The wider politics of water is a recurring theme throughout the thesis. How we provide WWS, how it is paid for and who owns and governs are inherently political questions. Given water and its accompanying services are rightly considered essential human needs it is unsurprising that these questions provoke political debate. Hence, solutions or ideas over WWS provision are informed as much by ideology as topography.

Political debate over the future of Scotland's water and accompanying services was last high on the political agenda when the then water authorities were identified for privatisation in the early 1990's. This proposal, by the then UK Conservative Government provoked a significant political backlash in Scotland. The most notable expression of the widespread discontent at this proposal was a referendum organised by the then Strathclyde Regional Council in 1994. The referendum's unequivocal rejection of privatisation was arguably the starting point for a legislative process leading to the current WWS model and has cast a shadow over the policy choices of political actors in Scotland ever since.

The broad structure of this thesis is as follows. Chapter 2 discusses issues of global significance concerning the provision of WWS. Water resources are under threat from climate change, population demographics and over-consumption. Water is currently unequally shared across the world. The consequence of this inequity is a human catastrophe in many developing countries and diminishing water basins in others. Understandably, these problems have escalated attention and policy deliberation over how best to provide water and sanitation services across the world. Given the dominance of neoliberalism in politics and economics, it is no surprise to find that many policy prescriptions reflect that orthodoxy in decision making.

A related aim of this research is to understand how ideas are developed and promoted prior to their transposition into legislation. This involves identifying and chronicling the ideas that dominate water governance discourse and assessing how such ideas penetrate at a Scottish level. This research considers the sources of these ideas, as well as the ideas themselves, and contends they are the result of deliberate and relentless lobbying of policy-makers in local, national and global polities. In so far as regulation is concerned the impact of a governance model, dominated by regulators, is also assessed in the Scottish context. During the course of my evidence gathering I have applied a public sociology (discussed below in chapter 5) approach, which has assisted in providing a wider understanding of the governance and accountability of Scotland's WWS for all stakeholders that goes beyond just the crucible of academia.

Chapter 2 also outlines the global context and the policy discussions taking place against that backdrop. Some of the perceived building blocks for water governance reform are discussed in this chapter, including an appraisal of the characteristics in corporatised models that have been adopted by some public utilities across the world. I recognise the argument there is no monolithic public framework (Hall and Lobina, 2014) just like there is no universal private model. But, of interest is how particular governance and ownership configurations impact on operations, access to water and questions of ownership.

Chapter 3 provides an overview of WWS in Scotland. It discusses the recent and current political context in Scotland in relation to water provision. This includes a chronicle of the history of WWS delivery in Scotland, before discussing the more recent legislative changes which have facilitated the corporatised model now practiced in Scotland. A review of the key components of the corporatised model is also developed. Discussing the structural element of Scotland's current corporatised model suggests the policy prescriptions promoted by global actors have penetrated Scottish policy discourse, legislation and subsequently its governance and operations. Chapter 3 also raises the question of policy development and how for many Scottish idea formers the current model is open to further contestation and change.

Informing this thesis is an understanding of the influence of ideas on policy-making. In particular, the thesis focuses on the current dominant paradigm of neoliberalism and its influence in policy-making and legislative circles. Neoliberal assumptions presently inform political and economic discourse within global policy making at elite institutional levels and amongst policy agenda setters who seek to influence those. Therefore the conceptual framing of the thesis in Chapter 4 offers an analysis of neoliberalism, and how the promotion of neoliberal remedies operates in practice.

Neoliberal ideas are propagated within particular structures and require actors to establish, entrench and disseminate their ideas and policy preferences. Thus, the conceptual framing of this thesis considers both structures, in governance and regulation, as well agents, such as policy networks and epistemic communities, who intellectually standardise and normalise neoliberal principles in policy and legislation. This chapter also draws upon sociological theory pertaining to structure and agency to analyse the promotion and consolidation of ideas and policies in practice.

Chapter 5 discusses the methods used to gather data. Included is an explanation of the triangulated approach adopted and the unique data gathered as a consequence of the evolution of the research design and strategy. Special focus is given to the use of Freedom of Information (FOI). FOI became a central instrument to collect information in this thesis. Often the information received from utilising FOI was official data that revealed some of the activities and strategies of key WWS stakeholders in Scotland. The

use of FOI and the (often negative) responses to my FOI requests foregrounded aspects of the governance and accountability culture that currently exists within the water sector in Scotland. In short, FOI provided evidence of the type of exclusive governance being practiced within the corporatised framework. The evidence gathered from just using this method, aside from the information gleaned from it, raises concerns over openness and accountability in the current framework. This theme runs throughout the thesis and is reflected in the conclusions of this research in Chapter 9.

The governance of WWS in Scotland has a regulatory framework incorporating drinking water quality, environmental, customer and economic components. The economic arm, charged with achieving economic efficiency, is particularly influential. Having the economic regulator, the WICS, as the dominant actor within the regulatory framework has arguably led to a dilution of political accountability and is consistent with the ideas around governance advanced by various global policy actors. The WICS set charges for customers and budgets for Scottish Water to carry out its maintenance and capital investment programmes. This is a responsibility of considerable importance and undoubtedly makes the WICS the central actor within the regulatory framework. How the WICS fulfils that role, their activities and policy preferences will be the main subject of Chapter 6.

The activities of Scottish Water is inextricably linked to, and impacted by, the regulatory framework in which it operates. Scottish Water operates against the backdrop of the WICS drive for economic efficiency. Chapter 7 offers an analysis of the utility, showing how legislation and the drive for continual efficiency have affected corporate culture, structures and operations. The formation of Scottish Water has been hailed by key stakeholders as having greatly improved the provision of Scotland's WWS. Investment has increased and improvements and modernisation of much of the asset base has ensued. This is undoubtedly to be welcomed; however, despite being only part of the broad narrative this increased investment and the corresponding improvements are often painted as the whole story. The research conducted here will critically scrutinise some of these improvements and aspects of the operational and regulatory performance of WWS provision since 2002. A core aim of this research is to offer a detailed and empirically informed assessment of performance (albeit I acknowledge it is

clearly an incomplete account of *all* Scottish Water activity) and outcomes that goes beyond official versions.

A notable characteristic of the corporatised model in Scotland is the substantial increase of private sector companies providing elements of WWS in Scotland. Chapter's 7 and 8 will examine private sector involvement in Scotland's WWS. This entails a discussion of PFI (a funding and operational mechanism for public services and projects), a form of Public Private Partnership (PPP), used to finance, build and operate 21 major Wastewater Treatment Works (WWTW's) across Scotland. Moreover, the overall scale and value of private penetration and the effect of this on Scottish Water (still a public utility) is assessed, including consideration of the effectiveness of, and the social costs arising from, private participation within the current corporatised framework.

Chapter 8 offers a detailed study of the impact of PFI contracts on two communities hosting WWTW's, which are serving major population hubs, Dalmuir (near Clydebank, Glasgow) and Seafield (in Leith, Edinburgh). Since the refurbishment of their local treatment plants as part of the PFI programme, both plants have endured operational problems. Using first-hand accounts from both communities, drawing extensively on interview and hitherto unknown documentary sources, this chapter will examine the problems associated with these PFI operated plants and the approach taken by Scottish Water in dealing with these concerns.

The presentation of the data gathered throughout this thesis sets up a discussion in the concluding chapter about the policy trajectory of WWS provision in Scotland. This thesis recognises many improvements since 2002, which have occurred from increased investment and tighter operational and regulatory structures. However, there is also an exposition of some of the negative externalities that have arisen, often excluded from the wider discourse, as a result of the commercialised ethos and budget constraints that characterise the delivery of WWS in Scotland today.

The empirical underpinning of the thesis offers a more nuanced and complicated picture of the evolution of WWS in Scotland since the creation of Scottish Water in 2002 than is available in authorised, publicly available, official accounts of performance.

Chapter 9 also discusses some of the main conclusions reached over the course of my research and assesses the likely trajectory of policy and practice going forward.

A central theme of this thesis relates to the democratic structures of the current model. Channels for the public to participate and to hold regulators and the utility to account are, on the face of it, available. Chapter 9 discusses whether meaningful public participation and democratic oversight are actually possible against a backdrop of partial information sharing with the very public served by Scottish Water and its regulators. In this context some policy recommendations and proposals to re-democratise WWS in Scotland are put forward to properly inform debate and deliberation on the future provision of these vital services. However, prior to that Scottish centric discussion a global overview is required.

Chapter 2: Global Water Problem(s), Opportunities Arising?

The governance, regulation and operation of Scotland's WWS are the focus of this thesis. Scotland, however, does not operate separately from the rest of the world. In today's interconnected and globalised world how societies organise their public services are regularly and incessantly debated at global and national levels, with some dominant ideas in the ascendancy. These ideas have, unsurprisingly, also penetrated policy thinking in the management and governance of water. The global direction of travel in policy terms chimes with the neoliberal philosophy that dominates so much of our political, economic and social relations in the contemporary world.

This chapter will, within the context of those global relations, chart key and central actors in the WWS sector and consider their ideas and policy preferences. Reforming the governance of WWS has been identified as a preferred policy choice and the consequent generation of ideas about reforming water governance takes place in the shadow of multiple water crises facing the world today. In effect and whether deliberate or not, crisis has been used to change, or at least propose change(s), to the governance and operation of WWS across the developing as well as the developed world. An intention of those generating ideas is to penetrate policy and then legislative circles. The generation of ideas in the WWS sector, stimulated by the numerous crises, has resulted in an increase in policy activism and, thereby, the commercialisation of, and private sector involvement in, WWS across the world. A consequence that has also seen WWS become increasingly financialised and seen as, a lucrative investment and business opportunity for financial investors and WWS TNC's.

This chapter outlines this policy activism and its consequences against the backdrop of the current water crises, beginning with a brief appraisal of the crisis of unequal supply and how so many people in the world lack the ability to access clean water and sanitation services. Thereafter I will examine some of the policy proposals being consistently promoted and show how these often benefit narrow interests.

Water crises in context

The existence of various crises concerning water is widely acknowledged. Ecologist Vandana Shiva claims that 'The water crisis is the most pervasive, most severe and most invisible dimension of the ecological devastation of the earth' (Shiva, 2002:1). The core crisis is the amount of people lacking access to adequate WWS. Despite its status as an essential component in all aspects and activities pertaining to our existence, including food and energy production and manufacturing, many people cannot access adequate supplies of water. The reality of such unequal access to WWS is stark for hundreds of millions of the world's population. The United Nations Development Programme (UNDP) reported in 2006 how:

In our increasingly prosperous world, more than 1 billion people are denied the right to clean water and 2.6 billion people lack access to adequate sanitation. These headline numbers capture only one dimension of the problem. Every year some 1.8 million children die as a result of diarrhoea and other diseases caused by unclean water and poor sanitation. At the start of the 21st century unclean water is the world's second biggest killer of children, every day millions of women and young girls collect water for their families—a ritual that reinforces gender inequalities in employment and education. Meanwhile, the ill health associated with deficits in water and sanitation undermines productivity and economic growth, reinforcing the deep inequalities that characterize current patterns of globalization and trapping vulnerable households in cycles of poverty (UNDP, 2006: v).

The sanitation crisis, caused by a lack of adequate wastewater services, has had devastating consequences for billions of people throughout the world. Black and Fawcett suggest 'At the outset of the 21st century, the lack of sanitation endured by at least 2.6 billion people, 40% of the world's citizens, is a hidden international scandal' (2008: ix). For people without adequate sanitation and access to clean water there are detrimental and often fatal health impacts. A World Health Organisation (WHO) publication stated 'Globally, improving water, sanitation and hygiene has the potential to prevent at least 9.3% of the disease burden or 6.3% of all deaths' (Bartram, 2008:

10). Of these the disproportionate burden is suffered by children, particularly those from developing countries (ibid).

As noted by the UNDP in 2006, a particularly challenging illness is diarrhoea: 39% of the entire disease burden is from diarrhoeal diseases (Bartram, 2008: 11). 1.5million deaths arise from diarrhoea caused by unsafe water and inadequate sanitation, most of which are the deaths of children (ibid, 2008: 7). Yet it is said, '94% of diarrhoeal cases are preventable through modifications to the environment, including interventions to increase the availability of clean water and to improve sanitation and hygiene' (ibid, 2007: 11). In total, 2.2 million people die each year due to low quality drinking water and/or lack of sanitation – that is 42, 000 people a week, 90 percent of whom are children (WHO/UNICEF, 2005: 15).

At the turn of the 21st Century the Millennium Development Goals (MDG's) were established to redress the awful reality of inaccessibility to clean fresh water and adequate sanitation faced by so many people across the world. Recent figures from 2013 from the WHO/UNICEF Joint Monitoring Programme for Water offer mixed results over the impact of the MDG's. Access to clean water supplies has improved, it is estimated that 768 million people now lack access or put another way 89% of the world's population enjoy coverage; a figure that is 1% above the MDG target (WHO/UNICEF, 2013: 3). However, coverage in sanitation is 64% of the global population, which was 11% less than the MDG target for 75% coverage by 2015. It is said that:

If current trends continue, it is set to miss the target by more than half a billion people. By the end of 2011, there were 2.5 billion people who still did not use an improved sanitation facility. The number of people practising open defecation decreased to a little over 1 billion, but this still represents 15% of the global population (ibid).

Despite the harshness of the human suffering caused by a lack of access to WWS it is broadly accepted that there is sufficient water, as well as the required resources and technology to provide all the people of the world with access to clean water and sanitation. This alludes to system of unequal supply that distributes to some who can access, through having the financial means and/or being located in a country with an

adequate supply, but doesn't supply adequate WWS who lack the means and ability to gain access. As Erik Swyngedouw notes:

It usually is a problem of access and equitable distribution of the available resources. What needs to be understood better, therefore, is not how to bring water to people, but, rather, why it is that some social groups do not have adequate access to water and sanitation, while others do (2006: 4).

Water is a finite resource and often over-consumed. This is particularly problematic when water is sourced from underground aquifers as once these run out they can take many generations to replenish or never recover at all. It is not just underground water where over consumption is evident. Some surface water basins, from lakes and rivers, across the world are water stressed through over consumption. For example:

In just one week in mid- November 2006 national media sources reported local but high-profile shortages in parts of Australia, Botswana, Canada, China, Fiji, Kuwait, Liberia, Malawi, Pakistan, Philippines, South Africa, Uganda, the United Arab Emirates and the United States (Unver and Cosgrove, 2009: 14).

Ironically, over-consumption of water leading to scarcity threatens the very system that is perhaps guilty of causing the reduction in supply. Indeed, water scarcity and water pollution are seen by global financial investors as posing risks to the supply chain in various industry sectors (Goldman Sachs, 2008, JP Morgan, 2008, Knight and Miller-Bakewell, 2007). Both over-consumption and pollution are man-made phenomena and are often driven by financial and market pressures. Rising demand from a growing global population and increased urbanisation, which increases demand on energy, agriculture and industry, all of which need water for their production and delivery, is a central reason for increasing scarcity (Connor and Webber, 2014: 22). It is these material conditions that are estimated to have increased demand for water threefold (UN WWAP, 2009).

Anxiety over scarcity has its beneficiaries. Scarcity presents opportunities for those who seek to organise markets, investment and services in WWS. For instance it may result in a higher cost on water and hence greater revenue for those in control of supply. A

commentator in *Global Water Intelligence* (GWI), a specialist journal for private operators, wrote, 'The most important impact of scarcity is that it will force public water authorities to price water as an economic good with real costs, rather than a 'gift from God', free from normal financial considerations' (Gasson, 2008). Or as another analyst suggests, 'We need to be very cautious when speaking of a water crisis, and always try to discover who stand to gain from crisis' (Bouguerra, 2006).

Increased demand for water is mainly from developed countries, whose advanced economies results in heavy consumption of commodities and food produced by and from water. These developed countries account disproportionately for water usage, unlike in developing countries where people tend to use water simply to subsist. In developing countries it is said that the average human requires 50 litres of water per day, yet the average American is estimated to use 500 litres per day. The outcome is that 1 billion of the world's population surviving on less than 6 litres per day (Scott, 2009). The concept of virtual water helps illustrate this point of unequal usage dependent on geography and life circumstances.

Tony Allan developed the idea of 'virtual water' to calculate how much water is used when producing a good or service (Allan, 2003: 4-11). Virtual water is also referred to as 'embedded water' because it represents the water used in the whole production chain embedded in end-products (rather than the actual water content of the finished product) (Frontier Economics, 2008: 2). Therefore it can be used to measure net imports and exports of the water used to produce goods and services. An extension to virtual water is the concept of the Water Footprint. The Water Foot Print Network states:

The water footprint of national consumption is defined as the total amount of fresh water that is used to produce the goods and services consumed by the inhabitants of the nation. It consists of two components: the internal water footprint, i.e. the water use inside the country, the external water footprint, i.e. the water use in other countries (2011a).

The Water Footprint Network states each UK citizen uses around 150 litres per person per day. However, they also calculate how the total consumption of each person in the UK, when including all the products they consume, but which are manufactured in other countries, means that each British citizen effectively soaks up a staggering 4,645 litres of the world's water every day (Water Footprint Network, 2011b). This often means that wealthier countries and/or water rich countries are often taking water from countries that are water poor and who can ill afford to do without such large quantities of water.

About 62% of the total UK water footprint is accounted for by water from other nations, whereas only 38% is used from domestic water resources. In other words, UK consumption of food and clothing has an impact on rivers and aquifers globally as well as in the UK and is therefore inextricably linked to the continuing insecurity of water resources in other parts of the world (ibid).

Climate change is another emerging threat to the steady and secure supply of WWS. The WHO and the UK Department for International Development (DFID), state 'Most impacts will be experienced through more droughts, floods, and less predictable rainfall and water flows. These will place established water and sanitation services – and future gains in access and service quality – at real risk' (WHO, DFID, 2009: 2). Such is the impact of climate change it is also said that 'Climate change can directly affect the hydrologic cycle and, through it, the quantity and quality of water resources' (Connor et al in Unver and Cosgrove in UN WWAP, 2009: 68).

As a result of climate change, over-consumption and polluted supplies and scarcity, there are fears wars will be fought over water as countries and other contesting interests compete for increasingly scarce supplies. Ismail Serageldin, former World Bank Vice President, famously suggested that 'Many of the wars of the 20th century were about oil, but wars of the 21st century will be over water' (In Shiva, 2002: Preface). Alex Bell, a former special adviser to the First Minister of Scotland, argues in 'Peak Water', (Bell, 2009) that global water supplies will dwindle in the near future, placing those countries considered to be water rich in a strong position to profit from their plentiful water supplies. As discussed, in later chapters, the ambitious 'Hydro-

Nation' agenda proposed by the Scottish Government, developed when Mr Bell was a key and influential Scottish Government adviser, is consistent with an agenda whereby water rich countries attempt to profit from the wider, global scarcity of water.

Tension over decreasing water supplies is amplified when two or more countries are sourcing their water supply from the same water basin. Maude Barlow reports how '215 major rivers and 300 groundwater basins and aquifers are shared by two or more countries, creating tensions over ownership and use of the precious waters they contain' (Barlow, 2007: 145). Hence, the concern for policy analysts that transboundary waters can become a source of conflict if not managed fairly (author field work notes, Stockholm 2009).

Ignacio Saiz, of the Centre for Economic and Social Rights claims that water can be used 'as an instrument with which one population group can suppress another' (2012). For example, the gaining of, and then preventing, access to water supplies is seen as a tool that is used in the conflict between Israel and Palestine. Ariel Sharon, ex Israeli army commander and former Israeli PM, claimed that the 1967 war was over water (Bullock and Darwish, 1993). More recently Oxfam International reported that Israel has placed restrictions on Palestinians in the West Bank to abstract the level of water they need to drink and produce food (Oxfam, 2012).

Interlocks, Networks and Alliances – Dominant Interests Influencing WWS Policy

How to solve the various water crises has attracted the attention of dominant interests. When working together they represent a powerful block and formidable global alliance in the WWS sector. International Financial Institutions (IFI), such as the World Bank and International Monetary Fund (IMF) and supranational institutions like the EU, the UN and its various arms, plus other organisations like the OECD have taken a keen interest in water policy at global and national levels. Often working alongside supranational institutions and IFI's, are global business networks such as the World Business Council for Sustainable Development (WBCSD) and the World Economic Forum. There are also dedicated water lobbyists such as the Global Water Partnership

(GWP), the World Water Council (WWC) and the more recently formed European Water Partnership (EWP) who are all active in developing WWS policy proposals.

It could be argued that such organisation often interlock with others and embody and represent the interest of capital and those who see and want profit maximizing opportunities in WWS. The private water industry is integral and influential in the development of policy and various policy papers that have been published since the turn of this century. Central (private) actors are the likes of Veolia and Gdf-Suez and its subsidiary Suez Environment. Their activity in seeking to influence policy is in the knowledge that policies agreed and legislated in local and global policy fora can either be in or against their private interests. This is evidenced in Scotland where recent policy decisions and subsequent legislation has enabled Gdf-Suez, Veolia and a host of other private interests to have an increasing role in providing WWS.

Perhaps the most prominent and active architects promoting a policy agenda, which advocates the increasing involvement of the private sector are the global water think tanks, the GWP and the WWC. Both have been involved, either together and/or with others, in producing many of the most influential publications and research promoting institutional change in the governance of water. Many of these publications are cited throughout this thesis.

The GWP was formed by the United Nations Development Programme along with the World Bank and the government of Sweden. Other significant donors include the governments of the UK and Netherlands (GWP, 2006: 4) showing how national governments collaborate in networks and with partners who seek to influence policy in their legislatures as well as the international institutions they are members of. The GWP is made up of a diffuse set of organisations involved in water resource management including 'developed and developing country government departments, agencies of the United Nations, bilateral and multilateral development banks, professional associations, research institutions, non-governmental organisations and the private sector' (Rogers and Hall, 2003: preface). In assessing their first ten years of activity the GWP acknowledged how, 'Water matters at all levels: local, national and global. GWP is active

at all of these, informing, influencing and enabling so that change can happen at every stage' (GWP: 2006a: 65).

The GWP has been described as a 'coordination network', seeking to bring together the public and private sector alongside civil society 'to collect and disseminate best practices and lessons learned in integrated water management programmes' (Benner et al, 2002: 11, Witte et al, 2002: 67). Others note GWPs role as a type of policy network pushing particular policy proposals (Reinicke 1999-2000: 51; Stone, 2008: 18; Goldman, 2005; Khagram and Waddell, 2007). The GWP has also been termed a Global Water Initiative (GWI) (Varaday et al: 2008: 24), broadly defined as 'the institutional frameworks, organizations, special events, and awareness-raising campaigns that focus on global water-resources management.' (Varady et al, 2008: 20). During my research I attended the annual Stockholm World Water Week, which, like the World Water Forum (WWF) resembles the concept described by Varady.

The GWP works closely with the UN and the World Bank as well as the WWC. The GWP are members of the United Nations General Secretary's Advisory Board on Water and Sanitation (GWP, 2006a: 66) and 'various UN bodies including the World Water Assessment Programme and the Commission for Sustainable Development' (GWP: 2006a: 93). They also have a close relationship with the World Bank. This was captured by John Briscoe, World Bank country director for Brazil, who remarked:

As someone present at the birth of the GWP, my relationship with it has been similar to that of parents with children. In the early years you feel you have a lot of influence. Then they find their feet. They need you less (and disrespect you frequently!). But, they form their own characters, and find their own ways through life. And you love them unconditionally (GWP, 2006: 4).

A senior economist at the World Bank suggests the GWP also have some influence over the World Bank policy on water, stating 'the GWP comb has been used to define the 'scope of water resources management' in the banks water sector resources strategy and hence our operations' (GWP, 2006: 33). This is significant given the influence the World Bank have in policy, due to its capacity to place conditions (sometimes on policy)

on loans they provide to countries. The GWP sees itself as a network grounded in knowledge to influence, inform and enable change at local, national and global levels (GWP, 2006: 65). In short, they seek to use their relationships, global in reach, to inform and influence political leaders to 'adjust and make major changes to water laws, policies and other institutional arrangements' (ibid). According to the GWP such relationship building is critical to influencing policy suggesting that, 'raising water matters on the global stage is critical to getting this political commitment' (ibid).

The GWP also played a key role in forming the *World Panel on Financing Water Infrastructure* chaired by the former Managing Director of the International Monetary Fund, Michael Camdessus (GWP, 2006a: 79), and assisting with preparations for the World Water Forum (WWF) (GWP, 2006a: 66). According to leading WWC figures the WWC and GWP 'enjoy a special relationship' (Abu-Zeid et al, 2009: 102). The WWC is similar to the GWP, in that it is a prominent organisation active in water policy/lobbying, however Abu-Zeid and colleagues suggest that the WWC is more of a think tank on world water policy than the GWP (ibid). Others describe it in similar terms to the GWP, characterised as a Global Action Network (Khagram and Waddell, 2007: 13) and a Transnational Policy Network (Goldman, 2007).

Just like the GWP the WWC is intent on influencing the higher echelons of policy makers. The WWC self-describes as 'an international multi-stakeholder platform' and was formed from 'the initiative of renowned water specialists and international organizations, in response to an increasing concern about world water issues from the global community' (WWC, 2013). Critically, a central objective is to raise 'awareness, build political commitment and trigger action on critical water issues at all levels, including the highest decision-making levels' (WWC, 2013).

The WWC are unequivocal in their desire to influence policy making processes. The huge water conference, the WWF, which the WWC organise, embodies their attempts to set policy agendas and the parameters for debate. They themselves state how WWF is designed to:

Raise the importance of water on the political agenda; to support the deepening of discussions towards the solution of international water issues in the 21st

century; to formulate concrete proposals and bring their importance to the world's attention; to generate political commitment (WWF, 2009).

The global reach and political pedigree of the WWC is illustrated by the 2009 WWF in Istanbul. It was attended by, among others, nine Heads of State/Government; three International Organization Directors/Secretary Generals; 84 Ministers and 19 Vice Ministers; 14 high level representatives from Intergovernmental Organizations; 250 parliamentarians and 200 local authorities, including 59 Mayors. According to the WWF these luminaries attended 'in order to create understanding for the urgency of positive and pro-active policies on water-related issues' in the world (WWF, 2009).

The WWC and its high-profile policy dialogue vehicle, the WWF, have created and occupied important space for the development and deliberation of water policy. The International Panel for Climate Change (IPCC), for example, likens the WWC to a water equivalent of the EU and UN, despite it having no political authority (Kundzewicz et al, 2007: 175). However, while the WWC is made up of an array of different actors, including from the private sector, there are also members of UN agencies appointed to the board of governors of the WWC (WWF, 2009). With its very close links to the private water industry, some critics question the legitimacy of the WWC and wonder why institutions such as the UN are so closely engaged. An online petition, organised by the Council of Canadians argued:

The current World Water Forum organizer, the World Water Council, is a body created by and beholden to the global private water industry. The World Water Council is not a credible convener of an objective discussion on world water policy. The UN should not legitimate the World Water Council by joining its Board of Governors. Instead, it should convene the next Global Water Forum (OntheCommons.org, 2009).

Others express similar concerns. Hall and Lobina describe the WWC as a 'powerful neoliberal think tank' (Hall and Hoedeman, 2009: 4). Barlow and Clark suggest the WWC is one of the 'vehicles of the corporate takeover of the world's water' (Barlow and Clark, 2002: 50). Joan Carling of the Cordillera People's Alliance in the Philippines asserts that the 'World Water Council's solutions are driven by personal, institutional,

corporate and political interests' (CUPE, 2003). Activist Jeff Conant describes how the WWC is 'dominated by two of the world's largest private water corporations, Suez and Veolia. Critics contend that the Council's links to Suez and Veolia, as well as the large representation of the business industry in the Council, compromise its legitimacy' (Conant, 2009).

Indeed it is said that the WWC was formed 'thanks to the initiative of water TNC's and various international bodies' (Corral et al, 2009: 1). Evidence of the continuing close links between global water companies and the WWC is provided by a series of interpersonal links and corporate interlocks. A founding member of the WWC was Rene Coloumb, an ex Director at Suez. Another former President of the WWC, Loic Fauchon, is an ex- President-General Director of the General Management of the Marseilles Water Supply Company, a subsidiary of both Veolia and Suez (Powerbase, 2009).

The UN is a key global institution involved in the development of water policy and governance regimes. Working alongside others, such as the GWP and the WWC, the UN has been active in developing water policy. The synergy between these different actors was encapsulated in a recent paper published by the UN in which they acknowledged the work of the GWP and WWC stating that they would like to 'thank the Global Water Partnership (GWP), the World Water Council, and the International Groundwater Resources Assessment Centre (IGRAC) for their support' (UN-Water, 2014: X).

Over the course of the past 25 years the UN has been a constant actor in the development of water policy. They organised two landmark global events, the January 1992 UN International Conference on Water and the Environment in Dublin and the subsequent United Nations Conference on Environment and Development, in Rio de Janeiro in June 1992. Both these conferences are seen as significant in shaping future policy trajectories, not least in drawing elite and public attention to the critical state of global water resources and the issues surrounding access, or lack of access, to water.

Central to the Dublin conference was the formulation of what became known as the Dublin principles including how 'Water has an economic value in all its competing uses and should be recognized as an economic good' (Dublin Principles, 1992). This particular principle has helped legitimise and normalise the commodification and

commercialisation of WWS. One commentator argues that the Dublin Conference led directly to an increasing role for the private sector in providing WWS as a result of the categorisation of water as an economic good (Gupta in Huitema and Meijerink, 2009: 43).

Another principle agreed at the seminal Dublin conference concerned the need to improve water management and governance. The principles are said to have penetrated, and had a significant impact on, water policy in national and international policy settings ever since. The GWP claim to have 'played a critical role in translating the Rio-Dublin principles into the work plans and tools needed to introduce more sustainable approaches to water resources development, management and use' (GWP, 2006: 65). A World Bank published paper on regulation suggests that:

The Dublin Principles have retained a central role in the ongoing debate on water resources management and development and have had a major influence on water legislation world-wide. The Dublin Statement can indeed be considered the *magna carta* for water resources management (Salman & Bradlow, 2006: 7).

Since the Dublin conference in 1992 the principles agreed have been synthesized and developed into market-based proposals and then relentlessly promoted by organisations like the GWP and WWC. This promotion has seen the publication of some of the most significant reports compiled in the water sector in the last 15 years or so. For example they closely cooperated on the influential 2000 paper *World Water Vision: Making Water Everybody's Business*, which was sponsored by, amongst others, several UN agencies and the World Bank, an association that illustrates the collaborative work between various stakeholders in the water policy making sphere.

This influential report argues for proper pricing of water and full cost recovery mechanisms to help incentivise water conservation as well as provide a favorable investment environment for private companies. It also characterises publicly managed utilities as inefficient and recommends legislative enablement of private involvement (Cosgrove and Rijsberman, 2000: 3). This promotion of governance change, at least the type promoted by Cosgrove and Rijsberman, necessitates an increasing role for the

private water industry. The Public Services International Research Unit (PSIRU) noted the fusion between this vision promoted by the WWC and GWP and the commercial objectives of TNC's in the water sector:

The Vision described in the draft Report clearly reflects the interests of the multinationals rather than those of consumers, taxpayers and workers worldwide. This is a Vision of a global water market dominated by multinationals with the support of multilateral agencies and national governments. The Vision expects that the distribution of water would be governed by commercial considerations with little attention for its social role as a public good (PSIRU, 2000).

Collaborative working between the WWC and GWP and others was illustrated in the aforementioned paper *Financing Water for All*, otherwise known as the Camdessus report. Others involved in the advisory panel demonstrate again the collusion between various actors including from the private water sector and from IFI's, like the World Bank and the European Bank for Reconstruction and Development (EBRD). The final report recommended doubling the investment in WWS and the public sector subsidising private sector involvement (Camdessus and Winpenny, 2003: 10).

This vision proposed that the doubling of investment should come from 'financial markets, from water authorities themselves through tariffs, from multilateral financial institutions, from governments, and from public development aid, preferably in the form of grants' (2003: c). Critics did not believe it was designed to solve the various water crises. Hans Engelberts, the General Secretary of the International Trade Union PSI, summarised concerns that the recommendations represented 'new mechanisms to reduce corporate risk and guarantee corporate profits' (in Hall, 2003: 3).

The World Bank, a key institution driving private involvement in WWS, has unsurprisingly been particularly persistent in arguing for institutional and legislative change that enables private sector participation in WWS. They outlined their approach in 1993 stating how 'The privatization of public water service agencies, or their

transformation into financially autonomous entities, and the use of management contracts for service delivery will be encouraged' (World Bank, 1993: 15).

Since then the World Bank has continued to encourage private involvement, though I detected a subtle change of language during a field trip to a conference in Sweden. During the Stockholm World Water Week in August 2008, World Bank Vice President, Kathy Sierra publically acknowledged privatisation was not the only answer to the water crisis. However, Lars Thunell, head of the International Finance Corporation (IFC), an arm of the World Bank, also revealed the continuing faith in business providing WWS when he said how 'we believe that providing clean water and sanitation services is a real business opportunity' (author fieldwork notes, Stockholm, 2008).

In these reports, in the formation of new bodies like the WWC and GWP, in the launch of global water initiatives, in the work of IFI's like the World Bank, in supranational institutions such as the UN and in the work of water TNCs we can observe a high degree of co-operation and co-ordination. Hall and Lobina, when evaluating the work of the World Bank, propose that this co-ordination is influenced by a particular strand of thought which results in mutual reinforcement among policy allies. Referring to the World Bank they argue:

The Bank's processing of information and turning knowledge into action is dogmatically devoted to the development of market opportunities for private companies.....The World Bank's thinking in the last nine years has been informed by documents launched by the World Water Council (WWC) and the Global Water Partnership (GWP) at The Hague, Kyoto and Mexico WWF. These documents include the World Water Vision/Framework of Action, the Camdessus Report and the Gurria Task Force Report. The development of these reports revolved around the systematic involvement of like-minded organisations, including the World Bank and other international financial institutions (IFIs) and multinationals, and individuals (Hall and Lobina, 2009: 1).

TNC Lobbying

TNC's in the water sector are often members of, or have links to, organisations advocating a change to governance and operational models in the water and wastewater sector. It is apparent that TNC's, such as Gdf-Suez² and Veolia, consciously lobby for policies that are beneficial to their specific interests, rather than for policies which are concerned with solving the multiple water crises.

I observed how business in general, including major water users as well as operators such as Veolia and Gdf-Suez lobby and seek to influence policy. A glimpse into the mindset of some influential water lobbyists/analysts was provided when I interviewed a prominent member of the EWP. He noted how his organisation was intent on raising awareness in Europe about increasing concerns over scarcity in southern Europe, concerns over sanitation coverage in eastern Europe, the water energy nexus, climate change and water and the economic opportunities that exist amongst all of these issues. Tom Verjeicken, EWP spokesperson, also explained how they were strongly involved in preparing the European discussions for the (then) forthcoming WWF. He stressed however that this was part of an ongoing dialogue to help create a water vision for Europe and, significantly, how its intention was to input and influence the European Commission and the European Parliament (Verjeicken, 2008).

Suez (prior to the merger with GDF) for example is on record about their lobbying in 2004 over the distribution of EU funds to Central and Eastern European (CEE) accession countries. The then Chief Executive Jacques Petry, admitted how 'the company (Suez) is lobbying the EU to change the way it distributes its funds' (Global Water Intelligence, 2004a). These funds were available to help improve water infrastructure, and bring the WWS of the new CEE members up to EU standards. In 2002 it was estimated that to drive standards up to a satisfactory level required 180 billion Euros (Global Water

² Suez-Environnement is a stand-alone entity providing Water and Wastewater services alongside waste management. The company in its present form was created after the merger between the electricity company GDF with Suez in 2008, which became known thereafter as GDF-Suez. GDF-Suez is a major shareholder in Suez-Environnement.

Intelligence, 2002). This was a not insignificant sum, which would have considerably benefited private providers if they were contracted to provide WWS.

The funds Petry referred to were the loans and subsidies available to help pay for the required improvements. According to PSIRU these were being distributed by the World Bank, the EBRD, and the European Investment Bank (EIB) and from a special fund, the Instrument for Structural Policies for Pre-Accession (ISPA) which aimed to enhance economic and social cohesion in the EU, and was targeted at CEE new member states. PSIRU reported in 2002 how the World Bank and EBRD were providing the majority of their funds to private operators, but the EIB and ISPA were providing the majority of their funds to the public sector (Hall, Lobina and Le Motte, 2003: 5).

In this instance Suez was an active lobbyist in promoting their involvement in providing WWS, either in partnership with or replacing the public sector. Replacing or supplementing the public sector is a stated business objective, alluded to by Jean-Louise Chaussade, former Chief Executive of Suez, when he proposed that governments should allow private companies like Suez to manage or receive public funds:

We can make our expertise available but public money needs to be mobilised. European funding dries up as soon as a private company becomes involved but private companies should be managing public funds because they will manage them more efficiently. Profit and public service do not have to oppose each other, it can be a win-win situation. The customers of large concessions do not create enough cash-flow to fund the project, so we need to add private investment and manage the project well (Global Water Intelligence, 2004b: 13).

The public affairs activity of the major water companies also entails helping to shape policy and anticipating changes to legislation that may affect their activities. Suez perceives regulatory changes as a potential risk to their operations. In their prospectus prior to their merger between Suez and GDF it was suggested that social and environmental regulation represents a key risk:

The Group's businesses are subject to environmental protection, public health, and safety rules that are increasingly restrictive and differ from country to

country... The competent regulatory bodies have the power to institute administrative or legal proceedings against the Group, which could lead to the suspension or revocation of permits or authorizations held by the Group or injunctions to cease or abandon certain activities or services, fines, or civil or criminal penalties, which could negatively and significantly affect the public image, activity, financial position, earnings, and outlook of the Group...Regulatory changes may also affect prices, margins, investments, operations, and, therefore, the activity, earnings, and outlook of the Group (Suez, 2008: 12).

The International Federation of Private Water Operators, otherwise known as Aquafed is said to be a front group for Suez and Veolia, the two main Transnational Water TNC's (Hall and Hoedman, 2009). Aquafed, under the guidance of former Suez Chief Executive Gerard Payen, has been particularly active in water policy networks, and prominent at mega-conferences or Global Water Initiatives (Varady, 2008), such as at the WWF and World Water Week.

Aquafed's activities to realise their mission involves attending conferences and raising and promoting their arguments amongst many stakeholders, not least policy makers. Aquafed make it their business to be prominent contributors at these events. At the WWF in Istanbul in March 2009 they published numerous papers and participated in several seminars and workshops. Their press release prior to the WWF, wrote how the unelected and self-appointed WWF was 'a rare opportunity to make decisions that are badly needed to solve growing water challenges' (Aquafed, 2009a).

Aquafed's collaboration with other actors in water policy-making networks is evidenced by how Aquafed has worked alongside UN agencies concerned in the development of water policy. Prior to the Istanbul WWF in 2009 the UN published their World Water Development Report 3. Aquafed, through their employee, Jack Moss, helped produce this report, along with other contributors such as GWP and the WWC. Jack Moss was also involved in drafting the report published in 2008 by another grouping, the Water Integrity Network, titled *Global Corruption Report 2008, Corruption in the Water Sector*. This report was particularly critical of corruption in the water sector, however it chose

to emphasise public sector corruption with little mention of corrupt behaviour by the private sector.

Aquafed also work with the OECD and its Business and Advisory Committee (BIAC). BIAC is the main conduit through which the private sector supports the OECD's 'efforts to combine analytical thinking and business experience to formulate an integrated set of public policy recommendations based on facts and analysis' (BIAC, 2013). The BIAC Water group is chaired by Aquafed's Jack Moss (BIAC, 2013: 18) and its orientation, of partnership working between governments and private business, is neatly encapsulated in their position statement which reads, 'Business can make a contribution to meeting these challenges, but depends on the lead and direction from policy makers and governments at many levels' (BIAC, 2013).

The above sketch seeks to illustrate the combined efforts of various actors that are driving a reformed governance model for water across the globe. However, such coalitions also happen at national levels too, as will be noted when the politics of water in Scotland is discussed in the next chapter. The thinking and subsequent policy solutions promoted by these influential bodies collectively and individually, at global and Scottish levels, are informed by the ideas of neoliberalism. This is discussed in detail in the conceptual framing of this thesis in Chapter 4. The specific characteristics of this thinking, in a water governance context, are subject to discussion in the next section.

Neoliberal Water Governance: A Brief Review

The concerns over accessing water provision and having sufficient water capacity against a backdrop of the plethora of current crises has resulted in much deliberation on how best to manage water. Prominent is the persistent promotion of reforms to governance models at local, national and global levels. Views over the nature of the changes required are polarised and in dispute, as is the reasons for the crises. As noted, dominating policy thought at the elite global level is a coalition of organisations who are actively seeking to develop and influence water policy at a global level. Involving many of the most influential and prominent water policy agenda setter's, many of them have

consistently argued for the transformation of the governance of water and increased private involvement, which necessitates reform of legal and institutional frameworks (World Bank 1993, Camdessus and Winpenny 2003, GWP 2003, Gurria 2006, OECD 2009a, OECD 2009b, UN-WWAP 2009).

A central reason for the various water crises is said by dominant networks to be one of inadequate and ineffectual governance (Camdessus and Winpenny, 2003, GWP, 2000, Rodgers and Hall, 2003). A 2006 UN report claimed that the crisis is Water and Wastewater Services 'is primarily a crisis of governance' (UNESCO-WWAP, 2006: 1), while another UN agency, the UNDP, echoed the sentiment: 'Faced with the threat of climate change and mounting pressure on the world's freshwater resources, the 21st century water governance challenge may prove to be among the most daunting faced in human history' (UNDP, 2006: 21).

How WWS are governed has also exercised the minds of numerous academics, (Bruch et al 2005, Tortajada et al (eds) 2006, Castro and Heller 2009, Conka 2006, Finger et al 2006, Sultana and Loftus (eds) 2011, Schmeier, 2013, World Water Week, 2007). The various academics in these books, and others, are seeking solutions to the issue of broad, equitable and secure access to water but without necessarily echoing the thinking of those organisations that advance market based ideas in the field of water policy development.

The GWP suggest strong governance, laced with a marketised approach, is required as 'without collective enforcement of institutions, such as property rights, the anarchy which is likely to result would only serve to consign human life to one of nastiness, brutishness and ultimately short-termism' (Rogers & Hall, 2003: 8). Hence they argue that to avoid this type of anarchy a new institutional and marketised settlement is required whereby 'poverty reduction is enhanced by a stable and just social order founded on clear institutional rules and effective and equitable markets' (Rogers & Hall, 2003: 9). However, it is recognised that the marketisation (and hence privatisation) of WWS has an image problem and the authors advise that 'governance systems must be established that overcome the legitimacy and accountability problems of marketisation' (Rogers & Hall, 2003: 14).

A WWC publication contended that principles of good water governance must include 'cost-efficiency, public-private co-operation twinning arrangements and private know how' (Gerquin et al, 2003: 158). The influential GWP report from 2003 also recommends other components of good governance; comprising of, amongst other things, inclusiveness, accountability, participation, transparency, predictability, integration, efficiency, responsiveness and, perhaps the most celebrated, Integrated Water Resources Management (IWRM) (Rogers and Hall, 2003: 9, 27-30).

A co-ordinated and integrated approach to water management is undoubtedly important in so far as protecting and sustaining water supplies. IWRM is a proposition that is much celebrated in policy circles. IWRM is sold as a mere technocratic change at the managerial and governance levels and as a silver bullet by which water supplies across the world can be protected and sustained. The GWP described IWRM as the means to ensure 'the coordinated development and management of water, land and related resources by maximising economic and social welfare without compromising the sustainability of vital environmental systems' (Rees, 1998: Preface).

However, IWRM could be seen as a technocratic proposition with potential consequences other than just the protection of water supplies. An influential WWC report cites Moore, Rast, and Pulich and Gyawali et al as saying IWRM represents a governance process which involves a diffusion of actors, including 'government officials, the private sector and civil society' who are involved 'in policy formulation and implementation' (in de Gooijer et al, in Unver and Cosgove 2009: 243). On this reading IWRM is in tune with the trend towards governance replacing government and wider processes of re-shaping and re-configuring the state that are taking place under neoliberal conditions, which insulates policy making from direct popular democracy.

The GWP suggest IWRM is consistent with the 'clear need for operational economic concepts and instruments that can contribute to management by limiting the demand for water' (Agarwal et al, 2000: 21). This is consistent with the approach taken since the Dublin conference and reflects the views of other prominent organisations seeking to develop policy in the WWS sector. For instance the World Bank who, as far back as 1993, encouraged 'the treatment of water as an economic good, combined with

decentralized management and delivery structures, greater reliance on pricing, and fuller participation by stakeholders' (World Bank, 1993: 12).

The adoption of IWRM as a policy exemplifies the strategy of some actors to infuse legislatures with their policy concepts and ideas. The GWP believe that their promotion of IWRM has been successful in penetrating policy making circles, describing how political leaders, at national levels, have bought into the process of IWRM as a result of their relentless promotion of the concept. They stated how 'through repeated exposure at all levels. GWP's work has visibly helped to infuse broader national development processes with considerations of water' (GWP, 2006: 15).

Ismail Serageldin, ex World Bank official, ex Chair of the GWP and Chairman of the GWP/WWC collaboration the *World Commission for Water in the 21st Century* confirmed that IWRM had made an important impact in recent policy making in WWS. He also asserted that it was a good example of how effective the GWP has been in firstly creating the idea of IWRM and secondly of disseminating and promoting the concept, stating: 'I think the two major contributions of the GWP are having built the GWP network and getting IWRM firmly and broadly accepted everywhere, each of these is a remarkable achievement in itself' (in GWP, 2006: 15).

Yet it seems that the embrace of IWRM is not necessarily based on evidence and as a result the success of IWRM is not overwhelmingly accepted. Renowned water engineer Biswas argues there is no clear definition of IWRM as it works in practice (2004, 2008). Biswas argues that IWRM is 'vague, un-definable and un-implementable' with no clear conceptualisation of how it is to be applied in practice and with no certainty or clarity on how it will lead to better water governance and management' (2008: 7-8, 13). Concerns have also been raised over the distributed governance dimension of IWRM. There are questions that this may result in those with the greatest resources and power disproportionately able to shape policy debate, deploy finance and policy knowledge or know-how to get their preferences adopted as the new policy orthodoxy (Lobina, 2010).

Biswas also suggests that IWRM is 'amorphous' and that critically, for such a widely used concept, there is 'no agreement on fundamental issues like what aspects should be

integrated, how, by whom, or even if such integration in a wider sense is possible' (2004: 248). This ambiguity over its success, or otherwise, gives credence to the view that rather than a technocratic device, IWRM could, arguably, be seen and used as a conceptual instrument to promote further marketisation of the governance of water.

Distributing Governance: Separating Politics from WWS

The various reports produced by the WWC and GWP argue openly that water governance organised along state or municipal lines is ineffective and a key reason for the crisis of supply. Arguably, this thinking has resulted in a strong belief in governance processes being separated from government and politics. Judith Rees - in a paper on regulation and private sector participation in the water sector drafted on behalf of the GWP - argues that privatisation became a popular policy solution due to the perceived failure of state enterprises, saying that 'public utilities have been seen as hopelessly overmanned, inefficient and incapable of providing even basic services to growing populations, while regulatory bureaucracies have been regarded as costly burdens on private sector enterprises' (Rees, 1998:5).

Cap-Net, an affiliate of the GWP asserts 'there is a widespread need for water sector reform' predominately reform which focuses on where 'government responsibility should cease, or be partnered by autonomous water services management bodies and/or community-based organizations' (Cap-Net, 2005: 15). *The World Commission on Water for the 21st Century* argued how public agencies and utilities are 'inefficient, unregulated, and unaccountable' (Cosgrove and Rijsberman, 2000:3). This mantra is often repeated by other prominent policy agenda setters, shown by a World Bank paper which also suggested 'Successful public utilities are still the exception, however, and since most people in developing countries are under the jurisdiction of public utilities, much of the world's population is still not adequately served' (Baieti et al, 2006:1).

Separating politics from operations is akin to applying the principles of IWRM in practice. A UN report in 2009 recommended a form of distributed governance which decentralises governmental responsibility to a diffuse set of governance partners and

non-governmental actors. UNESCO also recommends a form of distributed water governance and the application of subsidiarity:

Decentralization involves complex processes to enable decision-making and promote the sharing of resources and responsibilities among various levels of government. Occasionally, it includes the devolution of some power and responsibilities to civil society; in the water sector, decentralization of management, places decision-making closer to the level at which services are provided (UNESCO and UNWWAP, 2009: 270).

This notion of governance being distributed between public agencies, the private sector and civil society has been normalised in water governance discourse. The widespread embrace of IWRM which fits in with the notion of broad governance, - whereby the actors involved in the management of water include civil society and private actors - has assisted in this.

As noted above various actors are involved in policy development at a global level, arguably with a view to influence, and see its transposition, into national and regional policy. At national levels, such as in the case of Scotland, we can observe governance being out-sourced, as recommended by IWRM, to governing agents who are not democratically accountable, such as regulators, experts and other private or civil society agents. This partnership model of governance, as discussed in the conceptual framing of this thesis, is a form of governance so normalised that it has been said by a UN agency that decision-making should be the responsibility of civil society and the private sector alongside government (UNESCO and UNWWAP, 2009).

Consequently there is a clear trend towards distributed governance, reflecting IWRM, which offers the opportunity for various actors or interested stakeholders that function out-with traditional forms of democratic accountability, to be part of policy making and governing processes. This tendency in WWS is in tune with trends concerning the wider re-shaping of the state, which will be subject to a more detailed discussion in the conceptual framing of the thesis in Chapter 4. However, it is also important to bear in mind that this area is subject to scrutiny in Chapter 4 because of its relevance to

Scotland, as well as elsewhere across the globe, given the form of distributed governance currently applied in WWS in Scotland.

Cost Recovery

Placing a sufficient economic value on water is seen as another key component required for the effective governance of water and is consistent with the principle of charging being applied at the individual level rather than collectively paying for WWS through general taxation. Termed as cost recovery, market environmentalists contend that charging for water (at competitive or market based prices) will help conserve water, or any other environmental good, more effectively than non-market based mechanisms.

Cost recovery requires tariffs to be set so that the cost to the provider is recouped. In effect the WWS provider recovers all, or most of, their costs through charging individual customers at a rate that guarantees the provider is not exposed to much, if any, risk. In a privately run system it is also felt that charging at appropriate levels incentivises the private sector to invest on the basis that the levels set will ensure profitability. This thinking underpins economic regulatory rules in England and Wales where OFWAT, the economic regulator, ensures the charges paid by the public have an in-built profit for the private providers (OFWAT, 2009: 14). Global Water Intelligence calculate that full cost recovery in the English WWS sector can be broken down as '40% for the operating costs, 30% for infrastructure investment programmes and 30% is the companies operating profit including returns to major investments' (Global Water Intelligence, 2005: 207).

There is a belief that a cost recovery approach improves service and access to WWS. The UNDP has stated that 'Increased cost-recovery from households with the capacity to pay would mobilize revenue for maintenance and associated efficiency gains' (UNESCO and UNWWAP, 2006: 90). A proceeding UN report asserted 'Sound management accountability and good governance within the water sector contribute to creating a favourable investment climate. This should include new approaches such as payment for environmental services' (UNESCO and UNWWAP, 2009: xxvi). The 2006 report identified key challenges and benefits of cost recovery policies:

Charging, as a governance policy, aims to balance multiple competing objectives. Most water professionals now feel that the reform of charging policies is critical to improving the performance of the water services sector. Revised charging structures need to be more widely implemented to improve cost recovery, to facilitate adequate maintenance and expansion of water supply systems, and to provide incentives for conservation, while making water services affordable and available to all. The political unpopularity of increased charges will need to be overcome with phased tariffs in some areas but also programmes to help consumers understand the true costs and value of regular, reliable water and sanitation services (UNESCO and UNWWAP, 2006: 444).

The World Commission for Water in the 21st Century makes the argument in rather stark terms, while also setting out the minimum terms of trade for private sector involvement in water provision:

Water for free does not provide the right incentive to users. Water services need to be priced at full cost for all users, which means all costs related to operation and maintenance and investment costs for at least domestic and industrial users. The basic water requirement needs to be affordable to all, but this can be done more effectively than by making all water available to all users at way below cost... pricing water will provide an incentive for the private sector, large and small, domestic and international, to get involved (Cosgrove and Rijsberman, 2000: 41).

Judith Rees wrote in 1998 that 'Private companies are not social services. They will only provide public goods or below cost water supplies if they can recover the costs involved, including their required return on any investments made' (Rees, 1998; 11). World Bank researchers Salaman and Bradlow also argue for 'appropriate institutional, legal, and financial mechanisms (which should) be identified and strengthened or created to ensure that water policy and its implementation are a catalyst for sustainable social progress and economic growth' (2006:7).

Thus, in examining proposals for the reform of water governance globally it is clear that full-cost recovery is the sine-qua-non of the neoliberal factions seeking to marketise and open up water provision. Placing a contractual relationship on the use of public goods and services and displacing funding public goods and services paid for through general taxation appears to be the favoured model water lobbyists influenced by the wider philosophy of neoliberalism. This thinking reflects a wider shift in the changing relationship between the state and public services and the perception of the user of public services as a consumer rather than citizen; a subject that I will return to in Chapter 4 where the conceptual framing of the thesis will be set out.

What proponents of cost recovery appear to exclude, or at least downplay in their discussions, is the prospect of inequalities in access to services and water supply, once charging for WWS is adopted as a central feature of water governance and regulation models. The failure of private companies to effectively and universally supply people in the developing world as a result of a business model founded on cost recovery is discussed in more detail below. In the UK institutional safeguards are now in place if people are unable to pay their water bills. For example disconnections of supply in the event of non-payment are now outlawed (such safeguards currently exists in Scotland, at least for domestic customers). However, after the privatisation of WWS in England and Wales no such safeguards were in place. This led to water debts, disconnections, and in some cases detrimental health impacts (Gleick 2004, Hall and Lobina 2001, 16-17, Nicholson-Lord, 1993). This highlights the social impact when and if a pure form of marketisation is applied. However, the revising legislation in England also reveals how within marketised systems, if the political willingness exists, there can often be social and political interventions to mitigate against negative social impacts.

Institutional Change(s) and Enabling Private Sector Supply

Rarely does the involvement of the private sector in providing WWS mean full privatisation. Private sector participation in the water sector manifests in many different and partial forms of privatisation, concessions, lease contracts, management contracts, service contracts and Build Operate Transfer (BOT). With the exception of full privatisation, all other models are types of PPP's, with various hybrid forms of

public/private models now helping provide WWS across the world. As Karen Bakker suggests, there is no standard template which could be described as fitting an exact 'neoliberal model' for water (Bakker, 2007). The private sector sells their role not as promoters of neoliberalism but as important providers of WWS. Aquafed the private water lobbyists, for instance argue that the private sector should be used as an instrument that is:

Used by governments as implementing tools for their water policies....and for solving technical, managerial, financial and even societal challenges through various schemes involving Public-Private Partnership contracts, Water Operators Partnerships and other models, sometimes misleadingly lumped under the heading privatisation (Aquafed, 2009b).

Such a model is advantageous for those companies represented by Aquafed as it guarantees returns and minimises risk, where it remains with the public sector. An influential UN report observed that 'Partnerships have been strongly promoted in the water sector, particularly for service provision, public-private partnerships have been the predominant model' (UNESCO and UNWWAP 2009: 6). *The World Panel on Financing Water Infrastructure* describe how:

The contractual agreements made in other countries were of various kinds, but they rarely followed the British (English) model of full divestiture. The various other models of public-private partnership leave the ownership of the infrastructure and the overall control of the policy environment and the resource with governments, while private operators are contracted to perform certain tasks in operations and expansion of infrastructure (Camdessus and Winpenny, 2003: 7).

This is pertinent to corporatised entities such as the model evolving in Scotland, which sees the public sector retain the risk whilst outsourcing significant swathes of services to the private sector. As the OECD note, 'as in all of these (PPP) options...the public authority remains responsible for overseeing the activity and for ultimately ensuring that public needs are met' (2003: 2). This point over ultimate responsibility (and risk)

will be developed further in the context of the Scottish case studies in Chapter 8. Promoting partnerships with the public sector is perhaps also borne from the private sector increasingly recognising its own deficiencies in providing universal coverage. The WBCSD claims 'business cannot deliver water to the poor on its own but recognises that it can and should be a partner with governments and other agencies' (WBCSD, 2002: 5).

Given the breadth of ways open to the private sector the full privatisation of WWS in England and Wales is, to a large extent, an exception to the rule. But using the private sector to provide WWS has not been seen as the best means to deliver WWS. Historically, the state, either through public authorities or local government, has been seen as the best placed to provide WWS. 'Even the GWP acknowledge that over 90% of domestic water and wastewater services worldwide are provided by the public sector and this is likely to remain the case' (Hall and Lobina, 2003: 34). Yet there is an increasing espousal from the many, including the various stakeholders and networks operating at global and national levels as discussed above, that commercialised or privatised WWS and a rebalanced provision away from, what was, or at least is perceived as, public sector domination, is essential for improving WWS outcomes.

A central argument that tries to justify more private involvement in WWS is that public systems are failing. Rouse (2009) describes the failure and inefficiency within a public water utility. On his account public utilities are trapped in a vicious circle with bad service leading to discontented customers and therefore low revenue, in turn leading to more bad service and further discontentment. Low revenue equates to low salaries, thus low motivation and weak performance ensues.

As noted, a preferred remedy is for water tariffs (cost recovery) to ensure financial sustainability. Likewise, is the requirement for regulation and governance to be autonomous from government and politics. Another key component said to be needed to ensure viability is private sector involvement in providing WWS. Facilitating private sector participation, cost recovery policies and the separation of politics from operations, requires legislative and institutional change and of course a supportive political environment which introduces and then sustains change. The type of change favoured by pro-market ideas formers was summarised in the Camdessus report. The

report proposed the creation of legal and regulatory frameworks that facilitate private involvement in water. Stating that:

Corporate laws permitting the structure of corporate vehicles; the concept of freedom of contract for a project and the enforceability of commercial contracts; adequate investment protection laws; clear authority for the public sector to enter in public-private partnerships; lenders able to obtain effective security; supporting banking laws; sector specific legislation; confidence in the impartiality and competence of the judiciary, if local enforcement is necessary (Camdessus and Winpenny, 2003: 10).

Chiming with the Camdessus recommendation and akin to current model applied in Scotland, the World Water Vision suggested that publicly managed and operated utilities should develop work practices and an ethos similar to the private sector and in tandem with appropriate regulatory institutions:

Public and private management of water must be improved through greater accountability, transparency, and rule of law. Because of social concerns, in many countries the supply of water services has been entrusted to public agencies, which in most developing countries (and many developed ones) have become inefficient, unregulated, and unaccountable.... Once regulation and accountability are established for private companies, it logically follows to do three things: compare their performance with that of public companies, make public companies also responsible to users, and regulate public companies. This process can start a virtuous circle of competition, with, arguably, the greatest benefit being that public companies become regulated, accountable, and efficient (Cosgrove and Rijsberman, 2000: 3).

Others disagree and are concerned that separating politics from delivery, (involving the private sector and applying cost recovery and other market mechanisms) can lead to negative externalities. International, public sector trade unions for example, reject the notion of encouraging public operators to replicate the private sector, arguing that, 'This would induce public enterprises to follow exclusively commercial considerations with no attention to social and environmental considerations' (PSI, 2000: 3).

There are therefore concerns that negative consequences/externalities will flourish as a result of the fixation of sound financial management and profit making within commercialised, corporatised or privatised entities. Such tight financial management, as a result of changes to governance and operations of WWS, have undoubtedly helped facilitate the accumulation of capital for private water firms and investors. Attention in the next section will be directed to how norms and common sense at the global institutional level about the most efficient and equitable delivery of water services has, in many countries, directed resources towards the private sector. Discussing the resources and profits available for private business from WWS also provides important context for the reading of the empirical data on the Scottish case outlined later in the thesis.

Blue Gold: The Business of WWS and the Steady Stream of Profits

Reforming the governance of WWS has helped accumulate lucrative proceeds for businesses associated with the sector. The potential profits are so great that water has been described as 'Blue Gold' (Barlow and Clark, 2002). Hence, it is unsurprising that active lobbying by private companies to penetrate the WWS sector is occurring with, as noted by Barlow who in her follow up book, global water corporations looking to accentuate their activities to advance their control of water resources across the world (Barlow, 2007). Industry analysts suggest investors are increasingly attracted to water:

Wall Street now recognizes the investment potential and growth opportunities in the water industry for investors. Some industry experts predict that water is likely to be to the 21st century what oil was to the 20th century. Until recently, the water sector had largely been ignored by the financial community as an investment destination. However, recent activity indicates that times have changed. There are now conglomerates buying up smaller water companies and an increasing number of investors are becoming attracted to the sector (Frost & Sullivan; 2002).

At World Water Week in 2007 one attendee observed how until that week 'I had no idea there was so much money in water' (author fieldwork notes, Stockholm, 2007). An advertisement produced by the influential corporate journal Global Water Intelligence for their conference *Blue, Green & Gold: The future of water, finance and the environment* proclaimed under the broad theme of *Water Meets Money*, the lucrative returns available from the water industry:

This is the time for water and money. In these days of uncertainty, the big blue offers a dependability which has disappeared from the rest of the economy. As climate change and population growth leads to an ever more desperate search for water resources, the appeal of water becomes inexorable (Global Water Intelligence, 2009b).

By 2009 the global water market³ was worth \$501 billion per annum. 70.6% or \$354bn of this total was allocated to utilities (Global Water Intelligence, 2009a: 7). In Europe alone the municipal water and wastewater sector between 2006-2015 was predicted to be worth 356 billion euros to the private sector who were involved in delivering WWS (Danilenko and Child, 2005: iv). Globally, involvement by the private sector, in providing WWS, has increased from 5% in 1999 to 11% in 2007 (Lloyd-Owen, 2008-09: 36-7). The OECD reported this growth in private involvement since the early 1990s, stating:

In 1991, the percentage of urban residents served by the private sector was 0 per cent, 1 per cent and 2 per cent respectively for Low Income Economies, Middle Income Economies and Upper Middle Income Economies. In 10 years, this percentage has increased to about 5 per cent, 10 per cent and 35 per cent respectively (Perard, 2008: 16).

Most investment by the private sector in WWS is now virtually guaranteed to offer returns, resulting in a burgeoning market appetite for water (Goldman Sachs, 2008, JP Morgan, 2008, Knight and Miller-Bakewell, 2007). A trend illustrated by a significant

³ This market includes supply of products as well as delivery of service

increase in the number of active Water Investment funds (Moya 2010, Menon & Sa’Pinto 2012). The key factors drawing private investment to water, in addition to legislative and policy change include, *inter alia*: scarcity; new technological developments (such as de-salination plants); incorporating rising environmental standards and declining public funding.

From this section it is clear that private investment has increased across the world as public finances decline and investment is found out-with national accounting systems (off balance sheet is an attractive feature of many PFI-PPP projects for ministers concerned about managing current fiscal deficits), while the outsourcing of work and contracts to the private sector has increased as public bodies downsize. This is partially a consequence of diminishing tax yields, which in itself is a central plank of (neoliberal economic policy), and which has accelerated since the economic crisis in 2008.

Understanding the different forms of private involvement (which arguably embodies neoliberal thinking, discussed in chapter 4) and the rewards to be gained for corporate actors in the water industry is necessary for any analysis of the Scottish case. As since the legislative and institutional change to WWS in Scotland the private sector now plays a key role in the provision of WWS despite water in Scotland remaining in public ownership. This is consistent with the general trend across Europe.

Growing Private Participation: The European experience

The proportion of water and wastewater services provided by public and private sectors varies depending on location. As an OECD reports shows, the private sector serves 25 per cent of urban dwellers in the world (Nickson and Franceys, 2003), while in high-income countries, more than one urban resident in three is serviced by a private operator. In Western Europe this rises to 45% of urban dwellers being provided by private water operators (Perard, 2008:16). With the exception of England full divestiture has not occurred in Europe, nevertheless it was recognised back in 2003 that ‘private sector participation is...increasing in Europe even among water and wastewater utilities that have remained in public ownership’ (Frost & Sullivan, 2003). By 2012 a World Bank presentation reported:

Private activity in water infrastructure has more than doubled over the last decade (523 new projects since 2001 vs. 232 in 1991-2000). The increase in activity was led by China, which accounts for 61% of new projects since 2001, and 71% of new projects since 2005. However, since the beginning of the financial crisis, the number of new projects has constantly declined reaching a record low level of 25 projects in 2010 (Perard, 2012).

Nevertheless, despite the reduction in new projects there is still a trend towards using the private sector in WWS (Perard, 2011). In Europe the increased presence of the private sector in WWS has been driven by EU directives as well as the business and political strategies of the major water TNC's. In recent years these companies have taken a strategic decision to shift from developing countries to focus on business development in much less risky developed countries and regions such as Europe (Lloyd-Owen, 2009: 25).

The private water industry perceives the EU as a significant driver of new business opportunities and a 'lucrative market'. Private water companies have strategically reorganised their global operations to focus on Europe. It seems that water companies have concluded that Europe and other locations in the developed world offer a reduced risk profile, a better prospect of profit and the availability of municipal contracts and no doubt a hope for further, beneficial, structural reform. *Global Water Intelligence* published a report, *Water Market Europe*, which appraised the emerging opportunities for the private sector:

In Western Europe EU Directives are the most significant drivers of investment....Water utilities in most countries have well established systems for financing capital projects, but the scale of the investments required, the pressures on public sector borrowing and the need for greater efficiency will drive structural change across the continent (Danilenko and Child, 2005; iiv).

Jacques Petry, the then Chairman and Chief Executive of Suez Environment, identified Europe as the key market for Suez (Global Water Intelligence, 2004a: 7-11). The rationale for his thinking was doubtless influenced by the opportunities arising from

European directives which have raised environmental standards and the need for EU member states to find both technologically advanced solutions and finance to meet the requirements of the directives. In an era of constrained public finances and capability it is entirely predictable that the public sector seeks partnership opportunities with water providers to meet the new legal obligations. Conversely, it would also be unsurprising if private companies perceived EU directives, even ones that are superficially technocratic, as opportunities to expand their businesses.

In a survey for the European Commission companies were asked how the Water Framework Directive was perceived and whether it was seen as a threat or as an opportunity. 63.6% of the companies thought that it is an opportunity, and only 36.4% considered the Directive a threat (European Commission, 2004: 145). Business support for a directive that is nominally about improving the water environment cannot be explained by reference to sustainability policies, or even corporate social responsibility programmes. Rather it is the associated business opportunities and benefits of opening up areas of the public sector to private operators that explains the private water industry's enthusiasm and support for this and other directives. As will be noted with the Scottish example this section charts how legislation, influenced by policy agenda setters, can and does have a critical role in changing the shape and trajectories of WWS regulation and operations.

However, the move towards Europe may also have been a result of failure in the developing world. The drivers for this re-configuration may be related to numerous business failures in the developing world. Jean-Louise Chaussade, Executive Vice President of Suez remarked that 'the 'disastrous (financial) results' caused by 'the overly hasty expansion of water internationally (which) ended in failures that were painful for all of us' (in Global Water Intelligence, 2004b). At a conference in Brussels⁴, Eric Swyngedouw reported how John Talbot the chief executive of Saur International⁵, the world's fourth largest water company, also doubted the feasibility of water

⁴ Alongside colleagues from Strathclyde in the then Public Interest Research Network (PIRN) I helped organise this conference. It attracted over 50 delegates from 18 different countries.

⁵ Saur are also one of the PFI operators in the Scottish Water Industry. They were one of a few major water companies contracted to build and operate Wastewater treatment plants in Scotland in the late 90's

companies providing WWS in the developing world, offering a pessimistic reading of the business opportunities in the global south:

Overburdened private balance sheets, few new contracts, poor and diminishing returns for private investors, contract and even corporate failures, limited interest in the market, and investors turning to other, more lucrative, markets (author fieldwork notes, Brussels 2008).

The understanding of the reasons for that failure such as a drive for profitability, often in conflict with social and environmental concerns, and the lived experience of operational failure, for example poor service quality and pollution, have provoked concerns over private involvement in WWS. These concerns have led to an alternative movement that has emerged in response to the dominant policy agenda pushed by the organisations and their networks that have been outlined previously in this chapter.

Alternative Narratives: Social solidarity, Not Private Profit

This chapter has hitherto focused predominately on the policy consensus, that exists amongst prominent networks and policy agenda setters, which is founded on market based solutions reflecting the principles agreed at the now famous Dublin Conference of 1992. However, alternative movements and proposals have developed against the current neoliberal policy agenda. Academics, ecologists, trade unions, NGO's and others have formed alliances, both at local and global levels, to challenge neoliberal solutions in providing WWS. These alliances resemble that which emerged in Scotland in the early 1990'S to campaign against the privatisation of WWS and which culminated in the 1994 Strathclyde referendum.

Central to the alternative model being developed is the proposal that policy makers should seek more participatory, democratic and socially and environmentally accountable systems of governance and ownership. This approach therefore develops the idea that civil society should have a role in water governance (a feature of the new globalised water consensus outlined above), but the proposed 'terms of trade' promoted by this alternative alliance are radically different. In particular, a key principle is that

provision of WWS should be public and based on notions of social solidarity and broad social advancement rather than any form or amount of private profit. Various accounts either explicitly or implicitly allude to this (Corral et al, 2009 Barlow and Clarke 2002, Barlow, 2007, Brennan et al 2005 Cann and Jones 2006, Castro 2007, EPSU 2012, Hall, 2001b, Hall and Lobina 2001, 2005, 2006, 2007a, 2008, Holland, 2005, Pigeon, 2012, PSIRU, 2000, Shiva 2002, Swyngedouw, 2005).

This distinction is encapsulated by Castro and Heller who believe an integrated approach to governance and management of water is required, which combines the technical with a much stronger emphasis on planning and executing the public policy dimensions of WWS. In this approach governance is informed by wider public policy goals, such as universalisation of services and ecological sustainability (Castro and Heller, 2009: 3).

This resonates with the view that the provision of water is so important and essential for human dignity, social development and ecological sustainability that transparent, democratic, participatory and publicly accountable governance systems must be established to govern water⁶. Moreover, that all people should access no matter their financial wherewithal. This is a view that believes, 'Universal access to these services (WWS), which are essential for life in a civilised society constitute a social right of citizenship and cannot be subject to market criteria' (Mulas in Castro and Heller, 2009: 56).

A critique of WWS privatisation was expressed forcefully at a conference I attended in Marseille in 2006, which attracted participants from across the world. Oscar Olivera, from Cochabamba in Bolivia, one of the leaders of the now famous protest movement against water privatization in that region, articulated a central tenet of this alternative politics of water, insisting 'taking ownership of water is taking control of our lives'. Ricardo Petrella from Italy, prominent academic and commentator on water issues,

⁶ There are various 'Water justice' movements acting at local, national and international levels that are campaigning against the private appropriation of water and its accompanying services. Chief amongst these is the global Reclaiming Public Water Network (RPWN) and its regional offshoots in Europe, Africa, South America and Asia.

offered a critique of private water companies: 'They cannot invest if it does not provide a profit, they have no time for social justice, environmental sustainability and democratic participation' (author fieldwork notes, Marseille, 2006).

David Boys, a Trade Union official for Public Services International (PSI), insisted that 'private industry will not provide the investment to ensure water for all'. Another contributor warned of the power of regulators, with David Barkin explaining how in Mexico 'the main push for privatisation is from the regulatory authorities' (author fieldwork notes, Marseille, 2006). This analysis is consistent with the trajectory of water governance promulgated by those coalescing around market based policy solutions as discussed above, and is a significant feature of the Scottish water sector, as will be discussed in some detail in a number of the empirical chapters that follow, as well as in the conceptual framing of this thesis in Chapter 4.

New, progressive forms of water management and governance were also espoused regularly at both these conferences. Barkin for example argued the need for 'equitable and transparent management of water'. Olivera recommended 'new management proposals that are participative and transparent are required'. Suresh Veeraraghavan from Tamil Nadu argued for 'democratisation of water reform' leading to the 'transformation of water services' and Rafael Colmenares from Colombia suggested a strategic priority: 'we need to define what we mean by the public sector; it needs to be publicly orientated, with an engagement of public participation and not a 'public service' that excludes the public' (authors fieldwork notes, Marseille, 2006). This question of what constitutes a public service, whether in water or any other public service, is a core theme of this thesis, and delineating the boundary between public and private in the context of Scottish policy and practice is one of the conceptual and empirical aims of this research.

Many opponents to marketised WWS fear private companies cannot square the circle of generating increased profits and shareholder dividends whilst simultaneously increasing investment and improvements to infrastructure, setting lower prices and increasing connections to those without water. They also point to several failed privatisations, including Buenos Aires, Atlanta, Cochabamba, Manila, Dares es Salaam,

La Paz, Trinidad and Tobago, Tanzania as evidence for the impossibility of meeting both market and social demand simultaneously. This critique is widely shared and there are numerous documented examples of civil resistance to private involvement and remunicipalisation of hitherto privatised provision (Barlow and Clarke 2002, Barlow, 2007, Brennan et al 2007, Goldman 2002, Hall & Lobina, 2003, 2006, Hall 2001a, 2003, Holland 2005, Le Strat 2010, Lobina and Calvallo 2011, Petrella, 2001, Pigeon et al, 2012, Shiva 2002).

A factor in emerging civil resistance was undoubtedly the rising prices (cost recovery policies) of WWS associated with privatisation. Rafael Colmenares estimated prices in Colombia increased by 138% after privatisation. Adriana Marquisio Cáceres reported how privatisation in Uruguay saw some costs increase by a 'ridiculous' 700% (authors fieldwork notes, Marseille, 2006). Wider research confirms the introduction of a private operator nearly always results in tariff increases (Marin, 2009: 44; Prasad, 2006; 8). This is entirely consistent with the prospectus for private sector participation in water provision set out earlier. A World Bank study of PPP water contracts found only a single corporatisation (in Colombia) where average tariffs fell in real terms after the introduction of a private operator (Marin 2009: 113).⁷

However, this is not necessarily seen as negative by proponents. As noted above advocates of cost recovery policies argue price rises provide additional revenue necessary to pay for new infrastructure and improved services. A World Bank paper suggested that 'Tariff increases are not necessarily a bad thing for customers when they also translate into wider access to better services, as happened under many PPPs' (Marin, 2009: 6). This is contested by critics who point to cases where wider access does not occur, highlighting the social costs of this approach where those without the necessary financial resources are excluded from accessing services.

The consequence of price rises in Colombia and Uruguay was broad and effective civil resistance. In Colombia CENSAT Agua Viva 'launched a campaign in defence of public water' (Colmenares, author fieldwork notes, Marseille, 2006). This led to a petition to

⁷ A finding disputed by the Colombian campaigner Colmenares.

the national congress calling for a referendum asking for the people to declare water a basic human right,⁸ which received 2 million signatures (Blue Planet Project, 2010). A response that contrasts with the World Bank analysis of the impact of privatisation in Colombia mentioned above.

In Uruguay a movement emerged against water privatisation, this involved 40 different organisations and the gathering of 283,000 petition signatures required to re-negotiate the contract with the private company involved (authors fieldwork notes, Marseille, 2006). This campaign by the umbrella group Comisión Nacional en Defensa del Agua y de la Vida - National Commission in Defence of Water and Life - (CNDAV) 'secured a clause in Uruguay's Constitution which defines the right to water as a fundamental human right' (Santos and Villareal, 2005). Moreover, this campaign, the subsequent contract renegotiation and the constitutional change helped renationalise the existing private contracts and prompted the withdrawal of Suez from Uruguay (ibid).

As suggested by the various study's referenced above, concerns at the privatisation of water services are a global phenomenon. In March 2013 the Governor of Jakarta agreed with campaigners that the contracts with private providers should be changed or cancelled. It was reported by the *Jakarta Post* that 'the contracts have allowed the firms to book huge profits by overcharging costumers' (Demi & Simanjuntak, 2013). The profit motive was illustrated by the dispute between private operators (including Suez) and state regulators over the level of in-built profits - it was recommended in 2011 that the firms' profits be set at 14.8 percent, however the companies insisted on 22 percent (ibid). Despite the large profits and alleged over-charging, campaigners say that there is a 'poor water service and widespread lack of access to clean water in Jakarta' (Reze in Mega & Jacobson, 2013: 45).

Concerns over private control of WWS are not exclusive to the developing world. In England and Wales prices have risen considerably since privatisation in 1989.

⁸ The human rights agenda in water and more broadly has been subject of comment and critique from some commentators. They have considered the notion of water being considered a human right against the broader acceptance of private property relations which must and does affect WWS allocation; even if water is declared a human right. For a wider discussion on this see Mitchell (2011)

Corresponding with big price rises was exponential profits. Hall and Lobina reported in 2001 how 'pre-tax profits doubled in the first year of privatisation, and rose by 142% in real terms in (the first) 8 years' (2001). The amount of profits accrued by the water companies in England and Wales for those 9 years totalled £14.837 billion. Prices since then have risen significantly again, by an average of 64% between 2003-2004 and 2013-2014 (Jones, 2013). According to the *Guardian* water companies' profits have jumped over the same period and in some cases doubled' (ibid).

Such profits ensure healthy dividends are paid to shareholders. In 2005-2006 dividends paid by the water and sewerage companies rose by over 64%, to a total of £1,797.7 million (Hall and Lobina, 2007b: 15). Moreover, remuneration of directors and management is also said to be excessive (Hall and Lobina 2001, 2007b, Jones 2013, Hawkes 2013). It was also noted in 2001 that 'the privatised water companies were unpopular, with a bad reputation for excessive pricing, excessive profits, and poor performance' (Hall and Lobina, 2001:6). Unpopularity was doubtless exacerbated by disconnections (outlawed in 1997) which it's said resulted in bad health outcomes. According to a paper written in 1996:

Following the privatisation of the water industry there was an unprecedented rise in the number of households disconnected from water supplies. Between 1989 and 1992, the number of domestic disconnections rose from around 8,000 to over 21,000 (OFWAT, 1993). At the same time the number of notified cases of dysentery, due to *Shigella Sonnei*, and Hepatitis A increased substantially to the highest levels since 1969 (Rees 1996).

Other concerns post-privatisation about WWS performance includes water leakage and investment in infrastructure (Hall and Lobina 2001, 2007b). In 2006 it was reported how Thames Water had leaks totalling 894m litres a day yet had plans to increase water bills by 24% over five years while accruing pre-tax profits of £346m (Muir & Booth, 2006). Moreover, English companies were said to have a combined leakage of 3.6billion litres a day (Hickman, 2006).

Water pollution as a result of inadequate performance has also been a feature of privatisation (Hall and Lobina, 2001, 2007b). At the beginning of the century the water companies were indicted as the worst and most persistent polluters in England and Wales (Clover, 2001: 2). A report commissioned by the public sector union UNISON also said that debt (despite all debt being fully written off at the start of privatisation in 1989) has risen fourfold despite the large profits they have made since 1989 (Tinson and Kenway, 2013). Moreover, in 2013 six of the water companies in England were accused of avoiding paying millions of pounds of tax through exploiting a tax loophole (Corporate Watch 2013, Clancy 2013). Changes to the ownership of many water companies have also occurred with a significant increase in private equity firms currently owning English companies (Clancy 2013).

Across the Irish Sea, there has been active and popular opposition, from local councils and trade unions amongst others (IMPACT, 2012, McConnell and Harkin January 2014) to austerity inspired plans for metering and full cost recovery in Ireland. Campaigners have also chronicled the prospective privatisations of water utilities in Greece and Portugal, which have been proposed as part of conditions on loans given to both countries as part of rescue packages given in light of the financial crisis both countries faced (Karunanathan and Hall et al 2012). Critics have noted that austerity policies, that are reducing public spending, has been a pretext from the further marketisation of WWS in part of Europe, prompting an open letter to EU commissioner expressing the concerns of over 20 campaign groups from across Europe at the proposal to privatise WWS (CEO, 2012).

Crisis Responses: Challenges to the Dominant Water Policy Consensus

This chapter has examined how changes to governance, encompassing market based rules and resulting in differing operational vehicles chimes with wider accumulation strategies of TNC's. This is a global phenomenon, enabled by governments legislating for change, but clearly influenced by organised and coordinated policy advocacy as noted above. Such promotion of market rules and private involvement is consistent with wider neoliberal philosophy. As Barlow and Clarke noted, 'In this global market

economy, everything is now up for sale, even areas of life once considered sacred ... including water' (Barlow and Clarke, 2003). Erik Swyngedouw observes how:

Water, together with other common-pool goods like genetic codes, clean air, local knowledge and the like, is rapidly becoming part of new accumulation strategies. Capitalism has, of course, always been and will continue to be a system that attempts to break down all existing barriers and to incorporate whatever it can lay its eager hands on into its own profit-seeking logic. Nature itself has long resisted full commodification but in recent years, nature and its water have become an increasingly vital component in the relentless quest of capital for new sources for accumulation. Of course this privatisation of water does not take place in a vacuum, but involves centrally the transfer of ownership of water, infrastructure and the like from the public sector to globally organised private water companies (2006: 49).

These accumulation strategies come against a backdrop of crisis. The scale and urgency of these crises are not in dispute. What is contested is how the world solves them. Inevitably, the ideas being proposed reflect the political positioning of the respective protagonists. In this context it is perhaps to be expected that the ideas transposed into policy and legislation are those which are consistent with the wider dominant political ideology. Dominant policy ideas in the WWS sector, across the world, currently favour market based solutions and changes to governance and operations of WWS. This trend reflects the preferences of the private sector and its agents, who have aggressively sought to influence policy-making and exploit subsequent legislation in the water and wastewater (and indeed very many other) sectors.

This chapter has sought to identify some of the actors and coalitions that exist across the world today that represent the active social movements proposing and opposing the (neoliberal) reconfiguration of water services. The alternative water movement has emerged in opposition to those pushing for privatised, commercialised or corporatised WWS. The former is a counter-movement without the power of the dominant and influential coalitions which include supranational institutions, IFI's, WWS think tanks and policy networks and the global private water industry who are currently the

significant agenda setters in water policy. These significant actors have actively pursued and promoted changes that when, where and if introduced will reduce the role of the public sector and transfer control of water resources to the private sector.

In short I suggest that these key agents within this neoliberal alliance have exploited the opportunity created by the current water crises, using these as pretext for changes to governance and operational models. Thus, water crises have opened opportunities for the private sector to grow revenue and profits. Importantly, this does not usually result in full privatisations and still occurs within the public sector, for example, from contracts provided by public authorities and public utilities which are becoming increasingly corporatised.

In Scotland, there is a clear trajectory towards a corporatised model with the growing private sector involvement and practices in the WWS sector mirroring the recommendations of the global promoters of marketisation and privatisation discussed above. The governance of WWS in Scotland has also changed significantly from the localised service that existed until the mid-1990s. The differentiation between public and private in the governance and operations of water in Scotland is increasingly blurred, as the governance framework and the utility, Scottish Water, increasingly applies many of the characteristics discussed above.

The following chapters will explore these developments in detail and consider the changes to the governance of water in Scotland, and their impacts on operations and service users. A more detailed exploration of the impacts of the current model will be developed in the latter chapters, drawing on new data uncovered during fieldwork and documentary analysis. In order to contextualise this data Chapter 3 will first outline the chronology of WWS provision in Scotland and how this has evolved.

Chapter 3: The Changing Face of Scotland's Water and Wastewater Services

Contemporary Scotland enjoys a steady and effective supply of water and, comparatively speaking, an advanced wastewater system. Broadly speaking the infrastructure and asset base suggests the provision of WWS is at a relatively mature and highly developed stage. The Scottish Parliament Information Centre (SPICE) wrote how, 'Scotland's water resource is plentiful, finely managed, monitored and regulated' (Cook and Edwards, 2004: 4). Moving Scotland's supply of water from its natural basins in rivers and lochs across a diverse topography requires a monumental engineering and construction effort (and huge usage of electricity). Likewise the discharge of wastewater necessitates another tremendous engineering endeavour to ensure its collection and safe disposal. The general efficacy in achieving this feat is worthy of recognition and deserves credit.

The organisation and supply of WWS in Scotland, and the policy choices made to secure an effective, equitable and safe supply ensures that it is a subject that regularly attracts political attention. How societies govern, manage and own their WWS are inherently political choices. It was political decisions that changed the mode of delivery in 19th and early 20th century Scotland and it is political choices that are changing the shape of WWS in Scotland today. As noted in Chapter 2 political considerations and philosophy continue to shape current national and global debates over how to best deliver WWS. Globally (as discussed earlier) the debate is broken down between two broad camps; one side espousing a market environmentalist approach (discussed and defined in Chapter 4) and another arguing that water is both a collective good and human right that should not be determined by market forces⁹.

The last major public debate over WWS delivery in Scotland occurred during the Strathclyde referendum in 1994. Since then discussion of Scotland's WWS has remained largely within a specialist section of the political class. Since devolution and the

⁹ However this represents two broad camps and that neither are monolithic. Just as there many forms of private involvement there are many forms and variations of thought within the anti-privatisation camp. For wider discussions of this, see Bakker (2007) and Sultana and Loftus (2011).

formation of the Scottish Parliament, political discussion around WWS has continued. The calls for changes to the ownership of Scottish Water have emanated from some influential bodies in Scottish public life. Despite the changes to the operational mode and governance framework (discussed below and in proceeding chapters) the issue of how WWS in Scotland is structured, owned and regulated has nevertheless continued to be a subject of discussion by actors with particular interest in the issue of WWS provision. This insider policy debate, involving think tanks, peak business organisations, factions of the media and regulators is discussed in Chapter 6.

Recent debates in Scotland over the future of WWS resemble the 'revival and survival of insider politics' (Grant 2001: 349). Despite this, the devolved Scottish polity likes to define itself against such practices, at least in public rhetoric. Views advancing further reform will no doubt be pleased at the stance taken by two of the major Political parties in Scotland. The Liberal Democrats and Conservatives are firm supporters of a change in ownership. The Liberal Democrats built their 2011 Scottish Parliament election manifesto around arguing for Scottish Water to become a 'Public Interest Company', thus removing the utility from public control, arguing that revenues from the sale, plus loans from the Scottish Government to Scottish Water, could be invested in more pressing priorities (Scottish Liberal Democrats 2011). This is an argument that has attracted criticism. Alan Sutherland of the WICS, in an interview for this research suggested proceeds from the sale of Scottish Water would in all likelihood go to the UK treasury rather than the Scottish Government (2013).

Neither the SNP nor Labour has advocated, nor proposed any plans to change the ownership status of Scottish Water. However, it is not certain this is a position universally shared by all of their respective members. Jack McConnell, when Labour First Minister, opened a debate in the Labour Party regarding the possible mutualisation of Scottish Water, while Christine May, the then Labour and Co-operative Party MSP for Central Fife suggested: 'The mutual model is one many of us in the co-op party are keen to pursue' (Dinwoodie, 2006). The late Sam Galbraith, ex Labour Minister also asked 'Is the privatisation of Scottish Water inevitable? Despite our best efforts to prevent it the economics are not looking good', whilst also criticising those, including

those within his own party, who argued for the retention of Scottish Water in public hands (in MacMahon, 2005: 2).

The commitment of the current SNP administration to retaining Scottish Water in public ownership will be assessed further below. This discussion takes place against their continuing refusal (publicly at least) to countenance any change to the current ownership model. Since forming a minority government in May 2007, and a majority Government in May 2011, they have rejected the idea of either a mutualisation or privatisation of Scottish Water. Yet, as will be noted below there is some evidence that suggests the public stance is perhaps not as clear cut as the SNP led Scottish Government state in public.

WWS Today: Politics Hollowed Out?

Despite a rejection of privatisation by the current Government incumbents and by the people via the Strathclyde referendum in 1993, and WWS remaining in public ownership, the provision of WWS in Scotland has undergone significant transformation in governance, operations and ethos since its original post war formation. This change runs parallel with the disassociation with the post-war political consensus, which was social democratic in character. This transformation has journeyed from a consensus espousing social democratic principles, to a new accord based on market principles, private ownership and minimal state involvement and reduced state steering (or governance) capacity, which, as Rhodes famously remarked, resembles a hollowing out of the state (Rhodes, 1994, 1996). Hollowing out the state suggests that self-governing organisations emerged instead, however alternative voices argue that for wider objectives to be fulfilled, such as environmental targets, requires even greater governmental involvement (Bell and Quiggin, 2008). Such a view mirrors the discussion in Chapter 4 where there is a brief discussion of the argument suggesting that neoliberal reconfiguration leads to re-regulation of the state rather than its de-regulation.

This present Scottish model of WWS, in its provision and governance, is the result of recent radical reconfiguration, facilitated by a flurry of legislative activism since devolution was introduced in Scotland. This reconfiguration by 'insider politics' is very much in tune with the some of the major water policy activists at the global level.

Whether intentional or not, Scotland is applying much of the logic of the dominant water lobby, with emergence of a corporatised model, incorporating marketised characteristics.

Exemplifying this change is the relatively recent re-organisation of WWS in Scotland from a model politically controlled at local municipal level to a model giving governing power to regulatory bodies' who function out-with traditional forms of democratic accountability. WWS in Scotland have changed from a model local in operations (as well as governance), paid for in the main by taxation to one where politics and policy are separated from daily governance and delivery and where operations are funded mainly from customer charges through cost recovery principles and applied at a central, national, level¹⁰. Further, in accordance with the corporatised change, is the development of policy by the national utility, Scottish Water, encouraging the outsourcing of operations routinely manifesting in the contracting out of private water TNC's

The legislation underpinning these changes have come from several sources. Scotland operates under a multi-governance system where legislative competence resides in either London or Edinburgh, but which sees legislation often originating via the European Union in Brussels. Hence, the evolution of Scotland's WWS has been made possible by legislation at the Westminster Parliament and since its re-opening in 1999, the Scottish Parliament. However, much of the recent water related legislation and policy in Scotland has also been heavily influenced by directives from the EU.

Changes to WWS in Scotland have been delivered in a context of almost universal supply. However, from the mid 1990's the assets and infrastructure were said to require modernisation and improvement, not least due to the EU directives on water quality and waste water treatment. Historically, in the nineteenth and early part of the twentieth century, legislation was developed to address partial supply and a realisation there was a need to improve the rudimentary and basic coverage that existed. These changes, or even just proposed changes, to WWS in Scotland have traditionally been a

¹⁰ Customer charges are set at a national level through the offices of the WICS; however collection of the charges is the duty of each Scottish local authority. Water charges are being collected alongside the council tax.

subject played out and debated within the political realm. Evidence gathered for this thesis strongly suggests that the ideas that lead to legislative, policy and therefore operational changes often reflect the dominant political philosophy of the time.

Water and Wastewater Services in Scotland: A Very Brief History

Provision of WWS in Scotland, its management and the corresponding institution building that ensured water was safely, cleanly and securely supplied continued throughout the second half the 20th century (Sewel et al, 1983). Access to water and sanitation and the quality of supply had gradually improved from the latter half of the nineteenth century as politicians, at state and municipal level realised the fundamental need for satisfactory WWS in order to improve public health and for general societal and economic well-being. The urgent need for improvements in the 19th century was particularly felt in urban, industrialised conurbations.

In England, Edwin Chadwick famously created the Public Health Act (1848), which for the first time made Governments responsible for Public Health and Environmental standards. This approach was subsequently adopted in many other industrialised societies. Fundamental to improving public health was tackling sanitary conditions and ensuring a clean water supply (Fee and Brown, 2005). Chadwick's Poor Law Commission also went to Scotland (ibid), where until around that time clean, secure and steady water supply and satisfactory sanitation services were sporadic resulting in sanitary conditions that had many negative consequences on public health and wider social developments.

Historian Tom Devine discussed the relationship between inadequate WWS and public health in Scotland's major cities and towns in his seminal works *The Scottish Nation*, stating 'that the stench of the city, more than any treatises on mortality brought home to rich and poor alike the scale of the sanitary crisis' (Devine, 2012: 335). Devine cites Anthony Wohl to describe the nature of the stench and the health impact from unsatisfactory sanitation and a poor supply of clean water:

To stand close to a defective sewer today is to recapture the essence of early and mid Victorian towns...a compound of broken or inadequate sewers, overflowing cesspools, poorly drained cowsheds, abattoirs, domestic pigsties, exposed dungheaps and industrial waste. One medical authority stated that the influence of stink as stink was so nauseating that it could of itself have a lethal effect on health, loss of appetite, nausea, sometimes actual vomiting, sometimes diarrhoea, headache, giddiness, faintness and a general sense of depression or malaise¹¹ (in Devine, 2012: 335)

Evidence shows that public health was often appallingly affected by the partial, intermittent and unsatisfactory provision of WWS in 18th, 19th and early 20th century Scotland (Cumming 1980, Gow 1996, Mitchell Library 2009). A growth in industry and urbanisation led to an increasing demand for WWS, but it also resulted in severe pollution to the water supply and consequent outbreaks of disease. As Cumming States in his *History of Greenock's Water Supply*:

By 1772 the town's population was widespread...people drank unfiltered water and there was no sewage system...from 1813 to 1820 the sanitary conditions continued to deteriorate and epidemics of typhus, cholera and smallpox were frequent (Cumming, 1977: 8).

In the town of Greenock one person in every six died from typhoid in 1819. In 1832 cholera killed 2000, while in the same year smallpox claimed 600 victims. In 1864 thousands died from a typhus epidemic (Cumming, 1977: 8, 16, 19). It is said that in Glasgow in 1832:

Cholera made its first appearance killing nearly 3000 people mainly in the parts of the city still dependent on polluted wells – High Street, Saltmarket, Gallowgate

¹¹ This description and the proposed association between unpleasant smell and health will be particularly relevant in the present day to those Scottish citizens who currently live nearby to a wastewater treatment works that discharges unpleasant odour. As far as Scottish Water and others are concerned there is no such health impact from the stench.

and Trongate. A further outbreak in 1848 killed 4000 victims, but this time it extended into more well-to-do districts (Mitchell Library, 2009).

Private water supply was common during these outbreaks. The Loch Katrine exhibition¹² reported how Glasgow council was 'rather apathetic' in improving the city's water supply. 'So private enterprise took over' (Mitchell Library, 2009). Echoing the concerns of contemporary public water campaigners the private companies involved cherry-picked their investments with 'pipes only being laid in parts of the city where it was thought only a financial return could be made' (ibid). The 1801 Census showed, for example, 'how out of a population of 100,000 people there were only 30 wells – one for every 3000 people – which meant daily lengthy queues' (ibid).

The policy response in Scotland in the 19th century developed on:

A slow realisation that society as a whole had a collective responsibility to take remedial action...the difficulties encountered in attempting to raise finance for various private water projects led also to a similar recognition that a sustainable water supply could only be supplied using public funds (Mitchell Library, 2009).

It is apparent that a central idea, 'amongst the populace was that (WWS) should be in the public domain and (therefore) all such (private) companies were taken over by local authorities' (Gow, 1996: 10). The political support for this based on an increasing awareness amongst all social classes, that disease did not recognise socio-economic circumstances with all classes being affected by outbreaks of disease caused by poor WWS.

The benefit of change, incorporating municipal control, was felt across society (Herald, 2009). In Greenock after 'various new works and steps were initiated ... the health of the town began to improve gradually as new developments, which swept away many of the older houses and improved the sewage system, began to take effect' (Cumming,

¹² The Mitchell Library in Glasgow hosted an exhibition, from October until December 2009, celebrating use of Loch Katrine to supply clean water to the city of Glasgow. The exhibition also corresponded with the significant investment made in the new water treatment works at Loch Katrine

1977:20). The historical improvements to Scotland's water infrastructure and supply in the 19th and 20th century is illustrative of how changes to ownership and governance can correspond with a gradual and significant improvement in public health.

However, the changes described were made under a framework of support for universal access and collective ownership. Today's changes, whilst still under a public rubric, are underpinned by a marketised logic which diminishes support for collectivist policies in favour of increased private involvement and the application of private practices within the public sector. It is this change, its processes, manifestations and consequences that makes up the empirical bulk of this thesis.

When considering the history of WWS in Scotland it is apparent that legislation, created by politicians and political institutions, has facilitated institutional change, whether in taking private water supplies back into public ownership or conversely transforming the publicly operated WWS towards a marketised, corporatised model.

The evolution of WWS throughout 19th century Scotland can be traced through some key pieces of legislation. The Police Act of 1833 compelled local authorities to provide WWS, while the Public Health (Scotland) (1867) Act made town councils and, in rural areas, parochial boards, become public health authorities. As part of their public health remit they were authorised to form special water supply districts wherever WWS was deemed unsatisfactory: a demonstration of how providing good WWS was/is seen as being inextricably linked to promoting public health (Gow, 1996).

However, historian, Bill Gow also suggests that many local authorities failed to implement adequate reforms. The Local Government (Scotland) Act of 1889 was passed in order to improve performance. The act recognised that parish councils were too small to act, thus it enlarged the 'areas of rural public health administration through [the] creation of District Committees and County Councils'. In addition the Act gave the new organisations powers and responsibilities to appoint a medical officer of health and a sanitary officer, as well as other powers (Gow, 1996: 10).

By the 1930's there were over 1700 special water supply districts in Scotland. Due to the financial limitations of many of these districts, comprehensive and cost effective WWS was often lacking. Gow writes:

It was considered that larger supply areas were essential for the economic well-being of the country and accordingly the special districts were abolished by the 1949 Water (Scotland) Act leaving about 200 county, city and burgh water authorities (1996: 10).

It was decided that the need for efficiencies and economies of scale meant that larger entities were required. The 1967 Water (Scotland) Act established 13 Regional Water Boards and the Central Scotland Development Board which was to provide bulk supplies of water. However, sewerage services continued under local government. In the mid 1960's there were 234 local authorities responsible for drainage and sewage purification in Scotland.

Only eight years later the Local Government (Scotland) Act transformed water governance again. This Act, based on the Wheatley report, recommended that Water Boards be controlled by directly elected local authorities. The water boards were therefore disbanded and the 9 new Regional Councils, which emerged from this Act, took over the running of water and wastewater services (Gow, 1996: 11).

Paddling Against the Tide? Privatisation and the Strathclyde Referendum

In recent times the most comprehensive barometer of Scottish public opinion, in relation to the ownership and control of WWS, the Strathclyde referendum of 1994, resoundingly supported the retention of WWS in public ownership. When the then Conservative Government privatised WWS in England and Wales in 1989, Scotland was omitted from the plans. One can speculate that Scotland was excluded as it would have been politically unwise to seek the privatisation of WWS in Scotland in the same year

the detested Poll Tax¹³ was introduced. Not least given the level of active opposition and local campaigning the Poll Tax provoked in 1989 (Hendry, 2003). The public response to the Poll Tax perhaps resulted in a political calculation that water privatisation would simply intensify opposition to both flagship policies.

Nonetheless, plans to privatise Scotland's WWS were only temporarily delayed. The Scotland Office launched a consultation in November 1992 considering 8 options for changing the delivery model for WWS in Scotland, apparently with a 'thrust towards private sector involvement and privatisation' (Lobina and Terhorst, 2005: 9). Campaigns were organised to resist privatisation (Hendry, 2001, 2003), including the 'Hands off Scottish Water' campaign and the 'West of Scotland Campaign Against Water Privatisation'. These movements raised concerns about the 'economic and social costs of water privatisation, the loss of democratic control that this would have entailed, as well as losses of jobs and the costs resulting from the restructuring' (Lobina and Terhorst, 2005: 11). The public awareness of the plans and the political opposition saw a momentous response to the Government's proposals with the Scottish Office receiving 4,834 responses to the consultation: 94% of which favouring retention of the services within public control (Black, 1994).

The result of the Strathclyde Regional Council referendum was also unequivocal. 71% of the eligible electorate voted (1.2 million ballots), of those 97% rejected water privatisation (Crooks in Cooper et al, 2006, Hendry, 2003, Lobina and Terhorst, 2005). Some have since doubted the methodology of the referendum electoral process, although recognising its policy impact. The Chief Executive of the WICS, Alan Sutherland, would later remark, 'This was not a referendum that would have satisfied election purists and it was initially dismissed as a political stunt. But it did set the agenda' (2006: 4). Despite these misgivings the referendum represented a clear expression of opposition to the privatisation of Scotland's WWS. However, while the referendum may have offered a clear opinion of public preferences regarding WWS in

¹³ The community charge, widely known as the poll tax, was a new system of taxation introduced to replace domestic rates. It was a flat-rate tax on every adult, set by the local authority. Seen as particularly regressive and hitting low and middle earners the most it provoked significant civil unrest in Scotland at the time. As a result of public concerns it was replaced by the Council Tax in 1993.

Scotland, the evolution of policy in this area ever since has been characterised by the exclusion of the public in a private, elite and expert led policy dialogue.

After the Referendum: Corporatisation by Stealth?

Since the now famous Strathclyde Referendum a few key pieces of legislation have impacted on the provision of WWS in Scotland. Yet, in contrast to the early/mid 1990's there has been little political or public reaction accompanying these changes despite the cumulative impact from legislation that has seen a shift towards private involvement, the adoption of practices more akin to the private sector, and a move away from democratic and public control. These types of changes led to the concerns that drove the opposition to privatisation in the early 90's, but in contrast to 1993 they took place with little public comment, however this is perhaps as a consequence of the more strategic, patient and incremental approach employed since 1993. Given the process and nature of this cumulative reform it may be that Canadian academic, Gary Teeple's analysis of the restructuring of the public sector resonates with the ongoing changes in the governance of Scottish Water, 'Where the process is politically problematic, the preferred route has been privatisation by attrition and the gradual reduction of services' (Teeple 2000: 95).

The low key legislative approach, taken by successive governments, commenced almost immediately after the Strathclyde referendum, with the passing of the Local Government (Scotland) Act 1994. This Act led to three new water authorities, North, East and West of Scotland Water, being charged with the provision of WWS in Scotland. The formation of these bodies caused some concern about the loss of democratic input into water governance. Gow remarks how the establishment of the West of Scotland Water Authority led to the 'Water and Sewerage undertaking in Strathclyde, which had been under local authority democratic control for over 140 years [passing] to a quasi-autonomous non-governmental organisation' (Gow, 1996:11).

The Local Government (1994) Act allowed for the new water authorities to sub-contract significant works to private water companies. In particular, this act led directly to PPP style contracts being signed by the three newly created water authorities. Otherwise known as PFI contracts they contracted private contractors to finance, build and

operate new wastewater treatment works (Black, 1994, Hendry 2001). As Hendry noted, 'The retention of water and sewerage in public hands had a sting in the tail with the introduction of the Private Finance Initiative' (2003; 506). The nature of that sting and the longer term impacts of the PFI deals in terms of performance and negative externalities will be revisited in some detail in Chapter 8.

The Water Industry (UK) Act (1999), the last piece of water legislation directly affecting Scotland that was passed in the UK Parliament, has had a significant impact in Scotland. A major part of that legislation was the halting of the practice of disconnecting those unable to pay their bills in England and Wales, a regulation discussed in chapter 2, which was originally introduced after privatisation in 1989. However, while this measure to protect vulnerable customers dominated many of the headlines at the time, a more far reaching part of the Act for Scotland was the provisions that created the office of the 'Water Industry Commissioner' in Scotland which, going forward, have had a much greater impact on WWS in Scotland.

This piece of legislation advanced the separation of operations from politics. According to the Act 'The Commissioner shall, when required by the Secretary of State, advise him on the matters to be taken into, or left out of, account by the new water and sewerage authorities in fixing charges in charges schemes' (Part II, 13, 75A, (1)) (Water Industry Act, 1999). The creation of an advisory economic regulator was the forerunner to the formation of a more powerful economic regulator with statutory powers. Moreover, in creating the office of the Water Commission, the legislation gave birth to a key vehicle through which the marketisation of WWS in Scotland could subsequently be advanced. The role, activities and extent of the impact made by the economic regulator and the agenda setting and purposeful interpretation of its role will be considered in greater detail in Chapter 6.

Since the Scottish Parliament: Increasing or Reducing Public Control, Openness and Transparency of WWS?

Re-established in 1999, the Scottish Parliament was founded on core principles of representative democracy. The new legislature was designed to be accountable,

accessible, open, responsive, and participatory (Scottish Consultative Steering Group, 1998: Sec 2, 2). The Scottish Parliament is not fully autonomous however. It depends on Westminster to provide funding from a block grant and there are policy areas still reserved to the UK Parliament, such as foreign affairs, defence and welfare; although after the 2014 Scottish Independence Referendum some areas of welfare are being devolved to Scotland. Areas where the Scottish Parliament has responsibility include health, education, and the environment, including water¹⁴.

There has been a steady flow of water legislation resulting in a very changed landscape for the provision of WWS in Scotland (Cooper et al 2006). The 2002 Water Industry Act was arguably the most transformative legislation pushing WWS in Scotland towards a corporatised model. This was exemplified by centralising operations, through the merging of the East, West and North of Scotland Water authorities, into one centralised corporate public utility, Scottish Water.

Different reasons were given for the introduction of the 2002 Water Industry Act. One key factor was the argument to harmonise charges across Scotland and cross-subsidise investment requirements in the Highlands and Islands of Scotland where, due to the rural character and topography it was more expensive to provide WWS (Hendry, 2001, Findlay 2004), According to researchers at the Scottish Parliament the 2002 legislation was introduced:

To enable efficiencies in operating and capital investment expenditure to be achieved; provide a consistent approach to customers across Scotland in terms of charges and additional services; enable the organisation to compete for the retention of customers; allow a more consistent and strategic approach to investment planning and procurement so that environmental and quality objectives are met more effectively (SPICE, 2001: 10).

¹⁴ The powers of the Scottish Parliament is a subject in constant flux with the rise of the Scottish National Party, the resulting 2014 referendum for Scottish Independence after they won an overall majority in 2011 and the continuing public and political debate over new powers being granted to the Scottish Parliament.

The 2002 Act also augmented the existing regulatory framework, which saw it resemble key elements of the privatised English model.¹⁵ The separation of delivery and regulation from politics and policy-making became much clearer at this point, as governance shifted towards a more elitist and expert led regulatory model. In practice this meant the removal of elected officials from the board of Scottish Water, with instead a focus on attracting board members from, mainly, business backgrounds. This was a marked departure from the structures of the previous water authorities, which had some semblance of societal cross-representation on their boards, with each having between 12 and 14 board members drawn from different backgrounds and which included local authority elected representatives and trade union officials (SPICE, 1999).

However, while the board structure in the East, West and North of Scotland water authorities provided a semblance of cross society representation it was still a dilution of the original intentions for a much fuller democratisation. The Labour Party had made a pre-election pledge prior to the 1997 General Election to restore local democratic accountability to WWS in Scotland. Donald Dewar, the then Scottish Secretary of State and soon to be the first, First Minister, of Scotland also advocated for an improved democratic accountability of WWS (Scottish Office, 1997). But, after winning the election the 'New Labour' Government reneged from the promise to have WWS brought back under direct democratic control (Horsburgh, McGregor, and Robertson, 1997) and as a result the ultimate outcome did not match the original intent. Resulting instead in a framework that maintained cross-societal representation but which was still out-with direct political and democratic control in so far as none of the water authorities were directly answerable to any elected chamber.

The change of policy direction at this time prompted strong criticism, including from within Labour's own ranks. Michael Connarty, the then vice-chairman of the Parliamentary Labour Party, remarked, 'This was a banner headline in the manifesto. We were committed to returning Scottish water to local government control. It is a blatant breach of our manifesto commitment.' (in Buie and Macleod, 1997). Five years

¹⁵ In 2006 Scottish Executive Water Division official, Rosemary Greenhill, informed me that the English framework was the only regulatory model considered when drafting this legislation. The Executive did not look elsewhere around the world for any other possible templates (Kane, 2006)

later in 2002 the notion of democratic control over water was further undermined. Yet as noted there was no campaign or public outcry over the provisions in the 2002 legislation when compared to the criticism of proposals in the early and mid-1990's to reorganise water in Scotland. While these proposals were called something quite different in public (modernisation versus privatisation), in effect the 2002 Act progressed a 'strong' corporatised agenda, the meaning of which is discussed in Chapter 4.

Aside from politicians (who voted for the de-democratisation) senior stakeholders in WWS in Scotland were also apparently comfortable with the changes. In interviews for this research I heard overwhelming support for the merits and practice of expert led governance, (Axford 2010, Harvie-Clark 2009, Ponton 2006, Sawkins 2010, Telfer 2009). This consensus is in spite of any concerns that such elite led regulation amongst the senior stakeholders can result in the exclusion of individuals, communities and their elected representatives from WWS governance. This thinking reveals comfort at an approach, which prefers 'experts' in regulation and governance and is consistent with a broader view that experts are considered better placed to manage, develop and implement policy, or govern, than democratically elected representatives. A viewpoint that is gaining increasing traction in academic and policy circles (Vibert, 2007). A discussion on the rise of expert led governance and regulation and the impact this has on conceptions of 'publicness' is also developed in Chapter 4.

Diluting political involvement is said to help operational efficiency. Scottish Water officials George Ponton and Tom Axford, in separate interviews for this research, said that that prior to the formation of Scottish Water political involvement, priorities and decisions were often made with one eye on the wider political impact rather than the specific needs of the water sector. They suggested that, historically when governments or local authorities set budgets and spending priorities it was more visible and voter friendly investment needs, like schools and hospitals that would be prioritised over necessary spending on, for example pipes that could not be seen or wastewater treatment works (Axford, 2010, Ponton, 2006). This kind of populist policy making, they argued, had over a number of years impacted negatively on the infrastructure and asset base of Scotland's WWS.

The 2002 Act also created a regulatory framework of WWS that saw governance functions administered by new regulators with different responsibilities, augmenting the focus on expert led governance, albeit with Ministers still setting the overarching objectives for the industry. However, these objectives are in practice formulated as a result of discussions with regulators, thereby placing the regulators in a very influential position in terms of agenda and objective setting. This will be discussed in Chapter's 6 and 7 as part of the wider analysis of the WICS and the economic focus and hard budget constraint framework that they have imposed on Scottish Waters' operations.

The 2002 Act also enabled further private sector penetration of Scotland's WWS. The act brought the type of institutional change, favoured by influential water lobbyists and policy agenda setters, that enables public utilities, such as Scottish Water, to enter into partnerships with the private sector, for example by the outsourcing of capital investment works to various water TNC's. The Act legislated that:

Scottish Water may do anything (whether in Scotland or elsewhere) which it considers is necessary or expedient for the purpose of, or in connection with, its functions' (Water Industry Act, 2002: Part 3 25 (2)), including the right to 'form or promote (whether alone or with others) companies (within the meaning of the Companies Act 1985' (Water Industry Act, 2002: Part 3 25 (3) (a)) and to 'form partnerships, enter into arrangements or agreements and co-operate in any way with any person' (Water Industry Act, 2002: Part 3 25 (3) (d) and to 'enter into a contract with any person for the provision or making available of assets or services, or both (whether or not together with goods) whether by Scottish Water or by that person (Water Industry Act, 2002: Part 3 25 (3) (e)).

The 2002 Act therefore enabled Scottish Water to enter into partnerships with private companies and form commercial companies whenever they deemed it appropriate to do so. A more detailed analysis of these partnerships, as well as the commercial direction of Scottish Water is a subject that will be returned to in Chapter 7.

The 2002 Water Industry Act also legislated that Scottish Water recover all its necessary costs, and was directed to ensure its income exceeds expenditure. Requiring a cost recovery element in the 2002 Act has meant that the corporation is placed firmly on a commercial footing, moreover it meant the legal enshrinement of the cost recovery principle within its institutional structures:

Scottish Water must, in accordance with this section, make a scheme (referred to in this Act as a “charges scheme”) which fixes the charges to be paid for services provided by it in the exercise of its core functions and which may also make provision with respect to the times and methods of payment of the charges fixed by the scheme (Water Industry Act, 2002 Part 3, (31) (1)).

Other legislation consolidated and advanced this agenda. The 2003 Water Environment and Water Services (Scotland) Act and the EU Water Framework Directive (WFD), which inspired it, appear progressive pieces of legislation. This 2003 Act seeks to protect, improve and promote the sustainability of water, its quality and supply. However, ostensibly the WFD follows a market environmentalist trajectory, in that it establishes the use of economic incentives to protect and sustain watercourses (Iornis, 2008, Kaika 2003) whilst also enshrining the principle of full cost recovery (Danilenko and Child, 2005: 2) to pay for WWS rather than a fuller role for the principle of (progressive) taxation helping to pay for WWS.

The 2003 Water Environment and Water Services (Scotland) Act appears to encourage a more participatory form of governance, which includes a range of stakeholders, for example engineers, water users, utilities and policy makers. It contrasts with earlier governance models in that it is not merely reliant on politicians¹⁶. This reflects the new forms of governance and regulation in public goods and services generally and specifically mirrors IWRM in this regard. The 2003 Act therefore further shifts the

¹⁶ Applying the WFD in Scotland has seen River Basin Management Plans emerge. Split into 8 sub-basin districts, these are advised by a National Advisory board and eight area advisory boards. The people and organisations appears to be composed of a narrow base largely from industry and large users of water, local government, Scottish Water, NGO's and regulators. The work of these boards has not been researched in this thesis; however their role and efficacy is perhaps worthy of further academic research, particularly against the conceptual backdrop of IWRM.

governing and management of water from the state or municipality to new clusters and networks of interested, engaged and expert stakeholders.

The 2005 Water Services etc (Scotland) Act transferred the economic regulation of WWS in Scotland from the single Water Industry Commissioner (WIC) to the WICS. Moving from the WIC to the WICS involved expanding the regulatory system from a single commissioner to a commission with six members (the role and activities of the WICS will be discussed in Chapter 6). Most significantly however the new Commission was given statutory powers to set charges for customers and budgets for the utility, Scottish Water. This provided the WICS with unprecedented powers in directing WWS in Scotland. In addition, it removed political representatives from any involvement in setting budgets and charges with only a tenuous democratic link in setting policy and priorities. This further bypass of political representation has arguably assisted the advance of corporatisation of WWS in Scotland.

Another central part of the 2005 Water Services etc (Scotland) Act was the introduction of competition for non-domestic customers in Scotland. This was hailed as a pioneering development by supporters and the thin end of the wedge of privatisation by critics of the marketisation of WWS in Scotland. This policy was supported by the WICS pre- and post- legislation and was introduced in the wake of the Competition Act, originally initiated in the EU, which compelled governments to consider and introduce competition across sectors wherever possible and appropriate. Further and more detailed discussion considering the role of the WICS in encouraging competition will be assessed in Chapter 6.

The EU and Scotland: A Driver for Change

The EU was a key factor in competition being introduced in WWS in Scotland. More generally, as noted, it has been a key driver of others changes within the Scottish Water Industry. Hendry suggests:

Since the mid-1970's the European Union (EU) has produced several key directives, subsequently implemented into national law, requiring major

injections of capital into both water and sewerage services. The most significant for the WA's (Water Authorities) have been Bathing Waters (1976), Drinking Water Quality (1980 and 1998) and Urban Waste Water Treatment (1991) (2001, 3).

The UK Competition (1998) Act was developed in response to EU laws regulating and fostering competition in business and services. In terms of water policy in Scotland it seems that key actors, such as the economic regulator, concluded that the water industry would not be exempt from the requirements of the Competition Act. Two Scottish Executive papers published in 2000 and 2001 suggested the Competition Act could see Scotland's WWS opened up to private entrants (Hendry, 2001, 2003). Hendry suggests the Competition Act was a key driver for introducing the Water Industry (Scotland) Act (2002) stating:

Chapter II prohibitions prevent agreements, concerted practices etc which may prevent, restrict or distort trade in the UK, and Chapter II prohibitions prevent abuse of a dominant position. Penalties may be up to 10% of annual turnover. The Westminster Government and the Scottish Executive, as well as the WIC, have taken the view that these provisions will apply to the Scottish water industry and that there is no scope for exemption or exclusion under the 1998 Act (Hendry, 2001: 4).

The Scottish Executive and the Scottish Parliament's Transport, Environment and Infrastructure Committee also felt the Competition Act (1998) would compel competition in the Scottish WWS. However, the independent research arm of the Scottish Parliament, SPICE, suggested that it was possible to argue for exemption if certain conditions were met, 'for example with relation to the greater economic good' (SPICE, 2001). In contrast to the view from within the Scottish Executive and the WIC the STUC also doubted the assertions made by the WIC. When giving evidence to the Scottish Parliament Transport Committee they argued how:

The legal means exist to safeguard Scotland's water. What appears to be missing is the political will to recognise that competition is not the appropriate way

forward. For example, within the Competition Act (Schedule 3) there are provisions which would allow for the exclusion of competition from water and sewerage services in Scotland, either in perpetuity or for a protected period. Other EU nations, most notably France, have taken just such a stance over their utilities (STUC, 2001).

Such interventions from the STUC and others from the Trade Union movement were ultimately ignored and the threat of foisted competition, espoused by the economic regulator at the time, was used as a pretext for change. The political appetite to challenge the introduction of competition, and the consequent increase in the private encroachment of Scotland's WWS, appeared to be absent.

EU directives have undoubtedly resulted in the improvement of Scotland's WWS asset base and infrastructure. However they are also, arguably, at the root of changes to operations and governance. Epitomising this duality is the Urban Wastewater Treatment Directive (UWWTD), which has had a major impact on Scotland's WWS. In the mid 1990's 21 PFI contracts were signed by the Water Authorities to finance the upgrade of wastewater treatment works across Scotland to comply with standards associated with UWWTD and the Bathing Water Directive. Consequently new, modern wastewater plants and methods were established leading to a significant entry by the private sector and a further erosion of public accountability in the WWS sector. The need for PFI was also 'coupled with constraints on available borrowing' (Scottish Water, 2008a: 1). According to Sarah Hendry 'PFI was (and is) designed to encourage public-private sector cooperation and provide investment in excess of that available via central government' (2003: 506).

At Westminster the UK government decided that new investment in WWS for England and Wales should be sourced from the private sector rather than the public exchequer. As Hendry notes, 'New legislation from the European Union (EU) has imported higher standards and required new investment; in England and Wales, the response to a funding crisis was to privatise the supply of these services' (2003; 492). Critically, this was a stance consistent with the ideological standpoint of then Conservative Government, who had introduced various privatisations between 1979 and 1997. The

consequence for Scotland, of the UK Government privatisation of WWS in England and Wales, was no public money specifically allocated from the Westminster Government to Scotland's water industry via the funding mechanism, known as the Barnett formula, which provides a proportion of public funds and is calculated on how much is spent on the equivalent public service in England and in other parts of the UK. The result was a political choice, driven by financial imperatives that saw investments from the private sector via PFI/PPP being sought and an increasing role for the private sector in providing WWS in Scotland.

The aggregate impact of all of the different tranches of legislation passed since 1994, from the EU, British and Scottish Parliament's, has resulted in a corporatised model. The theoretical meaning of this shift will be discussed in Chapter 4, when the conceptual framing of this thesis will be developed. For now the fundamental structural change to the Scottish Water Industry is best summarised by two central stakeholders in the early history of Scottish Water. Alan Alexander, the first chairman of Scottish Water, told a Scottish Parliament Committee in 2006, 'It is extremely important to remember that the industry is a public sector industry, but we try to operate within the disciplines and constraints that have been successful in transforming the industry south of the border'(Alexander, 2006).

The first Chief Executive of Scottish Water, Jon Hargreaves, told the same committee 'What you have created in Scotland is unique – privatised regulation is not applied exactly in the same way to a public body anywhere else. That is the change in Scotland' (Hargreaves, 2006). Or to put another way Scottish Water resembles a strong corporatised model (discussed in the following chapter). Credence for that argument is given couple by some of the key characteristics inherent in the current Scottish model, not least autonomy from political and policy processes with daily operations and governance the responsibility of Scottish Water and regulators respectively.

Changing WWS in Scotland – A Work in Progress?

Despite the fundamental change to operations and governance there have remained regular calls for further change to Scotland's WWS. However, unlike the period of the

Strathclyde Referendum, this recent debate has involved elite stakeholders and not the wider public. The protagonists involved offer an impression that public ownership of Scotland's WWS requires further reform and have sought to build on the current default position of corporatisation as a base for further change. Numerous think tanks and commentators have provided an echo chamber for such policy prescriptions (Armstrong, 2006, 2007; Armstrong et al, 2008; Bell and Mackay 2006; Blundell, 2003, 2006; Hawkins, 2008; McLaren et al, 2010; Robinson, 2005, 2006). The Scottish CBI has been the voice of business calling for privatisation of Scotland's WWS (Scottish CBI, 2006, 2008, author fieldwork notes, Edinburgh 2008). What is more, parts of the media have recommended privatisation in their reporting and opinion pieces (Allardyce, 2006, Jamieson, 2007a, 2007b, 2009, Penman 2006, 2008).

Stewart Stevenson, then a Minister in the SNP Scottish Government, while averring support for the current model acknowledged in 2008 that arrangements 'would be kept under review' (author fieldwork notes, Edinburgh, 2008). Since then the Government have participated in a policy development process considering future options for Scottish Water. This process first came to light in newspaper reports in 2010 suggesting the Scottish Government were mulling over the future of Scottish Water.

It was reported that the Government held two meetings in 2008 with Macquarie Investment Banking Group which owns the privatised Thames Water, operating in London and the south east of England. Scottish First Minister Alex Salmond, met with officials from Macquarie in 2008, while the Finance Minister met with them in 2009, with officials from the Scottish Futures Trust (SFT), to discuss the 'future development of Scottish Water' (Vass, 2010).

During the same period the Scottish Futures Trust (SFT) and an Independent Budget Review (IBR) both conducted research into the future of WWS in Scotland. It was reported that the IBR would consider any element of Scottish Government spending 'including the affordability of services provided on a universal basis ... the review body will have the power to consider who should provide public services, including private firms, and whether Scottish Water should be removed from state control' (Johnson, 2010: 7).

The SFT informed the Office of the Scottish Information Commissioner (OSIC), during an FOI appeal process, that the SFT had 'advise(d) that its board had taken a decision to review the financing of Scottish Water in public ownership and that this had been set out in its 2009/10 business plan and also in its 5 year corporate plan' (OSIC, 2010: 5). Other evidence casts doubt on this reasoning used by SFT as the basis for conducting a review. KPMG, contracted to carry out research for SFT, said in their report how, 'The Scottish Government has asked Scottish Futures Trust to provide advice on possible alternative structures for Scottish Water' (KPMG, 2009: 4).

Prior to their review of Scottish Water the SFT met with the WICS to discuss Scottish Water. A confidential document reveals how, at that meeting, the recently appointed non-executive Chairman of the SFT, Sir Angus Grossart (who is also Chairman of Merchant Bankers, Noble and Grossart), questioned the reason for Scottish Water being dependent on public borrowing and asked 'why some form of mutualisation was not being considered' (WICS, 2008e).

Sir Ian Byatt, then Chairman of the WICS, replied to Grossart by saying that the Finance Minister (John Swinney) in a recent conversation with him had 'ruled out Scottish Water leaving public ownership'. Grossart responded by saying 'the basis for this should be further questioned' and suggested he would raise it with the Minister. He continued by saying that he agreed with the view that 'water, like other utilities, was an attractive investment for pension fund monies, but this did not mean that it need necessarily leave the public sector' (WICS, 2008e).

Insider evidence revealed that debates over the future of Scottish Water were taking place within the Government. This data surfaced after publication of an article on water policy in September (Kane & Mitchell, 2010), when I was approached by an informant involved in the policy discussions. The identity of this source has been kept confidential, and the write up of the following account has sought to ensure anonymity.

My source revealed details of the internal debates over the future provision of Scotland's WWS taking place inside the Scottish Government. This account suggests

there were several senior officials not averse to changing the status of Scottish Water. The insider described the views of some within the civil service and their links with the IBR, SFT and the think tank the Centre for Public Policy and the Regions (CPPR), which has been a regular and forceful advocate of changing the ownership status of Scottish Water. According to this informant the civil service:

Briefed the CPPR before their report on water privatisation, who briefed the SFT and IBR on the merits of mutualisation. They are doggedly pro-privatisation and appear to be playing a long-game in the hope that some cash short administration will submit to their biased briefing and at least shift the debt into private hands (Anon, 2010).

This disclosure reveals a degree of collaboration between think tanks, government appointed bodies, and government itself (in the form of civil servants) in the development of policy that is not amenable to public scrutiny. It appears for these influential stakeholders that the current model is not their preferred final destination for WWS in Scotland. Key players were, according to this account, actively pursuing an agenda that would have seen the removal of Scottish Water from public hands. As has been the case with all the major changes and proposals in the Scottish water sector since the late 1990's, this policy development process received significant input from the corporate sector, in this instance the commissioning of global corporate consultants, KPMG by the SFT, who then also submitted a response to the IBR that doggedly promoted a change in ownership.

The 2010 IBR also had a degree of input from the corporate sector. One of the members of the review, Robert Wilson was an ex-employee of Deloitte, while the review team held a meeting with Scottish Water in the offices of Deloitte in Edinburgh on 26 May 2010 (Benn, 2010). Just a couple months later Scottish Water held a meeting with Deloitte after an approach from the company. In the first approach an unknown employee of Deloitte (the name was redacted from the FOI) said to Richard Ackroyd, the then Scottish Water Chief Executive, that his company had held a 'workout session' on Scottish Water to discuss 'their perceptions of Scottish Water'. As well as suggesting that Scottish Water needed to 'become more proactive in marketing itself directly to its

customers' they intimated that Scottish Water needed to prepare for change. Stating how 'there is always the spectre that the organisation needs to plan for possible structural change in the future' (Deloitte 2010). A more informal note followed two weeks later which referred to a dinner that both Mr Ackroyd¹⁷ and the Deloitte employee had attended. In this correspondence Deloitte said how he had spoken to someone (again the name was redacted) at that dinner and that they were:

Struck by his views on the likelihood of change for Scottish Water, clearly the consequences for Scottish Water will vary depending on the nature of that change and as a firm, we have been involved with many others in your industry or other utilities in Scotland and England Wales that have been through privatisations, mutualisation, not for profit status or even a trade sale ... I would welcome the opportunity to meet with you and your chairman to discuss not only the consequences for Scottish Water but also the political landscape and how this may evolve (Deloitte, 2010b)

Despite the undoubted flurry of policy activism in 2010 ultimately the policy development process did not lead to a change in ownership. The Scottish Government rejected the proposal of both the SFT and IBR to change the ownership model of Scotland's WWS. However, what this period demonstrates is how the ownership of WWS in Scotland is a policy area that is under regular review. Moreover, the policy development process in 2010 represented an intense period of policy-making activity where the status of Scottish Water was (again) under a great deal of pressure. Yet, while the issue of WWS ownership is inherently political it is clear that little, if any, of these discussions played out in the public sphere. They took place behind closed doors and with very little, if any, public knowledge that they were going on at all. Indeed, it is doubtful if even most MSP's in the Scottish Parliament were aware of this process.

¹⁷ Scottish Water was actively meeting corporate agents around this time. In their recommendations for the SFT policy development paper, KPMG suggested Scottish Water prepare for any change to the ownership status of Scottish Water. Scottish Water themselves suggested in a submission to the IBR that Scottish Water should have its status changed if the Scottish Government were unable to furnish them with the current level of loans. Through an FOI request of his diary I was able to ascertain that Richard Ackroyd met numerous times with Rothschilds (a well-known corporate organisation who facilitate privatisations). Scottish Water refused to reveal what was discussed at these meetings despite further FOI requests asking for documents pertaining to these meetings.

The story so far: Authorised Accounts of Scottish WWS

Despite the attempts to make further changes to WWS in Scotland the governance arrangements of Scotland's WWS and the course taken by Scottish Water since its creation are hailed by other actors in Scottish public life. Audit Scotland reported in 2005 that 'Scottish Water has made good progress with the merger of the three previous water authorities and has developed robust corporate governance arrangements' (Audit Scotland, 2005: 3). Sir Ian Byatt, former Chairman of the WICS also remarked on the improved performance of Scottish Water, 'I am pleased to say that Scottish Water has continued to respond well to regulatory and other challenges. It is a public sector success story that may have lessons for other parts of the Scottish public sector' (WICS, 2009e: 3).

Further afield, a World Bank commissioned report described how 'the Scottish Water model is conceptually good and has, in theory, all the right ingredients necessary to provide a robust and sustainable institutional framework' (Baietti et al, 2006: 94). A report commissioned by the Scottish think tank, the David Hume Institute, also commended the transformation of Scottish Water, noting increased productivity while reducing operating costs and recommended the lessons learned at Scottish Water should be rolled out to other parts of the public sector (Armstrong, 2007). Stewart Stevenson, then Minister for Transport, Infrastructure and Climate Change claimed the 'governance and operations of Scottish Water [is] uniquely successful and this has been achieved by taking the best parts of the privatised example in England and combining it with the best parts [of] public systems' (author fieldwork notes, Edinburgh 2008).

All of these accounts refer to a transformation of Scotland's WWS provision into becoming a well-managed and lean utility. Key industry stakeholders at an Edinburgh conference I attended as part of my fieldwork all appeared to share this same analysis (Ackroyd, Sutherland, Taylor, author fieldwork notes, Edinburgh 2009). These commentators all stressed the improvements in the governance arrangements, subsequent financial stability and increased investment. To be sure, this is all part of the story of Scottish Water in the 21st century, but it is by no means the full story. The

following chapters while acknowledging increased investment will seek to offer a more complete portrait of the recent transformation of the Scottish water sector. This account emphasises aspects of governance and performance that are seldom heard at self-congratulatory industry events and official reports and publications. This research proposes an alternative, critical analysis of WWS in Scotland that is at odds with aspects of official accounts of the sector.

Changes to Scotland WWS, as documented here in this chapter, undoubtedly resemble many of the changes that are occurring globally. The institutional and regulatory architecture introduced in Scotland have borrowed from some of the governance templates discussed in Chapter 2. This study asks if the assumptions made about the efficacy of such a model are justified. Considering this question requires a much wider examination of Scotland's WWS, and an extrapolation of some of the social impacts caused by the changes outlined above. Prior to that discussion, the theoretical and conceptual framework that underpins this research will be outlined.

Chapter 4: Globalisation, Neoliberalism and Governance: Making Sense of the Water Policy Cycle

Understanding contemporary governance and regulation of WWS in Scotland necessitates developing a conceptual framework that captures the key features of this field. The central political and economic theme is neoliberalism. All the key concepts in this thesis are linked to aspects of neoliberalism. The impact and influence it has had on the increasingly prominent concept of market environmentalism, to changes to how public goods and services are owned and organised, the shifting role and shape of the state and the turn towards de-democratisation and an increasingly expert led (unelected) regulation (governance) are all features which reflect the predominance of neoliberalism and are relevant to this research.

This chapter discusses neoliberalism against the backdrop of the public-private nexus and the shift from government to governance. As part of this framing, attention is devoted to the policy actors and their networks that develop ideas, and their lobbying and promotional activities they apply in seeking to have their proposals implemented in policy and regulation. This links directly to questions of structure and agency, which is being applied specifically in the context of changes to water governance in Scotland. However, it is also implicitly assumed and accepted that the general applications discussed here in this specific area are being repeated in other polities and sectors elsewhere around the globe.

Developing a conceptual framework is important to assist in making sense of the data gathered and presented in the subsequent empirical chapters. As neoliberalism is at the core of this, an account is given of this doctrine and its application in today's globalised world. This acts as a foundation of a theoretical discussion of the neoliberal tendencies that have shaped the reconfiguration of WWS in Scotland. While parts of this framing focus on aspects of neoliberal governance that are evident in contemporary Scotland, other elements of this discussion are more conceptual and analytically significant in terms of a wider appreciation of the processes and players (or more formally the structure and agency) of neoliberal globalisation.

Considering Globalisation and Neoliberalism

Globalisation has accelerated worldwide interconnectedness in areas of deep importance such as trade, finance and politics. These processes have been assisted by technological advances and an increasing cultural, economic and political homogeneity. Held and McGrew describe globalisation as a 'historical process which transforms the spatial organisation of social relations and transactions generating transcontinental or interregional networks of interaction and the exercise of power' (2002:2). Observing how these networks exist in the WWS sector and assessing their agenda-setting activities has been a central focus of this research.

Such social relations, according to Tomlinson (1999), are influenced by a kind of global complex connectivity, a process that involves increasing social (and political) linkages across the world. As communications, travel and technology improve so the spatial world, between different groups and societies, is reduced (Scholte, 2000). Cultural homogeneity is created by these social linkages, with food, entertainment and sport enjoyed and shared by peoples across the world. The processes by which some cultural values and practice become prominent or dominant has been referred to as cultural imperialism (Foucault, 1980, Said 1991, 1994, Bourdieu and Wacquant 2001).

Applying this logic to the realm of political values, in a world dominated by neoliberal capitalism, it can be said that it is these values, underpinned by a belief in the primacy of markets and the spread of market ethics to all aspects of social life, that dominate. However, the notion that peoples around the world are mere passive recipients of such values has also been challenged (Tomlinson, et al, 1991) as has the assertion neoliberal ideas are all powerful. Thus, it can also be argued that the logic of markets is confronted with other social, political, religious and cultural logics as noted in Chapter 2 with highlighting the alternative voices who challenge the more dominant networks who promote a model that reflects more the marketised philosophy of neoliberalism. How this plays out at a local level underpins understanding of the dynamics of neoliberal globalisation. This thesis examines such processes in the context of Scottish political culture and the transformation of WWS in Scotland.

The focus of this chapter is how contemporary globalisation is shaped by the basic values of neoliberalism and how that has influenced and changed the political and governance realm. A paradigm shift from the so-called social democratic, or Keynesian, consensus that developed after World War Two began in the 1970's when social democracy, based on the mixed economy and government intervention and regulation in the economy, was increasingly seen as economically discredited.

However neoliberalism was not born in the 1970's. Hickel suggests neoliberalism 'came from somewhere, and was designed by particular people with particular interests' (2012). Neoliberal luminaries and seminal texts (Hayeck, 1944, 1949; Friedman 1962) endlessly promoted neoliberalism against social democracy (Peck, 2010). If there was a specific body promoting what became known as neoliberalism then perhaps that defining organisation, from which all neoliberal think tanks and policy networks emerged, was the Mont Pelerin society (Burgin, 2012; Cockett, 1994; Mirowski and Plehwe, 2009; Stedman Jones, 2012).

Those involved represented an intellectual counter revolution when the ideas of 'economic liberalism' were at their lowest ebb (Cockett, 3-4). When the social democratic consensus was ruptured in the 1970's it was the Mont Pelerin society and the other networks that they gave rise too, that ensured ideas for a free market alternative were ready to displace the social democratic model. (Bourdieu and Wacquant 2001; Plehwe, Walpen and Neunhöffer 2006). The active development of such thinking and the spawning of other similarly active groups espousing the virtues of markets is a powerful illustration of active agency, which is discussed later in this chapter.

The 1970's economic downturn in many advanced industrialised economies resulted in reduced output and profitability and less tax receipts required to maintain a full and comprehensive welfare state. Capital recoiled at having to pay high levels of taxation in a time of economic recession. There was also a wider critique that there were insufficient investment opportunities for private enterprise in a social democratic interventionist economy (Lavelle, 2008). This pressure led to policies which increased investment opportunities for business that hitherto were state and municipally owned

(Harvey, 2003, 2005; Dumenil and Levy 2004). According to Keith Joseph, a key architect of neoliberalism in the UK, this change 'signified the reversal of the trend of collectivism towards a free-market political economy' (Cockett, 1994: 243).

Capitalism has taken on many different forms over time and space spanning social democratic and neoliberal. Irrespective of its form, capitalist social relations have persisted. Therefore there is some dispute over whether neoliberalism has marked a new and radical departure from previous eras or is simply an accelerated and intensified version of what had gone before. For instance it is noted that:

Neoliberal capitalism is by no means the first capitalist era, however. Capital has required global solutions for its proliferation and expansion for centuries, and while recent events have made its inherent contradictions all the more evident, the history of capitalism demonstrates that neoliberalism is but the most recent embodiment of a well-established cycle of movement and reconfiguration, investment and production, and scouring, destruction, and abandonment (Heynen and Robbins 2005: 5).

However, the dominance of this most recent embodiment has led to the hypothesis that we now live in 'the age of neoliberalism' (Saad-Filho and Johnston, 2005:1) albeit the very same commentators state that neoliberalism is not a straightforward and fixed concept. In as much as there is no 'clearly defined set of invariant features [of neoliberalism]...it is impossible to define neoliberalism purely theoretically' (Saad-Filho and Johnston 2005:1). If it cannot be clearly defined then it may be difficult to justify the assertion that the current epoch represents the age of neoliberalism. However, it can be said that neoliberalism does have some general features and the contention here is that some of those have penetrated the policy and legislative agenda of Scotland's WWS.

Diffuse understandings and points of emphasis exist amongst commentators seeking to define the meaning of neoliberalism. One central reading is that neoliberalism represents a de-politicisation of the state as 'economization of the social, materializing either through naturalization of economic processes or technocratization of their governance or both' (Madra and Adaman, 2014: 692). This infers the dominance of

economics over politics and the increasing tendency for technocratic governance over political governance. Such an interpretation of neoliberalism is consistent with the aims of the many influential organisations seeking to influence policy in the WWS sphere and resonates in the current provision and regulation of WWS in Scotland.

To what extent it fully explains neoliberalism is a point deserving of much more deliberation. Defining and/or concretising a definitive meaning of neoliberalism is apparently not something that preoccupies scholars and writers of neoliberalism. A study of 148 articles which mentioned neo-liberalism found not one of them succinctly defined neoliberalism (Boas and Gans-Morse, 2009). This is consistent with the analysis of Mirowski who wrote how there was much dispute and disagreement over its meaning when Wikipedia began a page on neoliberalism (2009).

A broad perception and understanding of neoliberalism, albeit not a precise definition, is associated with a marketised turn, and a rejection of collectivist principles, in the fields of politics and economics. As noted ideas feed policy and they in turn find expression in legislation. More often than not ideas that penetrate policy and then become legislation often mirror the contemporary dominant orthodoxy of neoliberalism. This is undoubtedly the case with the development of water policy by those dominant organisations chronicled in Chapter 2. That said, it should be noted that how international policy agenda setting penetrates national policy making is dependent on local conditions. It is clear that global processes and global policy networks seek to influence national politics and consciously target national policy makers as well as supranational institutions like the EU. However, the depth and breadth of their influence can be impacted by the local context.

Indeed, it could be said to be erroneous to suggest that neoliberalism is all pervasive and dominant in all spheres. The free market is not entirely functioning in an unrestrained fashion across all countries. In the UK for example there are very many institutions that could still be construed as collectivist and/or Social Democratic. The NHS, the education system, local government services etc., are free at the point of delivery and not subject to market rules in so far as you can only purchase health care or education if you have the financial wherewithal to do so.

Even if some forces wanted to introduce such marked transformation there is often local resistance. Such was the case Scotland following a proposal to privatise WWS in the early 1990's. The actions of the various campaigns, epitomised by the Strathclyde referendum, prevented the privatisation of WWS from happening. The point being made here is that while neoliberalism is an exceedingly strong current in policy making circles it is not entirely all powerful, particularly at national and local levels where its penetration is dependent on the aforementioned local conditions.

There is some justification in suggesting that neoliberalism is not a homogenous concept and that it is, and has been, applied differently in different times and places. As Perreault and Martin say, 'neoliberalism is best characterized not as a coherent end product but rather as a complex and contested set of process, comprised of diverse policies, practices and discourses' (2005: 194). Castree also notes:

Neoliberal ideas may well have 'gone global' from the mid-1980s, courtesy of the US and its influence on the World Bank and the IMF. But this has not resulted in a tidy process of downward and outward diffusion from neoliberalism's North Atlantic heartlands. Instead, there has been path dependency, contingent couplings, unplanned adaptations, organic mutations, and a good deal of social resistance to 'new liberal' policies. Varying combinations of coercion, consent, contestation, and compromise describe the spatio-temporal evolution of neoliberal projects in different parts of the world (2010: 13).

However, despite the 'different theoretical starting points and diverse desired outcomes there are enough fundamental principles amongst its proponents to sustain the harmony which does exist' (Mirowski, 2009: 418). Core elements of neoliberalism include minimising government with a simultaneous increase of privatisation, commercialisation and private involvement in the provision of public goods and services. As argued by Stiglitz when he described how the Washington Consensus, 'emphasised the downscaling of government, de-regulation and rapid liberalisation and privatisation' (Stiglitz, 2006:17).

Arguably then the neoliberal project is built around some fundamental characteristics which incorporate and necessitate a focus on the economic and a corresponding diminution of the political and state realms. For instance it is argued that neoliberalism results in an economic transformation from a political interventionist economy to a self-regulating market (Munck, 2005) and an expansion of market principles that has diminished state interventionism (Thorsen and Lie, 2007: 8-9). Ironically, this requires the state to legislate a reduced role for itself, which has happened to WWS Scotland, where politicians have legislated transference of power from themselves as elected representatives to unelected regulators. Thus, neoliberalism has also, arguably, marked a self-inflicted shift in power moving from the state to markets and technocratic, unelected governance.

Kotz and McDonough encapsulate the view of the state held by supporters of neoliberalism, 'as inherently an enemy of individual freedom and economic efficiency' (2008: 94). Seeking to weaken the role of the state is central objective of neoliberal adherents. When the role of the state has been reduced by adopting and applying neoliberal principles, it has led to an altering and re-shaping of the state and institutional relationships within the state. Clarke and Newman suggest:

Neoliberalism has attempted to bring about a decisive ideological – political – discursive shift that involves remaking a whole field of relationships (between economy and society; between economy and politics; between people and states and between nations and the global; for example) (2004a, 3).

There are some key macro-economic and fiscal policies required for this political transformation from the social democratic to the neoliberal state. Heffernan describes key characteristics of neoliberalism:

The willingness of government to maintain zero inflation and price stability; produce a balanced budget, remove restrictions on foreign investment, deregulate capital markets, cut corporation taxes, downsize state bureaucracy, privatise state owned industries and prioritise private sector consumption are

all policies reflecting the fact that policy-makers are now to some extent influenced by a post-collectivist neoliberalism (2000: 18).

There have been numerous influential and critical analyses of social and political consequences of this new take on classical liberal economics, known as neoliberalism (Bourdieu 1998a, 1998b; Bourdieu and Wacquant 2001; Brenner and Theodore 2002; Chomsky 1999; Dumenil and Levy 2004; George 1999; Klein 2007; Harvey 2003, 2005, 2010; Kotz 2002; McDonough, Reich, and Kotz 2010; Plehwe et al, 2006; Saad-Filho and Johnston 2005; Teeple and McBride 2010). Critics of neoliberalism tend to share broad concerns about the negative social consequences of re-shaping society along market lines.

As a political and economic organisational form neoliberalism necessitates an incessant drive for profits and new markets that arguably can, and does, lead to unfairness, inequity and de-democratisation. McChesney argues that the economic consequences of neoliberalism results in:

A massive increase in social and environmental inequality, a marked increase in severe deprivation for the poorest nations and peoples of the world an unstable global economy and an unprecedented bonanza for the wealthy (McChesney, 1999: 8).

A core characteristic of neoliberalism is a requirement for a system of markets and strong property rights to help organise the economy. It does, in this sense, represent a liberalisation of the economy, which helps facilitate sustained capital accumulation. Reflecting this view it is said:

Neoliberalism is perhaps most tellingly viewed as a sort of caricature of liberalism, where liberal concerns for individual liberty, political equality and human rights have been warped into a purely economic ideology whose concerns lie with the establishment of free markets and in keeping state intervention in such markets at bay. Neoliberalism thus understood is primarily

a theory of how the economy ought to be organized, and not a political ideology in the same sense as political liberalism (Thorsen and Lie, 2006: 15).

However, enabling profit maximisation and capital accumulation requires a political framework, and in recent years that has been underpinned by neoliberal philosophy. There is a critique of those who have 'written off the movement too quickly as a mere epiphenomenon of a certain type of economics' (Mirowski, 2009: 433). For neoliberalism to thrive the state is required to legislate and enable the necessary reforms, including the accompanying marketisation that comes from the aforementioned contraction of government and direct political control and involvement in a neoliberal state. David Harvey argues:

Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets and free trade. The role of the state is to create and preserve a framework appropriate to such practices (Harvey, 2005:2).

Across the world politicians and governments are increasingly seeing the marketisation of public goods and services as a standard and normal policy option. Such is the neoliberal influence in political thinking that states are seen to be actively seeking the creation of new markets. As Harvey writes, 'if markets do not exist (in areas such as land water, education, healthcare, social security or environmental pollution) then they must be created by state action if necessary' (Harvey, 2005:2). In practice this means that everything is ripe for commodification or as Kuttner writes *'Everything is Now for Sale'* (1997), this also includes natural resources such as water.

Successive UK and Scottish Governments have also introduced a steady stream of policies, which could be considered as fitting the neoliberal model. The privatisation of WWS in England and Wales and the corporatised Scottish model, which includes a prominent role for the private sector, are both clear examples of this trend. Hence, previous and current UK administrations, as well as devolved administrations, have

been active participants. The UK has led in the development of neoliberal policies, such as privatisation of utilities and some public services, which also necessitated new governance arrangements. As Scottish historian Neil Davidson has suggested:

The UK, along with the USA, was one of the first sites for the neoliberal experiment in socio-economic engineering. Indeed, one of the flagship policies of the second phase of neoliberalism, the Private Finance Initiative was launched in Scotland from 1995 with the construction and commercial operation of the Skye Road Bridge. As part of the British state, Scotland has experienced, and continues to experience, the effect of these policies to the same extent as the rest of the UK with only minor variations since the establishment of devolved Government in 1999 (Davidson, 2010: ix).

Despite this view others previously argued Scotland had escaped the worst ravages of neoliberalism. Some Scottish academics argued how social democracy was alive and well in Scotland. 'As England moved towards the combination of neoliberalism and social authoritarianism known as Thatcherism, Scotland appeared to be a bastion of social democracy' (Keating, 2007: 9).

McCrone suggested in 1992 'in the last three or four decades Scotland has moved steadily away from the ethos of market liberalism and the reductionist model of human nature which underpinned it' (1992; 144). Supporting his assertion was the electoral rejection of the Conservatives in Scotland, culminating in their 1997 wipe-out in the UK general election. However, they were replaced by the Government of Tony Blair and New Labour who, it is said, comfortably accommodated with the Thatcherite legacy of neoliberalism (Heffernan, 2000). Support for this assertion is provided through their presiding over and facilitating excessive profit maximization and capital accumulation and an increasing role for the private sector and private sector practices in the public sector. Indeed, as noted in Chapter 2, it was Labour administrations, in both Westminster and Holyrood, with help in Scotland from their Liberal Democrat coalition partners, who presided over the corporatisation of WWS.

Market Environmentalism: Neoliberal Nature?

The neoliberal conflation of politics and economics and the search for new markets and investment opportunities is epitomised by how the environment and nature are treated by those who seek to profit from its exploitation. The concept of market environmentalism reflects neoliberal ideas and dominates much contemporary environmental thinking within neoliberal policy circles. The neoliberal global economy relies profoundly on nature (as indeed we do as a species) to provide resources for economic growth and corresponding profit maximization and capital accumulation. As natural resources become scarcer it is unsurprising that nature becomes a key battleground in the clash of ideas about how best to organise access to, and control over, the resources nature provides.

A key justification for the neoliberalisation of nature, resulting in its commodification and marketisation, is the need to manage nature more efficiently, particularly in the context of climate change and ever increasing consumption. Neoliberal logic suggests that markets are the most effective managers in all spheres and nature is no different. Thus, it is argued that conserving nature and its finite resources would be best served by the utilisation of markets to help in their governance and operations.

Distrust in political regulation and public ownership, as noted in Chapter 2 in relation to, and a belief in, market mechanisms is a recurring feature of market environmentalist thought. Market environmentalist, Jonathan Adler argues, 'Resources that are privately owned or managed and, therefore, are in the marketplace are typically well-maintained...Resources that are un-owned or politically controlled, and therefore outside the market, are more apt to be inadequately managed' (Adler, 2001, 668).

Anderson and Leal suggest that private ownership is vital stating, 'At the heart of free market environmentalism is a system of well-specified property rights to natural resources' (Anderson and Leal, 2001: 4). Assessing these viewpoints against a context of environmental problems caused by increasing consumption, which is accentuated by a relentless desire for profit maximisation one could see how market environmentalism offers a compromise that suggests safeguarding nature and a high degree of

consumption can be achieved simultaneously. As Karen Bakker states, market environmentalism is a worldview that 'offers hope of a virtuous fusion of economic growth, efficiency and environmental conservation' (2010: 5).

Opponents characterise Market Environmentalism as a kind of green imperialism (Bakker 2004, 543), while others suggest that rather than being an environmental saviour it is the cause of environmental degradation (O'Connor 1996; Pratt and Montgomery 1997; Hudson 2001). This view suggests relentless profit maximization and capital accumulation is destined to failure, as this pursuit treats nature as an unlimited resource and how 'this is increasingly untenable' (O'Connor, 1994:5). O'Connor also suggests that the use of natural resources needed to maintain current patterns of consumption, and the ensuing contemporary environmental problems from that, arguably, 'represent not only a major economic crisis of supply but also a new crisis of legitimacy for the market system' (O'Connor, 1994:3).

The Sustainable Development policy agenda mirrors mainstream market environmentalism and has provided opportunities for those policy entrepreneurs sympathetic to policy solutions infused with ideas from market environmentalism. Sustainable Development, as formulated by a UN sponsored commission in 1987, sought to ensure 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland, 1987). Sustainability, according to Brundtland, necessitates paying heed to three pillars of development: environmental, social and economic.

Following the logic and principle of Sustainable Development, governments, corporations, regulators, policy-makers etc must consider, and take into account, each of the pillars equally when devising policy. However, in a world where many are so concerned with profit maximization and capital accumulation critics have suggested 'sustainability has come to imply sustainable profits as much as saving the earth ... because of its ability to minimise the tension between capitalist expansion and planetary survival, sustainable development discourse has become arguably the dominant global discourse of ecological concern' (Johnston, 2003: 8). Dryzek describes Sustainable Development as 'involving a rhetoric of reassurance. We can have it all:

economic growth, environmental conservatism, social justice; and not just for the moment, but in perpetuity' (1997: 132).

Relationships within society, and between society and nature, are undoubtedly shaped and conditioned by their material context. Heynen and Robbins note 'neoliberal capitalism drives the politics, economics and culture of the world system, providing the context and direction for how humans affect and interact with non-human nature and with one another' (2005: 5). Hence, 'Privatization has particular salience for understanding contemporary nature-society relations because property has become the central mode of regulating multiple forms of nature' (Mansfield, 2008: 1). The impact of neoliberalism on nature and the governance of nature has exercised the minds of many thinkers (for example Bakker, 2007; Castree, 2010; Heynen and Robbins 2005; McCarthy and Prudham, 2004) and has placed the questions of property rights, the commons, ethics and equitable access to nature at the top of the research agenda. According to Noel Castree:

In the 21st century society-nature relations seem to be marked by a new breadth, depth and consequentiality. By breadth simply I mean that few areas and aspects of nature today remain untouched by human hands; by depth I mean that many society-nature relations extend 'all the way down' even to the level of genetic modification; and by consequentiality I mean that what happens to nature today may be of world-changing importance, both for ourselves and other species (Castree, 2001: 1).

Castree also describes how mass deforestation, global warming, the collapse of commercial fisheries, chronic species extinction, transgenic 'organisms, a growing ozone 'hole,' and desertification' are other problems arising from human transformations of nature' (ibid). In short, he suggests that anthropocentric priorities and an instrumentalised appropriation of nature have resulted in nature being abused and degraded. As noted with water, there is opposing viewpoints over the most effective means for the management and sustainability of natural resources. When rules and governing processes are proposed to protect nature it is said that 'the creation of, these (often) complex regulations and institutions have become a site of contest between

ecological social movements and capital' (McCarthy and Prudham, 2004; McCarthy, 2005).

The famed Karl Polanyi foresaw that the commodification of social and environmental relations and an unfettered market system threatened social relations, environmental protection and sustainability (1944). This view resonates with some contemporary critiques of capitalism and its 'destructive tendencies' (Brand and Gorg 2001: 71), and how it engenders processes of 'accumulation by dispossession' (Harvey, 2003; Swyngedouw, 2005) and growing social and economic inequality (McCarthy, 2005). An obvious and central manifestation of the commodification of social relations is how various public goods and services are privatised. That is to say that control and ownership is transferred from public, and therefore collectively owned, to private ownership.

Privatisation, its various guises and its centrality to neoliberalism

Privatisation takes various forms and need not mean full divestiture (Armstrong, Armstrong and Connolly, 1997, Hall, le Motte and Davies, 2003). PPP's, for example, are not full privatisation but are seen by some as a form of privatisation and representing 'a transfer of ownership and/or control that changes the operational calculus of a service from 'public good' to 'private profit' (McDonald and Ruiters, 2005: 3). Water is no different and private sector participation has, according to Prasad, taken various guises over the past 15 years with 'privatisation increasingly re-packaged in different forms such as PPP's' (2006: 670).

Privatisation can therefore be interpreted as a 'generic expression for a range of private sector involvement in service delivery rather than a single state of being' (McDonald and Ruiters, 2005: 15). The OECD says 'privatisation may be considered any material transaction by which the states ultimate ownership of corporate entities is reduced' although they argue the transfer of assets, rather than activities, is the most meaningful expression of privatisation (OECD, 2009c: 5).

Reputational damage to privatisation as a concept and policy tool has undoubtedly occurred since the early days of neoliberalism. The problems with private supply of WWS have been seized upon by the counter/alternative movement. Controversy surrounding excessive profits, exclusion of citizens from the public good or service based on (in)ability to pay and a dilution of public and democratic accountability, control and ownership, amongst other factors, have resulted in privatisation being perceived negatively by many. It is perhaps for that reason that privatisation now takes on so many forms with the discourse around the concept changing. Hall et al argue describe how the terminology of privatisation has changed as the policy has become more politically contentious:

When privatisation became politically controversial, even in the UK, new terms were introduced. 'Public-private partnership', abbreviated as PPP, was created to present the same forms of involvement of the private sector as more a collaborative, technical exercise rather than an aggressive transformation of relations. A similar term, 'private sector participation' (PSP) has also been widely used, especially by the World Bank and others in the context of developing countries. In both cases, the term is not a legal or technically exact phrase, but rather a replacement for the old general Thatcherite use of the word 'privatisation' (Hall, le Motte and Davies, 2003: 2).

The UK beginning with the election of the Thatcher Conservative Government in 1979 is seen as a crucible of 'privatisation' which encouraged other countries to follow suit, albeit the privatisation programme never really got under way until the second Thatcher Government in 1983. As a result state owned enterprises reduced dramatically and they became privately owned instead (Megginson and Netter, 2001). Corresponding with the commentary on neoliberalism set out above, Whitfield suggests creating different forms of privatisation and marketisation 'is part of a broader restructuring of the state in the interests of capital' (2006: 3). He also suggests that 'marketisation is the process by which market forces are imposed in public services, which have traditionally been planned, delivered and financed by local and central government (ibid)'. This process has, according to Whitfield five key elements:

The commodification of services and infrastructure; the commodification of labour such as the reorganisation of work and jobs to maximise productivity and assist transfer to another employer; restructuring the state for competition and market mechanisms; restructuring democratic accountability and user involvement; and the embedding of business interests and promoting liberalisation internationally (Whitfield, 2006: 4)

Corresponding with some of the analysis above Bakker (2007) notes how privatisation, liberalisation and commercialisation of public goods and services require policies, laws, legislation, and regulations at a national and supranational level which enables its seamless transition into policy implementation. These necessary rules do not signify de-regulation or a reduced amount of rules, but rather a new set of rules. Hence there is often a re-regulatory, rather than de-regulatory, process, in so far as new rules, new agents and structures are created in order to manage the new system. Water privatisation, for example, and its accompanying re-regulation exposes the neoliberal myth that privatisation equates to full scale de-regulation. As noted by the preeminent scholar Erik Swyngedouw:

In the water sector, the state or other governing arrangements (from multilateral organizations like The World Bank, IMF, or the EU, to national, state or local governments) are centrally involved in “regulating” and “organizing” privatization and dispossession. They change laws, rules, and conventions and produce new legal and institutional frameworks that permit and “regulate” privatization, often imposing all manner of conditions that force privatization through (Swyngedouw, 2005:89).

Privatisation Watered Down: Corporatisation in Theory and Practice

Full privatisation, as noted in Chapter 2, is rare in WWS. Legislation enabling private activity does not often equate to full scale privatisation, often it means laws that instead facilitate the involvement of private providers within still state owned entities. The encroachment of the private sector in this way arguably epitomises the neoliberal penetration of contemporary policy making and within bodies charged with providing

public goods and services in so far as it sees the commercialising of public service activities and some loss of democratic oversight and accountability emerges as a result. The consequent governance arrangements involve, as will be discussed below, public services being separated from, although still answerable to, a public legislature or regulator.

These tendencies are increasingly commonplace in WWS across the globe and it is this type of hybrid public-private model that characterises the current operational and regulatory framework in Scotland's WWS sector. Rouse suggests it is 'common for countries and cities, in attempting to improve the performance of water services, to form public-owned water companies operating under private sector laws of corporate governance: so called corporatised public companies' (2009: 141). However in introducing corporatisation the distinction between public and private could be clouded while the public service ethos might also be eroded. As Aquafed, the private water operator lobbyist appears to recognise:

The differentiation between public and private is increasingly blurred. Public utilities compete against private companies and win public-private partnership contracts. Public-private joint ventures are common in many countries. Efficient public utilities are frequently managed in the same way as private companies (Aquafed, 2009a).

Corporatisation, similar to neoliberalism, has general features but cannot be categorised as a monolithic concept. How corporatisation is applied in practice is dependent on the wider ideological and political focus in the locale it is situated. A recent book (McDonald, 2014) discusses the application of corporatisation in different countries and settings. McDonald suggests corporatisation is increasing and that this has corresponded with a 'renewed government interest in public ownership' (McDonald, 2014: 1). However, what form of public ownership occurs from that interest is open to question.

Hall and Lobina argue that there are weak and strong forms of corporatisation. Weak corporatisation, they say, can be defined as the corporatised entity having little distance

between the organisation and the political process (2014: 188) and is often actively more concerned with social and environmental obligations. A strong corporatisation is deliberately more detached from the political process and is 'subject to private law and all aspects of corporate governance' (2014, 194). Perhaps resulting in strong corporatisation that replicates the practices of the private sector and undermining 'the public interest agenda' (2014: 195). This resonates with McDonald's assertion that 'corporatization has been used to create market friendly public sector cultures and ideologies' (2014, 2). It is this latter form of corporatisation that I will focus on when considering the Scottish context.

Nevertheless, whether the form of corporatisation reflects a weak or strong version, as described above, its central characteristic is how the utility/public service is owned by the state but also has a degree of autonomy from political processes. It is consistent therefore with the view that 'corporatisation means government is still involved but kept at arm's length: in effect 'staying in, but keeping out' (Smith, 2004: 376). According to Bakker corporatisation represents the 'conversion of the organisational structure of a resource management organisation from local government department to a publicly owned corporation' (2007: 435). Private water lobbyist Gerard Payen says a utility that 'has autonomous legal status and its own accounts...is often named 'corporatisation' since the public operator is organised as if it is a private corporation' (2008: 9).

Corporatisation also results in commercialisation. It is said that corporatised models aspire to be types of public organisation that 'represents the application of specific commercially-orientated management techniques to improve the efficacy of government business enterprises' (Jane and Dollery, 2006: 54). McKay describes 'corporatisation (as) the conversion of public-water utilities into commercially viable autonomous entities' (McKay, 2005: 43). Proponents argue that this mode of corporatisation in WWS can bring improvements in efficiency, service quality and lowers costs (Brudenell and Sandy 2000; Marin 2009; Lloyd-Owen, 2009).

Australia has been a locus for developing corporatisation particularly in WWS (Brudenell and Sandy, 2000; Chapman and Cuthbertson, 1996; Jane and Dollery, 2006; McKay 2005) but also in other areas such as ports (Everett 2002). An Australian White

Paper, published to accompany the legislative change to the water utility in Queensland, defined corporatisation as:

A structural reform process which changes the conditions under which government [owned enterprises] operate so that they are placed as far as practicable, on a commercial basis in a competitive environment while allowing the government, as owner, to continue to provide broad direction by setting key financial and non-financial performance targets and community service obligations (Queensland, 1992: 5).

A key requirement of the corporatised Australian utility, Sydney Water, was the adoption of a commercial orientation in areas such as operations management, service provision, investment and procurement. They were also obliged to pursue consumption based pricing, full cost recovery and the removal of cross-subsidies. Efficiency, service and financial management is said to be improving as a result. A product of these improvements in performance has been a steady return of profit year on year (Jane and Dollery, 2006: 60-63).

Corporatisation is also described as being 'partially driven by market rationalist economics ideology' (Brudenell and Sandy, 2000). In striving for market discipline corporatisation has certain core characteristics which mirror some of the policy proposals promoted by the likes of the GWP and WWC discussed in Chapter 2. For instance cost recovery is an intrinsic component of corporatisation (Smith, 2004), as is a board that has business and management experience (McKay, 2005; Christensen and Pallesen, 2001). Rouse writes of how corporatisation separates policy making and politics from delivery (in Castro and Heller, 2009: 141), meaning there should be no direct political involvement or interference in either operations or regulation. Many of the corporatised characteristics described in this section are intrinsic within the Scottish model. The following description from the World Bank embodies the Scottish system. They suggest how this type of public body, which separates politics from delivery, leads to the creation of:

An autonomous statutory body (which) offers opportunities for improvements in efficiency by (1) allowing bureaucratic administration to be replaced by

commercial management, (11) facilitating the introduction of clear financial and operational performance targets and cost accounting systems (World Bank, 2004: 7).

Critics of corporatisation believe that it often represents a neoliberal reform (Smith, 2004, Loftus, 2009, Magdahl 2012), which undermines social welfare aims and a public sector ethos (Doogan 1997; Smith 2004; Magdhal, 2012; McDonald and Ruiters 2005). It is noticeable how a strong form of corporatisation, along neo-liberal and market lines, is in tune with many of the policy agenda setters, discussed in Chapter 2, who argue for institutional change and the adoption of practices 'borrowed' from the private sector. As Smith contends, 'Corporatisation involves changing public institutional structures to incorporate private sector principles in the provision of services' (Smith, 2004: 380). Chapter 7 discusses how this has occurred in Scotland; while Chapter 7 and 8 show how there has been a marked increase of private sector companies involved in the provision of services.

However, corporatisation also results in private involvement as well as the adoption of their practices. Australia, has seen public investment complemented by 'private sector investment and expertise' (McKay, 2005: 46). Conversely, it is felt that the commercial focus of corporatised organisations results in a disproportionate focus on the 'importance of costs of services rather than the social benefits' (Laws, 1998). There are concerns that the adoption of a corporatised ethos and structure has potential to negate universal provision and marginalise social and environmental objectives, as seen in the well documented case of South Africa (Bond and Dugard 2008; Bond 2006; McDonald and Smith, 2004; McDonald and Ruiters 2005; McInnes 2005; Ruiters, 2007; Smith 2004 and Smith and Hanson, 2003).

These commentators were concerned that the corporatised model of WWS delivery in South Africa prioritised cost recovery and commercialisation, which led to pre-paid metering and private provision. These private sector principles and strict market discipline curtailed the equal allocation of WWS and availability to the poor, which saw disconnections and water related disease increasing. From 1994 to 2001 ten million South Africans were disconnected due to their inability to pay for WWS within a cost

recovery system (Ruiters, 2007: 492). Disconnections of those unable to pay quickly followed, with one commentator observing that the 'effects of corporatisation can be just as negative as privatization for low-income households' (Smith, 2004: 390), with 'periodic deprivations of water' (Ruiters, 2006: 500-501).

There are also concerns that corporatisation is used as a first step towards full privatisation (Christensen and Pallesen 2001: 292) or that it creates the conditions for further privatisation or marketisation (Whitfield, 2006: 10) through commercialising a service which results in further private sector investment (Smith 2004; Lloyd Owen 2009). From a more pro-business perspective corporatisation is seen by some as not going far enough and does not provide sufficient commercial freedoms. Their critique is fuelled by concerns that ministerial (political) interference can still occur within a corporatised framework (Everett, 2002).

As noted in Chapter 3 new data on the strategies and policy preferences of key stakeholders in Scotland's WWS reveals how some stakeholders in Scotland see the current corporatised framework as a base from which the current ownership status can be changed further still. This again alerts us to the importance of conceptually teasing out the nature of the new governance arrangements and considering more normative or philosophical questions about what this means for our understanding of 'public'. It also raises questions about how ideas about the redefinition of public services have entered and gripped policy *discourses and practices* over the last few decades. The notion and concept of 'publicness' will be briefly discussed below, as will the redefining of public services and how this has impacted on governance and regulatory practices and processes.

New modes of Governance: Taking the Politics Out of Policy?

The advent of different forms of privatisation and corporatisation, within the neoliberal framework, has resulted in governmental re-organisation and the role of the state changing. This change represents a shift from government to governance. Kooiman argues that changed and new modes of governance occur as society changes:

The essence is that governance of and in modern societies is a mix of all kinds of governing efforts by all manner of socio-political actors, public as well as private; occurring between them at different levels, in different governance modes and orders. These mixes are societal responses to persistent and changing governing demands, set against ever growing social diversity, dynamics and complexity (Kooiman, 2003: 3).

Kooiman also argues that governance 'requires approaches involving previously uninvolved partners. Looking not only at the market as seems to have been an almost universal response in recent years, but also looking at civil society actors as serious governing partners' (Kooiman, 2003: 3). He also states that 'pragmatic principles such as openness to difference, a willingness to communicate and a willingness to learn are important criteria in coping with societal diversity, dynamics and complexity' (Kooiman, 2003: 7). Finger, Tamiotti and Allouche touch upon the changing dynamics of governance as it:

Allows one to reconceptualise the changing role and function of politics; as such governance defines a function i.e the function of collectively solving societal problems – as opposed to government (local, national and to a limited extent international), which defines a structure (2006: 1).

Jessop observes that actually the meaning of governance is often 'diverse and contrary' (Jessop, 1998: 29), but that there are some general meanings of governance that can be established. He suggests:

Governance is defined as the reflexive self-organisation of independent actors involved in complex relations of reciprocal interdependence, with such self-organisation being based on continuing dialogue and resource sharing to develop mutually beneficial joint projects and to manage the contradictions and dilemmas inevitably involved in such situations (2002: 142).

The increased prevalence of governance, which necessarily involves non-nation state actors, has, as noted, been described as 'the hollowing out of the state' (Rhodes, 1994,

1996, Jessop, 1997, 573). However, it is clear from this meaning it can and does also mean a loss of power to other institutions, as well as to non-governmental bodies. Rhodes suggests the hollowing out of the state means a 'loss of functions upwards to the EU, downwards to special purpose bodies and outwards to agencies' (1997: 17).

Jessop further describes three related trends. Firstly the 'denationalization of the state', which sees old and new state apparatus 'reorganised territorially and functionally on sub-national, supranational levels.....and a continuing movement of state power, upwards, downwards and sideways' (1997: 573-574). Secondly, Jessop describes a trend of 'destatization' of the political system'. In tandem with the change from government to governance this recognises the movement 'from the central role of official state apparatus in securing state sponsored economic and social projects and political hegemony towards an emphasis on partnerships between governmental, para-governmental and non-governmental organisations in which the state apparatus is often the first among equals' (1997: 574-575). This model represents to some extent the principles of IWRM and the regulatory framework of the Scottish water industry.

Thirdly, Jessop describes the internationalization of policy regimes. Discussed below, this relates to the 'widening range of extra-territorial or transnational factors and processes' which are impacting on and influencing domestic policy and which are increasingly the source of 'policy ideas, policy design and implementation' (1997: 575). This description resembles the work of the various actor's discussed in Chapter 2 and their individual and collective (as networks) role as policy agenda-setters at a global level with those ideas filtering down to local and domestic policy settings. Despite his articulation of the restructuring and redefining of the state Jessop nevertheless argues that the state has a key role in governance, or meta-governance (Jessop, 2002) in that the state coordinates 'different forms of governance and ensures a minimal coherence amongst them' (Jessop, 1997:576). In other words the state, while diminished, remains a key enabler of any change and a stabiliser of new governance frameworks that are created.

Mirowski offers a vivid description (encapsulating much of what has been discussed in this chapter) of the changes in governance arising from the state adopting neoliberal

policies, for example, how the state must reshape state roles and responsibilities after selling off hitherto publicly, or state owned goods and services. Moreover that this can, and does, lead to an expert led regulatory culture that is technocratic, depoliticised (in the sense it is separated from the state) and arguably anti-democratic:

A primary ambition of the neoliberal project is to redefine the shape and functions of the state, not to destroy it...hence, they are inclined to explore new formats of techno-managerial governance that protect their ideal market from what they perceive as unwarranted political interference. Considerable efforts have been developed to disguise or otherwise condone in rhetoric and practice the importance of the strong state that neoliberals endorse in theory. One implication is that democracy, ambivalently endorsed as the appropriate state framework for an ideal market, must in any case be kept relatively impotent, so that citizen initiatives rarely change much of anything (“constrained” democracy instead of the allegedly existing “unconstrained democracy”). Hence, the neoliberals seek to restructure the state with numerous audit devices (under the sign of “accountability”) or better yet, convert state services to be provided on a contractual basis. One should not confuse marketization of government functions with shrinking the state, however: if anything, bureaucracies become more unwieldy under neoliberal regimes. In practice, “deregulation” cashes out as “re-regulation,” only under a different set of ukases (Mirowski, 2009; 436).

From this account neoliberalism has redefined the shape and functions of the state insofar as curtailing the ability of the state to intervene while enhancing the power of the markets and the agents who mediate relations between the market and state. In re-regulating rather than de-regulating, the state creates new laws that result in its role being minimised in the micro-management of public goods and services. In so doing public or political involvement is excluded and/or minimised with new governing agents, often regulators, managing those rules instead.

This viewpoint challenges the much vaunted view that privatisation results in de-regulation. Also, rather than the state disappearing, for example in water provision after privatisation, its role has been ‘recast rather than reduced’ (Maloney, 2001:625-626).

Robert Nozic suggests market regulation 'sole purpose is to enforce agreed upon rules and laws for engagement within a broad context of free markets, free associations and free individuals' (1974: 15). This enforcement of agreed rules negates traditional forms of accountability and sees power transferred to regulators and indeed to private interests such as corporations. Often these rules are made by unelected and therefore unaccountable organisations which can, and arguably do, act on behalf of private interests rather than the broad citizenry or wider public interest.

From the discussion above, there is little doubt that a recasting of the state role has occurred and that within that change there is a strong inference that unequal power relations and a growing democratic deficit are key consequences. Moreover, that the character of neoliberalism necessitates the ceding of democratic control to markets and corporations, excluding people, communities and wider society from participating in decisions relevant to their lives, as citizen, consumer, or worker. The consequence is that decisions can and are made, not on wider notions of environmental and social responsibility, but arguably on a narrower set of economic concerns.

Governing and Regulating the Reshaped State

Key agents have emerged as part of the new structures of governance. These governing agents/mediators are appointed, and coordinated by, the state, in its meta-governance capacity (Jessop 2002). There are layers of 'mediators' or unelected bodies, often known as Non Departmental Public Bodies (NDPB's) or quangos (Rosie, 2002: 124), that are charged with governing key areas of society. NDPBs and quangos are a manifestation of a re-cast state under neoliberalism. In the UK the amount of unelected bodies wielding regulatory and governing powers has grown markedly over recent decades (Vibert, 2007:18). Flinders defines these organisations as 'any body that spends public money to fulfil a public task but with some degree of autonomy from elected representatives' (1999:4). Alex Neil, now an SNP Scottish Government Minister, expressed concern at the role and prevalence of quango's in Scotland:

We have got to get to grips with these bodies, they are an extension of executive government and as such they are very important. They decide priorities. They set agendas and together they spend almost £9billion of tax-payers money.

Distributed by people who are unelected but virtually unaccountable¹⁸ (in Rosie, 2002: 128-129).

Frank Vibert argues that such governing organisations bring much needed expertise to governance (2007). Marquand suggests quango's are necessary but recognises that they also prompt concerns about democratic accountability, transparency and participation (in Flinders and Smith 1999 vii). Flinders argues 'from a managerial perspective a semi-independent (expert) body does offer positive benefits, which allows the introduction of private sector management techniques and focused policy-making resulting in increased efficiency and value for money' (1999:9). However this involves a trade off to the 'detriment of democratic principles such as legitimacy and accountability' (ibid). Weir and Hall noted 'this hastily erected apparatus of appointive government lacks the essential democratic underpinnings of scrutiny, openness and accountability' (1995: 143).

Flinders also states that 'the creation of a quango is a convenient way for ministers to delegate a political hot potato' (1999: 9). Official agents, who are out-with democratic norms, who actively set policy agenda's with new ideas, are undoubtedly useful for governments who may wish to test new ideas whilst minimising the political risk to them from potentially contentious (proposed) policies. This is very relevant to the empirical data, from Scotland that will be presented throughout this thesis, particularly given the prominent role now played by regulators in Scotland and the active agency they have shown when carrying out their duties. That said elite governance networks are themselves highly sensitive to scrutiny and publicity, which poses considerable practical challenges for the researcher, including this one when gathering data during my fieldwork. These are themes that will be addressed in the following methods chapter and expanded in the detail of the empirical chapters.

Democratic accountability becomes problematic with the increase role in governance by quangos. According to Erik Swyngedouw:

¹⁸ Some years later Mr Neil would become a Scottish Government Minister in various roles, including at one stage having responsibility for the water industry. Mr Neil therefore worked with and had responsibility for, unelected regulators and other so called quangos involved in the regulation and governance of WWS in Scotland. The Government he has been part off has made no attempts at reducing the role of so-called quango's

The host of new institutional or regulatory bodies that have been set up (in the UK appropriately called Quangos for quasi-NGO's) that have considerable decision-making powers but operate in a shady political arena with little accountability and only limited forms of democratic control (Swyngedouw, 2005: 91).

Conversely, Vibert argues that the growth of the unelected in key areas of decision-making is a positive development as they bring a level of expertise that politicians do not have. Vibert explains how 'The rise of the unelected is spread across the democratic world' precisely because:

They untangle key conflicts of interest for society, resolve disputes over the allocation of resources and even make ethical judgements in some of the most sensitive areas. By contrast our elected politicians often seem ill-equipped to deal with the complexities of public policy, lightweight in the knowledge that they bring to bear, masters not of substance but of spin and presentation (Vibert, 2007:1).

Vibert is arguing that this shift from government to governance and the consequent re-shaping of society is required to cope with the more complex demands of contemporary society, as governments and other political institutions do not have the expertise to solve complex problems on their own. Others concerned with the effective governance of water resources concur: 'governance – as opposed to government – defines the phenomenon of societal problems (in our case water) appearing to be too interlinked, too complex, but also too overwhelming for any single nation-state to address them alone' (Finger, Tamiotti and Allouche, 2006: 1). Globally, networks, such as epistemic communities, are said to act as technocratic governing agents assisting in solving problems of a transnational nature and which national polities and politicians on their own do not have the necessary knowledge to help solve. Epistemic communities are discussed in more detail below.

A significant class of new governing agents are regulators. Previously, public goods were regulated by governments and municipalities but post-

privatisation/corporatisation regulators are entrusted and empowered to regulate public policy goals and ensure their effective delivery (Beesley 1997; Beesley and Littlechild 1997a; Majone, 1996; Baldwin and Cave, 1999; Parker 1999, 2012; Owen, 2006; Vickers and Yarrow, 1988). Regulation of privatised public goods and services is undoubtedly a central component of neoliberalism and a concrete expression of the reshaping of the state-society relationship (Larner, 2000, Clarke, 2004c; Overbeek and Van Der Pijl 2002). However, as noted such changes to governance result in concerns over democratic accountability.

Regulatory responsibilities can include social, environmental and economic elements (mirroring the Sustainable Development agenda). However, there is some concern that economic regulation can trump and overshadow other regulatory priorities such as environmental concerns. This is, as will be discussed in Chapter 6, a concern that some have expressed in relation to the regulation of Scotland's WWS. There is broad debate amongst regulatory academics over just what the role of economic regulators should be and if they should take into consideration other factors other than those that are strictly economic (Owen 2006). Parker suggests regulators should take into account social and environmental issues. Others disagree, the free market think tank, the Adam Smith Institute for example critiqued government interference in regulation (Boyfield and Ambler, 2005:24).

Consistent with the many of the organisation's discussed in Chapter 2 and in tune with theories of strong corporatised public goods and services, Sir Ian Byatt, ex WICS Chairman, has expressed his concern that regulators often have to endure ministerial interference:

That developments in regulation since 1997 have created the scope for much more detailed ministerial involvement in what are now privatised industries than was feasible for the nationalised industries...and that this trend has jeopardised the hard won advantages associated with privatisation (in Boyfield and Ambler, 2005: 28).

Regulation is often perceived as having a mere technocratic role. However, the interpretation of regulatory responsibility and the subsequent regulatory practice can be inherently political with technical decisions influenced by political worldviews. On

this reading regulators' can develop and guide policy in a way that arguably goes beyond simply protecting consumer interests and sticking rigidly to their statutory remit. By interpreting their role in a way that goes beyond their specified responsibilities and which interprets their statutory role in a particular way, regulators could be seen as setting agendas in a way that reflects their ideological standpoint as much as it does the customer interest. As will be noted in the empirical chapters this is salient in relation to the economic regulation of WWS in Scotland. Indeed, one influential commentator used the example of the economic regulators of the Scottish water sector as illustrative of agenda setting and purposeful regulation:

The work of the WICS indicates, once again, the significance of pro-active regulation in the evolution of competitive markets and their institutional frameworks. The initial steps may be modest, but, as Sir Ian Byatt and Alan Sutherland have emphasised, they are part of a "*journey*" of discovery. Moreover, legislative frameworks are virtually always specified in relatively broad terms, so that a purposeful regulator has the discretion, over time, to develop policy in ways that reflect 'new learning' (Yarrow et al, 2008: 50).

The purely technocratic role of regulation, as opposed to its purposeful nature, is often stressed by regulatory academics. Moreover it's the technocratic function that's focused upon rather than regulators understanding of their wider social purpose or political mission. Parker summarises the core functions of regulation as:

- Setting Minimum prices to benefit the consumer
- Ensuring Adequate profits are earned to finance the proper investment needs of the industry (earn at least a normal rate of return on capital employed)
- Providing an environment conducive for new firms to enter the industry and expand competition (police anti-competitive behaviour by the dominant supplier)
- Preserving the quality of service (ensure higher profitability is not achieved by cutting services to reduce costs)
- Identifying those bits of the business are naturally monopolistic

- Taking into consideration social and environmental issues (e.g when removing cross-subsidisation of services) (Parker, 1999: 218-219).

In this analysis the technical role of the regulator is to protect corporate, as well as consumer, interests. In that context there are concerns regulatory capture can occur, in so much as the interests pursued by the regulator may well correspond with those other interests/companies/utilities they are charged with regulating (Levine and Forrence, 1990). In England water regulation has allowed 'adequate' profits to be made by the plethora of private companies now providing Water and Wastewater Services.

The economic regulator, the Director General for Water Services, is charged with regulating WWS in England after the privatisation of the industry there. However, the legislation that enabled privatisation, the UK Water Industry Act, enshrines that 'companies holding appointments under Chapter I of Part II of this Act as relevant undertakers are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of the functions of such undertakers' (Water Industry Act 1991, 1, (2) 2 (2) (b)). As Hall and Lobina remarked 'OFWAT is statutorily responsible for ensuring that the companies were profitable, a task which it performed very well' (2001:5).

OFWAT and the English regulatory model are of key interest to the Scottish model in that Scotland's economic regulation closely resembles English regulation of WWS. However, the role of the economic regulator in Scotland, the WICS, is one that required some institutional flexibility and creativity as Scotland operated a hybrid water sector which was notionally in the public sector, but which is characterised by a private sector ethos and overseen by a regulator with strongly pro-business instincts. This public-private hybrid has meant that the Scottish water sector bears many of the hallmarks of corporatisation rather than either a fully public model or indeed the full privatisation of England. What corporatisation means for the 'public' ethos, 'public' role and 'public' involvement in Scotland's WWS, and indeed anywhere else, is a point worthy of further consideration.

Publicness

Corporatisation and other new forms of public service delivery, created against the backdrop of the neoliberal re-shaping of society, have provoked questions over the nature of publicness and how 'public' corporatised and marketised public services actually are. In some ways the publicness of a corporatised (but still public) water utility is dependent on whether it applies strong or weak corporatisation as conceptualised by Hall and Lobina (2014).

The question of 'publicness' has also been discussed by thinkers under the rubric of New Public Management (NPM) and Public Administration theory (Hacque, 2001 Moulton 2009; Pesch 2008) and debates on consumerism versus citizenship (Clarke, 2004a; Clarke 2004b; Clarke and Newman 2005; Clarke and Newman 2006; Fountain 2001). These discussions take place in the context of the erosion of the distinction between public and private institutions (Hacque, 2001) and the increasing blurring of the lines between public and private sectors, 'especially caused by the emergence of quasi-government state enterprises' (Emmert and Crow, 1988 In Hacque, 2001: 66).

Governance of public bodies by actors with little or no public accountability and who apply the practices of the private sector provokes debate over whether such bodies are meaningfully public at all and indeed more generally over what constitutes publicness. However there is some conceptual ambiguity over what is meant by 'publicness'. Pesch suggests 'there is a crisis of identity in public administration theory because of the lack of a consistent conceptual framework' and that this identity crisis becomes especially apparent in relation to the concept of 'publicness' (2008 170).

Hacque argues a crucial determinant of the publicness of public service is 'the nature of the role it plays in society – its broader and more intensive role represents its wider societal impacts, and thus, greater publicness, whereas its narrower and weaker role implies its limited social impacts and thus lesser publicness' (2001: 66). Central elements contributing to the publicness of a public service are said to include 'the extent of its distinction from the private sector; the scope and composition of its service

recipients; the magnitude and intensity of its socio-economic role; the degree of its public accountability and the level of its public trust' (Hacque, 2001: 67).

Applying this criterion it can be concluded that WWS is very much a fundamental public good and service, not least given its centrality in assisting social and economic cohesion. In many ways this appreciation of the status of WWS explains why undermining the public nature of water ownership, access and delivery is so politically sensitive and socially contentious. A WWS utility responsive to the public interest, arguably, should be concerned with fulfilling social and environmental obligations, is democratised, encourages wide, not narrow, public participation, will express international solidarity and offer assistance to less developed countries, will be a good and fair employer, will reinvest any surpluses and have social tariffs which lead to lower prices. Hall and Lobina offer examples of public utilities that have applied these principles in practice (2014: 190-194).

These core characteristics of publicness have been squeezed by public service reforms that 'have used private sector values and languages, instilled business management culture and eroded public sector ethics' (Hacque, 2001: 67). Underpinning this approach is a belief in the state taking a minimal approach where they outsource governance, and often operations, to external actors. This is encapsulated in NPM where it is said that the government should be 'steering instead of rowing' (Osborne & Gaebler, 1992: 25). This is worldview consistent with the notion of minimal government and a reshaped and re-regulated state.

Ideas around publicness are wrapped around serving the public interest. Some suggest that private companies are 'public' as when serving the public, by whatever means, it is said they are meeting the public interest. However, there is a distinction to be drawn between delivering a service to the public (where the main beneficiary could indeed be the service provider rather than the service users) and serving the public interest (Moulton 2009). Questions persist therefore over what then is the public interest. Is it simply the providing of public goods and services to individuals, or, is it about actively promoting collective interests (Schubert, 1960: Pesch, 2005)?

As important as these questions are, defining the public interest in the abstract is beyond the scope of this thesis. My intention is to try to develop a framework for assessing what might be in the public interest in the concrete case of Scotland's WWS. The empirical chapters that follow will bring together evidence and data on governance, performance and delivery which raise far-reaching questions about how the public interest is defined by policy makers and service providers. This allows for an informed assessment of whether and how the public interest in Scotland is being served by the contemporary re-organisation of water services in Scotland. This in turn also enables an evaluation of the nature of publicness via public involvement, either directly or by their political representatives, in Scotland's WWS.

The change in how the public interest is understood is partially explained by the way in which the users of public services are perceived, particularly given the increasing perception of them as consumers rather than citizens. As consumers it is expected they should be able to consume their public services in much the same way as they consume other products. Thus, accessing public services is increasingly normalised as a monetary exchange rather than a social or political relationship. A key manifestation of this trend is in promoting choice and increased personalisation in public services. It is said that choice is a proxy for competition and that 'choice is the human face of competition policy legitimising the expansion of market and quasi market dynamics in public services' (Clarke and Newman, 2006: 13).

The question of publicness is particularly relevant when considering the governance, regulation and operational delivery of WWS in Scotland, including: the decoupling of democratic accountability; the separation of policy and politics from delivery; the increasing role and power of unelected regulators; the application of private sector practices; the increase of private sector agents in the delivery of WWS and the increased perception of users of water as consumers not citizens. Moreover the weak and tenuous ways in which the public can contribute to, and actually know of, Scottish Water operations and priorities and how they come to decide what those are, all question the 'public' nature of the current model. The application of this model is a central theme that occupies the rest of this thesis. Before discussing the practicalities of this transformation it is worth outlining in a little more detail how such processes can be

conceptualised. To understand how such change is accomplished we need to consider briefly some aspects of the structure-agency debate, and relate these to how ideas are generated and translated into policy (see Miller & Dinan 2008, 2015)

Structure, Agency and Policy Activism: Making Ideas Real

Neoliberalism has transformed states and societies. However, as suggested by discussions over the conscious and active agency displayed by numerous active policy agenda setters around the world, including in Scotland, it is clear that reforms and policies do not occur by themselves, or via a ghost in the machine. It is obviously apparent that human agency is needed to begin to adequately explain the changes that have been outlined above; in that, 'agents are embedded in structures that make their actions possible' (Sells, 2003: 7). This is true in all spheres including policy making.

It is within existing structures that agency is exercised, and is the context within which agents plan, strategize, and act. One result is that agents can create or change institutions, thus leading to new structures, which can reproduce or change the context, power and opportunity structures within which agents operate. One goal is presumably for agents to try to make structures and new agents that are most conducive to their interests. Structures are influenced and created by agents and it is the deliberate actions, or agency, of people and groups, or agents, that creates and changes structures and, with their construction, new agents are also created. Sells describes this as structured agency and suggests 'Institutions mediate between structures and agents in two directions. Structures alter institutions, and create new agents. In turn, agents alter institutions and create new agents' (Sells, 2003: 7).

For example, Sells describes how it was processes of neoliberalism, which de-regulated the financial markets and changed the power dynamic between business and the state (Sells, 2003: 18-19); in that the power of the state was diluted and the power of the capital markets grew. She describes how key agents within the capital markets have a leading and influential role in policy making in the policy area of finance and business.

In this conceptual account structures are very much influenced by agents and vice versa. In other words social phenomena and outcomes can only be explained by the interplay between both structure and agency with neither dominant over the other. This was not always so with some favouring the explanatory merits of either structure or agency (Archer, 1982). Margaret Archer explained in 1982 how:

Two new perspectives have since begun to emerge which directly tackle the relationship between structure and action and seek to unite them. One is the 'morphogenetic approach'...the second perspective is 'structuration', recently spelt out by Anthony Giddens...both the 'morphogenetic' and 'structuration' approaches concur that action and structure presuppose one and another: structural patterning is inextricably grounded in practical interaction. Simultaneously both acknowledge that social practice is ineluctably shaped by the unacknowledged conditions of action and generates unintended consequences which form the context of subsequent interactions (Archer, 1982: 456).

Archer developed her morphogenetic approach over the course of numerous books and articles. A thorough yet succinct exposition of Archer's 'morphogenetic' approach is provided by Francois Depelteau (2008), who explained how Archer conceptualises social action over time (T) into a number of stages or steps: structural conditioning (T¹), sociocultural inter(-)action (T²- T³) and structural elaboration or structural reproduction (T⁴) :

This "morphogenetic" cycle is based on the following sequence. First, there are some "emergent properties" (T¹). They are "structural" and "cultural" and they come from the past. Thus, when they inter-act (T²- T³), actors have to deal with both constraining and enabling structures. These structures create different life chances, costs, opportunities, etc. related to pre-existing distributions, roles, institutions, systems, cultural products, and so on. Through their involuntary placements into a pre-existing social order, actors are not free but are not simply determined by the past and its social structure and culture. On the basis of their own vested interests, reflexivity and other emergent properties, actors can

change the order of things. This is why “T⁴” is not always a “structural reproduction” (“morphostasis”) but can also be a “structural elaboration” (“morphogenesis”). (57)

This model seeks to explain in particular how social change can take place, and recognises that while we exist in a particular historical moment, we can act or exert agency, to change the conditions for action (or structures) that will shape future action. Archer is also alive to the fact that different social groups or collective actors have differentiated power to shape structures and realise agency:

Therefore, two types of actors exist in the social universe. The actions of “primary actors” reproduce the pre-existing structures. This means “they can play no part in the strategic guidance of society because they literally have no say” (Archer 2000a:268). They are embedded into the daily reproduction of the social order; “their influence is that of uncoordinated co-action of those similarly placed, rather than co-ordinated interaction of promotive interest groups with clearly defined goals” (Archer 2000a: 268). But action is not restricted to reproduction. Actors may also realize their full potential as “corporate actors” when they are not confined to the “Me”; when, as collective actors, they “become part of an active ‘We’, which seeks strategically to transform this structure in order to make it a better place within which to live (Archer 2000a:268–69) (Depelteau, 2008: 58).

Archer’s morphogenetic approach, as explained here, resonates with what is being presented in this thesis. In the global WWS sector conscious collective agents (promotive interest groups in Archers terminology) are at play but they are at work within pre-existing and continually evolving and changing structures. Global structures currently exist but within them active agents, cognisant of their own wishes and place in the world, are promoting change that is beneficial to their own interests and needs. There are the social movements from above, as represented by the dominant networks discussed in Chapter 2, as well as social movements from below offering an alternative vision. These movements are engaged in a definitional and political struggle over how water should be conceived and governed. They are trying to shape policy as well as the

conditions for future action. This reality also highlights the importance of power and political strategy. At a national level collective action by a concentrated and large proportion of the Scottish people prevented privatisation in 1994, while as noted above other movements in countries across the world have either ousted or prevented privatisations of their WWS through their collective action.

However more recent developments in Scotland's WWS also correspond with the morphogenetic model. Since the overwhelming public rejection of privatisation in 1994 there has been active engagement and policy work by regulators, civil servants and advisers inside government as well as corporate bodies, think tanks and the media outside government to revisit governance structures. Regulators, in particular, have been given power to shape WWS within the evolving structures and have helped set the policy agenda. Simultaneously, the vast majority of Scot's have had their ability to shape the future of WWS taken from them. In essence they have been politically and practically excluded from reproducing or changing these structures. That said there are others who either lack the consciousness and/or wherewithal to challenge the pre-existing order. Only some have cultivated that awareness, described by C. Wright Mills, as a sociological imagination, necessary to connect social change at a particular historical moment to agency.

More broadly, agents actively seek to influence structures at various levels of governance. Sometimes referred to as lobbying, this vigorous engagement with governments and policy-making institutions at both local and national level by agents attempting to influence policy outcomes is seen as legitimate activity in a democracy. Considering lobbying in polities dominated by neoliberal thinking and by using a morphogenetic approach, it could be suggested that a general societal acceptance of capitalism by primary agents and the activity of promotive corporate actors (such as the Scottish CBI in Scotland) to entrench the dominant mode of organisation of economic and social life helps explain how business groups enjoy a political influence, which arguably outweighs the political influence of other groups. With this understanding of corporate lobbying as an exemplar of structured agency one can recognise the account from Colin Leys of the rise of market-driven politics:

The power of market forces, whether affecting macro-economic policy generally through the financial markets, or micro-economic policy through pressure from Trans National Corporation's (TNC's) and their home governments, has greatly increased and the autonomy of most states except perhaps the USA or oil rich states like Saudi Arabia, has greatly declined. National policy making is now pervasively influenced by this new circumstance (2003: 25).

This argument hints at global structures influencing national structures, but without outlining the role of active agency in achieving the successful transposition of global ideas and policies into national spheres. At the global level, policy thinking in WWS is influenced by key agents representing the interests of water TNCs and private capital more generally. The policy ideas and conscious and deliberate activism of the likes of the GWP, the WWC the EWP, OECD, Aquafed, some UN agencies, IFI's such as the World Bank etc as described in Chapter 2, has played a significant agenda setting role, for instance in advocating the changing of governance and operational models of WWS delivery to solve the various water crises. The implementation of these ideas over the last decade or so is leading to the creation of new institutions and regulatory regimes, IE, new structures, which mediate our manifold relationships with water.

Using Jessop's theory of internationalization of policy regimes (1997), it can be suggested that those acting at a global level influence national arenas and national agents, an outcome which has, arguably, occurred in Scotland. Taking on ideas around policy transfer it could be expected that local agents would seek answers to policy challenges that from policy proposals readily available from international policy networks, particularly if the worldview of both correspond and are consistent with each other. In Scotland, some of the activities of the economic regulator and others in reforming Scotland's WWS can be understood in such a way.

Supplementing this view is the notion that neoliberalism is the 'Outcome of a consciously pursued strategy, the political project of a transnational capital class and formed on the basis of an institutional structure set up to serve and advance the interests of this class' (Petras and Veltmeyer, 2003:11-12). The assertion is that agents (in this case peak business associations, policy planning groups and the CEOs of leading

TNCs), actively and strategically promote neoliberal ideas in assorted policy spheres, which arguably, serve particular class-wide interests, that is, the class who own and control business and capital. According to Sklair, neoliberal globalisation is 'driven by identifiable actors working through institutions they own or control' (Sklair, 2000: 1). Sklair also suggests:

Globalisation, like its main driving force, capitalism on a world scale, does not just happen. It is thought out, organised, managed, promoted and defended against its opponents by identifiable groups of people working in identifiable organisations. These make up the Transnational Capitalist Class (Sklair, 2000: X).

Sklair asserts that this emergent transnational capitalist class is 'more or less in control of the processes of globalization' (2000: 5). Retaining and sustaining control undoubtedly necessitates a perpetual redefining, renewing and developing original and novel ideas that legitimise and normalise their control. These ideas devised and promoted, using a morphogenetic approach within the parameters of the current political and economic orthodoxy, are undoubtedly a vital cog in the current neoliberal machine: particularly in the continual fight to gain and retain ownership and control of public goods and services.

The Production of Ideas and the Shaping of Policy

The formulation of ideas to sustain or change policy or to legitimate ideologies and worldviews is of vital importance when perpetually redefining and renewing. It has long been asserted that the ideas devised which gain most prominence often match the dominant political and economic system. As Marx and Engels wrote in 1845, 'the class which is the dominant *material* force in society is at the same time its dominant *intellectual* force' (1845a: 64)

John Maynard Keynes famously insisted on the importance of ideas in shaping policy.

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than commonly understood. Indeed the

world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas ... sooner or later, it is ideas, not vested interests, which are dangerous for good or evil (Keynes, 1936: 383-4).

Where the analysis of Keynes is perhaps flawed is in his lack of appreciation of the possibility of vested (and active) interests also being involved in the conscious production, adaptation and dissemination of ideas. Lacking the benefit of hindsight Keynes did not predict that a Transnational Capitalist Class might be active in developing and sponsoring ideas. The places where ideas are produced conventionally are universities, but any analysis of the contemporary production of policy ideas must include a focus on think tanks and policy networks. While difficult to measure how effective they are in penetrating policy and legislation, the aim of those producers of ideas is always to influence policy wherever policy making and legislation occurs.

The EU is a locus for think tanks and other policy networks to produce ideas and promote their transposition into policy (Missiroli and Ioannides, 2012). Research has also been conducted around interest groups/policy networks operating around the EU, their power and influence (or not) and the business, corporate and national interests which some might argue that they serve and are susceptible too (Borzel, 1997; Coen 2007; Dur and Bievre 2007; Richardson 2000, 2006; Mazey and Richardson 2006; Woll, 2007). In this regard and in terms of the world of ideas and policy surrounding water Richardson has written of policy networks and complex coalitions within those networks who are involved in seeking to influence EU policy processes (1994).

Policy networks are key agents in the formulation of ideas and in setting policy agendas. These networks are funded and influenced by the transnational capitalist class whose interests they represent, as described by Sklair. Borzel describes a policy network as sharing 'common interests with regard to a policy and who exchange resources to pursue these shared common interests acknowledging that co-operation [is] the best

way to achieve common goals' (Borzel, 1997: 1). Other definitions include refer to 'Global Action Networks' (Khagram and Waddell, 2007: 2) 'Transnational Policy Communities' (Stone, 2008) while others refer to 'Global Public Policy Networks' (Reinicke; 1999-2000; Reinicke and Witte, 1999; Witte, Streck and Benner, 2002). Reinicke and colleagues develop the concept further and differentiate, by function and character, 'Global Public Policy Networks' into 'Negotiation Networks', 'Coordination Networks' and 'Implementation Networks' (Benner, Reinicke and Witte, 2002: 9-14). Johnston labels those promoting the global sustainable development agenda as a 'Cadre Class'(2003: 12), while Goldman describes them as Global Resource Managers (1998). A notable conceptual tool explaining how these, and others, fit into policy processes was designed by Sabatier and Jenkins-Smith (1993 and 1994). They designed what has become known as the Advocacy Coalition Framework. This tool helps explain the different tensions, dynamics and competing interests in contested policy areas (Weible et al, 2011).

They have also been described as 'advocacy coalitions'. Seen as broader than epistemic communities these involve coalition type relationships between a variety of public and private actors, including government networks, think tanks, (elected) politicians, academics and others, who share core beliefs and values (Heard-Laureoate,2005: 42). Björkdahl refers to 'norm entrepreneurs, 'policy entrepreneurs', or even 'transnational policy entrepreneurs' (2002:45). The concept of 'policy entrepreneur' is attracting some attention as a means to set and develop policy agendas through the production of policy ideas (Mintrom, 2000; Mintrom and Norman 2009). Huitema & Meijerink, against the backdrop of the various water crises, noted the role of policy entrepreneurs in water policy and their role in driving policy change (2009).

Such global policy networks can be seen as technocratic agents without ideological predisposition, similar to how epistemic communities are conceived (Haas, 1992). The view of many is that in the absence of global government there is a growing need for collaborative working to help solve issues of global concern and magnitude (Benner, Reinicke and Witte, 2002: 9-14; Reinicke, 2000; Witte, Streck and Benner, 2002), for example the governance of climate change (Gough and Shackley, 2001). In one

interpretation the idea producers are neutral bystanders in the wider (ideological) policy debate and interested solely in solving a variety of existing global problems.

Supporting the notion of policy networks as technocratic 'networks of knowledge based experts' Haas develops the concept of epistemic communities as 'a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area' (Haas, 1992: 2-3). Haas describes their role as 'articulating the cause-and-effect relationships of complex problems, helping states identify their interests, framing the issues for collective debate, proposing specific policies, and identifying salient points for negotiation' (1992:2). For Haas epistemic communities can play a pivotal policy role, not least, as they 'can lead to new patterns of behaviour and prove to be an important determinant of international policy coordination' (Haas, 1992: 3). Those developing policies to solve the multiple water crises could be construed in this way. Sundström argues:

Epistemic Communities are a way of trying to make sense of the fact that hard-to-grasp decisions may move actual, although not necessarily formal, power from elected representatives (or dictators for that matter) to elites acquainted with the subject in a transnational setting (2000, 1-9).

This potential transformative power of epistemic communities in transnational settings is well recognised. Thus, it is important to trace linkages between the global and more localised knowledge production and policy networks, an empirical task that this thesis seeks to address. However, epistemic communities or any other policy network or groups of collaborating agents, will quite likely share a set of normative and principled beliefs, which provide a values based rationale for the activity of its members. Therefore one can see how supposedly technical and scientific communities can potentially act as agents promoting ideas which fit particular ideological worldviews. Therefore networks, such as epistemic communities, *could potentially* move beyond merely technical and scientific groupings and produce solutions that correspond with wider political ideas. Stone considers how Transnational Policy Networks are involved in this sharing and transfer of knowledge influencing policy debates:

Key actors in the mechanics of policy transfer are international organisations and non-state actors such as interest groups and non-governmental organisations (NGOs), think tanks, consultant firms, law firms and banks. These non-state actors have been shown to have considerable agenda-setting influence *when they function as part of transnational advocacy networks* (2004: 549 – emphasis added).

Stone makes the link between the production of ideas and advocacy. Johnston in analysing sustainability policy networks acknowledges the work they do in attempting to promote sustainability, however she expresses a concern that this core characteristic is vigorously pursued within specific ideological parameters and that there exists a dual character within this ‘cadre class’:

This class serves as the primary agent of socialisation...and are responsible for the planning and the propagation and monitoring of social norms...More specifically this means that the cadre class, as the managers of socialisation, react to and subsidise the ill effects of the market ... Their basic assumption is a technocratic one...They are genuinely interested in system maintenance and are capable of creating knowledge that explains how commodification threatens long-run system maintenance. At the same time they have a class allegiance to business and loyalty to profits and capital accumulation as system end goals (Johnston, 2003: 12-14).

Johnston’s critique draws attention to the policy restrictions within which expert knowledge production takes place, a phenomenon that most of the literature on epistemic communities appears to ignore or not even notice. Some epistemic communities in the water sector are undoubtedly working within narrow parameters. This is certainly true of many of those organisations discussed in Chapter 2 who can be seen as a ‘loose coalition of water privatisation advocates who all refer to the idea of the efficiency of the markets invisible hand to achieve the highest beneficial water utilization and management (e.g. the World Bank, the IMF, WWC and GWP)’ (Wegerich

and Warner, 2010: 239). According to Goldman, Transnational Policy Networks in the water sphere, seek influence policy with pro-private messages:

Three of the highest profile transnational policy network actors were borne from World Bank support: the GWP, WWC and World Commission on Water for the 21st Century. All are key production nodes for transnational water conferences, training seminars, policy papers and ultimately a highly mobile set of global experts on water that comprise the leadership and establish the guiding principles of the new water reform movement (Goldman, 2005: 793).

Generalist think tanks, as well as specialist ones such as the GWP and WWC, have been active in seeking to influence policy in the water sector. Consistent with market environmentalist thought, a common recommendation is for property rights to be introduced in water (Anderson 1983; Anderson and Leal 1988; Balen 2006; Bate 2006; Okonski 2006¹⁹; Segal and Moore 2003; Segerfeldt, 2005), facilitating the introduction of private ownership of WWS, and, applying market environmentalist logics to help allocate water resources. The Competitive Enterprise Institute encapsulates such thinking, when they argued 'a property-rights-based system could alleviate water shortages and pollution problems by properly pricing water resources and giving parties a stake in ensuring water quality' (Logomasini 2010: 61).

The epistemic communities interested in water policy, which includes think tanks and lobbyists, are primary agents intent on changing pre-existing structures through actively contributing ideas and solutions to the current water crises. It is evident that many of these policy prescriptions are laced with a neoliberal character. In looking at the general policy trajectory on water issues it is clear that solutions are often generic and that those proposing them are not necessarily technical experts in the field. This serves as an important conceptual as well as practical health warning once we begin to look more closely at what the new governance, regulatory and technical approaches (such as IWRM) being proposed and implemented actually involve.

¹⁹ This publication contained a chapter on the Scottish Water Industry. The foreword was also written by the then Chairman of the Water Industry Commission for Scotland, (WICS), Sir Ian Byatt.

Charting the Water-Course: Some Markers to Navigate This Thesis

This chapter has sought to provide a broad, conceptual framing of the thesis, which sets the changes in Scotland's WWS in some context and suggests that these changes have not taken place in isolation nor simply occurred by accident or chance. On the contrary, the many agents who devise ideas, promote policy and introduce legislation are located in particular, sometimes overlapping, policy, epistemic, and political networks.

What this chapter has also sought to illustrate is that the broader neoliberal framework is not necessarily a homogenous and fixed concept, and how, depending on the local conditions, it can take different forms and be a permutation of the very many elements which can be seen as 'neoliberal'. For example, strong corporatisation as a concept and practice is not simply replicated across the globe in an identical fashion. However its core elements have a clear neoliberal character as will be seen in relation to WWS in Scotland. While there has been a strong accent on examining neoliberalism, it should be stressed that I do not intend a deterministic reading of neoliberal ideology and ideas. Instead, as the empirical chapters will show, I am proposing that there is a relationship between ruling ideas and ideology, policy, legislation and subsequent material conditions and outcomes. I also contend that ideas are not simply imported or imposed – rather they are developed and implemented in the context of an already existing political culture and set of social and political values and practices. It is the examination of these dynamics that makes up the substance of this research.

By framing this chapter in the way I have offered the context to how and why WWS in Scotland have evolved in the way it has in recent times. A central change to the Scottish Water industry has been to the governance and regulation of WWS in Scotland. A key component of that has been the introduction of economic regulation; the manifestation of that economic regulation is the subject matter in Chapter 6. Prior to that discussion a discussion over the methods I used to gather data in the Scottish Water industry is required.

Chapter 5: Methods

This chapter reflects on some of the main issues that emerged when researching this topic and during the course of data gathering. It also provides an outline of my research methods as well as my experiences in trying to gather evidence within the changed governance and operational structures of Scotland's WWS. This necessitates a discussion of the lack of openness that I encountered, arguably caused by those new structures and subsequent behaviour by agents acting as key gatekeepers and informants, which meant evidence gathering was not always easy or straightforward. I will also outline my triangulated approach involving documentary research, interviews, observational methods and significantly my exploitation of FOI legislation, which has given rights that until relatively recently were not available to researchers.

Hence, this chapter also explores the conflictual relations and a lack of trust between me as researcher and the (powerful) subjects I was investigating, that occurred during my research. My experiences and the evolving research design and strategy as a result raises questions around the behaviour of the researcher during fieldwork, particularly positionality, if and when new understandings and insights are grasped during the course of the researcher's evidence gathering.

Sharing knowledge was a feature of my PhD journey and is consistent with my view that social science has a place in public policy debates. I took the view that my research findings were of public interest and, utilising a public sociology approach, I decided it was legitimate to publicly share information and findings and to take a position on the issues I was researching. My account of this follows the outline of the methodological approach that guided my research.

People, Processes and Numbers

Methods are the tools used to gather and analyse evidence. According to Bryman 'By methods we typically mean the techniques that researchers employ for practising their craft' (2008: 160). Methodology, not simply methods, is the broad approach taken in order to find truth and knowledge. Kaplan describes methodology as the 'description,

explanation and justification of...methods' (1964: 18). Carter and Little state that methodology helps justify, guide and evaluate methods (2007: 1317). They also contend that epistemology links with methodology whereby knowing what we know helps modify methodology, which in turn shapes the methods (ibid). Another view on methods and the collection of evidence is that of anarchistic epistemology. This argues that what we know and how we come to know it is the product of various power relations, pressures and social choices rather than a rigorously scientific or positivist approach (Feyerabend, 1975). This corresponds, in some ways, with my experience and approach: the information I pursued and the methods I chose were influenced by the various social relations and wider context encountered during my research journey.

I sought to understand Scotland's WWS sector by focusing on internal and governance related communications processes, that is, accounts of how and why change was being implemented in this sector and who and what forces were behind the changes. I did this by using standard qualitative techniques, such as elite interviewing and observation methods, where practicable. I also sought documentation accessed from key stakeholders. I chose to employ a triangulated approach believing this was the best available and most appropriate methodology for the topics under investigation.

There is no agreed model for triangulating or for the gathering of evidence, as alluded to by Feyerabend (1975). Triangulation is a principle and my interpretation of this in the context of the research questions I set myself meant I chose a mixture of participant observation, interviews and analysing official documentation. But, the data derived from these methods do not guarantee a holistic account of all the evidence and sometimes the researcher may feel other methods are required for a fuller account. This was the case in my research where it became clear that to better understand my topic I had to go beyond using these standard research tools.

Approximately two years into my research I found access to informants and data via public meetings quite limited. It was evident that deliberations over regulation and future policy making largely excluded the public and their elected representatives. The processes I was interested in examining were increasingly private, if not secretive. This reality made my work as a social researcher challenging with my attempts to gather

data and accessing information, beyond what was already circulating in the public domain, difficult.

Since the formation of Scottish Water in 2002 WWS has enjoyed increased investment that has resulted in improvements to the asset base and infrastructure. However, the official chronicles of the Scottish water industry tend to be dominated by this account of success with few acknowledgements of some of the failings within the sector. This success narrative is underpinned by numbers and quantities of 'things'. These measures often expressed as KPI's or, in the case of Scottish Water, the key measurement framework is known as the Overall Performance Assessment (OPA), which are used to gauge and legitimate the performance of Scottish Water. How much more has been spent, how many treatment plants have been improved, how many pollution incidents have been reduced etc, is typically the information provided in official accounts. Such 'accounts' of WWS resemble the type of audit society described by Power (1997) in which many elements of society are monitored and measured, often as a means of legitimising the status quo or direction of travel.

The impression deliberately constructed from these official publications is to downplay any problems and extol the successes of WWS operations and governance. Official documents suggest that increasing investment means there are only good stories to tell. There is some merit in using this quantitative information to help inform how WWS in Scotland are progressing or indeed that improvements through increased investment are occurring. But the focus on selective metrics in the official reporting of the current model works reveals a rather narrow utilitarian approach, which I have concluded is insufficient if one is interested in a holistic, broader and indeed critical, account and understanding of Scotland's WWS performance.

Authorised versions of the current arrangements therefore miss out the human impact of the decisions made and wider strategy taken. Bryman distinguishing the nature of positivism from qualitative social research methods, he writes how some believe the:

Scientific method associated with the philosophical position known as positivism was ill-suited to the study of humans and their societies. Instead, advocates of

qualitative research argued that an approach is needed that better reflects the uniqueness of humans compared to the subject matter of the sciences (2008: 161).

This encapsulates the underpinning rationale and methodology of my research. The methodology and the methods chosen have been concerned with enabling me to critically address the consequentiality of the emerging governance and operations framework of WWS in Scotland, and in particular my interest in the social consequences and social relations embedded in these new arrangements. Approaching these issues using qualitative methods is undoubtedly a distinguishing feature of this research, and has resulted in my accessing private communications hitherto not publicly shared, which clearly demonstrate the private views of official stakeholders that quite often contradict their public proclamations. This suggests that there are indeed other stories to tell about WWS in Scotland and this thesis offers a glimpse of these processes and an account of their causes and impacts.

Had I unquestioningly accepted 'official' versions, then the evidence I would have gathered and the corresponding analysis developed would likely have resulted in a rather narrow account reflecting the narratives preferred by key WWS stakeholders. I was initially dimly aware that there may be other perspectives that were not being included in official accounts. Thus, I tried to develop an alternative or more complex story of Scotland's WWS that was not often reported. This required a broad, multi-method qualitative inquiry that actively sought out information not easily available elsewhere.

Gathering Data: Interviews, Ethnography and Accounts

Knowing where to look for information, and what to look for, sounds like a relatively straightforward proposition. However, in practice the simplest problems can be very difficult to address adequately. The research design adopted reflects my best efforts to develop an alternative and critical account of Scotland's WWS. However, this research design evolved over the course of the research as my understanding of the kinds of questions worth pursuing and where I might locate data to answer these questions

developed. The changing focus of research methods was a crucial feature of this research. This principally involved a concentrated use of FOI legislation in order to establish a broader version than that provided in 'official' accounts by stakeholders.

The first step in any social research project is choosing the research question. Sarantakos states 'this is a methodological necessity: no research can be undertaken unless the research question is chosen and accurately defined' (Sarantakos, 1988: 119). From the beginning of my research journey my central research question was to try to explain how and why the governance and regulation of WWS in Scotland has been changing, particularly since devolution and before that from the time of the Strathclyde referendum. Sub-questions include a consideration of the economic regulatory authority, the WICS, the operator Scottish Water and the costs or negative externalities, as well as acknowledging the improvements, that have resulted as a consequence of the activities of both. Pursuing these questions inevitably led to an examination of the real, material consequences of the current model as well as a detailed attempt to explain who and what informs policy making processes in relation to Scotland's WWS and the role of key agents in setting policy agendas.

Gathering reliable evidence requires careful identification of legitimate and credible sources and data. Locally and globally this meant investigating those organisations active in setting policy agendas and of course in interpreting and delivering on policy and legislation. Once these actors were identified I then sought to gather evidence from those sources, along with information available in the public domain. As noted beforehand, in attempting to build a reliable evidence base, a triangulated or multi-research method approach is said to be important (Jick, 1979, Denzin 1978). What exactly this should look like in practice is not explicitly defined in terms of how it will be 'performed and accomplished' (Jick, 1979: 602).

Triangulation can refer to its application between or within methods (as first raised by Denzin in 1970). However, the broad understanding, and how it is being applied here, is that it is a multi-research approach between methods, which seeks to validate and substantiate the findings by using multiple *methods and sources* to help produce better findings. Or, put another way it is about selecting 'the appropriate . . . methods that, in

combination, will result in complementary data, and thereby reduce the possibility of unsubstantiated findings' (Olafson, in Mcfee 2009: 39). Careful attention to methods, sources and their integration can 'increase confidence that one's data is sound' (Mcfee, 1992: 215).

Qualitative research is said to be 'any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification' (Strauss and Corbin, 1990: 17). In employing a triangulation of qualitative methods I intended to gain a richer understanding of the Scottish water industry. This originally encompassed observation of key stakeholders (regulators and Scottish Water) at events they were participating in, for example conferences, annual meetings and Parliamentary appearances. I also carried out desk research including gathering official publications, legislation and other accounts of WWS in Scotland, as well as general and specialist media monitoring for news and accounts that was relevant to my research. Finally, I conducted numerous interviews and tracked those actors, both in governance and operations as well as those outside the official policy making structures, who were participating in policy debates.

I interviewed nearly 25 respondents from a broad range of backgrounds. Scottish Water, the Scottish Government, Waterwatch lay members and officials, the Drinking Water Quality Regulator (DWQR), WICS officials and the WICS Chief Executive, trade union officials, councillors, MSP's, an academic, representatives of geographical communities affected by operational issues and communities of interest, including a representative from the fishing industry affected by the sewage spill from Seafield WWTW's (discussed in Chapter 8). In addition two individuals with access to the highest levels of policy making and strategy development around WWS in Scotland assisted with this research. Given the sensitivity of their positions both wished to remain anonymous. These two informants provided me with important data in relation to operational and governance issues. However, despite this wide range of stakeholder perspectives I remain conscious that there is no guarantee of gaining new knowledge from interviewing research subjects, particularly from those respondents only prepared to offer partial or self-serving accounts.

Interviewing stakeholders may not provide a comprehensive and full account. They may be willing interviewees, but inevitably they can only provide information on what they know, which is quite likely not the totality of information sought by the researcher. Or, they may not reveal all that they know in an honest and forthcoming way and provide only a partial and limited account of what they know (Silverman, 2001). This risk is exacerbated if interviewees are suspicious of the interviewer and their intentions. As I will discuss below, given the chronology and focus of this research, this is a possible scenario with some of my interviews, particularly those I carried out with powerful stakeholders. Conversely, I had many very open interviewees, who undoubtedly helped my understanding and sensitised me to the complexities and nuances in my field. These latter interviews conform more to Miller and Glasner's assertion that interviews can assist in providing information and greater understanding about the social world (1997).

As well as undertaking elite interviews my fieldwork also included an element of ethnography. I attended numerous meetings relevant to WWS in Scotland. These included five public Waterwatch meetings, two internal Waterwatch meetings, and three Scottish Water public meetings, two private meetings with Scottish Water public affairs officials, Scottish Water stakeholder meetings in the communities of Dalmeir and Crossford and five WICS stakeholder meetings. I also attended parliamentary committee meetings and debates that concerned Scottish Water and the wider industry and a Food Standards Agency meeting held to analyse the response to the Seaford sewage spill. Taken together these meetings offered me some understanding of the complexity of WWS regulation and the practical challenges of providing its safe delivery to the whole of Scotland. Attending these meetings also confirmed that some issues were underplayed or simply not reported in official accounts and publications.

I also observed and participated in ten elite-policy conferences, including two held in Scotland that were concerned solely with Scottish issues. The others held in the USA, France, Spain, Belgium, Sweden and Kenya were global in breadth and content and helped clarify my general understanding of WWS drivers and delivery across the world. Attending international events offered me insights into how the provision of WWS in Scotland relates to, and reflects, some of the policy and governance trends from around

the world and which were deliberated in Chapter 2. This ethnographic strand to my work sensitised me to the ways in which globalisation and neoliberalism are shaping the development of WWS around the globe, and how Scotland is not immune to these pressures.

My participant observation at conferences in Scotland exposed me to predominately official accounts of the water industry. At both Scottish conferences I attended many stakeholders repeatedly praised the current model. Only one stakeholder, Waterwatch Scotland (the then regulator responsible for customer interests), mildly criticised Scottish Water and decisions made through the Strategic Review of Charges (SRC) and the regulatory framework. By attending meetings and conferences I was able to enhance my understanding of WWS issues locally in Scotland and internationally. Observing and listening at these conferences offered leads for further inquiry. These helped inform research strategy, inspired questions for future interviews and, perhaps more importantly, helped steer subsequent FOI requests, the responses to which then offering detailed direction for further FOI requests.

In parallel with interviews and participant observation I undertook detailed desk research. This involved scrutiny of parliamentary questions and committee inquiries, media monitoring, which included setting up electronic alerts through the Google search engine and signing up to appropriate journals, magazines and specialist list serves which post almost daily news in relation to the WWS policy and issues across the world. This approach heightened my awareness of global and national issues happening in real time and enabled me to become conversant in the discourse used by policy makers in the field.

This desk research was invaluable in informing me of Scottish developments and was knowledge I also used to help formulate FOI requests. I also conducted archival research at the Scottish Government library in Edinburgh and at the British Library in London to access sources such as the Global Water Intelligence journal. This publication is not publicly held in Scotland and is prohibitively expensive for a PhD researcher to purchase.

Over time my desk research helped identify some of the main policy preferences of key stakeholders, as well as an overall narrative emerging from policy insiders that accentuated the positives of the new governance arrangements. Typically problem areas within the current operational or governance arrangements were underplayed or ignored, at least publicly. I found that Scottish Water communications resembled a perpetual PR campaign, suggesting a lack of full transparency in their public communications, a point previously picked up by others (Miller et al, 2003, Cooper et al, 2006, Baty, 2009). As my knowledge and understanding of the sector improved I concluded I was learning little new from desk research, or from some interviews that merely repeated information readily available in official documents and from the publications of key sector sources. I decided that a more critical and investigative approach was necessary.

Research Redesign: Freedom of Information and Rules of Engagement

The qualitative methods described above helped guide my research particularly when I cross-referenced official documents, interview transcriptions and participant observation notes on particular issues and themes (such as the behaviour of the WICS within the governance framework) with other documents including some that I had accessed using FOI. I also cross-referenced data from my initial qualitative enquiries with data such as the minutes (which were often published online) and supporting papers of Scottish Water and WICS board meetings subsequently obtained via FOI.

From these minutes it was obvious that discussions that were not being shared via the publicly available minutes or for that matter with parliamentary representatives during Parliamentary Committee meetings. For example, issues such as the internal concerns at the performance of PFI operated plants, or the Chief Executive Reports presented at board meetings, which, amongst other problems, outlined operational negatives such as persistent pollution failures. This was counter to publicly available accounts, where the focus was on extolling positives.

In relation to the publicly available minutes, they do not provide a full account of the discussion at board meetings, they record how a discussion has taken place but no

detail of the actual conversation is given. Crucial for progressing my research was in accessing those board papers, referred to in the public minutes, which are submitted for discussion at Scottish Water and WICS board meetings but which were not publicly available. These papers, accessed via FOI proved to be a rich seam for data gathering and greater understanding of the inner thoughts and discussions in both organisations, the WICS and Scottish Water, which were not shared in their official accounts.

A key line of inquiry of my research sought to understand the level of private sector involvement in Scotland's WWS in terms of regulation and policy making as well as the more obvious participation in operations. My understanding was enhanced after accessing a WICS board paper that was not published publicly. My research progressed after I noted a standard item in the WICS minutes referred to 'Framework Contractors'. However the minute didn't expand on who the contractors were, how much they were being paid or specify the work being carried out on behalf of the WICS. The minute did however mention the board paper, which I presumed did outline these details.

I therefore submitted an FOI request to get more information about the framework contractors. The data released allowed me to profile who the contractors were. I submitted further FOI's asking for more papers and details of the work that some of these contractors undertook. It was this approach that revealed the existence of a policy paper looking at Alternative Ownership structures for Scottish Water, nicknamed 'Project Checkers' by the protagonists involved in producing it. There is an account of this discussed in Chapter 6. In summary, information obtained originally from qualitative investigations led to FOI requests which informed further research inquiries (FOI requests) from the clues they contained.

Applying an investigative method, in a concerted fashion, and centring it on FOI saw my empirical inquiry come into clearer focus as new data emerged. The richness of the information gained stood in contrast to some of my earlier data gathering from publicly available official accounts and indeed some of the interviews I had conducted. The newer findings made me critically reflect on the efficacy of my original research. Such reflection, considering the success or otherwise of any research project, must be a continual process for the researcher in any type of research project.

The reluctance of some public bodies to provide full information in response to interview questions and requests for data prompted an expanded use of FOI. FOI is a relatively recent tool in the armoury of researchers and came into force in Scotland in January 2005, after the Scottish Parliament approved legislation for the Freedom of Information (Scotland) Act (FOISA) in 2002. It gives any individual the right to access a wide range of information held by public authorities. There are, as I discovered during my research, some important exemptions. Nevertheless, in social research terms FOI has helped, in some way to re-balance the power relationship between the researcher and powerful public authorities.

During the course of my research I made over 500 separate FOI requests, usually under the provisions of FOISA, but also the Environmental Information Regulations (also overseen by OSIC). Of these 145 were made to the WICS between 2007 and 2010, 220 to Scottish Water between 2008-2011, 115 to the Scottish Government mainly between 2010 and 2011 and some others to the Food Standards Agency and City of Edinburgh Council relating to the Seafeld Sewage spill, to West Dunbartonshire Council regarding operational issues at Dalmuir and to SEPA in relation to pollution incidents involving Scottish Water. The responses (and indeed non-responses²⁰) received added to the data corpus as well as guiding and informing future data gathering. In a sense this interlock resembles that of the link between epistemology, methodology and methods as outlined by Carter and Little (2007) previously in this chapter.

Using FOI involved an initial trawl for information; albeit in an informed way as a result of prior investigations and my evolving understanding of the field. I requested documents that would help provide information on the activities and policies of public authorities on a number of key issues. One tactic I used was to ask for the diaries of senior managers at both the WICS and Scottish Water, a method which I recognise provokes consternation, but which is a very effective means to identify the activities of some of the main protagonists in the Scottish Water Industry. I also requested correspondence between senior stakeholders, board papers, internal papers and

²⁰ Non-responses must provide reasons for the refusal to share information. The reasons and exemptions can provide both clues and further information that adds to the evidence base of the wider research project.

reports and minutes of meetings of sometimes obscure, often unknown, committees within Scottish Water.

The diaries of senior executives at the WICS and Scottish Water²¹ showed who they met and the subjects they were discussing, which often were not mentioned in any public documents. Like minutes of meetings these diaries provided leads for further enquiry which enabled some detailed scrutiny of the WICS and to a lesser extent Scottish Water²². As fruitful a tactic as this was it did serve however to further alienate me from the public authorities I was researching. Relations would become further strained, trust lost and any hope that I could secure information voluntarily from them on a face to face level fatally compromised. However, given the dearth of information provided beforehand and the rich data I was getting from the use of FOI I decided that this was a price worth paying.

Yet, I was also aware of the view that building trust between researcher and subject is an important, albeit not fundamental, component of good research. There is a view that the relationship between researcher and researched *should* be 'built on mutual respect, dignity and trust' (Lincoln and Guba, 1987: 26). I was initially hamstrung by this concern and avoided FOI on that basis, at least as a central method, and welcomed compromise when offered. This was offered when I initially submitted FOI requests.

I had two meetings with two different public affairs officials of Scottish Water. On both occasions I was assured they would cooperate with my research. At one meeting it was said that hopefully there would be little need for me to use FOI. At another I was asked to provide an overview of my research and that this would help open doors for interviews with senior management²³. After providing this information interviews never materialised using this conduit. I also met with John Telfer, Head of PFI at Scottish

²¹ I also obtained the Diary of a senior Civil Servant in the Scottish Government Water Division, Mr Tom Harvie-Clark. This was also useful in demonstrating the areas which Mr Harvie-Clark was working and the people and organisations he was meeting.

²² After further FOI requests which were formulated directly as a result of information gleaned from the diaries of Richard Ackroyd and Ronnie Mercer Scottish Water provided only part of the information requested.

²³ This occurred at a meeting in 2007 with Judy Wakker, a senior public affairs official at Scottish Water.

Water who also said he would endeavour to provide information that would negate the need for FOI²⁴.

Similarly, I was taken for lunch with a senior government official and over a cordial and pleasant meal I was reassured that FOI was unnecessary as officials would be very happy to provide the information I required without the fuss and hassle of FOI. I initially welcomed these overtures. However, afterwards it dawned on me that these discussions and offers were perhaps more about 'managing' me than genuinely sharing information. When I renewed my FOI data gathering it was something of a relief. The ambiguity was over and I had a clear understanding of the operable rules of engagement, as did the public authorities concerned.

Using FOI has enabled me to interrogate official statements, to access communications, information and activities, thus better informing my understanding of these processes at regulatory and operational levels. I have little doubt that its application during this thesis has augmented the usefulness, credibility and legitimacy of my research. This is demonstrated throughout the following empirical chapters, given the unique and hitherto unknown information subsequently published in this thesis.

However, no method is perfect and so it is with FOI. Using FOI can be a drawn out affair and can sometimes prove to be an ultimately fruitless exercise. If public authorities refuse to provide information or if it is necessary for the researcher to challenge disclosures or appeal to the Office of the Scottish Information Commissioner then this approach can take a considerable time, which is something social researchers should take cognisance of prior to using FOI, not least when commencing time constrained projects like a PhD thesis. Moreover, even after prolonged legal processes you may fail to obtain the information requested.

This was a common experience for me when using FOI. It is apparent that even with the advent of FOI public authorities may not wish to share information, particularly when

²⁴ Mr Telfer did provide information that has proved invaluable for this thesis both in written form and during an interview. However other valuable information pertaining to PFI projects was only learned by way of FOI and not through Mr Telfer.

the information requested refers to sensitive policy matters and/or issues that the authorities would prefer to have little or no publicity. As such there are some lessons and rules, of a practical nature, for the researcher when using FOI. For instance, to prevent giving opportunity to authorities who would seek to wriggle out of providing information one should be specific and clear when making requests.

In order to maximize the chances of successfully using FOI the research requires considerable patience, organisation and diligence. FOI requests should be kept manageable and the researcher should avoid submitting too many requests at once. If the researcher challenges a public body should they refuse to release information, a running and updated administrative log is important. This is especially the case when submitting reviews and appeals to the OSIC²⁵, which requires learning quickly how to navigate the attendant legal process.

Perhaps for some of the above reasons FOI has not been embraced by the academic community, with some of the available evidence suggesting little appetite amongst academics for using FOI as a research tool (Booth, 2009). Other commentators argue FOI could potentially be counter-productive for researchers:

The implementation of FOI conflicts with the orderly processing of Government records, because it is so difficult to do both things at the same time and in practice this demanding challenge is imposed on under-resourced records managers. This is a problem that seems to be endemic to FOI regimes in other countries. As FOI is implemented over time, it becomes harder and harder for hard-pressed officials to fulfil FOI requests within the legislated time limit. Those obligations take priority over the systematic review of records being transferred to national archives, an extremely important task which gets hopelessly de-prioritised. Inevitably, standards suffer and neither process is satisfactory, so that researchers end up waiting so long for requests to be filled that they stop

²⁵ There is a legal procedure that guides the initial request and appeals process if required thereafter. This is time consuming and does require a clear understanding of the legal process and your rights. Moreover, it requires the researcher to write in some detail justifying their grounds for first a review within the organisation itself, and if that is unsuccessful, a more detailed appeal to the Scottish Information Commissioner.

using FOI; and the quality of the records that end up getting transferred to archives deteriorates (Jones, 2009, 1).

Flinn and Jones also fear public authorities, over time, will change their culture and practices in order to prevent information being shared, for instance in relation to how they maintain and manage (public) records. They argue that public record keeping has changed to avoid, rather than enhance, the sharing of information (2009). Such 'adaptation' strategies are said to have occurred in Sweden, which has the oldest FOI regime in the world.

As FOI has evolved in Sweden over the past two and a half centuries, so has a culture of information evasion. There is overwhelming evidence to suggest that instead of increasing access, FOI has fatally compromised public scrutiny of government policy and the integrity of Sweden's public archives. 250 years of FOI in Sweden has resulted in the development of an oral culture of decision making that leaves no trace in the official records. Correspondence that does exist tends to be formal and prepared with FOI in mind (Jones, 2009). As will be discussed below, Scotland has not been immune to these consequences since 2005 when Scottish public authorities were beholden to the FOISA.

The former head of the Swedish National Audit Office, Inga-Britt Ahlenius (currently head of the Office of Internal Oversight Services at the United Nations), has described the Swedish model as based on 'The Myth of Our Openness':

What we know and have seen up to now mainly points to the fact that the Swedish freedom of information principle if anything leads to fewer opportunities for scrutiny... most of what is of the greatest interest is not written down and hence not available (Jones, 2009).

This example from Sweden exemplifies a broader point about the behaviour of organisations who occupy positions of power and influence within society. Researchers often encounter powerful research subjects who do not cooperate in an open manner. Researching the powerful was an important strand of my research focus for this thesis

and the experience of tackling this kind of research became a significant feature of my PhD journey.

Researching the Powerful

Holding the powerful to account is an important function in any society. Different component parts in society, the media, civic society, opposition political parties all have a role in doing so. Academia is a societal arm that can, indeed I would contend should, challenge power where appropriate and necessary. Independent expertise is a vital resource for checking and reigning in the powerful, particularly in the context of academia's role in seeking truth and fidelity to evidence. However, academia's added value is through the supply of intellectual and evidence based rigour that those other component parts in society may not be able to match.

But academic research on the powerful is not without its challenges. Defending power and the status quo can often mean downplaying failings, withholding damaging information as well as emphasising and extolling activities which help sustain and protect power. It is also worth mentioning that universities are embedded within the networks of power in any society. This means that certain research projects and questions may not attract research funding, as they do not accord with the research priorities set by governments and other influential research users.

Researching powerful public authorities using FOI raised questions for me about how willing public authorities are to share information. A central concern that emerged during the research was to conduct my work in ways that anticipated and could overcome attempts to prevent disclosure. This occurred at the initial stages of inquiry and later when using FOI. In terms of my own research subjects it became clear to me that the (un)willingness of senior stakeholders in the operational and regulatory parts of the new WWS model spoke to the type of culture and practices that have been created. In so much as openness is compromised, while a culture of tight information management was practiced as a matter of course.

A culture of secrecy and minimal disclosure at the heart of Scottish Water, the WICS and the Scottish Government undoubtedly limited the information gleaned from interviews and official documents. It also resulted in regular negotiations and legal processes over FOI requests that I made. Whether it was due to political sensitivity, commercial confidentiality, reputational anxieties and/or financial interests my research subjects gave an impression that they were reluctant to fully share information with me. Becker's description of researching powerful elites and institutions resonated during the course of this research:

The trick for dealing with the hierarchy of credibility is simple enough: *doubt everything anyone in power tells you*. Institutions always put their best foot forward in public. The people who run them, being responsible for their activities and reputations, always lie a little bit, smoothing over rough spots, hiding troubles, denying the existence of problems. What they say may be true, but social organization gives them reasons to lie. A well socialized participant in society may believe them, but a well socialized social scientist will suspect the worst and look for it (Becker 1998: 99-100).

Arranging interviews with Scottish Water and Scottish Government officials often felt like a protracted negotiation. Indeed on two occasions I was asked to provide a summary of my research findings and purpose prior to interviewing Scottish Water officials. This experience resonated with Scott's assertion that 'researchers must frequently negotiate with those who act as custodians of the documents as they are the gatekeepers to the information produced' (Scott, 2002: 62).

The legal processes I became involved in when trying to access information from public authorities (which hint again at similarities with the culture in Sweden) illustrates the importance of information rights for a relatively powerless researcher. In these situations it was obvious that the public bodies in question had both organisational strength and resources at their disposal, which as a researcher working on my own I could not match. This was clear from the seven legal battles I had with the Scottish Government, the WICS and Scottish Water. I appealed to the OSIC when I was

dissatisfied with the responses provided by the aforementioned respective stakeholders.

It was an often uncooperative approach from these authorities that led to these legal processes. The Scottish Government exemplified this, when they resisted my attempts to gain information relating to meetings and correspondence between Government officials and Ministers and the WICS to discuss the subject of Project Checkers, a subject discussed in detail in Chapter 6. I had evidence that a meeting had taken place between Scottish Government officials and the WICS with regard to the WICS commissioned programme, nicknamed Project Checkers which was researching alternative ownership models for Scottish Water. My request was concerned with establishing what level of awareness and involvement, if any, the Government had with this initiative.

I appealed to the OSIC when the Scottish Government stated that they held no information relating to my request. Initially they denied that they had ever met, discussed or corresponded with the WICS on Project Checkers. Moreover, it was claimed that no document pertaining to Project Checkers existed within the Scottish Government. However, eventually it was confirmed in the Decision Notice, the final report published by the OSIC relating to my legal appeal, that one Government official admitted a meeting had taken place. But it was said that the presentation made by the WICS to the Scottish Government was not saved or kept, the OSIC stated in their ruling that:

One of the individuals recalled a meeting at which the WICS had made a presentation on this matter. However, he did not believe that the presentation had been saved on the eRDM system (as was confirmed by the relevant searches of the system) and did not have a copy (OSIC, 2011a: 4).

I also submitted an FOI request to the WICS asking them for a copy of any report or presentation that they had given to the Scottish Government in relation to Project Checkers. The WICS denied that any information was held about Project Checkers. This confirmed to me that the WICS, despite initially being a cooperative FOI respondent, had chosen avoidance, if possible, rather than disclosure on this subject. I challenged their

response to my FOI and their review by lodging an appeal to the OSIC. The OSIC reported that the WICS denied having any information *at hand*, explaining that record keeping processes were at fault rather than not ever having the information. The OSIC found that the WICS had changed their public record keeping and that they now routinely deleted information and had a culture of communication (akin to the Swedish example outlined above), that was predominately oral in nature. The OSIC reported how:

The Commissioner shares Mr Kane's surprise on finding that WICS held no records falling within the scope of requests 1 and 2, and that only very limited documentation was found falling within the scope of his request 3. He found some explanation of the lack of documentation within the following key points regarding WICS practice that were recorded following the meeting between the investigating officer and WICS representatives:

- WICS' Directors do not record information as a result of meetings or conversations and take a mental note. If actions are required, the Directors will advise the appropriate staff verbally.
- WICS' culture is one in which action points from a meeting may be noted (on paper), but little else. Once these action points are passed on to the appropriate member of staff, then any recorded information is destroyed.
- If the meeting is held with an external organisation, the chair of the meeting is responsible for the minute.
- The majority of meetings are arranged by telephone and the arrangements for the meeting are recorded in the individual's electronic calendar. These calendar entries are deleted once the expenses for the time period concerned are received.
- In 2010, new server hardware was installed which resulted in a radical overhaul of the information held by WICS' staff, with information being

destroyed that no longer had use and tight restrictions being placed on the amount of information individuals can hold on in their emails; so information is routinely deleted. (OSIC, 2011c: 7).

Yet as discussed in Chapter 6, the WICS Chief Executive later admitted in an interview for this research that they had shared their Project Checkers research with the Scottish Government, corroborating the civil servants account of this to the OSIC. One wonders why the Scottish Government and the WICS went to such lengths to avoid admitting they had met to discuss this particular matter. Perhaps they were aware of the political sensitivities of the Project Checkers research project, realising it would have been a source of some contention in Scottish public life had this information been public knowledge at the time. Moreover, it is entirely credible to suggest that it was not in the interests of the Scottish Government to have it known that they were even discussing, let alone acting on, a report offering a pathway to changing the ownership status of Scottish Water (this was the substance of Project Checkers, again see chapter 6 below for details). My fruitless attempts at forcing disclosure of this information, despite having the levers of the law available to me, highlights the difficulties for social researchers when faced with research subjects' who are intent not to share information, even when faced with legal obligations via FOI.

During another appeal process to the OSIC it was also found that the WICS no longer maintained diaries for senior management (OSIC, 2011b). I sought diaries from the WICS Chairman and Chief Executive in 2010, after their diaries for 2008 had been disclosed upon my FOI request. However, when I requested 2010 diaries I was told these were no longer kept. One can only speculate why this particular record management practice had changed but it was certainly unhelpful for my research that they had ceased to use a diary only two years after having to disclose such information. The notion that the two most senior people in the WICS, an organisation charged with regulating billions of pounds worth of investment and charges, do not keep diaries simply beggars belief. The fact that OSIC could not satisfactorily resolve this issue also shows how the legal process lacks sufficient power to enforce record keeping and information sharing standards.

Scottish Water has also refused many of my FOI requests for information citing various exemptions. The protracted process of submitting FOI requests to Scottish Water became somewhat fraught and the response from public officials at times strayed from acceptable professional practice. At one stage Scottish Water denigrated my academic abilities and indeed the legitimacy of my research. One senior manager accused me of having 'no specific area of interest...instead, your requests have been a 'scatter gun' approach to all areas of activity of Scottish Water' (Wallace, 2011).

Not only was this a misguided and angry reproach, it was quite frankly wrong. The particular request that triggered this response related to, amongst other research areas, Scottish Water's involvement in a policy development process, unbeknown to the wider public, that may well have resulted in a change of ownership for Scottish Water. The FOI request was deliberately targeted to particularly sensitive aspects of policy and strategy, and the topic of Policy Development was one that senior managers within Scottish Water may well have preferred to have remained private. The response from Scottish Water shows my objectives came into conflict with of the preferences of some subjects I was researching. This conflict corresponds with Jack Douglas's assertion that the:

Social world is a complex, conflictual and problematic world in which people, both unintentionally and purposefully often (but not always) construct complex, ways of hiding parts of their lives from the outside public, especially researchers (Douglas, 1976 3).

Douglas makes it clear that in his view research is not always cooperative and non-conflictual (1976). As noted some of my experiences during the research reported in this thesis resemble this view. Perhaps unsurprisingly, conflict emerged when I took a more investigative approach. Nevertheless, taking the view of Becker and Horowitz, I felt this was a price worth paying. They argue that to be true to the world it is important to clarify and reveal all layers of truth even if this upsets the powerful.

A sociology that is true to the world inevitably clarifies what has been confused, reveals the character of organisational secrets, upsets the interests of powerful

people and groups. And while uncovering error does not necessarily aid the interests of those exploited by an organisation or society, it does at least permit equal access to the evidence upon which action must be based (1972: 55).

Despite the conflicts triggered by my use of FOI, it has been a crucial method that has enabled me to build the evidence base for this research. Information gained from FOI enhanced the reliability (others can access the data I have managed to have disclosed to check my interpretation of the processes and events in question) and validity (as evidenced in the following empirical chapters, and my account here of how and why the data was gathered and how this related to and informed my research questions) of the research. Without this strand I would argue that the findings would have been significantly diminished and reduced to speculation regarding processes not amenable to direct observation of ethnographic data-gathering.

An indicator of the validity of my research was when I was contacted by sources with insider knowledge in the WWS industry. These sources, whose anonymity I am committed to protecting, deduced not only that I had developed a sound understanding of Scotland's WWS, but also that I might benefit from information they had access to. The information these sources chose to share with me further enhanced my understanding and indeed provoked further targeted FOI research. The question then arose of what to do with this information, given the ongoing policy processes that were the concern of this research at the time in question.

Public Affairs, Public Sociology and the Public Interest: Research as Partisanship?

Good social research seeks to find and gather as much credible evidence as possible. Sharing research, particularly when it is of some public interest is also important and good sociological, indeed good academic, practice. Taking a conscious decision to engage in public policy debates through knowledge exchange, while crucially taking a position, has been described as public sociology. I applied this thinking in practice via dissemination of my research throughout the course of my research. One cannot be involved in researching WWS without awareness that it is a subject very much in the

public interest. As noted in earlier chapters WWS standards are fundamental to life itself and to achieving various quality of life outcomes for individuals and societies.

As a social researcher I wear the hats of professional, critical and policy sociologist. Practicing the craft of sociology rigorously in terms of data collection and its subsequent analysis is something I have done critically while engaging in policy debates. However, public sociology goes beyond this to recognise that social researchers explicitly take a position, in the understanding that the world as it is needs to change and that the social scientist can, and indeed should, play a key role in that transformation.

Michael Burawoy is synonymous with public sociology. Speaking at a seminar in Strathclyde he remarked: 'if before I studied the world to change sociology now I study sociology in order to change the world' (author fieldwork notes, Glasgow 2008). Public sociology takes up the infamous injunction of Marx and Engels who wrote 'the philosophers have only interpreted the world, in various ways; the point is to change it' (1845: 123). Such thinking coincides with other critical sociologists, notably C. Wright Mills, who argued the need for a sociological imagination, in order to understand the world and our place within it thus ultimately contributing to social improvement (1959). In a celebrated contribution to this debate Becker questioned whether social scientists can remain neutral and value free from the world they inhabit. He famously said research cannot be value-free therefore the issue for social scientists 'is not whether we should take sides, since we inevitably will, but rather whose side we are on' (1967: 239).

I acknowledge I did not carry out my work as a social researcher from a value free position. However I did approach my research legitimately. I pursued good sociological research that was 'true to the world' in the way described by Becker and Horowitz:

Good sociology is sociological work that produces meaningful descriptions of organisations and events, valid explanations of how they come about and persist, and realistic proposals for their improvement or removal. Sociology based on the best available evidence should provide analyses that are likely to be true in the linguistic sense of not being falsifiable by other evidence, and also in the

ontological sense of being "true to the world"...sociological work loses its potential practical importance if it does not encompass the major processes and the actors involved in those parts of the world to be changed. Therefore, work that is not true to the world has neither scientific nor practical value (1972: 50, 51).

To expect social researchers to artificially detach themselves from the world they inhabit is arguably an unfair and unrealistic ask. They are part of the world and societies that they study. Indeed rather than keeping evidence closeted from public view it could be argued that social scientists engaged in policy relevant work have a duty to share their knowledge. The strength of public sociology is its acknowledgement that the public sociologist can legitimately share their research and engage out-with the academy. Of course those whom academics choose to engage with, and what they believe will make the world better is where contention and controversy emerge. Public sociology is underpinned by the belief that the transfer of knowledge should not simply harbour egotistical or commercial ambitions, but instead should be used to intervene in policy debates, whilst inevitably taking a position within them.

My research and its subsequent dissemination were informed by a belief in the role of the social scientist to critically examine the social world and share findings where appropriate. In relation to WWS policy I understood there was a battle of ideas over control and ownership of this fundamental social and environmental resource and that for me it was untenable not to take a standpoint on the policy solutions prescribed by the differing sides of the argument.

Applying this understanding at local and global levels I engaged with various actors and groupings involved in struggles to protect WWS as a public good and service. Locally I shared knowledge and engaged with individuals, community groups, trade unions, local councillors and Scottish Parliamentary elected representatives. I have previously provided research for trade unions and published in popular journals²⁶ and co-edited a

²⁶ In 2006, I was involved in a research project, commissioned by the STUC, considering the consequences of mutualising of Scottish Water. This research concluded how it was better to keep Scottish Water publicly owned; in fact it recommended an enhancement of its current public organisation. In addition I

water portal on a wiki site. Internationally, I co-organised a water conference that engaged with many diverse civil society actors (including unions and activist networks in development and social policy fields) from across the world. I have worked closely with non-governmental organisations, participating in a global initiative inspired by global water movements and administered by UN-Habitat. I have also spoken, presented, and contributed at numerous public events, while also contributing in the media²⁷.

I felt compelled to disseminate my research in the knowledge that I had information that was of obvious public interest. However, I suspect that for the public authorities concerned it may have made them question if my role was that of an academic or activist²⁸. The value of my research, particularly from a public sociology standpoint, was evident in relation to my engagement with community representatives and activists in Seafield. In many respects this represents an exemplar for how knowledge exchange can work. I heard from the Seafield community about the local negative externalities they believed were occurring as a result of Scottish WWS policy. In turn, I shared information with them, from my research, concerning some of the detail of the contract and performance of their local wastewater treatment plant that began to explain the problems their community was experiencing.

This was information they had no prior knowledge of, despite their own efforts over a number of years to secure an explanation and accountability for Scottish Water's performance. This vignette (for more detail see chapter 8 below) not only demonstrates how exhaustively and rigorously I had investigated the subject area but also confirmed for me the validity of my research. Moreover, the assistance I provided to the community at Seafield points to the practical utility of taking a public sociology approach, both for the researcher and research users in this instance.

published four articles in the Scottish Left Review (SLR). Working in conjunction with colleagues, initially Dr Shona Russell and then Kyle Mitchell, the articles discussed issues which emerged from my research. I also published an article in a German publication, I wrote the official report for the Holyrood Conference on the future of Scottish Water and presented at various conferences including at the American Public Health Association annual conference.

²⁷ I occasionally commented in the Sunday Herald and appeared on BBC Good Morning Scotland to debate the merits, or otherwise, of privatising Scottish Water

²⁸ I was an active member of the Reclaiming Public Water Network (RPWN), a global grouping who campaign against the privatisation of water. My involvement in the RPWN was publicly known.

Likewise the contact I had with the community at Dalmuir involved providing information pertaining to Scottish Water's First Draft Business Plan. This document proposed that Dalmuir should be excluded from the performance assessment model (the OPA, see chapter 8 below) as there was no money allocated to improve operations at Dalmuir. Scottish Water believed that because the plant was operating so badly (and as, apparently, no money was available for necessary improvements) that the inclusion of Dalmuir would bring the OPA score down, hence the proposal for Dalmuir to be excluded from the OPA for the regulatory period 2010-2015.

I shared this as yet publicly unknown information with the two local MSPs, local councillors and the local Tenants Association, who in turn informed the local newspaper, the Clydebank Advertiser. This provoked a great deal of controversy in the local area. I was informed by the local residents association that my credibility was attacked by Scottish Water and the local council at a stakeholders meeting. However, after the furore had quietened down, and at the end of the SRC process, it was decided by the WICS that £30million would be allocated to fund improvements at Dalmuir. Hitherto, an increase in investment was never mentioned by either the WICS or Scottish Water in the SRC process. It is not known whether the publicity impacted on the decision by the WICS to allocate £30million of funds to improve operations at Dalmuir WWTW's.

The value of my wider research on PFI operated WWTW's, which revealed evidence of operational difficulties at numerous plants was of use to various groups, including those representing both community and employee interests. When some of my findings were published in the Sunday Herald, Dave Watson UNISON Regional Organiser in Scotland, commented that:

There is an absolutely must read exclusive by Rob Edwards in today's Sunday Herald. Largely based on the work of Tommy Kane at Strathclyde University, it shows that the taxpayer is spending £4.8bn for sewage plants that cost £600m to build. You might say well that's not new the cost of PFI, and the water schemes in particular, have been widely condemned in the past. What's new is the scale of

performance failure and the concerns that Scottish Water has over compliance risk, including pollution limits. Their performances have been so poor that Scottish Water has imposed financial penalties totalling £7.5m on PFI operators. Scottish Water is now having to spend many more millions putting the problems right (Watson, 2011).

I do not simply take this kind of commentary as welcome publicity for, or endorsement of, my research approach. I think it is significant in that it helps validate my research and appreciates the contribution of my research to inform and evidence an alternative and critical understanding of the consequences of the changes underway in Scotland's WWS. From my perspective there is less value in only making such arguments in the academic domain when there is an opportunity to contribute to public deliberation about the impacts of policy choices and spending decisions in relation to WWS and access them. The logic that runs throughout this entire project is that policy-making needs to be based on the best available data and analyses. In order to ensure this happens there needs to be a presumption towards openness and disclosure. Following this argument in practice means it is incumbent on those who have information and insight to contribute to these processes, be they academics, journalists, community members, activists or others with an interest in ensuring public deliberation is open, transparent and accountable.

Combining traditional methods and a systematic FOI based approach illustrated the partial nature of information disclosure to those outside the water governance framework in Scotland. This belies a wider culture and instinct not to share information with the very people affected by their operations (often those negatively impacted). Thus, this research has shone some light on to the lack of openness generally practiced within the governance of WWS in Scotland. From the perspective of sociological research methods there is little doubt that the use of FOI was the cardinal research method for this project. Only through adopting such a rights based approach could I ensure the research had sufficient depth and substance.

Knowledge exchange, currently en-vogue in higher education, is more often than not discussed as a commercial exercise. This research demonstrated how such exchanges

need not be exclusively so. I undertook knowledge exchange without one penny changing hands or one contract being drafted or signed. Instead the exchange was based purely on, what I perceived to be, the public interest. This component of the research process, shows how there are other ways in which research can be judged over and above 'normal' technical measures of reliability, validity and value. There are other socially beneficial meanings attached to value, reliability, legitimacy and usefulness than technical judgements made within academic disciplines. This thesis, in some small way, attempts to reconcile subject specific criteria for 'good social science' with the kinds of criteria that those out-with the academy might recognise in their struggles to secure safe, affordable and equitable access to WWS.

Chapter 6: Purposeful regulation: The Water Industry Commission for Scotland

This chapter explores the reshaping of water governance in Scotland, paying particular attention to the economic regulator, the WICS. The WICS are particularly influential as they set budgets and charges and advise Scottish Government ministers on investment priorities and their affordability. This chapter chronicles some of those processes, particularly considering the SRC process and some of the trade-offs and tensions that exist when setting investment priorities within the SRC. For example, the issue of sustainable development is foregrounded within discussions over regulatory priorities and how economic aims have potential to predominate in relation to social and environmental objectives.

This analysis also goes beyond the mere technical and statutory role of the WICS. A key part of the discussion examines the WICS as a ‘purposeful regulator’ developing policy to reshape Scotland’s WWS sector. This involves thought leadership, which I suggest reflects a particular ideological predilection toward market solutions. In so doing this chapter contributes to wider discussions over the role of regulation and regulators and how they interpret their statutory roles and responsibilities.

Separating Scottish Politics from Governance of WWS

The institutional change occurring within WWS governance in Scotland corresponds with the reshaping and regulation of the state discussed in Chapter 4. Namely, some governing functions of the state involve regulators and NDPB’s now fulfilling state governmental responsibilities with an increasing role in governance for ‘experts’. In Scotland’s WWS this reconfiguration has involved a shift from democratic to regulatory accountability. This new framework has incorporated a tenuous parliamentary link, but with regulators now central to the monitoring of performance, as well as the crucial functions of setting budgets and service charges in the Scottish water industry.

A fundamental element underpinning the reorganisation of WWS in Scotland therefore is the separation of politics from governance and operational delivery. The manifestation of this is the role and influence of regulators in setting the operational

environment, with Scottish Water managing day-to-day delivery. Elected representatives, either at local or national level, now have very little involvement in water governance. Thus, it is regulators and operators who, to a large extent, are most influential in determining the priorities, direction and ethos of WWS in Scotland within the new governance structures.

This change is absolutely consistent with those in the global water lobby, some of who were outlined in Chapter 2, who argue such separation is a prerequisite for improved governance. This is illustrated in Scotland in relation to the economic governance of water, where charges and funding allocations are set by the economic regulator and not by government or local authorities. The argument that in its previous incarnation political involvement, or interference, was problematic in Scotland's WWS sector has been advanced by various prominent stakeholders. This view is certainly shared at management level within Scottish Water. For instance, George Ponton (2006) and Tom Axford (2010) remarked how during the days of direct political involvement, priorities and decisions were typically made with one eye on the wider political impact and context rather than the specific needs of the water sector.

Decentralisation of power and a dilution of political involvement, two pillars of neoliberal reform, are characteristic of the new institutional framework in Scotland WWS. Government still has a steering role, in setting broad strategic priorities via Ministerial Objectives or Ministerial Directions. However there is no direct input from any democratically elected representatives, or any locally elected bodies, beyond normal consultative processes open to any other organisation. Members of the Scottish Parliament, though, may formally discuss matters of interest when the Scottish Water board (and the WICS) present their annual report to the relevant parliamentary committee and they may raise matters directly on behalf of their constituents. While, any changes to the model must be ratified by the Scottish Parliament.

Representatives in local authorities can only raise matters on behalf of their constituents and have no means to hold the Scottish Water board (or indeed any of the regulators) to account. This is in contrast to the previous governance framework which was directly linked to the democratic process, specifically local authorities and then

regional councils. This was prior to the East, West and North of Scotland water authorities being formed. While these regional water authorities were de-coupled from direct political control they did retain local elected representatives, as well as trade union officials, as members of their boards. Unlike today's arrangements, which makes no attempt to reflect diffuse societal interests on its board.

The key governing agents today are the regulators. The regulatory framework governing WWS in Scotland includes economic, environmental, water quality/public health, and customer components. The regulators operating WWS in Scotland are the WICS, the Scottish Environmental Protection Agency (SEPA), the Drinking Water Quality Regulator (DWQR) and the consumer body, Consumer Focus Scotland, which replaced Waterwatch Scotland. The different regulators, mirroring the concept of sustainable development, integrate a combined focus on the social, environmental and economic in their regulation of WWS in Scotland. A key element in the work of the regulators is in appraising the performance of Scottish Water and its compliance with water and environmental regulations and the achievement of regulatory targets. To do so requires the monitoring of Scottish Water's capital investment programme. This also helps the regulators during the SRC process and in their deliberations over future investment requirements; which is another significant part of their role.

The establishment of an economic regulator epitomises the separation of politics from delivery and represents a mode of expert led governance. This responsibility placed on regulation is emblematic of wider political trends, which has normalised minimal government and entrenched marketisation and private involvement in the delivery of public goods and services (see Leys 2003; Hellowell and Pollock 2007; Crouch 2011; Raco 2013). It also signifies a desire to ensure WWS in Scotland is instilled with a degree of financial discipline complemented with operational efficiency. The focus of the empirical findings over the next few chapters will examine this duality and the tensions inherent within it.

The Political Economy of Regulation – Introducing the WICS

The WICS is undoubtedly the most influential regulator in the Scottish water industry. Their statutory duty is to set budgets and charges with a view to achieving the lowest reasonable financial cost for the customers of Scottish Water. They must ensure there are sufficient funds, raised mainly through customer charges, for Scottish Water, to meet the wider Ministerial Objectives and more specific investment agreed in the SRC. The WICS, formally established on July 1st 2005, originally consisted of 6 members. The first commission was made up of experienced regulators, water industry expert members and a supporting secretariat of around 25 employees. Today the WICS has five members, including Ross Finnie who was previously the Scottish Executive Minister in charge of WWS in Scotland in the Scottish Executive (Government) of 2003-2007.²⁹

How the WICS have proactively interpreted their statutory duty has arguably moved beyond technical budget setting and helps explain some of the dynamics in the Scottish water sector over the past decade. The WICS have been credited with infusing a sense of economic discipline into the Scottish water industry. Prominent stakeholders proclaim the success of a so-called hard budget constraint approach, and applying market mechanisms to improve the economic efficiency of the industry, the operations of Scottish Water and their asset base management (Ackroyd 2009; Harvie-Clark 2009; Sawkins 2010; Sutherland 2009; Taylor 2009 author fieldwork notes and interviews). One former member of the customer body, Waterwatch remarked that ‘the WICS have overseen a marked improvement in customer service, the results of which are very impressive’ (Sawkins 2010). Tom Harvie Clark, Scottish Government civil servant in the water division, claims the regulatory framework is working well and that ‘the WICS were always working in the customer interest not least in seeking to achieve the lowest reasonable overall cost for the customer’ (2009). This is echoed by the WICS Chief Executive who insisted during an interview for this research that improved performance and ensuring the lowest overall reasonable cost to the customer is the main purpose of the WICS (Sutherland 2013).

²⁹ Mr Finnie was a Liberal Democrat member of the Scottish Executive coalition with Labour. His party remain proponents of changing the ownership of Scottish Water from public ownership to a mutual model.

This approach of lowering costs and hard budget constraint is aligned with the use of economic incentives to change practice. Applying this principle has also led to significant increases in management pay. The WICS have been a significant driver of increasing the rates of pay and the bonus culture, amongst senior management, which is now at the heart of the pay and performance ethos at Scottish Water and is subject to discussion in Chapter 7. In 2006 the then Water Industry Commissioner advised Ministers to:

Establish clear and public criteria for the payment of incentives to executive directors. These criteria should be based on overall achievement within the proposed revenue cap, of the required environmental and public health compliance targets and customer service standards (WICS, 2006a).

This statement from the WICS in 2006 makes it clear that bonuses are linked to performance. The use of incentives is one reason why the WICS believe the economic performance of Scottish Water has improved, helping them meet their objective of lowest reasonable cost to the customer. According to the WICS Chief Executive Scottish Water had succeeded in reducing its operating costs by £160m a year in real terms. This apparently equates to a reduction of £50 in each household bill in Scotland, while improved efficiency in capital expenditure equates to a further £40 reduction in customer bills (Sutherland, 2007).

The high level of capital investment and the subsequent improvements to the infrastructure and asset base is unquestionable. Spending is complex but the commercial director of Scottish Water and economic regulator have broken the spending down in approximate terms stating that some £500m is spent annually on capital investment projects (Banks 2006, Sutherland, 2013) and around £200m (approx.) per year on operations and maintenance (Banks, 2006).

However, there is some evidence that the current arrangements have also led to negative externalities that are problematic for Scottish Water customers, workforce and wider environment. In other words, costs or negative externalities arise through the application of 'hard budget' constraints and the need for Scottish Water to out-perform

its regulatory contract. Some of these issues are examined in subsequent chapters. The regulatory contract is ultimately what is agreed on completion of the SRC, a process discussed in detail below.

Strategic Review of Charges: Trade Offs and Constructive Tensions

The WICS, at the heart of facilitating this regulatory review, stated in 2008 how:

Strategic reviews are designed to ensure that customers get value for money from the water and waste water services they pay for: a strategic review therefore considers both the price customers pay, and the service they receive in return over a defined period of time (WICS, 2008a).

The WICS appraise budgets and charges against the broad objectives set by Scottish Government ministers. The process was summarised by the then Scottish Executive:

In undertaking the SRC the WICS will determine the level of charges required to fund the water industry in Scotland for the period 2006-2010, taking account of the objectives set by Ministers for Scottish Water, and the principles by which Ministers will require water charges to be levied upon Scottish Water customers (Scottish Executive, 2005a).

The WICS work alongside other regulators and Scottish Water in considering how to achieve the Ministerial Objectives. However, the WICS in determining the charges required to meet investment needs are the most powerful actor within the process. Given that budgets are essentially paid for by customer charges rather than taxation, the WICS effectively set the budgets for investment. The Scottish Government says the SRC is:

Run by the WICS, in which all the stakeholders of the Scottish water industry are involved. WICS' aim is to establish the lowest reasonable overall cost to meet the objectives Ministers want (as set out in the Ministerial Directions) and determine price levels that are consistent with Ministers' Principles of Charging. The

process determines the level of charges customers must pay...Scottish Water submits a Business Plan to WICS which sets out how it would achieve the required service standards and the resources it needs to do so. WICS considers this and issues a determination of the charges Scottish Water can levy (Scottish Government, 2013)

There is also a Quality & Standards (Q&S) process, which helps guide investment decisions and priorities. Each SRC process, which is informed by Q&S, determines the priorities for the regulatory contracts. Priorities include drinking water quality, the environment and customer service. How these are met within the finite investment available is a central part of the SRC, which receives input from other regulators the Drinking Water Quality Regulator (DWQR) and SEPA as well as Scottish Water. How the SRC and Q&S processes are meant to work in tandem and what priorities are set, is described as follows:

Q&S...will advise on the capital investment that is required over the period 01.04.06-31.03.14 to meet a variety of needs including public health; environmental; customer service; and network improvement including extension of the networks...These conclusions will determine the key outputs from Scottish Water's Investment Programme and will inform the Water Industry Commissioners next strategic review of charges (Scottish Executive, 2005: 7).

The Q&S process initially involved various partners in developing the investment priorities over time. Known as the project board this included 'Communities Scotland, Confederation of British Industry (Scotland), CoSLA and local authorities, Drinking Water Quality Regulator, Historic Scotland, Homes For Scotland, Scottish Environment Protection Agency, Scottish Executive Departments, Scottish Federation of Housing Associations, Water Industry Commissioner, Scottish Natural Heritage, Scottish Water, and Water Customer Consultation Panels' (Scottish Executive, 2005a: 7). How responsibility for the governance and management of WWS has been extended to agencies and removed from the political arena is further demonstrated by how investment is monitored. Most notably this is done through the Outputs Monitoring

Group, which is made up of representatives from the Scottish Government, the WICS, SEPA, DWQR, Waterwatch (prior to its dissolution) and Scottish Water.

The SRC and Q&S processes are indicative of a more integrated approach to WWS management and governance in Scotland and are clearly processes borne from new structures and the consequent new agents within them, which intrinsically separates operations and regulation from politics. I further noted this when I attended 'Stakeholder Information Days', organised by the WICS to gather evidence for the 2010-2015 SRC. Having attended two of these days I observed how these were essentially elite stakeholders events, involving mainly big water users, those involved in the competition framework water as well as Waterwatch (the then consumer body) and Scottish Water (author field notes, Stirling 2009). There was no involvement from the wider public or their elected representatives (WICS 2009a, 2009b).

Regulators monitor quality outcomes, delivery and future priorities (Byatt, 2006, Harvie Clark, 2009, McLaren 2009) prior to Ministerial Objectives being set. Each regulator has their priorities and, during the SRC, vies to include as much investment in their specific area as possible. All participants recognise there is a finite financial pot, dictated by the WICS though influenced by the Principles of Charging as set by the Scottish Government. Water Division Civil Servant Tom Harvie-Clark compared the SRC to an election where all the political parties pitch their manifestos. Similarly, all the regulators compete to have their priorities included for investment to meet the ministerial objectives in order that they meet the customer interest in their particular regulatory area. Harvie-Clark claims the Minister decides priorities after hearing representations from each regulator (2009).

The DWQR, the late Colin McLaren, provided an insider account of the SRC process, identifying a constructive tension between the regulators, operator and government: 'We have all got different interests but [regarding] Q&S it does seem to work well and come together' (2009). He described a procedure where each regulator individually sets out their 'requirements' based on compliance with directives and Ministerial Objectives. Thereafter there are corrections and adjustments based on concerns over cost and a subsequent process of prioritisation guided by affordability:

The DWQR had significant discussions with Scottish Water about where we needed to invest. Or, where I thought they needed to invest to maintain standards and where they are failing, or at risk of failing, and we came up with a drinking water quality list of projects to be involved in the investment programme. Likewise SEPA were doing the same thing on their side....Individual parts, almost like a wish list, were constructed separately; all were then brought together by the Scottish Government. All were looked at as a whole and it was determined whether it was affordable or not. The whole package wasn't affordable. We then got into a prioritising stage to consider what the priorities were for Scottish Water and Scotland. Each regulator was sent back, it was said 'go away guys and come back with priority 1 and 2 projects. Decide what the absolute musts are and what the others that are needed but can wait until the next price review (2009).

Harvie-Clark argues expectations need to be managed regarding investment and charging in the Scottish water sector. He describes how, with limited finance, not all operational requirements or problems can be addressed at once:

Are there choices that have to be made? Absolutely. Would we like free water? Absolutely. Would we like nobody to have to pay for any of this (investment)? Absolutely. Would we like to spend enough to deal with everything? Absolutely. However, of course we would like all of this, but we can't have all of them. We can't afford all of them, there are choices and trade-offs to be made (2009).

Trade-offs in Scotland's WWS between competing social and environmental needs is explained in part by insufficient funds needed to make all the investment identified to improve the asset base. Such a lack of funds can partially be explained by an inadequate tax yield, which is as a result of wider political priorities incorporating a low tax system. If funds are excessively deficient this might also pose a risk to meeting all legal requirements and public policy objectives. In such circumstances the Scottish Executive confirmed in 2005:

Choices around these issues will also have to factor in trade-offs between the level of investment we are able to commit and risk factors associated with these choices, e.g. in terms of public health and environmental risk (2005a: 9).

Colin McLaren, like Tom Harvie-Clark (2009) and the Scottish Government (2005a), indicated that trade-offs are inevitable. This is evident in the technical expression section of the Ministerial Objectives (Scottish Executive, 2005b, Scottish Government 2009). The Technical Expression is a document that details what investment will occur and where. In the documents from 2005 and 2009 essential and desirable areas for investment were outlined. The essential works would receive guaranteed investment, the desirable objectives became somewhat aspirational, and while Scottish Water are expected to deliver as many as possible, in practice this represents something of an unfulfilled wish-list.

Desirable objectives may remain incomplete due to finite resourcing allocated after the SRC process. Unmet desirable objectives are one source of negative externalities; the partial nature of the agreed essential objectives represent yet another. For instance, the Ministerial objectives for 2010-2014 made it essential to 'Ensure that the numbers of non-compliant Wastewater Treatment Works does not exceed 45' (Scottish Government, 2009). This meant in practice that despite the investment agreed by the SRC there would still likely be near 45 non-compliant works at the end of the regulatory contract. That said, the application of hard budget constraint offers incentives (particularly for management and directors) to out-perform the regulatory contract (IE make further improvements/investment) as agreed and to meet desirable Ministerial Objectives³⁰ but critically within existing budgets. The type of strategic approach applied in seeking to accomplish meeting desirable objectives, without spending more, was hinted at in letter from Scottish Water to the DWQR:

Improvements will be achieved through a combination of capital investment, capital maintenance and operational practices. There is insufficient capital

³⁰ What proportion of desirable objectives have been completed requires further research. This information is not collected or published

funding to achieve the required investment through capital investment alone (Aitkenhead, 2006).

In the formative years of the current governance arrangements there was tension between the WICS and Scottish Water over the allocation of resources. During the first SRC for example, the Chairman of Scottish Water resigned after disagreeing with the budget allocated by the WICS (Cooper et al, 2006: 21). Scottish Water claimed they required £3.15 billion whereas the WICS insisted Ministerial objectives could be delivered for £2.15 billion. It is agreed by both sides that their mutual understanding of their respective roles has improved since 2005 and that the relationship is now much better (Axford, 2010, Sutherland 2013).

Concerns about affordability, lowest reasonable cost, out-performance of targets and budget constraint dominate the SRC process. Against this backdrop, in a SRC system guided by cost, the WICS as the body charged with setting budgets and charges is the crucial actor. In using this approach there is, arguably, a potential for insufficient attention being paid to environmental and social concerns, or whether this kind of marketised system is actually able to adequately internalise either nature or welfare.

Rising Tides: Meeting the Sustainable Development Agenda

An example where there are challenges facing WWS in Scotland, not least as a result of budget constraints, cluster around the concept of sustainable development. Scottish Water has resolved to 'Develop and implement a strategic framework to ensure that sustainable development is embedded throughout Scottish Water's operations and activities' (Scottish Water, 2007a). Indeed, from its formation Scottish Water sought to develop sustainable policies. As part of this strategy they set up the Sustainable Development Advisory Group (SDAG) in 2003.

The minutes of an early SDAG meeting, obtained through FOI, allude to how, from its inception, the SDAG were concerned economic priorities could trump the focus on environmental sustainability. Those minutes reported concerns that in the forthcoming capital investment programme 'the current mechanism for measurement is financial

with no measure for potential environmental or social factors' (SDAG, 2004a). In other words, the group set up by Scottish Water to promote sustainable development were initially concerned that without agreed metrics or reliable data the possibility of paying lip-service to sustainability was clearly present within the regulatory framework.

This concern is implicitly expressed in the remit of the SDAG, which is instructed to 'identify the extent to which funding mechanisms constrain the ability to meet the Sustainable Development Duty' (SDAG, 2008). At the SDAG inaugural meeting in 2003 it was noted with appreciable understatement that 'Scottish Water has some challenging financial targets and it is the marrying of these targets and the requirements of sustainable development that will test this group in the advice or guidance it can offer to Scottish Water' (SDAG, 2003).

During the SRC process the SDAG attempted to persuade the regulators of the need to fund sustainable development targets and strategies. Scottish Water acknowledged in their sustainable development strategy document that lobbying regulators to allocate resources for sustainable development objectives was a key objective. In an internal document they recognised the need to 'challenge regulators on investment requirements to meet regulatory drivers through the periodic Strategy Review process' (Scottish Water, 2009a).

The SDAG provides further evidence of how within the existing governance structures competing interests can be problematic. The SDAG expressed concern over the mechanics of the SRC, commenting on how 'a debate is necessary around the often incompatible drivers from different regulators' (SDAG 2004b). A key worry for the SDAG was that the implementation and adoption of sustainability strategies was 'unlikely to happen if the WIC continues to drive Scottish Water using financial measures alone' (SDAG, 2004a). Consider the example of climate change where, according to the SDAG, there was no allowance for climate change mitigation measures in the regulatory period 2002-2006 (SDAG, 2003). A senior manager at Scottish Water sheepishly admitted as much during a fraught public meeting in Kirkcaldy. Questioned over external sewer flooding and the consequent problems this had caused

communities across Fife, he explained that this was ultimately caused by climate change and 'there is no budget for climate change' (author fieldwork notes, Kirkcaldy, 2007).

Consistent with this public pronouncement in Fife was the SDAG suggestion in 2004 that the Draft Determination for budgets and charges for 2006-2010, which set budgets for climate change adaptation and mitigations (amongst other things), 'would result in non-sustainable, short term solutions' (SDAG, 2004a). In the pursuit of economic efficiency only projects that offer best economic value over 4 to 5 years rather than precautionary projects over an uncertain 25 year life cycle were supported. Since then Scottish Water has argued for longer term planning to ensure the effective implementation of sustainable practices. In a 2006 submission to OFWAT, Scottish Water suggested:

The current planning horizon that underpins the periodic reviews does not encourage the development of sustainable solutions which usually have a longer pay-back period than 5- years. Instead it creates an economic bias in favour of 'quick-fix' solutions; which while perhaps being good for prices, in the short term, may not support the delivery of sustainable objectives (Scottish Water, 2006a).

It appears short-termism presented a particular challenge within a regulatory system focused on cost effective solutions. At a private Waterwatch meeting I attended in 2007 Geoff Aitkenhead, Scottish Water's Asset Director, admitted new buildings completed within the capital investment programme since 2002 could well be rendered obsolete before the end of their expected lifetime, as the equipment and specifications were such that they might well not meet future environmental standards (author fieldwork notes, Edinburgh Airport, 2007). Anonymous insiders confirmed the structural circumstances that influenced spending on sustainable projects and infrastructure in 2007. Stating how some within Scottish Water 'openly admit they do not look at sustainability issues because of cash constraints imposed by the WICS' (anon, 2007)

Former Waterwatch Scotland board member, SDAG member and ex SEPA board member, Jack Lord, bemoaned short-termism in the current regulatory cycle, remarking how cheaper 'off the shelf' options were chosen instead of environmentally sustainable

equipment which would be cheaper over a 25 year life cycle of a project, particularly in relation to energy consumption over that longer period (Lord interview, 2009). While the WICS, at this time, could have been accused of being overly complacent or insufficiently concerned about the sustainability agenda the same could not be said for their approach to competition and marketisation.

Cryptosporidium

Cryptosporidium originates in animal faeces, mainly sheep, which can infect the water supply. If contracted by human beings it can cause diarrhoea, stomach cramps, upset stomachs and a slight fever. It can be fatal to the elderly and those with low immunity levels, including babies, the sick and the infirm. Colin McLaren in his interview for this research identified this as a big issue that required attention (McLaren, 2009). Richard Ackroyd, said, in 2009 that 'too many of our customers are still at risk of cryptosporidium' (Hobson, 2009). In 2007, Colin McLaren said in relation to cryptosporidium how 'The low point of 2007 occurred in August when a number of Scottish treatment works failed to adequately treat raw water that was deteriorating in quality due to heavy rainfall' and, 'I firmly believe that such situations are unacceptable in 21st-century Scotland,' (Ends Report, 2008: 20). The DWQR reported 'some smaller treatment works in more rural parts of Scotland may not be capable of consistently removing Cryptosporidium and it is not unusual to find it in some of these supplies'. However, this assertion is countered by the important caveat that 'there is little evidence of any resulting ill-health from these smaller works' (DWQR, 2013b).

McLaren claimed Scotland has the largest cryptosporidium monitoring programme and laboratory in the UK and a robust process. However, he also acknowledged there is an inherent risk with water quality monitoring and management and judgements are made on the basis of perceived risk, historical data, and affordability: 'it's not a cheap option to put in a cryptosporidium barrier and we have to prioritise' (2009). Moreover decisions in relation to investment are 'based on the best available evidence but I have to accept that something may happen in one of those catchments that hitherto has not happened and cryptosporidium may get through to the public water supply' (McLaren, 2009).

As noted the SRC process employs a risk assessment and cost benefit approach where priorities are set and trade-offs accepted. Scottish Water's 2009 report typifies this practice:

[We have] identified 145 Water Treatment Works out of 266 Water Treatment Works expected to be operational by April 2010 (the date which marks the end of the current regulatory – investment - cycle and the beginning of the next between 2010-2014) that have had positive detections of cryptosporidium or that do not have robust treatment processes to prevent cryptosporidium occurrence in drinking water supplies (Scottish Water 2009j: 118).

Risk was reduced (but not fully eradicated) in 69 WTW's by 2010 due to investment in 2006-10. Scottish Water reported that they would invest a total of '£116million to remove the risk of cryptosporidium at 44 WTW's in the regulatory period 2010-15. But, this would leave 32 WTW's still without robust treatment processes to prevent cryptosporidium occurrences in drinking water' (Scottish Water, 2009j: 17). To provide robust treatment processes at these 32 plants will cost a further £76.1million and provide safeguards for 140,000 people (ibid).

It is perhaps these water treatment works Colin McLaren had in mind when he described the risk based approach that was taken when deciding priorities in the SRC. The fact that these 32 plants remained without robust treatment processes against cryptosporidium until at least the next investment period demonstrates how trade-offs are made and the potential for negative externalities, in the shape of public health risks, arise from the SRC process.

Moreover, even within the already reduced proposals made by Scottish Water in their business plan, as advised and agreed with the DWQR, the WICS reduced the funding even further. According to the WICS:

The Reporter expressed particular concerns with regard to the scoping of the work proposed by Scottish Water to achieve the required level of protection

from cryptosporidium. He notes the use of a high-specification, standardised solution at all sites and identifies the possibility of lower cost options at a number of sites; for example through the use of alternative water sources and alternative treatment options. The Reporter also notes that reductions in scope may be possible; for example he questions the need for standby generators at all sites. Finally, he notes that the on-costs added to these schemes appear very high (WICS, 2009n: 7).

After receiving this advice the funding allocated for reducing the risk of cryptosporidium, was cut significantly. From a proposed investment of £148.3m £113.2m was allocated; a decrease of £35.1m from the original proposals made by Scottish Water, as agreed with the DWQR (WICS, 2009n: 10). This is a significant cut in the original proposals. Yet, even that cut is deemed as a 'pre-efficiency' tranche of funding. In other words even from this reduced figure there is an expectation that Scottish Water should aspire to out-perform the agreed budget and cut further the cost of providing protection against cryptosporidium.

Colin McLaren reported that the WICS suggested a 25% reduction in outputs and investment. Consequently, Scottish Water 'accepted that they can reduce investment through different ways of doing things' (McLaren, 2009). However McLaren was concerned that the 'WICS think there are different ways of treating water aside from putting in a barrier' (ibid). He stated how there has been talk of using UV disinfection to kill cryptosporidium. McLaren explained however that,

It's not that simple. As to use UV disinfection you have to have very clean water. ... so it's not a case of simply going along and bolting on a UV unit, it just won't work. So it's not a simple solution to say you don't need a barrier and just stick with UV – because you can't. There are maybe other solutions I don't know about; so what I need to do is speak with the WICS and ask where the 25% reduction is coming from (McLaren, 2009).

Cryptosporidium is but one instance of the trade-off between public health and economic efficiency. Questions over bacteria affecting drinking water quality such as

Trihalomethanes (THMs) and lead (from lead pipes in need of replacement), leakage and the economic level of leakage approach and the issue of wastewater discharge, compliance with the Urban Wastewater Treatment Directive and the indirect impacts of operational failures on the wider community and other businesses and organisation are all issues that require further research and examination. .

Purposeful Regulation, Marketisation and Competition

Resembling the morphogenetic approach outlined in the previous chapter the WICS, within existing structures, are active agents in seeking to achieve the lowest reasonable cost when setting WWS charges and budgets. During the course of this research evidence has been uncovered that suggests the WICS has acted beyond their defined statutory duty. How regulators interpret their responsibilities and functions is an important subject and worthy of further research, given the prominence of regulators and their governing role as states reconfigure. The ideological foundation for the work carried out by the WICS is undoubtedly predicated upon a marketised philosophy. Understanding this raises a series of questions, including whether the behaviour and activities of regulators are influenced by particular worldviews or ideologies and how this then impacts on policy and operational outcomes.

The statutory duty of the WICS is clear. However, the legislation that has been introduced during their tenure has provided scope for them to expand on their duties. George Yarrow, a colleague of WICS chair Sir Ian Byatt at the Regulatory Policy Institute observed how, 'Legislative frameworks are virtually always specified in relatively broad terms, so that a purposeful regulator has the discretion, over time, to develop policy in ways that reflect new learning' (Yarrow et al: 2008, 51). This assessment is relevant to the behaviour of the economic regulator of Scotland's WWS.

The WICS, arguably, is such a purposeful regulator and it seems prepared to interpret its role as not simply ensuring user costs or water prices are minimised, but actually, over time, shaping the institutional frameworks they operate in. The most influential figures at the WICS (at the time in 2007), candidly acknowledged how 'regulators must take opportunities as they arise' (Byatt and Sutherland, 2007). The following

assessment of how discretion is exercised in the context of WWS in Scotland helps illustrate what is meant by purposeful regulation.

The WICS have sought to instill change and improvements through the creation of new institutional frameworks that lever and facilitate competition. For instance, WICS developed the OPA tool that imitates the template from the English privatised model, measuring and comparing the performance of each utility in several areas of customer service and operations. Sutherland characterises the OPA as follows: 'our assessment of Scottish Water's actual performance draws heavily on the private sector benchmarks established by the regime of comparative competition south of the border' (2006: 7). The rationale is that OPA creates a competitive framework, albeit an artificial one, whereby each utility is benchmarked against peers, thereby (whether intentionally or not) incentivising Scottish Water to act like the privatised water companies in England.

Yarrow's account of purposeful regulation is consistent with the WICS understanding of their role. It is clear that WICS used their interpretation of legislation as a lever to promote a competition agenda. Clause 29E of the Water Services Etc (2005) Act was seized by the WICS as a means to 'expose more parts of the business to competitive forces' (Byatt and Sutherland, 2007). The WICS acknowledge that 'we identified that section 29E of the 2005 Act could potentially allow more activities to become contestable' (WICS, 2008b).

The WICS now have responsibility for administering retail competition. The Water Services Act, incorporating a new framework of competition, was passed in 2005. The 2005 Water Services Act charged the WICS with administering the new competition framework, with responsibility for deciding licence conditions, the market code, operational code and the template wholesale services agreement (Sutherland, 2008b).

The broad principles of the new competitive framework allow business customers to choose their WWS supplier, though Scottish Water will continue to operate the network of pipes, resources and treatment assets. Scottish Water has a new fully separate company, Scottish Water Business Stream (SWBS), to carry out its retail activities within this new framework. New entrants can compete with SWBS, 'purchasing

wholesale services from Scottish Water at standard prices and providing retail services to customers' (Sutherland, 2008b). Sutherland outlined to an audience at the pro-market think tank the IEA, the scope of competition for non-domestic users:

All non-household organisations in Scotland from the smallest newsagent in the Western Isles to the largest Industrial sites; from small council offices to leisure centres and hospitals have been able to choose who supplies their water and wastewater services (Sutherland, 2008c).

The WIC was central in developing this competitive market in the Scottish water sector. Alan Sutherland, when solely the WIC, argued that if competition was not introduced via the UK Competition Act, there could be a legal challenge that may force competition. In written evidence to the Environment and Rural Development Committee for the Water Services etc Bill, he claimed:

The impact of the Competition Act on the water industry would not become clear until there was a challenge. However, such a challenge may result in the framework for competition in the public water industry in Scotland being determined by the Courts. Any interpretation of the Act by the Courts may not be consistent with the broader policy objectives of the Scottish Executive for the water industry in Scotland. At the same time, the Scottish Executive has also recognised that, subject to safeguards, which ensure broader policy objectives can be delivered, it may be beneficial to allow the introduction of some competition into the water and sewerage industry in Scotland (Sutherland, 2004).

The introduction of competition was ground-breaking and proclaimed as 'a world first' (Sutherland, 2008b) with Scotland 'leading the world in the introduction of a competitive framework for the water and sewerage sector, it is a system that has never been tried anywhere else in the world' (Sutherland, 2008d). The hyperbole about competition was shared by the Scottish Government, with Minister for Infrastructure, Stewart Stevenson, who enthused how:

The opening of the retail market for non-domestic water and sewerage customers is an exciting development for Scotland. For the first time all business and public bodies, such as schools and hospitals and local authorities, will have a choice of who supplies them with their water and sewerage services. This is the first time such market competition has been introduced anywhere in the world (2008).

The WICS sought to build momentum on this issue and suggested competition could be broadened and include the household sector. Sutherland remarked shortly after competition was introduced that 'It is clear from the success of Business Stream that there can and should be changes in household retail' (2008b). The WICS reiterated this message to the Cave Review³¹, which was looking at competition for England, stating, 'we regard the introduction of retail competition as a useful first step. It is now quite clear that a choice of supplier could be offered to household customers and that this need not require metering or disconnection' (WICS, 2008b). Sutherland also told a delegation from Kosovo that opening up competition for household customers was a means by which to broaden competition, albeit 'we will need to design appropriate safeguards to protect vulnerable customers' (Sutherland, 2008b). The strength of my triangulated approach (discussed previously in chapter 5) is shown here, as in an interview for this research Alan Sutherland informed me that he did not support competition for household customers (2013).

The WICS regulatory agility in being quick to recognise opportunities was shown when they seized on the Scottish Government plans for a local income tax, which they used as another opportunity to expand competition to domestic customers. Sir Ian Byatt wrote in the WICS 2007-2008 annual report how they were 'preparing for other eventualities, such as the possible abolition of Council Tax and the substitution of a Local Income Tax. This could prove an opportunity for the extension of retail competition to household customers' (Byatt, 2008a: 7). This prospect was also mooted to interested stakeholders at the Adam Smith Institute (Byatt, 2008b). To take this agenda forward the WICS

³¹ Professor Martin Cave led an independent review of competition and innovation in water markets for England and Wales between March 2008 and April 2009

commissioned a report assessing the implications for Scottish Water should a local income tax be introduced in Scotland (Armstrong and Armstrong, 2009).

Regulatory leadership is evident in the promotion of the Scottish model of competition. Byatt drafted a paper titled 'Is the Scottish Model Exportable?' (Byatt, 2008c), setting out the strategy, benefits and lessons learned from introducing the competitive framework in Scotland. Moreover, the WICS have publicly argued for a wider British market, asserting how 'Customers are already benefiting [from competition], but could benefit more if the market were opened in the rest of GB' (Sutherland, 2009a).

The view articulated from inside the WICS was that competition, including the privatised English and Welsh markets, would be the best long term option for water provision and it would be appropriate for 'Scotland (to) look to open up competition upstream: in resources, treatment and distribution, as well as in domestic retail...a Great Britain-wide competitive market might be the best option for customers, entrants and the market' (Sutherland 2008a).

This kind of advocacy appears to stray outside a narrowly technical remit that many assume is the role of an economic regulator. In addition to advancing a clear policy agenda the WICS has also sought to assert its pro-market preferences amongst opinion leaders and policy setters in Scottish and UK policy circles.

The WICS and Thought Leadership: Setting the Policy Agenda?

Consistent promotion of the benefits of competition has been a feature of WICS policy activism. Papers obtained using FOI offer some insight into the thinking and approach of the WICS. A central part of their communications strategy was to raise the profile of the WICS 'as a 'thought leader' in the field of retail competition' (WICS, 2009c). In 2008 Sutherland insisted 'as a regulator, we have taken a leadership role in implementing competition' (Sutherland, 2008b). An internal communications strategy paper says 'how choice was good for users' and identifies promoting that message as a key task. Another feature of the communications strategy was to use their own annual 'Comiston

Lecture', delivered in 2008 by Phillip Collins as 'another opportunity to promote competition in Scotland' (WICS, 2008c).

In 2008 Sutherland told an IEA audience that 'our experience in Scotland suggests that there needs to be a pro-active – some might say bloody minded approach by the regulator in order to make sure competition happens the way it is intended' (Sutherland, 2008c). This rather candid observation highlights the significance of the WICS own mission and agenda. They have been key agents in extolling the benefits of 'ground-breaking' competition and in aligning resources and investing time and effort to ensure its success.

The WICS have fully engaged with policy and industry partners – many of whom have a preference for further change in the Scottish water industry - to support and promote competition. These have included papers to the Institute of Economic Affairs water conference in 2008 and an IEA lunch in 2009 titled 'Introducing Retail Competition into the Scottish Water Industry'. Other papers publicising and promoting competition have been delivered to the European Policy Forum, the MEUC, The Scottish Conference on Water 'Turning the Tide: The Future of Scotland's Water', Water UK, UNESCO, the Martin Cave Inquiry into Competition in England, the Adam Smith Institute and the Regulatory Policy Institute³².

The WICS acknowledge their active role in considering the 'next steps in water competition' and pledged to promote 'competition and contestability wherever possible' (Byatt and Sutherland, 2007). This strategy was echoed by Sutherland claiming 'we are examining what we can do to broaden, strengthen and deepen the competitive market' (Sutherland, 2008a). While Byatt is on record stating:

The most urgent task is to make progress on enhancing the role of the market, primarily, but not exclusively by promoting competition...This will require leadership by regulators to ensure that the costs of the various elements in the vertically integrated chain of supply are disentangled (Byatt, 2007a: 17).

³² All the presentations delivered at each of these conferences have been obtained using Freedom of Information, though many of them have now been put up on their website

The WICS proactivity in their thought leadership and advocacy role highlighting the benefits of competition in Scotland is also evident from their communications strategy, which used both in-house and external capacity to promote market friendly ideas. The scale and scope of this effort was evident from the WICS contract with PR company 3 Monkeys³³ Communications (3MC) to coordinate and formulate their PR and lobbying activities (WICS, 2008d).

They have also worked alongside the journal 'Utility Week' to host four seminars raising awareness amongst business users that competition had begun (WICS 2008d). 3MC also set up a radio advertising campaign. These PR activities resulted in a great deal of attention in national and local TV and radio, as well as in a wide range of print media. The WICS reported that the 'advertising equivalent value of the print coverage alone is estimated to be over £415,000 (WICS, 2008d).

Part of the communications strategy included a website, Scotland on Tap, which proclaims the potential benefits from competition. Launched in 2008, it declared 'Competition should bring wider choice, lower prices, better services and more innovation' (Scotland on Tap, 2008). Alan Sutherland also prepared a paper 'on the benefits that competition will bring to customers, supported by initial evidence from Scotland'. This was distributed to all attendees at the Major Energy Users Council (MEUC) and marketed to journalists and trade magazines (WICS, 2008c). This paper is remarkable for its foresight: published in February 2008, yet able to outline evidence of the success of competition *before the market was introduced* in April 2008.

Purposeful Regulation: The Case of 'Project Checkers'

Evidence gathered during this research shows that the most significant and far-reaching illustration of their agenda setting role that goes beyond their statutory duty, is a research project commissioned by the WICS to look into *alternative models of ownership*

³³ Information obtained from Freedom of Information that listed the external consultants used by the WICS and the payment they received, showed that 3 Monkeys worked between September 2008 and November 2009 and received £219,856.19 for the work provided. (WICS, 2008d).

for Scottish Water. Nicknamed by one of the main protagonists as 'Project Checkers' (Oaten, 2007), it is officially titled *Organisation of the Water Industry in Scotland* and is a study not widely known outside of elite policy-making circles. There is no public trace or evidence of this project, aside from the information gleaned from FOI for this thesis, and the WICS have not shared this document with the public or their elected representatives since its completion in May 2007. Yet, Geoffrey Smith, who took part in this work on behalf of ING Barings, described it as a 'high profile project' (Smith, 2007). We must assume that the work had considerable importance for those who commissioned it and the high profile refers to its salience among the upper reaches of water policy makers in Scotland.

The papers uncovered, using FOI, reveals how Project Checkers represents an advanced plan and timetable for the legislative programme, should a political decision be made to change the ownership structure of Scottish Water.³⁴ The final document provides an apparent template for the necessary approach and tactics, in addition to an outline for the associated legislative process. This appears to have been influential amongst others thinking of change, with the SFT and IBR reports produced in 2010 closely resembling Project Checkers. In initiating this project the WICS have not only provided considerable thought leadership and played an agenda setting role in relation to the future ownership of WWS in Scotland, they have also, arguably, supplied some of the technical and detailed policy analysis required to make such a change happen.

Repeating a well-worn path of initiating change in the Scottish Water industry, the key agents involved in producing the report come from the corporate sector. The consulting firm LECCG, investment bankers ING Barings, as well as Edinburgh based corporate lawyers Shepherd and Wedderburn worked jointly on the project. The cost of the research was some two hundred thousand pounds: £143,920.72 for the advice from LECCG and £60,000 for advice from ING (WICS 2009d). Shepherd and Wedderburn have an annual retainer with the WICS as a legal adviser. Overall the cost for this research is a substantial outlay for the WICS, especially when one considers their budget for the relevant financial year totalled £3,610,284 (WICS, 2009e: 35).

³⁴ This research is still not publicly unavailable. As noted the account here is based solely on documents secured via FOI.

The lead organisation, LECCG, and some of its consultants, involved in Project Checkers, have been involved in privatisation projects all over the world. For instance, Michael J Oaten, an affiliate at LECCG and an ex-employee of Arthur Anderson, had overseen 'Acquisitions and divestments of many types and sizes in the UK, Europe, and Asia; Privatisations in the Middle East, India, East Asia, Eastern Europe, USA, and Australia; Strategic, financial, and accounting aspects of acquisitions and disposals and Stock exchange and takeover code regulation' (LECCG, 2010).

Neil Summerton was another key advisor on Project Checkers. Summerton was a non-executive director at companies whom Veolia owned, Folkestone and Dover Water Services (which became Veolia South East) during 1998-2009 and likewise at Three Valleys Water (which became Veolia Central³⁵), 2000-2009 (Debrets, 2010). He was a non-executive director at both Veolia South East and Veolia Central from 2009-2012. Veolia, one of the biggest global water TNC's, also operates PFI contracts in Scotland and is a major partner in Scottish Water Solutions (SWS). Evidence uncovered shows an LECCG invoice of £17,606 for external advice from Neil Summerton (WICS, 2009d).

Thus, an employee of Veolia, Summerton was paid to provide advice over how Scottish Water's ownership status could be changed, advice that could potentially be of direct benefit to Veolia. This issue clearly raises a number of concerns regarding corporate governance and conflicts of interest, yet all this activity happened without any form of external scrutiny or public accountability, typifying the new mode of governance that pertains to WWS in Scotland.

It is not fully clear why the WICS commissioned LECCG and to pay significant sums of public money to them to undertake Project Checkers in the first place. Indeed there is evidence that key actors have different understandings of why 'Project Checkers' was initiated. The WICS stated that:

³⁵ Following the sale of Veolia UK water businesses these two companies became part of Affinity Water in 2012

The advice provided by the commission to launch the research was that, in light of the Scottish Parliamentary elections in May 2007, the commission wanted to understand the implications of the proposals contained in the manifestos of the political parties and how these might impact on the commission and Scottish Water (WICS, 2009f).

However, the LECG research team suggested the original basis for the study was because:

The commission approached us to assess different structures for the Scottish Water Industry in the event that the Scottish Executive could not make available the current level of new debt to the industry in real terms (Lisle, 2007).

The inspiration for this study is clearly a matter of both dispute and some concern. What can be deduced from this episode is how the WICS has acted when they perceive an opportunity has arisen to promote 'competition and contest'. Moreover it is apparent that the WICS did not simply commission the research, but were actively involved in Project Checkers during the process of compiling research and evidence. Further data uncovered via FOI suggests that the WICS and the research team met regularly during the project. According to an FOI response the WICS met 19 times, between the 24th November 2006 and the 5th of May 2007, with those involved in 'Project Checkers' (WICS, 2009g).

'Project Checkers' considered different ownership options but favoured a Company Limited by Guarantee. This model envisioned further regulatory powers and further separation of politics from delivery and governance. Specifically, the report recommends any change should:

Empower the regulator; define the statutory duty of the regulator and allow an efficient company to finance its functions; enshrine independence (presumably of the regulator from government) and use the concurrency powers under the Competition Act, (1998) (Lisle, Downie and Smith, 2007).

In essence this project, recommended more powers for the WICS and less influence for political and democratic institutions. This is the kind of scenario that corresponds with the prospectus proposed by the global water lobby and which would further distance politics and the democratic process from the governance and regulation of WWS in Scotland.

What the Scottish Government knew of this research is unclear. Gordon Downie of Shepherd and Wedderburn, in an e-mail to Alan Sutherland claimed, 'I also understand ... that there may also be a meeting taking place in Edinburgh on the same date on Project Checkers, possibly involving the executive' (Downie, 2007). Sutherland confirmed that the then Scottish Executive knew of the research, and that the WICS delivered a presentation on the research findings to the government (interview, 2013).

However, in original responses to me the WICS denied any knowledge of a meeting with the Scottish Government (OSIC, 2011c). The Scottish Government also denied having any knowledge of this research when I made FOI requests to them (Scottish Government, 2010a, 2010b). These original denials raise questions over the veracity of competing accounts of how Project Checkers has been disseminated among policy makers. One possible reason for the reticence to acknowledge the existence of Project Checkers is the political sensitivity of its findings. It also confirms how as a researcher I could not fully trust what I was being told at face value by my research subjects therein validating my use of FOI as a means to gather evidence.

That said the final report did not unambiguously call for a change in ownership. However, the draft report, also obtained via FOI, was more forthcoming and did argue that a change of 'organisational arrangements might permit greater efficiency in the long term interests of customers' (Lisle et al, 2007: 4). The key issues identified in the draft report suggest that the report's authors were minded to recommend further marketised reforms, while suggesting that the Scottish Government would financially benefit if the ownership model was changed. The following are observations made in their draft report '*Project Checkers, Survey of Options*':

- The comparative institutional weakness of the WICS as regulators of Scottish Water
- The extent that the Scottish Executive (now known as the Scottish Government) controls and influence over Scottish Water
- Weak Incentivisation of staff of Scottish Water under the present government control of rewards and incentives
- The institutional relationship of the Scottish Executive and Scottish Water invites political pressures for intervention by the executive
- The impacts of Scottish Water's borrowing on public expenditure requirements in Scotland
- The scale of asset value which is locked into Scottish Water as a public entity and which could be released to public benefit (ibid).

The last point suggests that they believe selling of Scottish Water would see a significant financial return coming to the exchequer. This draft paper therefore also offers a glimpse into the thinking of those who would not be unsupportive to changing the current corporatised structure. Privatisation and the benefits from it are quite clearly stated as the best option in this paper. However there is a view, perhaps influenced by the resounding barometer of public opinion expressed in the Strathclyde referendum 13 years previously, that full privatisation would encounter significant political obstacles and would 'likely be controversial' (Lisle et al, 2007: 14).

Other options were considered more palatable to a sceptical Scottish public and could be sold more effectively. One such scenario was a mutual model which the authors claim 'might well be publicly acceptable in a way that privatisation might not be' (Lisle et al, 2007: 17). A Trust model had particular merit in that 'there might be presentational advantage' (Lisle et al, 2007: 20), and 'with careful explanation and presentation, a company limited by guarantee is likely to be more publicly acceptable than either full privatisation or the concession option' (Lisle et al, 2007: 26). Crucially, this model, like the others is attractive as 'it establishes an entity which would be free of detailed ministerial influence and interference' (Lisle et al, 2007: 25). This thinking reveals a desire to gain some traction with the public and while a Company Limited by

Guarantee might be politically advantageous, it would, according to the LECG, still be ‘a form of privatisation’ (Lisle et al, 2007: 27).

The commissioning of Project Checkers is an example of work that is not simply in the realm of ideas or abstract debates about public versus private. It represents a concrete contribution to a wider project of taking Scottish Water out of public ownership. As discussed, this is an agenda that the WICS appear to have been consistently happy to endorse and promote, despite their public utterances over the efficacy of the current corporatised model. How this sits alongside Ministerial objectives is a question that will be returned to later. Yet, despite the cost and significance of this project, and the potential for its findings to set in place a policy agenda with far reaching implications for the provision of WWS in Scotland, there is still no public trace of this document. Unlike other high profile projects and commissioned research ‘Project Checkers’ was not accompanied with a press release or media coverage, neither is there any trace of the project on the website of the WICS or indeed in their annual report which covered the period when the work was undertaken and report submitted. This lack of openness contradicts the public proclamations by the WICS about being an open and transparent organisation (WICS, 2009e: 5) and also reveals the detachment of the public within the current governance framework.

In commissioning this report, the WICS have purposefully financed and directed research which could further separate WWS from politics and political institutions. Furthermore, the research was carried out by potential beneficiaries of a new ownership structure who have recommended that the WICS enjoy increased regulatory power. This whole process reveals a culture of pro-market sentiment within the key regulator in WWS in Scotland. It is also suggestive of a style of governance that is led by elites and experts, and has some worrying blind-spots in relation to political accountability, not to mention public scrutiny. In relation to the former the case of Project Checkers also raises questions over the political influence of the WICS within the Scottish Government.

The WICS activity in laying forth alternative models for Scotland’s WWS has also highlighted their role as a policy agenda setter. The 2010 IBR, noted in Chapter 3, recommended that Scottish Water become a Company Limited by Guarantee; otherwise

described as a Public Interest Company. The SFT in their final report did not argue for full privatisation, and further claim they do 'not seek to promote any single option'. However, they did outline the benefits of different ownership models including a Public Interest Company model, which they deem as still remaining 'public'. The SFT stating that 'this structure could form a financially and operationally viable alternative to the status quo of SG ownership' (SFT, 2010a: 1-2). However, while we know that the WICS met with the SFT prior to their 2010 report it is uncertain if the SFT and IBR reports were influenced by the WICS commissioned Project Checkers report into alternative ownership structures for Scottish Water.

Insider Politics: Influence and Change Agents in Scotland's WWS

The economic regulator occupies a privileged and influential position with the Scottish Government in relation to the Scottish water industry and has helped shape the current economics of water in Scotland. During an interview for this research, former Waterwatch member, Professor John Sawkins, alluded to the political influence of the WICS when discussing the introduction of retail competition:

The most remarkable recent development in WWS in Scotland is retail competition being introduced. It is remarkable the Commissioner got it through when there is such antipathy (in Scotland) to marketisation in providing essential goods and services (2010).

Alan Sutherland concurs: 'Perhaps our greatest achievement in Scotland was implementing the framework for retail competition without our politicians showing any significant interest in what was being done' (Sutherland, 2009b). Sawkins wondered 'how the Commissioner managed to get it passed through all the MSP's' but partially answered this question in remarking that the WICS were very influential and astute and 'have very good links with MSPs and Civil Servants' (2010).

Further evidence of the policy activism and ideological proclivities of the WICS can be gleaned from their links to, membership of and participation with think tanks and at policy seminars pushing the marketisation of water. It is not being suggested that these

links, in themselves, influence the regulatory activities of the WICS. However, they do give a hint to their wider networks, worldviews and political values.

In March 2007 the WICS agreed to donate £15,000 to the David Hume Institute for a study looking at 'The Regulation of Public Services' (WICS, 2007a), claiming the aims of the David Hume Institute were consistent with their remit of promoting customer interests'. It is credible therefore to suggest this meant that they were also content with the David Hume Institute world view and 'orientation ... towards the relevance of market approaches and market solutions in determining economic well-being' (David Hume Institute, 2009). During the WICS board meeting that approved their donation two then members, Charles Coulthard and David Simpson, declared their membership of the David Hume Institute (WICS, 2007a), while in 2009 Sir Ian Byatt became the Chairman of the DHI.

In many respects this is quite typical of how elite policy networks operate and cohere. Interlocking directorates and membership of peak policy planning organisations are recognised ways of accessing decision makers, building alliances and coalitions, and ultimately influencing policy deliberation. In this respect the WICS are simply following a tried and trusted strategy of large corporations in playing politics. This is also aligned with the current vogue for partnership governance and stakeholder dialogue. The WICS can justify their participation in these largely elite, private, closed and unaccountable networks by pointing out that these are the routines of the new governance mode. Conversely, the WICS interlock with these groups indicates a partiality towards those they associate with and a political activism that arguably goes beyond their statutory duty.

The establishment of the current regulatory model, with the agency of the WICS at the heart of it, has provided the foundation for further change. The formation of the WICS has created new (active) agents as well as new structures and allowed these mediators between the government and operator a great deal of power, as well as some liberty, to proactively initiate and advocate for reforms and new structures for the Scottish water industry. Allowing them this space has been the separation of delivery from politics, which is arguably the key component of the current regulatory model that governs Scotland's WWS. The change to governance, with a strong role for

regulators corresponds with the template promoted by influential policy networks that were discussed earlier.

Yet, while the WICS has been a purposeful regulator, it has managed to evade detailed scrutiny by media and politicians. This raises some far-reaching questions over the role and organisation of regulation. Who regulates the regulators? Can regulators be effectively held to account in an expert led technocratic system? Can regulation ever be depoliticised? It could be argued that the role of the WICS, and indeed other like-minded regulators, is political. This has been evident in the Scottish case in the way the WICS interpret their duties based on a particular worldview and in how they proactively promote particular policies which have a clear ideological leanings. Against this backdrop the power and relative autonomy of regulators like the WICS make them ripe for study in order to help scholars gauge the success, or otherwise, of wider trends towards marketised delivery of public goods and services and the governance by expertise which accompanies it.

While there is broad belief that the WICS have helped transform the economic performance of Scottish Water, it has become apparent that there have been costs from this drive to balance the books. Concerns have been raised that the WICS have prioritised economic objectives over social and environmental targets, and also about how these costs that arise are distributed. Stakeholders including senior civil servants acknowledge that hard budget constraints and seeking the lowest reasonable cost result in trade-offs or negative externalities.

The culture, ethos and behaviour of the operator, Scottish Water, have undoubtedly been impacted by the WICS. The statutory duty of the WICS to set budgets and charges and to get best value for water users, and their interpretation of how to achieve that, has had a significant impact on the direction of Scottish Water. Assessing how Scottish Water has developed as an organisation is one way to assess the influence of the regulator and the new mode of governance outlined above. One manifestation of this is in the development of a commercialised culture and use of market instruments in ways alien to traditional public services. The following chapter considers the corporatisation of Scottish Water in this context.

Chapter 7: Scottish Water: A Model of Corporatisation

Understanding how regulation impacts Scottish Water can be seen in its policies and practices from the boardroom to workers carrying out operations. This chapter identifies some of the key changes that have occurred in Scottish Water; however, given the scale and scope of the national corporation, it is not possible to address all of Scottish Water's activities and functions here. To place this analysis in some context a brief discussion and acknowledgement of the scale of the task facing Scottish Water in providing WWS to Scotland is provided.

There is no doubt that delivering WWS across Scotland is a monumental undertaking. Scottish Water explain how they provide:

Clean, safe and high quality drinking water to 2.4 million households and 152,000 business premises across Scotland. Every day we provide 1.3 billion litres of clear, fresh drinking water and take away 839 million litres of waste water, which we treat before returning to the environment...operate and maintain 29,762 miles of water pipes, 31,477 miles of sewer pipes 1,863 waste water treatment works and 266 water treatment works (Scottish Water, 2012a: 1).

Discharging their duties and operating and maintaining their asset base and infrastructure, requires a significant level of funding. The outlay for the regulatory period 2002-2006 cost £1.8 billion, while in 2006-2010 £2.15 billion was invested. Scottish Water state this was 'one of the largest ever investment programmes for the water industry in Scotland and one of the largest investment programmes per customer ever undertaken in the water industry in Britain' (Scottish Water 2010a: 8). For the regulatory period, 2010-2015, the total finance allocated was £2.5billion, which was spent on 'maintaining its assets and improving its environmental and public health performance' (WICS, 2009i: 3).

The significant investment and the improved asset and infrastructure base does not detract from a central assertion of this thesis that Scottish Water has become a corporatised public water and wastewater utility; in so much as its governance and operations resembles corporatisation (as described in Chapter 4), as does its adoption

and application of commercial practices. Although Scottish Water is formally a public company it behaves as if it is a private corporation. The Scottish corporatised model incorporates different components of corporatisation, including in its governance, commercial practices, incentivising staff related to target setting, human resource management, and partnerships with private sector etc.

Introducing a corporatised model has been acclaimed as transforming WWS regulation and operations in Scotland. The model of corporatisation has many admirers in Scottish policy circles, typified in the comments of one former minister who celebrated 'a publicly owned water business, subject to tough regulation, whilst there is still progress to be made the benefits are clear, stable prices outperforming its business plans and improved efficiency in customer service' (Stevenson, 2008). The Think Tank, the David Hume Institute, commended the transformation of Scottish Water, citing increased productivity and reduced operating costs as measures of success (Armstrong, 2007). Similarly, at a conference in Edinburgh Alan Sutherland, the Chief Executive of the WICS emphasised 'the financial transformation of Scottish Water from 'financial basket case' to 'one of the most financially secure companies in the UK which has maintained price rises set below the rate of inflation' (author fieldwork notes, Edinburgh, 2009).

Senior management at Scottish Water agree with much of these assessments. Chairman Ronnie Mercer stated in 2012 how Scottish Water had 'made real achievements in our first decade to deliver the investment Scotland needs and the improvements in our service that our customers deserve' (Scottish Water, 2012a: 2). Regulation is seen as central to the perceived improvements. The then WICS Chairman, Sir Ian Byatt noted that 'Scottish Water has continued to respond well to regulatory and other challenges' (WICS, 2009e: 3). Research, commissioned by the then Scottish Executive, also praised the corporatised model at Scottish Water and the regulators role in fostering economic efficiency.

The evidence suggests that independent economic regulation which makes use of external benchmarking with the private sector to set the charges and borrowing for Scottish Water will deliver Scottish Executive Ministers' objectives at the lowest reasonable cost (Howat, 2006: 128).

Such endorsement across policy circles has led to suggestions lessons could be learned, and the model could be applied, in other parts of the public sector (Byatt in WICS, 2009e: 3; Armstrong 2006; Howatt 2006). A recurrent theme is how the type of corporatisation applied in the water sector would benefit other parts of the public sector where there is seen to be commercial potential in delivering public services.

Applying Marketised Characteristics: Reducing Cost and 'Out-Performance'

According to WICS Chief Executive, Alan Sutherland, there are three key areas where the WICS have sought improvements in the performance of Scottish Water: customer service, capital investment and operations (Sutherland, 2006: 7). As noted in Chapter 6 benchmarking, in the form of the OPA is a market device used to drive and incentivise efficiency (see Appendix A). The OPA is in essence an artificial competitive framework, which compares the operational performance of Scottish Water, in arbitrarily picked areas of customer service, against the performance of the English privatised companies.

Arguably, the OPA narrowly directs operational priorities for Scottish Water. Moreover, it tends to produce partial solutions to particular aspects of operations, rather than fully, eradicate problems (the scope of these problems are reported in the form of reports presented by the Chief Executive of Scottish Water to the Scottish Water board, this is not shared publicly and was only discovered via FOI). The OPA has attracted criticism from both sides of the ideological divide. The STUC believe the OPA to be fundamentally flawed, as it does not take into account the historical difference in funding, the difference in topography and physical landscape between Scotland and England (Findlay, 2004). Market ideologues, such as Colin Robinson from the IEA, believe benchmarking is a poor compromise and only a fully liberalised, competitive and privatised water sector will bring improvements in service (Robinson, 2005, 2006).

The WICS introduction of the OPA clearly shows how their regulation is a central influence on customer service and the operations of Scottish Water. Its creation has been a key driver in the corporatisation of WWS in Scotland. Another significant example is the imposition of the hard budget constraint during the SRC. As noted the

SRC process is intended to drive efficiencies in operational and capital investment costs. From a Scottish Water perspective the SRC applies pressure on them to fulfil their core functions for as little economic cost as possible. Even when the total budget is decided, Scottish Water is expected to try and out-perform the costs/budget for the regulatory period. During the regulatory period 2002-2006 the WICS reported how:

At the Strategic Review of Charges 2002-06 (published in November 2001), the Quality and Standards 2 investment programme was costed at more than £2.3 billion, before taking account of the scope for capital efficiency in delivering the programme. Once the former Water Industry Commissioner's efficiency targets had been applied, Scottish Water was required to deliver the investment outputs for £1.8 billion (WICS, 2006b: 2)

Despite the prevailing wisdom that squeezing efficiencies is always possible evidence suggests that reducing costs is not always straightforward. During the 2002-06 regulatory period it was agreed that additional investment was required - the total spend was eventually £2.098 billion (ibid). Moreover, the pressure from the WICS and the wider SRC applied on Scottish Water can provoke tension and disagreement as information from the SRC prior to the 2006-2010 regulatory period confirms. Evidence unearthed by this research reveals how Alan Sutherland claimed Scottish Water estimated the cost of Quality and Standards 3, amounted to £3.6 billion. The WICS queried these investment plans 'challenging gold-plated solutions' proposed by Scottish Water, resulting in a reduction in budgets down to £2.2 billion in the Final Determination Allowance (Sutherland, 2008e: 7). A decrease of £100m per year, from £300m to £200m, in the maintenance component of the capital budget formed part of this calculation (Sutherland, 2008e: 8).

This disparity and the ensuing tension and difference of opinion between the WICS and Scottish Water eventually resulted in the acceptance of the WICS budget proposals and the ensuing resignation of the Scottish Water non-executive chairman, Alan Alexander. An outcome that illustrates how the WICS regulatory role was destined to influence the behaviour of Scottish Water and of course wider outputs provided to the Scottish user of WWS. The WICS themselves consider that this is a positive influence, in so far as their

approach is 'delivering more for less' and ensures customer charges are kept down and best value provided. In this regard, the WICS state:

Scottish Water had reduced its operating costs for the fifth year in a row. In 2007-08 these costs were some 40% lower than they were, and customers are saving more than £3 million a week as a result...This is a clear indication that the incentive framework that we have put in place is serving the interests of customers well (WICS, 2009e: 9).

The view from inside the WICS is that Scottish Water can continue to reduce costs indefinitely. In an interview for this research Alan Sutherland stated that new and greater efficiencies can always be squeezed from Scottish Water (2013). However, this is slightly at odds with Sutherland's exchange with then Chief Executive of Scottish Water, Richard Ackroyd, discussing concerns about capital programme costs for the 2006-2010 period when he said:

It is of course likely to be increasingly difficult to continue to outperform future price reviews in areas such as operating costs and assets disposals and this will increase the pressure to deliver the required capital outcomes on time and to budget (Sutherland, 2009c).

This correspondence was prompted by WICS concerns expressed over 'improving the delivery of capital expenditure' (ibid), and, what the WICS calculated was an overspend of £53.5m by Scottish Water during the 2006-2010 regulatory period. This increase was as a result of uncompleted projects from the previous spending round (regulatory contract). WICS states:

There is always a risk that the overhang of projects from one period to the next will require more resources to complete than are originally expected. This is for two reasons: there will be no inflation allowed for in respect of the overhang; and the overhang often comprises the more tricky projects where completion may not be straightforward and costs may be more difficult to control (WICS, 2009j)

This exchange offers further lessons. As despite this acknowledgment of risk the WICS did not allow any additional funds or inflation adjustments. Instead, budgets were set tightly with little leeway apart from how 'Scottish Water had to out-perform its regulatory contract in order to cover any additional costs incurred' (ibid). In such a situation the WICS are forthright that the customer should not pay twice for outputs agreed at the start of each regulatory contract. In this context, where Scottish Water 'spend the financial resources available without achieving the required outputs, Scottish Ministers alone would be liable to meet the costs of remedying this' (Sutherland, 2006: 10).

This particular situation raises questions over whether the application of 'hard budget constraints' may be so tight the efficiencies it seeks are unlikely without costs being displaced rather than removed. There may also be occasions where Scottish Water simply cannot outperform the regulatory contract. In such circumstances, it would potentially fall on Scottish Ministers to find additional monies to pay for any shortfalls, or Scottish Water may have to find savings from other (tight) budgets, raising the real likelihood of costs being passed on to either the taxpayer, the consumer or the environment or sometimes all. A detailed examination of selected negative externalities within the current corporatised arrangement is developed in subsequent chapters.

Bonuses, High Wages and Job Losses – Corporatised Incentivisation?

As noted the use of incentives is a key cornerstone of the WICS strategy to improve Scottish Water's performance. It is also another characteristic of how the model of corporatisation has penetrated the public utility. Aligned with the OPA incentives are bonuses, which are predominately targeted at boardroom and senior management level, to encourage directors to 'outperform' the regulatory contract, (Byatt, 2007b; Sutherland, 2006; WICS, 2009a). A confidential WICS discussion paper insists incentives are in place to drive performance but is clear that 'such improvement is to the benefit of customers' (WICS, 2009k). The paper suggests:

Bonuses should only be paid to Scottish Water's management if the company outperforms its regulatory contract (as measured by the size of the financial

reserve) and by performance on levels of service (measured by the Overall Performance Assessment (OPA)) (ibid)

The annual and long-term out-performance incentive payments (bonuses) paid to senior staff at Scottish Water totalled £3.2m between 2002/03 and 2010/2011, incorporating £2.574m in annual payments and £625k in long term payments (SPICE, 2011). At a Scottish Parliament Committee meeting in 2008 it was said four of the senior management team had the highest paid salaries across the whole of the Scottish public sector (Macnab, 2008). The size of these salaries and bonuses for senior management has provoked some controversy and concerns are expressed periodically.

For instance in 2010 criticism followed five senior executives sharing in a £273,000 bonus, in addition to what were seen as already sizeable salaries (Hutcheon, 2010). In 2011 five executives shared a further £450,000, said to relate to long term incentive plan for improvements to customer service and meeting financial targets from 2006-2010 (Scotsman, 2011). Given that these bonuses were being paid against the backdrop of austerity and pay freezes for the rest of the staff, as acknowledged by the then Scottish Water Chief Executive (Ackroyd, 2011) it is unsurprising that the bonus culture was criticised. Green MSP Patrick Harvie articulated these concerns:

It's simply obscene for five directors of a public company to trouser half a million pounds between them in bonuses on top of an existing pay packet that's already two and a half times that. Public services are being closed down while workers face pay freezes and compulsory redundancies, yet this gilded elite make more in a month than most people make in a year. It's time for ministers to see what kind of staff Scottish Water would get at a proper public sector pay rate (in Scotsman, 2011).

These salaries and bonuses, or incentive payments, are entirely consistent with a corporatised entity. Bonuses of this size are now normal in the private sector and, as Scottish Water perceives itself as a business which operates within a competitive marketplace (including in the recruitment of highly skilled staff and management) it is entirely logical that they argue they need to pay, what they see as, the going rate in

salaries and bonuses. Ronnie Mercer, Chairman of Scottish Water, defended their pay policy for senior management when questioned during an appearance before a Scottish Parliament Committee:

As you are aware, the bonuses are paid on the basis of performance—we have discussed that before at great length. The salaries that they earn are based on an exercise that was undertaken using the Government's advisers in order to get the best management we can afford and not lose them to others because what we pay is so far behind...They were set to attract to the top jobs the people we need to drive a company with a £1 billion turnover and to keep the people whom we want to keep, although it is not always possible to do that, as people move on or get bigger jobs.....*They look out of place in the public sector - I totally agree with that - but the company is not a typical public sector company; it is run as a business and it needs people at a certain level to make it run that way because of the complexities of it (Mercer, 2010).*

The general workforce at Scottish Water have not enjoyed the same security, pro rata salary increases or incentives as the higher echelons of senior management. In fact in aspiring to outperform its regulatory contract Scottish Water has made major workforce efficiencies, resulting in a significant downsizing of staff from 5,648 in April 2002 to 3,756 by April 2005. Staff severance costs in this period amounted to £84.8 million, paid out of the £183.6 million restructuring and transformation costs (Scottish Water, 2006b; Audit Scotland, 2005: 7). By 31 December 2008 staff numbers had reduced again to 3589 (Scottish Water, 2009b) and by 2011 staff numbers stood at around 3400 (Ackroyd, 2011). However, despite the increase in directly employed full time equivalent staff there were still 6252 full time equivalent employees when temporary and agency staff were included (Scottish Water, 2009k).

A Scottish Water worker informed this research that though the workforce in his front line team had been halved they were still expected to carry out the same total amount of work (Striking worker, 2008). In 2011 Scottish Water senior management admitted to the Scottish Parliament Infrastructure and Capital Investment Committee that they were constantly seeking to reduce staff costs. Richard Ackroyd said:

We regard cutting costs as being an important thing to do. It is one of the ways in which we keep bills down to affordable levels. Inevitably, people costs - the cost of employing people - are a significant part of our operating cost. They account for roughly a third...we always expect progressively to reduce the number of people we employ. When Scottish Water was formed in 2002, the number of people employed was about 6,000; it is now about 3,400...It is about how we progressively make the business more effective...We expect to reduce by roughly another 80 over the next three years (ibid).

During the course of this research tensions between senior Scottish Water management and the workforce erupted. In November 2008 the workforce went on strike for the first time since the formation of Scottish Water in 2002. In an interview on the day of the strike workers explained to me the concerns that had led to them voting to strike. Despite decent partnership working up until this point and their cooperation with the drive for efficiency by management, they said that the attitude and approach of senior management had changed towards them. They described how a new pay offer had been imposed by management causing 'a lot of resentment against them', increased by the belief the management 'always wanted to make savings and it always seems to be us at the bottom that it is affecting' (Striking worker, 2008). Their frustration was exacerbated by their calculation that the pay of management had increased by 60% over the lifetime of Scottish Water (ibid). It was this that led to the vote for strike action which had a turnout of 77% with an overwhelming majority in favour (ibid).³⁶

Reducing labour costs is consistent with cuts to the workforces at corporatised utilities. One study suggests the reduction in staffing is an inevitable (and beneficial) outcome after private sector participation or when private sector practices are replicated in the public sector (Marin, 2009). According to Marin, 'introducing a private water operator usually results in lower staffing levels and higher labour productivity' (2009: 96). There is a counterview to this analysis. Cooper et al. outlined the wider economic and social consequences resulting from the reduction of the workforce at Scottish Water. They

³⁶ The strike was settled in December 2008 just before further action was to take place.

argue that people find it difficult to get others jobs immediately and that therefore social security benefits would need to be paid for by the state. While it's likely that health impacts are felt by the workforce, stress etc, which has an additional cost for the NHS and thus the state (2006). Moreover, that tax yields are cut because the unemployed don't earn and pay tax (2006: 35). Hall and Lobina also challenge the assumption that cutting staff is a positive direction for effective operations water utilities to take:

Many banks and analysts assume that the less workers, the better, and so use a standard measure of employees per thousand connections, the lower the number, the better the performance. This measure is technically weak, if a water operator carries out its own construction, it will appear to employ far more workers per connection than another operator which outsources the work to contractors, even at a greater cost. But it also fails to recognise that extending services and providing better services often requires extra workers (Hall and Lobina, 2006: 13).

Making cuts to the workforce has coincided with the board of Scottish Water being shorn of democratically elected trade union officials and elected members from local or national government. The composition of the Scottish Water board, which is dominated by people with business and commercial backgrounds, is another reflection of the corporatised path chosen for Scotland's WWS³⁷ and helps illustrate the de-democratising trend in the Scottish water sector. The board of Scottish Water appears to be selected on the basis of business background, rather than specific water industry or public sector experience. Whether this is good or bad is a contested point, but it is clear that the trajectory within Scottish Water is for senior management, who themselves are from a corporate background, to increasingly corporatise the organisation.

³⁷ The current board has of eight people is composed of seven people from a business background. Their previous experience incorporates finance, banking, construction and utilities. The one other member is a former trade unionist.

Paying for WWS: Charges not Taxation

The promotion of cost recovery policies are seen as a central component in the management of a corporatised utility. This mimics practices in the private sector where placing a cost or price on water is seen as necessary mechanism to regulate water use and provide the means for investment and improvements. In short it is an approach that embodies market environmentalist thinking.

In Scotland cost recovery has been embraced, albeit a portion of Scottish Water's revenue comes from loans. Richard Ackroyd stated how 85% of revenue derives from customer water charges and 15% from Scottish Government loans (author fieldwork notes, Edinburgh, 2009). The total Scottish Water budget during the period 2002-2011 was £8.870 billion from customer charges and £1.020bn from government loans. Of that £9.890bn total nearly 60%, £5.865bn, was spent on capital investment, carried out mainly by the private sector and PFI vehicles, with the remainder spent on operations and maintenance (SPICE, 2011).

It has been noted that capital investment projects in Scotland also employ the so-called Regulatory Capital Value mechanism, which ensures there is a surplus built into the cost of the works. This surplus is shared by partners in Scottish Water Solutions (Cuthbert & Cuthbert, 2007a). While private contractors have benefited from this investment bonanza Scottish Water have managed a cumulative retained surplus after tax accrued (between 2002/2003 and 2010/2011) of some £1.002.4bn. It is said that this surplus or profit shown is for accounting purposes only and there is no cash available as all surplus is re-invested in the asset base and the 'business' (Millican, 2010, 2011 Sutherland, 2013). However, making such surpluses is intertwined with outperforming the regulatory contract, which as noted, is in turn linked to the senior management bonus culture. The latter point aside, the reinvestment of surpluses is a point particularly relevant in any future debate over the privatisation of Scottish Water.

Stabilising costs is an important regulatory objective. In the final determination of charges and budgets for the regulatory period 2010-2015 the WICS planned for below inflation price increases, stating how 'households will enjoy a price freeze in the first

year and, subject to inflation, the prospect of a further price freeze in 2011-12. Household charges will increase by less than inflation between 2012 and 2015' (WICS, 2009i: 2).

However, contemporary pricing needs to be understood in the context of significant price rises in the recent past, which were seen as necessary to pay for investment requirements. These 'prices paid by domestic customers have, since 1996, increased annually at or around 10 times the rate of inflation' (Sawkins and Dickie, 2005: 226). Sawkins and Dickie also reported how in 1996 the average water charges bill in Scotland was £107 but by 2002/2003 this had risen to £248 (2007: 20). Global Water Intelligence calculated that by 2008 Glasgow was ranked fourth in a top ten combined water wastewater tariffs in the world (2008, 33-36). There were concerns that such steep rises were potentially unaffordable for people. As Sawkins and Dickie observed:

Empirical evidence has emerged to show that the large and relatively rapid price rises have placed a particularly heavy additional financial burden on low-income households. This, in turn, has fuelled a political debate over the problem of water affordability (2005: 226).

As noted above the WICS suggested WWS in Scotland previously resembled a financial 'basket case'. In addressing this supposed financial mismanagement and meeting investment demands, predominately driven by EU directives, the then WIC sanctioned these price rises at the same time as seeking efficiencies within the broader self-imposed hard budget constraint approach. Hence, the WIC advised that charges in Scotland for 2002-06 should rise by 15% while Scottish Water was simultaneously required to reduce its operating cost and capital expenditure by 34% (Sutherland, 2006).

Such price rises, alongside more efficient operations were deemed necessary in order to secure investment in the asset base and infrastructure. Meeting EU Directives was driving investment decisions and a policy consensus quickly emerged that meeting investment requirements could only be achieved by both price rises and squeezing further efficiencies. The need for improvement and investment was also a key driver for

an increase in private sector involvement in Scotland's WWS. It was in this context that it was decided the private sector should play an increased role, based on a broad calculation that they could bring a level of capital, operational capability and technical expertise to meet the infrastructure investment challenge posed by EU directives.

Private Sector Participation

Penetration by the private sector is a central component in the current corporatisation of Scotland's WWS. It has been enabled through two main mechanisms: PFI, which as noted involves a series of contracts to provide wastewater treatment; and SWS, the joint venture charged with delivering Scottish Water's capital investment programme. Scottish Water's spending on private sector contractors between 2002-2011 accounts for a large proportion of the £5.865bn spent on capital investment via SWS and PFI contractors (SPICE, 2011). Aspects of these PFI contracts will be discussed in the next chapter.

SWS is the capital investment delivery vehicle created after the formation of Scottish Water in 2002. The role of SWS has been a significant element in the history of Scottish Water to date, though there is some doubt if it was required at all. Two trade union officials working within the water industry believed there were sufficient skills and manpower at the time to meet the investment demands, negating the need for a joint venture such as SWS (Scott, Nisbet, interview, 2013). Nevertheless, Scottish Water chose to significantly reduce their workforce whilst creating a joint venture that contracted significant swathes of work out.

SWS was originally a joint venture 51 per cent owned by Scottish Water, with the rest split equally between two consortia³⁸ but was reorganised latterly to become SWS 2. This new configuration was designed to ensure specificity and greater matchmaking between the capital investment needs and the skills and capabilities of contractors. However, this newer arrangement retains a key similarity: the entrenched reliance of Scottish Water on external private actors to accomplish their investment programme.

³⁸ SWS was originally was composed of Stirling Water (comprising Thames Water (before Veolia bought them out) and engineering/construction firms KBR (a subsidiary of US firm Halliburton), Alfred McAlpine (replaced by the global player Black and Veatch) and MJ Gleeson (replaced by Carillion) and UUGM (made up of United Utilities and building groups Galliford Try and Morgan Est) (Ockenden, 2004: 18).

SWS have not received the same level of scrutiny in this thesis as other areas such as the PFI contracts. This is mainly to its commercial status which is exempted from the provisions of FOI. There is an inherent difficulty in sourcing information and finding substantive evidence about its operations using this method as being a private provider exempts it from FOI. This illustrates the broader anomaly of private sector provision of public services. With such hybrid or private organisations operating outside of the usual accountability regimes of the public sector it is very difficult to accurately and verifiably scrutinise their activities and performance. In this particular instance SWS being outside the parameters of FOI legislation is surely in need of correction. At a more specific level there is little doubt that SWS requires further research and analysis.

Reliance on external, private partners to provide engineering and construction work, administration, IT and other services does seem to be symptomatic of the current corporatised model. Public bodies have long contracted out work but Scotland's WWS has experienced an intensification of private participation since the late 1990's and the formation of Scottish Water in 2002. The ethos of corporatisation that underpins Scottish Water and its comfort with using the private sector is one explanation. Another is the influence of the WICS and their drive for efficiency using a hard budget constraint model. This drive for efficiencies has seen Scottish Water reduce its own capacity and encourages the use of external partners. Moreover, this hard budget constraint has also led to a more commercialised outlook with some 'non-core' projects initiated that are commercial in character. The alleged strategic intention behind this policy has been to try to make profits to help cross-subsidise other Scottish Water operations and simultaneously assist the drive for economic efficiency demanded by the WICS.

Commercialisation

Scottish Water's perception of itself is evolving. Mirroring the corporatised pathway currently followed by its board and regulator, Scottish Water appears to now see itself not so much as a public utility and essential public service, but instead as a business. The late Richard Ackroyd claimed in October 2009 'we are going to turn Scottish Water into Scotland's most trusted and valued business'. When questioned about this

assertion he repeated his belief 'Scottish Water is demonstrably a business. Water is not free; it is a business' (author fieldwork notes, Edinburgh, 2009).

The Commercial Committee of Scottish Water offers a glimpse of this mind-set and orientation. In 2003 a committee minute 'noted the positive start in relation to the projects highlighted within Mr Bank's (business development) paper and supported the evaluation of continuing opportunities as they arise' (Scottish Water, 2003a). Soon after its formation Scottish Water indicated its intent to pursue a commercial, non-core business development strategy. A Commercial Committee minute of 2005 records how Scottish Water had 'developed a non-core business plan and ... felt duty bound to exploit the business assets of Scottish Water' (Scottish Water, 2005).

An example of this thinking being applied in practice was the joint venture Scottish Water formed with Thames Water. Named Nevis Water it was created to provide WWS to the 550 or so military bases across Scotland. Known as Project Aquatrine, Scottish Water contributed operational capability (Construction News, 2004). Thames owned 100% of the shareholding with Scottish Water being responsible for operations and maintenance (Scottish Water 2003b). Scottish Water has also entered into other contracts to provide operational and maintenance services, including a £700,000 Project Management Contract at Hunterston nuclear power station and has actively developed other commercial opportunities (Scottish Water, 2003a).

The commercialisation of Scottish Water is further illustrated by the creation of new non-core businesses. These include Scottish Water Business Stream (SWBS), founded to enter the new market place after the WICS inspired introduction of competition in the non-domestic sector. Other commercial vehicles are Scottish Water Horizons and the recently formed Scottish Water International. Scottish Water describes Horizons as 'a new commercially sustainable, stand-alone business and goes beyond what is asked of Scottish Water by ministers and regulators' (Scottish Water, 2010d). Scottish Water also considered 'the export of raw water to international markets' (Scottish Water, 2010d). Exporting water has never been mentioned publicly but the domestic implications of such a future policy are potentially profound. This is an area requiring further research.

Waste management is another area of non-core activity that Scottish Water looked to develop (Scottish Water, 2003b). Scottish Water Horizons was the vehicle charged with developing waste disposal business. Demonstrating its wider role Scottish Water Horizons was also given responsibility for renewable energy development and telecommunications, including ‘installation of fibre optic cable in [the] sewer network’ (ibid).

The commercial direction of travel for Scottish Water is clear. The content of the paper ‘Scottish Water of the Future – Water Super-Agency Scale and Remit’ reveals how Scottish Water is planning further commercial expansion into non-core activities. Waste management, flood defences, renewable power, and international consultancy were all suggested as potential areas for expansion (Scottish Water, 2010d). By 2012 it was apparent that the Scottish Government saw Scottish Water Horizons as a vehicle to help deliver the Hydro-nation strategy, which will involve significant non-core activity (Scottish Government, 2012).

There are concerns that the pursuit of non-core objectives may negatively impact on Scottish Water’s foremost role of providing Water and Wastewater services in Scotland. Consultant’s hired by the WICS to evaluate transactions between core and non-core activities revealed there were concerns that competitors in non-core activities could be disadvantaged through Scottish Water subsidiaries receiving subsidy from the parent company, Scottish Water. Conversely, they also raised concerns ‘that losses in the non-core business may be paid for by core customers’ (Arup et al, 2006: 3).

Accessing and raising capital for non-core activities appears to be something of a historic problem for Scottish Water. In 2003 Scottish Water’s commercial director reported that developing a waste management business ‘was progressing very well but constrained by access to capital’ (Scottish Water, 2003b). In 2004 it was said that ‘The (Commercial) Committee agreed in principle that Scottish Water should consider future proposals involving external capital involvement’ (Scottish Water, 2004). Scottish Water continued to express their concern that non-core activity was being constrained by the current funding models, and that they were disadvantaged not having the type of model which enabled them to access ‘full funding’ (Scottish Water, 2010d). Under the

current arrangements this type of model would inevitably mean a partnership model between the public utility, Scottish Water, and private investors.

By 2010 Scottish Water was actively soliciting private capital. According to the Scottish Government Scottish Water had 'been developing effective partnerships with private organisations that can provide capital and other resources to take forward non-core projects' (Scottish Government, Sec 4, 2010c). For example in the renewable industry where Scottish Water Horizons had in 2010 entered into partnership with 'major renewable energy developers, three of which are in development and a further six have been approved for development by the Scottish Water Board' (ibid). Seeking private funding for commercial non-core activity and the embrace of this approach, by the Scottish Government and Scottish Water, is another indication of the corporatised character of the current model. It also confirms the broader political support for this strategy.

Generating external, private capital for funding non-core activity is obviously meeting wider political expectations (Scottish Water, 2005). The Hydro Nation Agenda and the Water Resources Scotland (2013) Act provide the most recent legislative framework for commercial development in non-core activities. The Hydro Nation agenda is beyond the scope of this thesis (the legislation passing after most research and fieldwork was completed), but it is already clear that it will entrench and expand non-core activity within Scottish Water. It will also open conduits for Government loans to be provided to non-core Scottish Water subsidiaries, such as Scottish Water Horizons (Scottish Government, 2012: 21-22). However, as noted if Scottish Water were to lose out from these deals it is core customers who would have to pay for those losses. This is an inherent risk that such activities must take cognisance of.

An example of the synchronicity of expectation and support for commercialisation between Scottish Water and the Scottish Government is shown by the newly formed Scottish Water International. Again this venture represents non-core business and is intended to 'export the expertise Scottish Water has built up over the past 10 years...it is also actively exploring further opportunities internationally' (Scottish Water, 2012b).

This, and the news they had secured their first contract in Canada, was welcomed by the then Minister for Infrastructure and Capital Investment, Alex Neil:

Scottish Water's contract in Canada underlines that Scottish ingenuity and expertise, is seen as a valuable global commodity ... it shows that there is real potential for further contracts to be secured across the world, which is why Scottish Water's decision to create a new international decision is to be applauded (ibid).

The expansion into developing commercial non-core activities encapsulates the current ethos and strategy of Scottish Water, which has been enabled through institutional and legislative change. Legislation has facilitated business development in non-core activities, PFI, SWS, competition, high bonuses, hard budget constraint and cost recovery policies. All of this has shaped the focus, culture and Scottish Water's perception of itself, particularly key actors at a senior level. How Scottish Water perceives itself and behaves is therefore shaped by wider structures. Elaborating this point is helped by observations over how they react to problems or costs/negative externalities that arise within the current structure.

Negative Externalities: The Case of External Sewer Flooding

As a corporatised entity Scottish Water may sometimes suffer from identity confusion. Particularly, when Scottish Water concern themselves with commercial rather than social priorities, which makes ambiguous their role and most importantly their purpose. How this confusion within public utilities can manifest itself is encapsulated by Castro and Heller:

Public utilities are being reorganised, giving priority to the principles of commercial and technical efficiency, to the neglect of their main function as the provider of an essential service. Thus, many public utilities are indistinguishable from private entities as their main objectives have also become profit maximisation, business expansion and even private accumulation...The citizen has been replaced by the customer...the trends...send a clear warning: the

erosion of the ethics of public service and social citizenship and its replacement by an individualistic ethic that gives priority to market interests poses potentially intractable constraints to the sustainable universalisation of water services (Castro and Heller, 2009: 28).

Data gathered for this research reveals that components of corporatisation, such as regulatory expectation for outperformance, hard budget constraint, the squeezing of efficiencies has created some negative externalities. The concept of externalities within the current arrangements was noted in the previous chapter using the specific areas of sustainable development and cryptosporidium, within the SRC process, to illustrate the point. Other externalities are when, for example, workers are made unemployed, when pollution incidents remain persistent and when external sewer flooding is not dealt with. These negative externalities fall upon workers inside Scottish Water, individual users and communities. The quandary Scottish Water often finds itself in when managing costs and problems arguably encapsulates a key weakness of the current regulatory system. Scottish Water cannot fix some operational difficulties as no monies have been allocated as part of the Final Determination of Charges agreed after the SRC process. This is exacerbated if any problems that arise are not incorporated within the arbitrary OPA framework designed by the WICS.

For instance, external sewer flooding is not a measure in the OPA and despite growing awareness from both Scottish Water and Waterwatch Scotland of the problem the WICS did not allocate any funds to address the problem in either the 2006-2010 or 2010-2015 regulatory period. Governance insiders informed me that external sewer flooding was a problem caused by climate change and that it impacting communities throughout Scotland. However, they said 'there was no cash available' to deal with it in the 2006-2010 regulatory period. A situation they described as 'quite extraordinary' (Anon, 2007). In the draft business plan Scottish Water submitted for the 2010-2015 they proposed to tackle external sewerage problems. Despite their original proposal being limited they significantly diluted them in the second draft business plan. Tom Axford, Scottish Water company secretary, in an interview for this research, acknowledged, that the original plan was 'superseded by the 2nd draft business plan' (2010), exemplifying

the trade-offs that occur during the SRC and how it can result in much needed work not being done.

The proposals in the second draft plan were costed at £4.3m and concerned solely with eradicating external sewage from 92 properties in the ‘vicinity of the commonwealth games sites’ (Scottish Water, 2009j: 38). It was said that this would assist in achieving the Priority 1 (essential) Ministerial Objective which sought to ‘Improve the water and aesthetic quality of surface waters currently affected by sewage and debris discharges from sewer networks to support the 2014 Glasgow Commonwealth Games’ (Scottish Government, 2009: 4). In addition, the Scottish Government set desirable objectives for Scottish Water to:

Create and maintain a register of all properties affected by external sewer flooding; and minimise external sewer flooding, where it is cost-effective to do so, at identified high priority sites such as school playing grounds as specified by the Scottish Government (Scottish Government, 2009: 7; Scottish Water, 2009j: 136-138)

Scottish Water also requested an additional £14.6m to deliver other desirable objectives. It was proposed that this funding would, ‘begin to address this customer priority, which we anticipate could address 308 properties experiencing external flooding due to overloaded sewers’ (Scottish Water, 2009j: 136-138). However, as this was a desirable and not essential objective³⁹ the WICS did not allow funding for that request in the final determination.

The example of external sewer flooding serves to show how negative externalities can result, or are not dealt with, as a result of the current framework. In two SRC processes the issue has not been allocated any resources, despite being extremely unpleasant for

³⁹ According to the WICS, ‘The Scottish Government categorised its objectives as Priority 1 (‘essential’) and Priority 2 (‘desirable’). Priority 1 objectives must be delivered during the 2010-14 period. Priority 2, while remaining important priorities for Ministers, may require to be delivered in the next investment period. The Commission’s role is to establish the lowest reasonable overall cost of delivering Priority 1 objectives and to determine the extent to which Priority 2 objectives can be delivered efficiently and without projected charges to customers in the period to 2014 rising by more than the level of inflation’ (WICS, 2009n: 2)

those people and communities sometimes affected by it. It reveals how tightening the financial management of WWS in Scotland displaces rather than removes costs.

This change has prompted a focus and emphasis on their Public Relations (PR) and reputational concerns, which is an unsurprising development given a core part of any 'business' is the protection and enhancement of its reputation. As Scottish Water perceives itself as a business like any other it is understandable that they will seek to protect their reputation just like a 'normal' business would do.

Protecting Reputation and Applying Corporate Social Responsibility

In operating under a hard budget constraint some necessary investments and improvements are prioritised and others are foregone during the SRC. Squeezing efficiencies and limiting budgets might result in Scottish Water being unable to deal with all those areas in need of improvement. Hence, it is understandable that consternation is provoked amongst people and communities who are affected by problems and issues that have not received investment or who have to wait until the next SRC before spending is allocated to address the service failures they experience. Similarly, when problems arise unexpectedly which affect people and local communities, it is to be expected that those detrimentally affected by unsatisfactory operations or negative externalities arising from operations and investment decisions will complain and seek redress.

In circumstances where the public are angered at institutional delays and failure organisations on the receiving end of public concern and anger can and do seek to allay those concerns. A standard corporatised response is where organisations deploy PR practices and attempt to soothe anger and placate concerns. Data gathered for this thesis shows how PR strategies are a key part of Scottish Water's handling of public *anger*. *This PR activity indicates how the utility is conscious of its reputation and external perceptions of its performance.* However, applying a defensive and reactive PR approach may mitigate against openness and genuine dialogue with all stakeholders. This response echoes the critique of Scottish Water's openness and transparency in its

early life (Dinan, et al: 2003). In a paper outlining their Corporate Social Responsibility (CSR) strategy it was stated by the head of organisational change and development:

To meet its obligations to the Scottish Government and the people of Scotland, Scottish Water should develop a coherent and integrated Corporate Responsibility and Sustainability strategy, aligned with the Government's 5 strategic objectives. The strategy would bring a broad range of significant benefits to Scottish Water and its stakeholders, including building credibility and trust with our customers and employees, increased employee engagement, offering us a distinctive position in the marketplace, protecting our reputation from the risk of adverse incidents, and strengthening our brand (Stevenson, 2008).

Scottish Water's PR activity emphasises areas of success, as well as 'managing' public perceptions in the areas and issues which provoke concern and which may detrimentally impact on their reputation. Evidence, from observations during public forums, meeting, from other documents outlining their CSR⁴⁰ strategies and their crisis management activity, reveal an organisation intent on protecting and enhancing its reputation by emphasising efficiency and success and downplaying areas perceived as failing. This has translated into downplaying public concerns, even when they are appropriate and legitimate.

Public comment from Scottish Water rarely discusses failings or problems. Scottish Water's website extols success, for instance increasing investment and the subsequent improvements to the asset base and infrastructure. Likewise their annual report is a document which emphasises the great work Scottish Water is doing; there is little or no reporting of any problems or areas where people are dissatisfied or where operations on the ground have provoked concern. The Annual Report for 2008-2009 is a case in point.

⁴⁰ Once again through utilising FOI, I obtained 8 CSR documents from Scottish Water.

In that report, the Chairman of Scottish Water, Ronnie Mercer, claimed 'The first seven years of Scottish Water from 2002-2009 has seen the company become more efficient, driving over 40% of the day to day running costs out of the business. This continued drive to become more efficient has helped keep charges steady' (Scottish Water, 2009c: 2). Then Chief Executive of Scottish Water, the late Richard Ackroyd, stated:

I am pleased to report even more progress in 2008/09. The continued and sustained efficiency of the business has enabled customer charges to remain steady as we work to provide one of the best value for money water and waste services in the UK (Scottish Water, 2009c: 4).

This emphasis on charges and economic efficiency illustrate the corporatised metrics used by Scottish Water in evaluating its own performance. Thus, rather than offer a full and balanced public report the thrust of the 2008-2009 Annual Report was almost entirely positive, espousing achievements, such as increased investment and improvements that resulted in satisfactory performance. This is quite typical of large private companies' annual reports to private shareholders. Whether this is an appropriate forum for explaining and accounting for the organisations activity to the public is a moot point. While this is emblematic of Scottish Water's corporatised nature, it also suggests that a key audience for the utility is the investment community rather than customers, regulators, employees, or elected representatives. For example, the report mentions how Scottish Water's OPA score was improving and a key success of that, amongst others, was in reducing the risk of internal sewer flooding to 180 properties (Scottish Water, 2009c: 9). This assertion neglects to mention the very many properties still at risk to internal sewer flooding as well as the level of external sewer flooding across Scotland. This issue of external sewer flooding, which incidentally is not a performance measure applied in the OPA, is not mentioned at all in the Annual Report. It is however mentioned in an internal Scottish Water document (Scottish Water, 2009d) and is an issue returned to later in this thesis.

In their 2008-2009 Annual Report, Scottish Water also describe improving Wastewater Treatment Works compliance (Scottish Water, 2009c: 17) and the significant work being done to improve waste water quality (Scottish Water, 2009c: 11). No mention is

made of the predicted year-end total of 19 failing wastewater treatment works, with these non-compliant works serving the equivalent of 10.13% of the Scottish population and the prediction for a year-end total of 834 pollution incidents, as chronicled in Chief Executive Report (See Appendix A for a full copy of one of these reports) to the Scottish Water Board. Nor is any reference made to the prosecutions instigated by the Procurator Fiscal against Scottish Water, which the Chief Executive notes in this report⁴¹ (Ackroyd, 2009).

The period between 2002 and early 2008 saw Scottish Water prosecuted and convicted 48 times. The prosecutions were for a range of contraventions including a fine of £5000 for 'causing or knowingly permitting sewage effluent to be discharged into controlled water, namely the Moray Firth, by way of a long seafall'. On another occasion Scottish Water was fined £6500⁴² for an incident at Markinch in Fife for causing or knowingly permitting 'poisonous, noxious or polluting matter or any solid waste matter, namely untreated sewage effluent, to enter controlled waters, namely the Back Burn' (SEPA, 2009). None of these incidents, or the other 46, were included in any Annual Report that was published by Scottish Water.

The OPA is focused on improving customer satisfaction and is a key part of Scottish Water's strategy. Scottish Water has around four public meetings per year in various parts of Scotland where they explain what Scottish Water is doing to improve performance. In dealing with the public at these open board meetings I observed how Scottish Water management and staff respond to concerns expressed by the public. Their typical approach is to individualise problems; in so much as placating the individual who is expressing concerns by dealing with, and hopefully solving, their specific complaints (author fieldwork notes Inverness, 2008, Dumfries 2009).

⁴¹ The Chief Executive presents a paper to the Scottish Water board at each board meeting. These reports provide a more detailed extrapolation of current issues facing Scottish Water than anything that is released publicly. For example they outline some of the operational areas of concern including persistent wastewater compliance failure but also unexpected incidents of wastewater or drinking water failure that sees the public impacted. I obtained this particular report plus several other Chief Executive Reports via Freedom of Information.

⁴² The level of fines dispensed to Scottish Water for their breaches of the law do not appear to be particularly significant. It could justifiably be suggested that the level of these fines do not offer sufficient incentive to Scottish Water to ensure adequate performance. This is perhaps another area in need of further research.

At Open Board meetings in Dumfries in 2009 and Inverness in 2008 I observed nearly 20 Scottish Water staff meeting, greeting and dealing with people raising concerns. The approach they used with individual customer issues was by asking the complainant to leave their details and lodge their concern with a member of Scottish Water staff who would assist them in fixing whatever their problem was. I also observed this tactic being used during a Scottish Parliament Infrastructure and Capital Investment Committee in 2011. Adam Ingram MSP raised a constituent's concern, and Scottish Water Chief Executive, Richard Ackroyd, responded by asking him to pass on the details of his constituents complaint to Scottish Water staff after the meeting (Ackroyd, 2011). This approach may satisfy the individual complainant, but, individual complaints, cumulatively measured, may suggest a more systemic or structural problem rather than simply an issue between just the user impacted and Scottish Water (author fieldwork notes, Inverness 2008, Dumfries, 2009, Edinburgh 2011). Thus, it appears that the standard response to concerns raised at various public fora is for Scottish Water to offer to help those individuals who have the wherewithal to come to meetings and raise their concerns. The flip side of this approach is that those suffering in silence may not have their problems addressed. We also have very little way of knowing if the concerns raised in this way are adequately addressed by Scottish Water.

Nevertheless, in acting in this way Scottish Water creates a perception of actively responding to customer concerns. In their 2008-2009 Annual Report they proclaimed how they had achieved their highest level of customer satisfaction of 80% (Scottish Water, 2009c). To calculate these figures Scottish Water carried out surveys to assess customer satisfaction. 'Close the Loop' was Scottish Water's in-house survey programme used to track customer experience. In February 2009 they surveyed 400 people in Scotland, the outcome from that was a rise in overall satisfaction (Scottish Water, 2009d). Perhaps cognisant of their reputation and PR strategy Scottish Water excluded the actual numbers of complaints and contacts that Scottish Water and the customer representative, Waterwatch had received over the years, which expressed a level of dissatisfaction that had not been captured or explained by Scottish Water in their public statements.

Figures, see Table 1 and Table 2 below; show how Scottish Water and the previous customer body, Waterwatch Scotland, received a significant amount of contacts and complaints. A contact could be construed as a first tier complaint and an initial signal of dissatisfaction. From these numbers it can be seen how many people have felt compelled to contact Scottish Water on matters of concern to them and also those that registered a full complaint. The numbers involved suggest that customer satisfaction within the new corporatised structure is perhaps not as positive as Scottish Water's surveys would suggest.

The two customer service reports from 2009 provide evidence of the scale of the contacts and subsequent complaints received by Scottish Water. The August report showed how Scottish Water had received the following contacts since its formation in 2002.

Table 1

Year	Contacts
2003/2004	777,000 contacts
2004/2005	855,000 contacts
2005/2006	875,000 contacts
2006/2007	625,000 contacts
2007/2008	535,000 contacts
2009/2010 (for only Apr – July)	162,000 contacts

(Scottish Water, 2009e: 4)

These show a gradual decrease in contacts, which appears to be evidence of improving increasing satisfaction, perhaps a result of improving customer service. However, the level of contacts still suggests that Scottish Water's public pronouncements on 'customer' satisfaction are not as fulsome as they could or should be. Their surveys found overall satisfaction for their customers experience when contacting Scottish Water improved from 80% in January 2009 to 87% in August 2009 (Scottish Water, 2009d and 2009e). It is not clear why the figures have improved but it is said that one of the main drivers for improvements is 'increased communication with customers'

(Scottish Water 2009d: 1). Given that Scottish Water are focused on improving 'proactive communication with customers to help secure increases in customer satisfaction' (Scottish Water, 2009e 1), it may be that improving communication at various levels of the organisation has helped reduce the number of initial contacts.

Nevertheless, despite 'proactive communication' a significant proportion of contacts were translated into written complaints. Table 2 below reveals the number of written complaints received by Scottish Water between 2006 and 2010.

Table 2

Year	Written complaints
2006/2007	6077
2007/2008	4077
2008/2009	5093
2009/2010 from April to July	1744

(Scottish Water, 2009e: 5).

A detailed breakdown of these written complaints is not provided. Moreover, these figures do not include the written complaints which Scottish Water Business Stream (SWBS) received. When in 2007-2008 SWBS figures were included the number rose to 5667 written complaints (ibid). In addition, Waterwatch Scotland (WWS) received 1077 contacts, which in turn led to 229 second tier complaints in 2007-2008 (WWS, 2008: 6). Therefore despite improving communications there was clearly operational areas that still provoked concern amongst many Scottish Water users.

However, in dealing with these complaints the corporatised character of Scottish Water is revealed. In so far as they often apply the techniques of the PR industry rather than substantively address the problems raised by their customers, the organisation behaves very much like a private corporation. However it is also true that the techniques of public relations and promotional culture more generally (Davis 2013) are now widely adopted across the public sector in the UK. Others have argued (Miller and Dinan 2008) that this kind of communications style and strategy is symptomatic of a wider shift in

British public culture towards business friendly modes of organisation and public address. A clear manifestation of this within Scottish Water is seen in their approach to customer problems via PR and the creation of their Reputational Steering Group.

Reputational Steering Group

In order to manage operational difficulties and problems that may damage their reputation, Scottish Water formed the Reputational Steering Group (RSG). Journalist Rob Edwards described the RSG as 'high-powered...whose job it was to try and head off public relations problems with sewage works across the country' (Edwards, 2011). This report is only partially correct. There are reputational steering groups across regional areas in Scotland and moreover the remit of each is to protect the reputation of Scottish Water, wherever their reputation could be damaged, not just in relation to concerns over sewage works.

There are no public records or documents confirming the existence or activities of the RSG. But through the use of FOI data has emerged that helps profile the work and rationale behind the formation of the RSG. Made up of prominent individuals working at Scottish Water, the Terms of Reference (TOR) (See Appendix B) for the RSG confirm Scottish Water has actively organised itself with a view to seeking ways to positively manage its reputation.

The RSG TOR is clear; it exists solely to guide Scottish Water when the utility is faced with issues that could damage its reputation. Strategies they may employ, as outlined in the TOR, include taking a 'temperature check of the Scottish Exec and MSP's including the number and content of MSP letters' and assessing the communication strategies and engagement with stakeholders (Scottish Water, 2009f).

The RSG Terms of Reference reveals Scottish Water as an organisation intent on safeguarding its reputation. They also allude to recognition within the organisation that position(s) taken by Scottish Water can be in conflict with the demands and desires of the public. The RSG is concerned with managing these conflicts in a way that minimises the reputational damage that Scottish Water may suffer when faced with such a

scenario. The RSG approach, arguably, evidences how corporatisation and the application of a hard budget constraint results in inevitable, though occasional, divisions of interest between the utility and the public it serves.

How the RSG has dealt with issues demonstrate the strategies used to 'manage' issues and the ways in which Scottish Water has stuck to its position – which can often mean not investing to solve problems - and how these often diverge from so-called customer demands. Information obtained for this research shows various examples where Scottish Water has sought to protect its reputation from damage (in line with RSG strategy), when issues arise that highlight operational deficiencies.

For example funding constraints or other reasons can see tensions arise when Scottish Water is not able to immediately satisfy customer demands and/or delays dealing with problems. In such circumstances the RSG, alongside others in Scottish Water such as the communications team and media team, work to mitigate any damage to the reputation of Scottish Water through a coordinated public communications strategy. This offers the appearance of dealing with public concern without necessarily doing so.

The corporatised character of Scottish Water, in so far as the separation of policy and politics from delivery is concerned, is reflected in the RSG, a committee more or less unknown to the public at large, being given some power to decide, whether customer (public) demands are met. For example following reports of how heavy rainfall was leading to a power outage caused by flooding in two areas of Ayr that led to calls for a permanent back up power supply, a Scottish Water employee wrote to the RSG noting:

The Escalation note requires the decision of the RSG on whether or not Scottish Water should provide full permanent standby generation capability (option 3 on the list) at Ayr SPS at an estimated cost of £400k, in order to prevent flooding in the event of a grid power failure (RSG 2007).

In this note the Scottish Water employee appears to presume that it will be the RSG who rule on this issue. This responsibility bestowed on the RSG highlights the limited ability of external parties, not least the people affected in Ayr, to participate in decisions, or to

know how and why they are made, which have the potential to significantly impact on their lives. Instead, the decision was made by people unknown and unaccountable to the people of Ayr.

Another RSG briefing, obtained through FOI, shows how the RSG seeks to manage expectations. This paper noted how a project to build a new sewer at Dunfermline, intended to alleviate flooding and excess effluent discharges into the Forth under storm conditions, had been put on hold. As a result of an FOI enquiry from Kenny MacAskill MSP, the RSG noted 'the political interest and timescale of report and the potential for media interest. RSG is to identify key contact to work with media team to prepare key lines ready in response to media/external interest' (RSG, 2006a).

Documents obtained from FOI also show how the RSG has sought to manage issues where work that is needing done to resolve problematic areas has not been carried out or was delayed due to funding issues. For example in dealing with compliance issues at Loch Ryan, sewer flooding at Campbeltown (RSG, 2006b) and external sewer flooding at Loanhead (RSG, 2008a). At Loanhead, a Scottish Water employee noted the utility was 'stuck between a rock and a hard place' (ibid) between the reputational damage caused and the cost of addressing the problem. This perhaps epitomises the structural source of public concerns and how Scottish Water deals with reputational problems that subsequently arise. In this instance one can trace a causal link to the SRC decision not to allocate funding for external sewer flooding, following the hard budget constraint approach.

Conclusions

Evidence of the intrinsic commercialisation Scottish Water has been set out in this chapter. The data gathered for this thesis has shown how that has resulted in some key corporatised characteristics, which many key stakeholders have welcomed and believe to be beneficial. There is a broad consensus that introducing a commercialised, market environmentalist approach has ushered in improvements to Scottish Water's operations.

Given the consensus amongst regulators and politicians alike it is no surprise that recent policy and legislation has increased the scope for commercialisation. The new Hydro Nation vision (Scottish Government, 2010c) for Scotland intends to aggressively exploit commercial opportunities. The current Government has high hopes for the economic potential of WWS, both in terms of attracting inward investment as a consequence of Scotland's still plentiful water resources and by profitably exporting the expertise of Scotland's water engineers and technicians.

In short, Scottish Water has and continues to execute a commercialised strategy within the current corporatised framework. A question that has received little public debate is whether this strategy is consistent with the public interest? Related to this there has been very little deliberation on how the corporatised character of Scottish Water produces costs or negative externalities such as in relation to basic democratic notions of transparency, openness and accountability, and material issues such as rising prices, tense industrial relations, a reduced workforce and all the costs that emanate from unemployment for workers who are made redundant (Cooper, et al: 2006). There are also social and environmental externalities that need to be factored into an overall cost-benefit calculus of this new model. The analysis above has suggested some lines of inquiry for that kind of reckoning, and has also demonstrated that Scottish Water and its regulators have yet to offer a convincing defence of this new system that speaks to this wider, but no less socially and politically important agenda.

Costs and concerns as a result of the drive to achieve economic efficiency are widespread. The next chapter will consider the policy choice of using Private Finance Initiative (PFI) contracts to provide wastewater treatment throughout Scotland and whether any negative externalities have arisen from using the PFI to fund WWTW's.

Chapter 8: PFI: A Costly Way to Treat Scottish Waste Water?

Increasing private sector participation is a central element of WWS in Scotland today and a further indication of the separation of politics from delivery. The extent to which the private sector is involved in delivering WWS in Scotland is borne out by the level of spending in areas of delivery or capital investment where the private sector is involved. The decisions that have enabled private participation are inherently political, even if they are often presented as technical or administrative matters. This is particularly evident in the widespread use of PFI to fund water infrastructure projects.

The provision of WWS by the private sector is legitimised by a perception they bring an expertise lacking in the public sector. Other determinants explaining the expansion of the private sector in providing public services include: the declining availability of public finance - arguably a result of a belief in reducing taxes to stimulate economic growth (a key neoliberal principle); and the influence and predominance of such thinking in policy making and legislative circles. The development of PFI contracts to treat waste water in Scotland offers some lessons about private sector involvement in delivering public services. Understanding the terms of these contracts, and their consequences is the focus of this chapter. Here, two case studies, Dalmeir and Seafield, are examined to evidence the arguments around PFI investment and service delivery.

PFI Reshaping Policy Delivery in Scotland

PFI contracts, a type of PPP, were signed and enabled in the late 1990's and early twenty first century as a result of institutional change. Broadly speaking PFI reflects the reconfiguration of Scottish public policy around public service delivery. A critical institutional change, necessary for reshaping policy delivery, was in Section 66 of the Scotland Act 1998, which legislated that the newly devolved Scottish Executive/Government cannot borrow or issue bonds for investment. As a consequence the newly devolved administration could rely only on existing budgets to fund investment across the public sector. Private finance was permissible however, providing investment that did not show on current spending budgets and effectively remained 'off the balance sheet'. Thus the conditions were created to encourage

significant investment from private capital in public projects. In essence the Scotland Act 1998 created 'a budgetary incentive to favour private over public finance even where the long-run cost of private finance will be higher' (Hellowell and Pollock, 2009: 407).

The Conservative and Labour Westminster governments, pre and post 1997, embraced PFI schemes, as a central policy mechanism to fund capital investment requirements, as well as some operations, in public services across various sectors, including WWS. The Labour Westminster administration introduced section 66 of the Scotland Act, which arguably locked public authorities into using PFI. Even amongst those public authorities reluctant to do so as they had calculated PFI would not provide value for money over its lifetime. The adoption of PFI could be construed as a political choice that embraced, or at the very least accepted, the wider neoliberal policy trajectory. As Shaoul and colleagues argue:

One of the defining characteristics of public policy in the last decades of the twentieth century, not just in Britain but internationally, has been the turn to neoliberal policies such as the privatisation of many of the activities of the state. In 1992, with its programme of privatising the state owned enterprises largely complete, the government introduced the Private Finance Initiative (PFI), later re-branded as Public Private Partnerships (PPP). Partnerships, an umbrella term, include a range of hybrid forms of funding and financing public services that involve the public sector procuring services and their underlying assets from the private sector. Partnerships have become the means by which education, health, roads, prisons, roads and other public services, which could not be privatised outright for both political and financial reasons, are being opened up to the private sector (Shaoul et al, 2005: 3).

Hood and McGarvey describe how, 'PFI gives local authorities access to new sources of capital investment and management skills for new or improved facilities and creates new opportunities for the private sector to combine construction, facilities management, finance and operating skills' (2002: 22). However, PFI is not merely a technical mechanism. PFI represents a political choice that has come under scrutiny

from academics and trade unions. In particular questions have been raised as to whether the PFI operational delivery model is more expensive, represents poor value for money in comparison to traditional forms of funding, offers an excessive return for private investors, poorer terms of conditions for staff and a deterioration on the quality of service (Asenova and Hood, 2006; Cuthbert, and Cuthbert, 2007b, Hellowell and Pollock, 2006, 2007; Hood and McGarvey, 2002; Parker, 2012; Shaoul 2005, Shaoul et al 2007, 2008; UNISON, 2007, 2011).

It is said that it is often 'the large multi-nationals that are frequently the key beneficiaries of PFI schemes' (Hood and McGarvey, 2002: 22). Most critics also highlight the lack of accountability associated with PFI schemes and how that 'dims the searchlight of democracy' as elected officials struggle to understand the intricacies of the contractual arrangement between the public authority and private operator (Hood and McGarvey, 2002: 22-23). In their analysis, Hood and McGarvey discuss mainly local government but the same critique could also apply in other sectors.

For example, it is said that the savings accrued using the PFI model in prisons, necessitates reduced staffing levels and inferior terms and conditions for staff in contrast to their counterparts working in the public prison estate (Cooper and Taylor, 2005). Concerns have also been expressed about the sustainability of PFI contracts that run over decades and which require the long term viability of the private operator contracted to provide the service. A shortcoming of the scheme is that the state remains the bearer of much risk and the insurer of last resort. The impacts on the public service if the contractor's experiences financial difficulties (Asenova and Hood, 2006) are not simply academic questions. Recent private partner withdrawals from NHS PFI contracts in England illustrate that the state bears the burden when contractors 'hand back the keys'.

John Swinney MSP, Finance Secretary for the Scottish Government, said in 2007 that the 102 Scottish PPP Contracts then in existence would cost £22.3 billion over the course of their contractual life (a total period of 42 years to 2041) (UNISON, 2007). The interest payments for these projects dwarf the costs of the original capital investment. In health it is reported that 'PFI projects create a debt for the NHS, which is far greater than the

investment it provides. The total capital value of signed PFI contracts in Scotland's NHS is £602 million, but the debt created is in the order of £2.4 billion' (Pollock and Hellowell, 2006: 1) and the total spending on these deals by health boards is likely to exceed £4billion (ibid). Epitomising this differential was the Royal Infirmary in Edinburgh, which was built originally for £184m but service costs over the lifetime of the contract with the PFI contractor, Consort, will exceed £1billion. Despite the huge costs there are concerns that service levels have not met appropriate standards, and even occasionally compromised patient safety (Christie, 2012).

Transferring risk to the contractor is said to be a major reason for the adoption and use of PFI. However, one study of PFI contracts questioned how closely the UK government assessed the relationship between risk transfer and risk premiums (Pollock and Price, 2008). Public sector contracts, using traditional forms of funding are said to be cheaper than private options, which borrow capital from the more expensive private, capital markets. However, when risk adjustment formulations take place, where risk is retained by the public sector, the cost of the Public Service Comparator (PSC) rises above the PFI option. UNISON assert that in Scotland this amounts to a '£3.5 billion 'insurance' policy (that) is effectively paid to the private sector to cover the risks of things going wrong with the contracts' (2007: 1).

There are concerns that this formulation is problematic and that ultimately risk, given these are still essential public goods and services, is ultimately still retained by the public sector. Public sector trade union UNISON elaborates the point:

Several research studies have highlighted how the public sector comparator generally works out cheaper than the PFI bid and that only the risk adjustment takes the cost of the PSC above the PFI cost. Audit Scotland's *Taking the initiative* report said that in five cases, out of the six examined, the PFI construction costs were higher than the PSC and in all six cases the operating costs of the PFI option were higher than the PSC. In most cases the risk adjustment tipped the balance back in favour of the PFI option...However, there is a limit to the extent that the private sector will actually absorb the risks because these are essential public

services. The public sector must provide them if the private sector fails (UNISON, 2007: 5).

PFI in Wastewater Treatment in Scotland

The performance of PFI contracts in Scotland's WWS sector has not been independently or extensively researched. Despite concerns over the quality of delivery from PFI contracts it is an area that requires some analysis, particularly in relation to questions of cost and financial implications of PFI. This section proceeds with an evaluation of how PFI has been introduced in the WWS sector prior to a discussion of some of the consequences and implications for delivery and quality from the PFI contracts currently in place to deliver wastewater treatment in Scotland.

The Local Government (1994) Act enabled private companies to enter Scotland's WWS sector through PFI and to provide wastewater treatment services for the newly formed East, North and West of Scotland water authorities. Together they entered into nine PFI contracts, incorporating twenty-one Wastewater Treatment Works (WWTW's) to Build, Operate and Transfer (BOT) facilities around Scotland. When Scottish Water formed it inherited the management of these contracts.

The PFI WWTW's were long-term contracts, ranging between 25 and 40 years, with 30 years being the norm. These included various private sector consortia being tasked with treating and disposing of wastewater. Taken together the contracts cover over 45% of the Scottish household population as well as a significant proportion of industrial discharge. They also treat and dispose over 80% of sewage sludge (Scottish Water, 2007b).

The use of PFI has a global dimension, as public authorities seek best value beyond national borders. As a Global Water Intelligence publication suggests, 'municipal water authorities (in Europe) which have operated in their own world for decades have to look around internationally at the options for increasing their efficiency and reducing the pain of investment' (Danilenko and Child, 2005: iii). This runs parallel with developments in Scotland where Scottish Water themselves acknowledged that PFI was

a matter of financial necessity given the EU directives compelling investment (Scottish Water, 2008a). Hendry argues PFI was introduced to acquire new investment:

In order to bring about new investment, the 1994 Act provided for the PFI in Wastewater (but not water) services. PFI Schemes would enable private companies to make the capital investment necessary to construct wastewater treatment plants, and the water authorities would meet the cost by revenue expenditure (Hendry, 2001).

Paying private contractors to operate the PFI schemes confirms the shift from paying for WWS through general taxation towards charges imposed on the customer to fund investment. In Scotland the WICS decided 'to treat PPP schemes (the PFI schemes) as an operating expense and financed the full amount from customer charges in the year' (WICS, 2007b). In using the PFI mechanism the government neither pays for the initial investment (paid for by the PFI Company) nor does it pay back the PFI partner – this obligation is met through customer charges.

The financial sums generated for the whole lifetime of the WWS PFI contracts are significant. The original capital costs required to build the WWTW's was £587.45million and the cost for the duration of the contracts is estimated at £4243.1million (Telfer, 2008a)⁴³. These sums involve the operation and maintenance of the WWTW's. How much it would have cost had these WWTW's remained in public control is not known. Apparently, Scottish Water 'lost' the public service comparator highlighting the difference between the actual costs under PFI and what it would have been had the WWTW's remained in public hands (Unison, 2007, Axford 2010).

PFI contracts have resulted in significant global corporations operating in Scotland. Veolia, United Utilities (English utility in the North West), Degremont (a subsidiary of Suez), Thames Water (sold to Veolia), Kelda Water (Yorkshire Water), Bechtel, (Scottish Power, owned by a Spanish energy company) operate, or have operated, the PFI contracts in wastewater treatment in Scotland. Private equity firms also have

⁴³ This was Information provided by John Telfer, head of PFI at Scottish Water. At this stage Mr Telfer was co-operating with the research.

shareholdings in some of the PFI contracts. These include Henderson Capital, Trillium PPP holdings and I2 (Telfer, 2008a).

The so-called secondary market is where the lifetime on PFI contracts are bought and sold (Telfer, 2008a). It is a trend which has seen private equity investors buying stakes and establishing holdings in PFI contracts despite, some of them, having little knowledge of the water sector. At Dalmuir for example, the majority shareholder is Henderson Capital, with 77% of the shareholding of Scotia Water, the PFI Company. At the Tay Project (one of the 9 PFI contracts) Henderson Capital had a 33% stake with another private equity fund, I2, owning a 33% stake (Telfer, 2008a). This secondary market and the ensuing interest from private equity sees Scotland again mirroring global trends given water companies are increasingly seen as attractive to the private equity sector, with 21 companies having been taken over by private equity firms since 2001 (Lloyd Owen, 2009: 40).

The launch of the infrastructural fund for Henderson PFI Secondary Fund L.P suggests why private equity firms have invested in the PFI WWS contracts. They state how their:

Main objective was to provide investors with strong income streams and stable capital values ... (and) global demand for infrastructure investment opportunities is growing strongly and the fact the fund was so heavily oversubscribed demonstrates the appeal of PPP/PFI assets (Henderson Global Investors, 2005).

PFI has been commended by prominent stakeholders in Scotland's WWS sector. Scottish Water suggest that the 'broad government aim of these arrangements was to hasten the delivery of major state-of-the-art infrastructure assets in an innovative manner that demonstrated value for money' (Scottish Water, 2002a). when interviewed for this research, academic, and former Waterwatch Board member John Sawkins, said that private companies brought with them new and increased investment as well as skills and knowledge (2010).

Previously Professor Sawkins had said, 'This stimulus (from PFI) lifted overall levels of capital investment in the Scottish Industry...and provided a means by which private sector expertise was accessed by the water authorities' (Sawkins & Dickie 1999: 236). Conversely, John Telfer during his interview insisted the then water authorities had the skills to build and operate the new WWTW's; it was simply that they lacked finance (2009), a view supported by Steve Scott and Andy Nisbet, Scottish Water Unison Official's, in interviews for this research (2009, 2013).

The WICS have said the PFI contracts appeared to offer 'significant benefits and value for money' in that they allowed access to more 'efficient build, operate and maintain solutions (and they did so) under the prevailing constraints of public finance without forcing immediate substantial bill increases'(WICS, 2007b). However, the WICS added a note of caution, stating 'the contracts for the nine projects represented good value for money at inception it was less certain that this remained the case' (WICS, 2009l: 1). Indeed the WICS stated that their 'previous analysis of the PPP contracts led it to consider that it would be in customers' interests to refinance the contracts or to renegotiate them'. Ultimately they decided not to saying it would require significant citing at a time when public funds were likely to be constrained (WICS, 2009l: 2).

PFI: A Risky business?

Transferring risk from the public utility to the PFI Company, as noted, was a central argument justifying the use of PFI. John Telfer, during an interview for this research, asserted 'we have transferred risk regards design, build, operation, maintenance and finance' (2009). Scottish Water publicly acknowledged that:

In order to ensure that these arrangements were accounted for as off-balance sheet for the water authorities it was necessary to ensure that sufficient risk was transferred to the private companies. This led to the PFI companies being responsible for the provision of a service (i.e treatment and disposal of wastewater) in accordance with the water authorities tailored performance requirements. In so doing, the PFI companies assumed the risks associated with

the design, construction, operation and financing of each project (Scottish Water, 2002a).

Events since then challenge the assertion that risk has been transferred in the apparently unambiguous way described by Scottish Water. Indeed, cases have arisen where it is not clear where responsibility lies. PFI arrangements have led to disputes over responsibility between the PFI operator and Scottish Water. Scottish Government civil servant, Tom Harvie Clark, intimated how this could occur, saying, 'it's not straightforward with PFI, contracts can be argued about between the operator and Scottish Water' (Interview, 2009).

Arguments over responsibility for improvements (and investment) when operations go wrong was a key issue faced by campaigners in Edinburgh, who lived near the odour plagued Seafeld WWTW's. Rob Kirkwood, spokesperson for the Leith Links Residents Association (LLRA), claimed that initially it was unclear who was accountable and responsible for operational failings. In an interview for this research he described how:

Passing responsibility was another part of their strategy. When we started complaining to Scottish Water they said it was Thames. When we went to Thames they said it was not their responsibility. They used to say we are simply hired to run the plant; the infrastructure is to do with Scottish Water....There was mystification, deliberate mystification and complication going on. Trying to confuse lay people but we persisted....It was eventually accepted – after meetings with Ministers – that it was Scottish Water's responsibility. They are responsible for the infrastructure – nobody else. The buck stops with Scottish Water (2009).

Gordon Munro, local Labour Councillor credited the LLRA with relentless pursuit of council officials, Scottish Water and the PFI operator to clarify where exactly responsibility lay. He said:

When council officers were put under the hammer by the residents (LLRA) they started to bring out through their work where ownership and responsibility lay. Ultimately, although initially Scottish Water said it was someone else (the PFI

operator), responsibility did lie with them. Now, that relationship is publicly known, whereas before it was pretty opaque (Interview, 2009).

The Baty report into the sewage spill at Seafield in 2007, also highlighted how there was some ambiguity over roles and responsibilities:

There was a failure at the PFI interface to recognise which organisation was responsible for what ... Responsibility for the assets (and the failure of them clearly rests with Stirling Water (PFI operator), but responsibility for the overall service to customers, to the public at large and for the reputation of Scottish Water as the owner of the service rests with Scottish Water as the impact of this incident so clearly demonstrates (Baty, 2008:45).

PFI the OPA and Reputational Risk

In 2007 Scottish Water conducted a strategic review which assessed the ability of each PFI project to meet SEPA effluent discharge consent and satisfactorily disposal of sewage (both issues raised concerns that they could impinge on their OPA score) and whether these operational areas could impact on the reputation of Scottish Water (Scottish Water, 2007b). Telfer confirmed that the key challenge Scottish Water faced in relation to the OPA 'is making sure our WWTW's are compliant' (Interview, 2009). It was reported in 2007 that meeting the SEPA effluent discharge was Scottish Water's single biggest area requiring future OPA improvement: 'only 5 points out of a maximum 50 points on WWTW compliance; securing a major improvement in WWTW OPA points is dependent on PFI plants complying with their discharge consent' (Scottish Water, 2007b).

The failure of PFI operated plants has the potential to significantly diminish the reputation and overall performance of Scottish Water thus impacting the OPA score that the regulatory framework places such store in. As noted the OPA is a vital yardstick used to gauge the performance of Scottish Water, while as noted in Chapter 7, there much importance placed on protecting and enhancing reputation. Consequently, a review of PFI operated plants based on 'the introduction of the OPA performance measurement system and the operating failure at Seafield WWTW in April 2007'

acknowledged the 'high level of dependency that Scottish Water places on third party service providers in respect of meeting our overall performance targets and protecting our external reputation' (Scottish Water, 2008a: 2).

The cumulative outcome of these reports and reviews was that Scottish Water appears to have felt compelled to get involved at a management and operational level with some PFI operated WWTW's. In 2008 Scottish Water policy was to intervene where the PFI company is 'unwilling to commit to make improvements or to do so within an acceptable timeframe Scottish Water will consider funding such works under the contractual change procedure to ensure those plants are sufficiently robust' (Scottish Water, 2008a: 2). The underlying concerns over the performance of PFI contracts and the overall reputation threat to Scottish Water arguably confirms that risk has actually remained with the public authority. Telfer, summarised the situation as follows:

We are now almost as interested in every part of the operation as if we ourselves were operating it. So we have almost become quasi-operators, which is not what PFI is about. PFI is about transferring risk, and paying them (PFI Co) and letting them get on with it. However, what we are also transferring is our reputation and overall performance. Because nearly 50% of this (wastewater treatment) has been placed in their hands....we had the Water Research Council (WRC) (consultants) take a look at them and while some of them (PFI plants) came out extremely well from it. For people, who are not playing by the game we have taken a much more intrusive approach (Interview, 2009).

Partnership Problems? Performance and Outcomes under PFI

This acknowledgement of how risk ultimately lies with Scottish Water, recognised by a swathe of people and organisations, undermines the case for PFI in the first place. But it is not just the transfer of risk that has proven problematic. Evidence is emerging that that some PFI WWTW's have performed unsatisfactorily (which has also exposed where risk actually lies) and not provided value for money whilst at the same proving profitable for the owners of the PFI contracts. The latter concern was expressed by the WICS who questioned the value for money of these schemes, suggesting that 'customer

bills were financing substantial and possibly excessive returns by equity holders in the PPP schemes' (WICS 2007b).

A key indication that the PFI operated WWTW's were not performing satisfactorily is the level of performance related deductions that Scottish Water have meted out to the PFI companies. Scottish Water imposed financial penalties totalling £7.5 million on the PFI operators for failures from the beginning of each contract until 2009 (Scottish Water, 2009g). Moreover, these have been imposed despite what are considered to be, weak contracts (in terms of compliance and enforcement provisions) a subject that will be discussed below.

Early documentary and fieldwork research for this thesis found little criticism of PFI from Scottish Water, the Scottish Executive/Scottish Government or indeed from within the Scottish Parliament. Dissatisfaction expressed in communities impacted by operational failings apart, no public statements from Scottish Water, PFI contractors or the Scottish Government have admitted problems with these PFI contracts. It was only through information from FOI requests that I was able to gather evidence about the operational problems afflicting many of the PFI operated plants.

Weak and inadequate contracts are a feature of PFI waste water treatment schemes. These weak contracts arguably illustrate the divergence between public and private interests. Data, from FOI and interviews suggests that private companies without robust contractual incentives may not necessarily act in the public interest. John Telfer, Head of PFI Scottish Water, admits that the contracts between the water authorities and the private contractors were often inadequate and did not contain sufficient incentive for the private contractors to guarantee satisfactory levels of performance all the time (Interview, 2009).

Tom Harvie-Clark, Water Division Civil Servant observed that the PFI operated WWTW's were amongst the first PFI contracts signed by any public service, and that the water authority teams did not have the benefit of others experience of PFI when the contracts were signed (Interview, 2009). Waterwatch Scotland also mildly criticised the contracts: 'With hindsight, it would appear that the contracts could have been better

drafted and afforded Scottish Water and therefore customers more protection and better value' (Waterwatch, 2008a: 2).

Of the contracts signed there is considerable variability. Telfer notes that North of Scotland contracts are 'hugely draconian' given they are tested '365 times a year' and 'if you fail any parameter on any day you lose the equivalent of a day's revenue' (Interview 2009). However, this contrasts with the Dalmuir contract, which is much weaker. Scottish Water state, 'The Dalmuir project (annual value £8m pa), penalties of £16k only apply after 10 failures of the required 61 annual waste-water samples' (Scottish Water, 2008a: 1).

In comparing the different types of penalty regime John Telfer suggests, 'It's like if you're driving a car at 31mph in a 30mph zone and only get a wagging of the finger but in another part of the country you get thrown in jail for the same offence' (Interview, 2009). Given the contrasting operational performances of different plants Telfer forthrightly admitted how: 'there is a co-relation between contracts and the robustness of performance' (ibid).

Telfer stated the Dalmuir PFI WWTW's contract, signed by the West of Scotland Water Authority, 'is not doing what it should be doing' (Interview, 2009), namely motivating and incentivising the PFI company, Scotia Water, to achieve compliance targets. He continued:

You may have a weak penalty regime but a good performing plant – in which case that's ok. But, if you have a poorly performing plant and a poor performance mechanism, which we do and it happens to be a big plant – Dalmuir – then this is a real issue...Effectively we have a mismatch, we need compliance to help us hit our targets but we have a very weak penalty mechanism (Interview, 2009).

Three internal Scottish Water board papers provide candid expressions of internal concerns about PFI operations⁴⁴. These papers, dated 2002, 2007 and 2008 reveal how Scottish Water was exasperated with the operational performance of some PFI plants, identifying Almond Valley, Seafield and Esk (comprising 5 plants), Dalmuir and Daldowie as problem plants. This frustration has not been admitted publicly, either to the communities impacted or indeed to the Scottish Parliament, to whom they are accountable. Yet despite the lack of public comment they wrote privately how:

Almost all of the schemes have encountered some form of pre and post commissioning difficulties. Although some of the problems are of a teething nature as the operators seek to implement the most efficient operating regime, other problems have been more fundamental and difficult to resolve. The more major problems include failures in technology that have resulted in late completion, protracted settling in problems, or a persistent inability to meet certain performance standards such as those relating to odour emissions (Scottish Water, 2002a: 33).

These three papers also expressed concerns over the management of some of the works. In 2002 Scottish Water said their 'biggest PFI challenge is in the proactive management of these contracts' (Scottish Water, 2002a: 34). The 2007 review reported that there were problem plants, which had 'significant operational and/or contractual problems that require serious attention' (Scottish Water, 2007b: 2). A concern raised by Scottish Water was the enthusiasm and contractual obligations of the contractors to resolve their operational and contractual problems, as well as their long term commitment to the contracts (Scottish Water, 2008a: 2). Admission's such as this by Scottish Water underline concerns over both risk and weak contracts.

The 2007 report did suggest that some plants were operating satisfactorily. Nevertheless, even in the better performing plants the review drew attention to management and contractual issues. For example, Levenmouth WWTW's, where the contract was owned by Caledonian Service and operated by Northumberland Water,

⁴⁴ I sought other similar PFI papers from Scottish Water. They did not provide any more and contended that these are the only papers evaluating PFI contracts.

there was a protracted court proceeding between the operators and Scottish Water. This was 'a major claim relating to the original failure of the works to meet Scottish Water requirements (and) was lodged with Scottish Water in May 2007 (c£50m) based on the contention that breaches by Scottish Water...were the cause of the problem' (Scottish Water, 2008a: 5). Scottish Water had suggested previously that 'were the outcome of this process to have a significant impact upon the PFI company then there would be serious doubts over their viability which in turn could lead to their default under the contract' (Scottish Water 2007b: 4).

The financial position of PFI operators is another potential source of instability for operations. For instance, Scottish Water noted that the main issue for Moray Coast Project, operated by PFI vehicle Catchment Moray Limited, owned at the time by I2 (66.7%) and United Utilities, was its finances (Scottish Water, 2007b: 6) They reiterated the point in 2008, stating, 'Catchment is under financial pressure following their loss of an adjudication with their operator, which has impacted upon their financial position exacerbated by flows being less than predicted' (Scottish Water, 2008a: 5).

The on-going commitment of the PFI operators is a cause of some anxiety within Scottish Water for other reasons. For example, it is intimated that there is a higher risk of performance failures as most contracts reach mid points (around 2014) (Scottish Water, 2008a: 3). Telfer acknowledges that PFI operators will see their incentive to invest and solve performance failures diminish as the contracts near their end (Interview, 2009).

Scottish Water was so concerned about the performance of the PFI operated plants that they raised the possibility of buying out the contracts (Scottish Water 2008b: 3). The WICS, despite their concerns about the value for money from PFI, rejected the proposal stating how 'There is...no alternative to the current arrangements until such time as finance is available to allow Scottish Water to buy back the PPP assets'. Suggesting, instead that Scottish Water should 'exert all possible contractual pressure on its PPP partners' in order to ensure the operators meet their obligations' (WICS, 2009l: 4). This

scenario demands Scottish Water become closely involved in the operations of PFI operated WWTW's, which again suggests risk was not fully transferred to PFI operators.

The regulators view on asset buy-back also highlights how the separation of politics and policy from delivery is applied in practice. Some might argue that such an important decision should have been made by democratic institutions; in this case the Scottish Parliament. Instead within the newly corporatised framework this policy, despite the significant public impact and interest, was essentially decided, without public and democratic input, by unelected regulators.

Seafield and Dalmuir: PFI serving the public interest?

A more intrusive approach has been adopted by Scottish Water at the PFI operated WWTW's at Seafield and Dalmuir. The operations and management at Seafield and Dalmuir WWTW's offer a glimpse of the effectiveness, or otherwise, of some PFI contracts. Since improvements were completed in both WWTW's they have had persistent difficulties concerning odour emissions detrimentally affecting their local communities. Dalmuir also had serious issues relating to unsatisfactory intermittent discharges and has consistently failed to meet compliance targets as set by the licence granted by SEPA under the Controlled Activities Regulations (CAR)⁴⁵. Seafield WWTW's also experienced an avoidable and serious sewage spill in 2007. The cause of these problems and how they have been dealt with have raised specific concerns regarding the operational competence of PFI WWTW's and more broadly about the governance of Scotland's WWS industry.

Seafield WWTW's serves the wastewater needs of the city of Edinburgh and its outlying districts from Gullane in the east, Penicuik to the south and Cramond to the west (Seafield OIP, 2008: 59). Seafield is part of a larger contract operating WWTW's in the Almond Valley, at Newbridge, East Calder, Whitburn and Blackburn. Seafield WWTW's was upgraded in 1999 and 2000 and became operational in January 2001.

⁴⁵ Since 2005, the Water Environment (Controlled Activities) (Scotland) Regulations have required operators of any sizeable discharges, abstractions and impounding works to provide details to, and obtain authorisation from the environmental regulator SEPA.

Dalmuir is a Wastewater Treatment Plant situated close to Glasgow on the River Clyde. First built in 1904 it was upgraded in 2001 and 2002. Dalmuir serves 600,000 people living throughout North West Glasgow, East Dunbartonshire as well as parts of North Lanarkshire. It services a catchment area of approximately 200 square miles, encompassing areas from Moodiesburn, Cumbernauld and Kilsyth in the east, Birdston and Milngavie in the north, Old Kilpatrick in the west and is bordered by the River Clyde to the south (Saur, 2014).

Seafield was operated by the PFI Company Stirling Water (STW), which was initially a consortium made up of Thames Water, M.J Gleeson and MWH. Veolia Water bought out Thames Water's shareholding in STW in 2008 (Scottish Water 2008b). It is reported that the initial capitals cost for the operations at Seafield and the other smaller works within the Almond Valley was £105m. The estimated tariff cost over the course of the 30 year contract is £697.3m (Telfer, 2008a). At Dalmuir Scotia Water was the PFI consortia appointed. Currently, it is operated by the French Multi-national Saur, whilst the shareholdings of Scotia Water are owned by Henderson Global Investors (80%) and Saur (20%). The capital costs of the upgrade were £32.2m while the estimated tariff costs for the 30 year contract are £165.9m (Telfer, 2008a).

In 2007 Scottish Water described some PFI WWTW's, particularly, Seafield and Dalmuir as 'problem plants' in that they had 'significant operational and/or contractual problems that require serious attention' (Scottish Water, 2007b: 2). From the outset of its PFI facilitated renovation Dalmuir was a major concern for Scottish Water, stating how in November 2002 the 'commissioning of the WWTW's was a year behind schedule' (Scottish Water, 2002a: 35).

The inadequacies of Dalmuir WWTW's were evidenced by the level of penalties incurred; which were imposed in spite of the very weak contractual arrangement (discussed above). Scottish Water reported that the total of performance related deductions amounted to £205,085 between 2002 and 2007, while deductions for 2008 were still under negotiation. Of that total, £77,551 was for breaches for final effluent, £1023 for a SEPA notice, £6,510 for breaches of storm discharge, £43,773 for unit

breach of odour control, £15,155 for breach of sludge specifications, £38,550 for influent flow capacity and £22,523 for late reporting (Scottish Water, 2009h).

The performance related deductions served by Scottish Water on STW indicate the scale of the operational problems at Seafield. Penalties for compliance failures for final effluent quality standards amounted to £1,004,904. These penalties were for failures during 2000-2001 and 2004-2005, while, from 2000-2001 until 2006-2007 penalties for non-compliance with contractual boundary odour standards amounted to over £1m (Scottish Water, 2009i).

Scottish Water reported Dalmuir had the potential to lose Scottish Water 45 OPA points because of various performance issues including significant compliance failures in 2006 and 2007. The internal assessment noted that Dalmuir 'WWTW's is undersized to meet targets; that a major upgrade/replacement is potentially required by 2014 in order to meet tighter ammonia standards' (Scottish Water, 2007b: 8). Scottish Water appeared so concerned at the problems at Dalmuir that they suggested the way forward may mean having to 'explore the feasibility, and cost, of regaining control of Dalmuir' (Scottish Water, 2007b: 3).

The management at Seafield WWTW's was also criticised, noting *inter alia* that 'the plant is not particularly well-maintained', there were 'serious issues with site management' and the 'works appear to be under-resourced (number and skills) typified by a re-active rather than pro-active approach' (Scottish Water, 2007b: 7). Scottish Water also reported how a number of the old assets at Seafield are run on the basis of 'operate until failure' (ibid).

At Dalmuir there was apparently 'low operator (Saur) commitment' (Scottish Water, 2007b: 2), to fix the problems and any additional investment, related as it is to poor performance, 'may be contested by Scotia Water...the support and financial commitment of the parent company, based in Paris, has been poor (e.g low level of spares held on site)' (Scottish Water, 2007b: 8). In addition 'the plant suffers from a lack of automation due to a lack of investment in appropriate systems' (ibid). The PFI dilemma facing Scottish Water is encapsulated in the 2008 review, which noted 'the operator (French

Company Saur) is losing £1m a year and needs to be incentivised to perform as their focus is on cutting costs with an increased risk of failure' (Scottish Water, 2008b: 8).

Odour emission from the plant, which affect the nearby local communities, is a recurrent issue at both Seafield and Dalmeir. The operators and partners (including their respective local councils) developed Odour Improvement Plans (OIP) to alleviate these impacts on the respective communities situated close to the works. Both these OIP's acknowledge the odour problems at their respective wastewater treatment works (Seafield OIP, 2008, Dalmeir OIP, 2007). However, adequately addressing the odour emissions reveals a great deal about the operational and governance consequences of the current corporatised model.

Odorous Impact: Creating a Stink

Local councillor for the Leith ward, Gordon Munro, claims the stench from Seafield WWTW's has blighted the Edinburgh east area around the works for upwards of 40 years (Interview, 2009). Scottish Water PFI Project Coordinator Angus Swanson claimed 'Seafield WWTW's has a long and persistent history of odour problems well in advance of the refurbishment and upgrading of the works under the PFI scheme in the late 1990's' (Swanson, 2003). The refurbishment was intended to remedy the odour problem, however the plant remained beset by odour management issues afterwards (Scottish Water 2002a; Scottish Water 2002b; Swanson 2003; Seafield OIP 2008).

At Seafield the odour can stretch southwards all the way up Easter Road, east to Portobello, West to the harbour area of Leith and even south right across the Forth estuary to Fife (Kirkwood and Munro interviews, 2009). Odour released into nearby communities has a profound social impact. One respondent captures the loss of local amenity:

The smell on occasion is so bad – we had to abandon our house, you can't imagine how bad the smell was, you could have cut it with a knife. It gets so bad that people have been unable to open their windows and use their gardens and

have cancelled children's parties, rather than have guests visit during the peak of the stench (Kirkwood, Interview, 2009).

At Dalmuir the Chair of the local tenants association Danny Glennie said, 'This stuff makes you ill; if you are old or young, it will make you sick, it will make you vomit' (in Edwards, 2009). Local MSP, Gil Paterson, carried out a community survey regarding the odour issue. The survey, containing both quantitative and qualitative elements, attracted 1268 responses from 4709 households. The quantitative element asked how regularly the stench affected them. Out of the total responses 41% said that the smell affected them more than once a week. 18% said it affected them around once a week, 14% said it did so monthly, 16% said it did so seldom and 10% never (Paterson et al, 2008).

One respondent wrote 'It is quite disgusting in summer and a disgrace that Scottish Water get away with this' (ibid). Another remarked 'It is absolutely ridiculous that we have to put up with this odour in the twenty first century regardless of which way the wind is blowing' (ibid). Others write of their inability to partake in hobbies and activities: 'whilst walking and cycling...it can actually make me feel nauseous' (ibid), 'it affects everyday activities, even going to the park; the smell is so bad that the kids hold their noses' (ibid).

West Dunbartonshire Council are charged with ensuring Dalmuir meets its obligations under the Sewerage Nuisance (Code of Practice) (Scotland) Order (2006). They are certain that 'There is no known health effect of odour from a sewage works, so no health risk assessment has been carried out' (Hoey, 2009). Scottish Water failed to conduct a public health risk assessment stating, 'this is not a Scottish Water responsibility and the question should be directed at the relevant health authority for this area' (Axford, 2010). Rob Kirkwood claims Scottish Water conveyed to him 'it's a nuisance but not detrimental to public health' (Interview, 2009), a view apparently shared by NHS Lothian (Kirkwood Interview, 2009) and council officials (Munro Interview, 2009).

Nevertheless, despite these reassurances there remain concerns, informed by anecdotal evidence, about potential public health impacts. Rob Kirkwood described reports of

vomiting, including by his own children. He also suggested that stress and anxiety is a health impact of odour being emitted from Seafield (Interview, 2009). Research has shown the link between lived environment and the widespread stress that can impact on public health (Evans, 2001, Wells et al 2011). Councillor Munro reported evidence from local parents of impacts on children with asthma and allotment owners attributing skin conditions to WWTW pollution, and concerns about the potential long term public health impacts if the problem is not rectified. Researching, in a detailed fashion, the public health impact from odour was beyond the scope of this research. However, I would strongly urge that the public health impact of odour is an area worthy of further research.

Odour and the Tension between Public and Private Interests: Defaults and Defects at Seafield

Scottish Water served a defects and defaults notice on STW due to ‘persistent breaches by STW of their contractual obligations in respect to odour’ at Seafield in 2002 (Swanson, 2003). In the same year the City of Edinburgh Council (CEC) served an odour abatement notice on Seafield WWTW’s, setting in motion a legal process where CEC sought to reduce the odour being emitted from the plant. Scottish Water and STW legally challenged the notice, despite Scottish Water knowing of operational problems.

The abatement notice triggered a legal process that forced various parties to co-operate and develop upgrading options to solve the problem of odour at Seafield. This resulted in the formation of the Seafield Odour Abatement Steering Group in 2005, comprising CEC, Scottish Water, STW and SEPA. The overall objective of the Odour Abatement Steering Group was to ‘produce a proposal which will represent the ‘Best Practicable Means’ (BPM) in respect to (solving) odour at Seafield’ (Odour Abatement Steering Group, 2005a).

In 2005 the steering group, being obliged to use the BPM model, were acutely aware of affordability issues, an awareness perhaps exacerbated by wider funding issues, not least the hard budget constraint approach applied by the economic regulator. In

addition there were tensions over liability. According to the Seafield Odour Abatement Steering Group any:

Revised odour standard would need to be translated into an amended condition within the PFI contract. Scottish Water and STW will then need to agree the apportionment of contractual liability based on the amended standard in order to determine the overall cost liability (2005b: 25).

As discussed there was some ambiguity over responsibility and financial liability. Seafield's status as a PFI operated plant meant clarifying which party was responsible for the increased investment. Acquiring the necessary investment from public funds was apparently problematic. The WICS had allocated only £47.5m in the 2005 draft determination, for the period 2006-2014, for odour improvements, which was to be distributed amongst 35 WWTW's across Scotland. However, none of this funding was to be allocated for any of the PFI operated WWTW's (WICS, 2005). In this context identifying liability for the necessary improvement became a core issue for the odour abatement steering group:

In terms of costs that are due to be met by Scottish Water funding will need to be secured. In terms of upfront capital and developmental costs this will either be sourced by means of (i) funding from Scottish Water's baseline capital programme and/or (ii) Stirling Water securing additional funding which will be recompensed over the remaining life of the contract through the tariff mechanism for which an additional allowance will be required as part of Scottish Water's regulatory settlement (2005b: 15).

According to this it would ultimately be the users of water who would bear the additional costs over and above the costs already being paid to the PFI operators. Yet three years later there was still ambiguity and dispute over just how much was to be spent and who was liable for what portion of the investment. According to Scottish Water 'negotiations are taking place to deliver required improvements of c £30m, funded c 80% by Scottish Water by March 2011' (Scottish Water 2008a). Another paper suggested the Odour Improvement Plan would have an indicative capital cost of £19.3

Million (Seafield OIP, 2008: 1). John Telfer claimed Veolia needed to go cap in hand to its headquarters in Paris to get funds to make the improvements (Interview, 2009). Whatever the final cost Scottish Water acknowledged 80% would come from public funds. Local Councillor Gordon Munro believes this highlights how the ultimate guarantor and bearer of risk is public authorities and that the initial justification of using PFI because it transferred risk is a misnomer as risk at Seafield was ultimately 'socialised' (Interview, 2009).

Correspondence after the 2007 defaults and defects notice that Scottish Water served on STW exposed further tensions over risk and responsibility. This notice followed the WRC analysis of operations at Seafield, prompted by the catastrophic sewage spill. This report laid bare disagreements between Scottish Water and STW over responsibility for investment that the WRC concluded was necessary to improve operations. Despite the WRC independently reporting there were 'defaults and defects' at the plant, STW remained unwilling to fulfil the terms of the notice. STW expressed concern that Scottish Water had not discussed the WRC report with them prior to issuing 'formal notices', resulting, they alleged, in 'quite erroneous conclusions' (Paterson, 2007). Moreover, STW believed they had no contractual obligation to solve or improve certain areas of the WWTW's identified as problematic by the WRC report (ibid).

In another letter to Scottish Water STW questioned liability under the terms of the PFI contract: 'the alleged Defaults and Defects notice are not actual Defaults and Defects under the services contract' (Mitchell, 2007). STW insisted that 'the additional investment is not an endeavour to achieve contractual compliance or to provide for good industry practice because we believe this is what we are already achieving and providing' (Braid, 2008a).

In March 2008 Scottish Water director, Douglas Millican, wrote to STW asking them to provide 'an updated timetable for achieving earlier implementation of all four stages' (in Braid, 2008b). STW did not appear to be fully in tune with the expectations of Scottish Water, replying that the proposals 'would be subject to amendment as the overall scope of the work becomes better defined and further stages were implemented

as necessary, and the efficacy of the work undertaken and the scope and cost-effectiveness of future phases is reviewed' (Braid, 2008b).

Later, Scottish Water acknowledged that there had been 'several improvements both in relation to overall process and associated timescales, however there are a number of issues which give us concern' (Telfer, 2008b), adding, 'In general terms Scottish Water is seeking a clear commitment from STW to undertake major improvements at the inlet works to ensure compliance with your contract obligations' (ibid). Scottish Water concluded:

The overall tone of your letter, whether intended or not, does not convey a firm commitment to taking the necessary action required to remedy a part of the works which has significantly underperformed and which by your own admission has caused your operator a number of operational difficulties. In this respect, while acknowledging it is only reasonable to review the situation after completion of stage 2, Scottish Water remains of the view that all four stages of your plan are likely to be required to resolve these difficulties (ibid).

However, one week later it appeared that tensions were dissipating and compromise had been reached. Perhaps as a result of Scottish Water committing to fund the OIP, as said by STW:

We are committed to improving the performance of the inlet works and it is for that reason, *and in recognition of your commitment to fund the OIP (my italics)*, that we have been prepared to propose the additional measures set out in the action plan...the reason for suggesting criteria against which we can measure performance is simply you agree when it is no longer reasonable to continue with improvements if the cost/benefit of so doing is patently adverse (Braid, 2008a).

This dialogue over the defaults and defects notice highlights some fundamental differences and the potential inconsistency between public and private interests. Evidently, the conditions of a commercial contract may prevent necessary work being

carried out, even though investment is clearly required to improve operational performance. At the end of this dialogue it appears that Scottish Water accepted that STW were not contractually liable and that ultimately they would have to shoulder the cost. This situation again raises questions over ultimate responsibility when things go wrong, the socialisation of risk and the attendant accountability deficits in this new governance and decision making framework.

The Case of Dalmuir, the SRC and the OPA

Evidence from Dalmuir also suggests competing public and private interests. A case in point is how officials dealt with Dalmuir WWTW's consistent failure to meet compliance targets as set by the licence granted by SEPA under the CAR. How the PFI company, Scottish Water and the regulators have negotiated compliance failure highlights how a finite financial allocation, an arbitrary competition framework (the OPA) and hard budget constraint approach can result in behaviours arguably contrary to the public interest, and certainly indicative of sub-optimal performance.

After refurbishment Dalmuir continued to discharge unlicensed effluent into the River Clyde. Scottish Water's second draft business plan in 2009 acknowledged that Dalmuir could not 'achieve sustained compliance because it is undersized for the flows requiring full treatment' and that Dalmuir WWTW cannot comply reliably with its CAR licence without major enhancement' (Scottish Water, 2009j: 25). John Telfer described Dalmuir WWTW's critical condition as like 'a patient on the operating table' (Interview, 2009). However, despite the acknowledged failure at Dalmuir, Scottish Water proposed not to invest at, and to omit, Dalmuir WWTW's from the OPA, claiming any investment decision should await the completion of the Glasgow Strategic Drainage Study:

We have not included enhancement investment at Dalmuir WWTW to achieve robust compliance because it is subject to a strategic study in the 2010-14 period to determine the longer term solution for improving the quality of the Clyde estuary. Until the outcome of this study is known it is not in the interests of customers to commit significant investment at Dalmuir WWTW to achieve robust compliance, as this may prove abortive if part or all of the works

ultimately requires to be relocated. As the Dalmuir WWTW cannot comply reliably with its CAR licence without major enhancement investment, performance at Dalmuir WWTW should be excluded when assessing our OPA performance (Scottish Water, 2009j: 11).

Despite acknowledging Dalmuir was in need of investment (ibid), Scottish Water suggested improvements should wait at least 6 years, illustrating how the existing regulatory and governance arrangements were failing both the Dalmuir WWTW's and the local community living in proximity to the works. The Scottish Water proposal came during the SRC process. The WICS in their draft determination initially agreed with the justification provided by Scottish Water:

There remains considerable uncertainty around the work required in Glasgow and we agree with Scottish Water's proposal that detailed study work is required to determine the true extent of work required. This is consistent with the approach being adopted for the River Clyde strategic study (WICS, 2009m: 23).

The WICS thereafter confirmed how, 'In the Draft Determination we allowed for £2 million additional annual PPP operating expenditure to cover the costs of maintaining compliance at Dalmuir waste water treatment works' (WICS, 2009i: 15). This was in addition to the standard fee paid to the PFI operators, which amounts to £130m per annum (Ibid). However, the scale of this investment significantly increased in the Final Determination, perhaps a result of the public outcry once the local community became aware of the plans not to improve Dalmuir and its exclusion from the OPA.

Local stakeholders were not privy to the SRC discussions affecting Dalmuir and only became aware as a result of media reporting of information gathered for this research. The media criticised the proposal by Scottish Water and drew attention to 'the plant being in such a poor state that it breaches its operating licence, causes a stink and contaminates the Clyde' (Edwards 2009). The chair of the local tenants' association, Daniel Lennie was quoted saying 'It's disgusting, disgraceful and out of order, for the next few years they are going to continue to pollute this area and that's shameful' (in

Edwards, 2009). The local press ran a series of follow up articles that highlighted the issue and expressed local concerns and anger (Gilbert, 2009a, 2009b, 2009c).

In the wake of this public outcry the WICS significantly changed their position in relation to funding Dalmuir in the Final Determination. They revised upwards the estimated compliance costs to £4m per annum and allocated a 'one-off allowance of capital/ operating expenditure of £30 million in order to achieve a permanent solution at Dalmuir for the remaining operational life of the current works' (WICS, 2009i: 15).

As much as this investment was welcome for the Dalmuir community it raises important issues around priority setting, community participation and accountability within the current system. Moreover, the increased investment at Dalmuir was paid for by Scottish Water, again showing how risk under this PFI scheme was retained in the public sector.

The Dalmuir case exposes some flaws within the current regulatory configuration. The OPA system and the use of incentives within a hard budget context effectively created perverse incentives at Dalmuir. A key measure of the OPA is how well WWTW's comply with wastewater discharge standards. Thus, failing PFI operated WWTW's have been identified as jeopardising Scottish Water's overall OPA score and rather than actually address this issue as social and environmental logic would suggest, the predominance of a narrowly defined economics based regulatory logic led to the attempt to exclude Dalmuir from the OPA.

This represents an implicit tolerance by the regulator and corporatised utility of on-going environmental, social and public health harms. It remains a matter of conjecture as to whether public pressure led to the change in regulatory policy in this instance. The wider question about the effective exclusion of local stakeholders in the current regulatory complex in Scotland is one that will be returned to in the conclusions of this thesis. For now, it may be instructive to examine how public concerns at Seafield and Dalmuir were managed by Scottish Water.

Fuss over nothing? PR at Seafield

From data obtained via FOI, and interviews and observational fieldwork it appears that communities who organise and agitate on water service issues are seen as a problem to be managed by the utility. At Seafield the community and their representatives, the LLRA, were effectively perceived as a PR problem rather than the bearers of legitimate grievances. The strategy used by Scottish Water whilst engaging with the local community at Seafield has been to attempt to control information and reduce opposition, whilst entering into partial dialogue and community engagement. The LLRA contend that when they started complaining about odour there was:

A feeling that we were making a kind of fuss over nothing ... if you lived next to a WWTW's it was to be expected that you would experience some smell and odour from the works and you should put up with it (Kirkwood interview, 2009).

John Telfer, head of PFI at Scottish Water suggested in his interview for this research that it was unrealistic to expect there never to be a smell if you lived nearby to a WWTW's (Telfer interview, 2009). Scottish Water also expressed this view in 2003 when an official commented on how local people want:

An absolute guarantee that Seafield will never smell, an unrealistic aspiration for any water treatment works where smell can occasionally occur due to plant breakdown, abnormal operating conditions or unusual weather conditions (Swanson 2003).

This attitude undoubtedly inflamed some within the local community. The treatment of the community around Seafield by regulators, the utility and some elected representatives galled the LLRA. Rob Kirkwood described how:

We had environmental officials, SEPA officials and even some of our own councillors completely apathetic and in a sense not understanding this was a social problem. Certainly, Scottish Water was not used to being held to account. Initially I was dismissed with almost an arrogant wave of the hand saying 'you

don't know what you are talking about'. Soon I did a lot of research and began to understand what was going on. Then we started to get media attention...and that was when they started paying attention (Kirkwood Interview, 2009).

A lack of trust characterised the relationship between the LLRA and the official stakeholders. The LLRA were sceptical of official promises 'we wouldn't trust Scottish Water as far as we could throw them' (Kirkwood interview, 2009). The lack of trust among locals is understandable in the context of information contained within Scottish Water board papers, showing how problems did exist, that were subsequently released to me via FOI but which were never shared with the community. Scottish Water from the outset sought to placate local concerns and reassure the local community that the problem of odour would be fixed. In a paper circulated to the local community in 2002 they stated:

The odour problem at Seafield is a long standing issue – one that is being vigorously addressed...Scottish Water is working closely with the site operators, STW, who have drawn up a robust and in-depth action plan. This firmly tackles the issue of odour. This crucial work will markedly improve the odour situation in the long-term...(And) Major steps have already been taken which have significantly reduced the odour risk at Seafield (STW and Scottish Water, 2002).

This public account was disseminated is not consistent with an internal review outlined Scottish Water's far-reaching concerns about performance and options for Seafield. This public reassurance was part of wider strategy that sought to maintain a public narrative emphasising improving performance and proactive engagement by Scottish Water with local stakeholders. The 'Seafield Community Liaison Group', a body which the LLRA participated in during the period 2002-2003 alongside Scottish Water, STW (then controlled and operated by Thames Water), Edinburgh Council and Susan Deacon, the then Labour MSP, typifies this approach. The very existence of the Seafield Community Liaison Group is evidence of a community engagement strategy within Scottish Water. However, it is not clear that the group had any substantial impact on how the utility or regulators actually addressed the odour problem. Rob Kirkwood described how:

We used to have meetings with Scottish Water and Thames every three months. We eventually withdrew from them on the basis they were community exercises and not decision-making meetings. They were meetings where they were trying to convince us that we ought to commend them for doing the best they could....The community meetings were a sop to accountability, it was something that they felt they had to do. We would meet in a hotel, they would give us nice sandwiches, everybody would be very nice. It was just a way of placating the community. The fact that we kept saying no and we didn't compromise, well they got very annoyed and angry, you could tell that they felt we were being very unreasonable (Interview, 2009).

Despite Seafeld WWTW's poor performance, acknowledged in the internal Scottish Water board papers, Scottish Water and STW were continually at pains to embellish any perceived improvements. At a 2004 meeting both stated 'Seafeld was currently performing well' and that they were to consider how this 'good news' could be incorporated into PR outputs' (Scottish Water and Stirling Water, 2004). This 'good news' coincided with Scottish Water imposing performance related deductions on STW and an Odour Abatement Notice being served on Seafeld by Edinburgh Council.

The fallout of the failure of Scottish Water's communication strategy was acknowledged in 2009 in a register of risk written to highlight potential risks from the Seafeld OIP. Among eighteen areas identified in this risk register (Seafeld Project Risk Register, 2009: 33-36), failure to effectively communicate and manage the expectations of residents is one acknowledged risk. The mitigation measure proposed was to 'manage the public's expectations through meetings, consultations etc' (Seafeld, Project Risk Register, 2009: 33).

Scottish Water also identified concerns over the public health impacts of operations, including 'public concern about chemical dosing odour treatment creating odour and an increased threat to public health', due to a 'public perception that chemical treatment has associated health concerns and object/protest at the use of this form of treatment'. The mitigation measure proposed was once again to 'manage public expectations through meetings, consultations etc' (Ibid). What is not clear from the risk register is

whether there has been any organisation learning about the terms of engagement with local communities. Clearly local stakeholders had lost faith in Scottish Water due to their key concerns not being met, despite consultation and engagement strategies. Whether the risk register and proposed mitigation measures represent a cultural shift within the organisation or 'more of the same' remains an open question. What is evident from sentiment among local communities impacted by poor performance is that Scottish Water faces a significant challenge to regain public trust. The assumption that this can be won by communicative strategies that do not permit local stakeholders any power or voice is highly problematic, and goes to the heart of the democratic deficits embedded in the current regulatory model.

PFI: Reflecting Dominant Position's?

Introducing PFI marked an ideological shift in how WWS were provided in Scotland and, arguably, is another manifestation of a reshaped Scottish state. This change was legitimised on the basis of unsubstantiated assumptions, for example, that the private sector could bring a know-how that was missing in the public sector and that risk would be transferred to the private operators. In short, taken against the wider backdrop of the increasing dominance of neoliberalism, it can be legitimately argued that the introduction of PFI was a political choice reflecting dominant ideological assumptions.

Commercialisation in the form of PFI resulted in new structures and players, further separation of politics from delivery and several unintended consequences. When problems emerged this new regulatory framework was initially unable to cope or deliver sustainable or tenable solutions that served the public interest well. Where they have had to invest there has been a reluctance and unwillingness by PFI companies, leading to delay and deferral in solving problems.

Where operations have been inadequate the evidence shows how it has been as a consequence of bad practice, often as a result of private financial interests taking precedent over the wider public interest in securing a safe and efficient water service. Moreover, where new investment has been deemed necessary private operator

reluctance or unwillingness to make the necessary investments has become a major issue. Scottish Water has been exposed as unable to compel contractors to perform.

In the meantime communities and the wider environment absorb the attendant negative externalities. Exacerbating this suffering has been the way the communities felt neglected and treated as a PR problem to be managed. Scottish Water was seemingly torn between forcing their PFI contractors to work effectively and protecting their own reputation. The consequence was that Scottish Water acted in bad faith towards the affected communities, deliberately withholding full accounts of operational difficulties. The result has been a breakdown of trust in some communities. This outcome questions the efficacy of the current governance model and, moreover, shows how the separation of politics from delivery can marginalise public involvement and notions of public accountability. PFI has also shown that institutional change and separating politics from delivery is an inherently political choice.

The choices relating to WWS in Scotland, paying particular attention to the past 20 years are central to the thesis. Those policy choices, influenced by the wider political context, contextualise the overall critique and the suggested policy recommendations offered in the conclusion of this thesis in the next chapter.

Chapter 9: Conclusions

This chapter attempts to draw conclusions from, and reflect on, the evidence gathered in relation to policy making and governance of WWS in Scotland. Explained in the previous chapters is how providing WWS in Scotland has radically changed in the last twenty years. Since the Strathclyde referendum in 1994 there has been a stream of legislation that, when considered cumulatively, has overhauled both the governance and operations of WWS in Scotland. This thesis has sought to understand the reasons for and context in which these changes have taken place and to assess the consequences of them. The wider political backdrop, including the dynamics of devolution and globalisation, are the backdrop to key parts of the recent story of Scotland's WWS.

Specifically, the research questions developed for this thesis, focused on legislative, governance and regulatory changes, with a consideration of some of the outcomes from the changes to governance and operations. The attention to negative externalities and unintended consequences represent a key finding of the research. My case studies and profiling of how regulatory and governance processes work in practice provide a fuller and more holistic narrative that goes beyond the mere technical and theoretical in the sense that they also include an evaluation of some of the human and environmental impacts of the changes to WWS in Scotland. An approach that is, as noted throughout, counter to the official evaluations of the performance of Scottish Water, which tend to emphasise good news and the positives of the current system.

Attempting to develop a full picture of negative externalities is not a straightforward exercise. The information in the public domain produced by Scottish Water, and the wider WWS sector, is arguably partial and one-sided with little self-critique, publicly at least. This reflects one of the findings of this thesis and how Scottish Water seems extremely concerned about protecting its reputation, which means good customer service and extolling its own virtues. However, it also means downplaying failures and problems and concealing, or at the very least not reporting, information that pertains to operational difficulties, with the public and elected representatives. Good news is apparently openly disseminated but little, if any, public recognition of problems willingly and openly shared as a matter of course. Such behaviour is manifested in

official, publicly available, publications with success and efficiency proclaimed and operational problems and any tensions excluded from these official accounts.

I was drawn to using FOI as a method after realising it would enhance my understanding and knowledge of WWS in Scotland, as Scottish Water as well as the Scottish Government and the WICS, were not always willing sharers of information. Using FOI as a method helped reveal this propensity for partiality in information sharing, which indicates that the current framework encourages secrecy. The defensive reaction to many of my FOI requests exposed the lack of transparency and openness practiced within the realms of the governance and operations of WWS in Scotland. The public authorities I encountered were devising methods and ways of communicating that negated the value of FOI, illustrated by the behaviour of WICS that was exposed during a Scottish Information Commissioner Appeals process that I initiated. The OSIC found the WICS had avoided sharing the information I had requested, informing the commissioner's office that they now just verbally communicate with whatever documentation used being routinely destroyed. This type of manipulative behaviour is certainly not applying the spirit of the FOI Legislation and has wider implications for the efficacy of the current legislation. If public authorities are deliberately changing how they collect and retain information in order to avoid sharing information then much less official data will be open to public accountability and the open regimes that FOI sought to encourage will be seriously undermined.

Reluctance to share information was possibly exacerbated by my dissemination of some findings during the course of my research and prior to publication of this thesis. Applying a public sociology approach I decided that it was important to share evidence with those communities that would be interested in the information I had gathered given that it was of direct concern to them and their communities. I could have waited until publication before public dissemination. However, I decided that doing so would have been too late for those communities and they had a right to know at that particular point rather than on publication of my thesis. While I am convinced this was the correct action I am under no illusions that it made my work as a researcher more difficult amongst some of my research subjects.

In analysing all the changes in the round it can be deduced that the current governance and operational framework has resulted in the type of (strong) corporatisation of Scotland's WWS described by Hall and Lobina in Chapter 4. Scottish Water acts and behaves as if it were a private company. The activities of Scottish Water are significantly influenced by the regulatory framework, driven primarily by the economic regulator, the WICS. The current regulatory emphasis on economic efficiency is a vital factor in explaining and understanding how Scottish Water behaves and performs. The creation of the WICS and their particular interpretation of their remit is a central component in explaining the corporatisation of Scottish Water.

The strong corporatisation of WWS in Scotland and the structures at its core, including a very influential economic regulation, offers an example of how the state, and state authorities, have been reshaped and reconfigured in recent times. Governance of WWS in Scotland has embraced this reliance on (regulatory) expertise and with it a diminution of public control, ironically coming as a result of the Scottish Parliament voting for a dilution of their own power. It is valid to argue that politicians often don't have expertise and the ability to micro-manage in portfolio areas, such as WWS and therefore including 'expert stakeholders' in governance, for instance in IWRM can be perceived as a sensible measure. The danger of rebalancing governance in this way is that if it goes too far then democratic accountability is compromised. Arguably, this is what has occurred in Scotland.

The danger is that a purposeful regulator, perhaps assisted by other stakeholders such as civil servants, can push policy and be a policy agenda setter without any real accountability. An important question therefore within this new, reshaped state is who regulates the regulators? The view that the WICS has created greater economic efficiency has undoubtedly allowed the regulator a degree of freedom from under the auspices of the Scottish Parliament and Government, which should have had much greater oversight over their activities.

A reshaped WWS industry in Scotland, as with a reconfigured state generally, was not inevitable. After the 1994 Strathclyde referendum the Labour Party, who were involved in the fight against WWS privatisation in Scotland, promised a newly democratised and

strengthened publicly owned WWS sector if elected in 1997. However, after being elected they reneged on that promise, diluted democratic control, introduced an economic regulator and set in motion the strong corporatisation that we have now. This is a position that was in tune with the global trajectory influenced by the Dublin principles and of course the powerful networks outlined in Chapter 2. This was not inevitable; it was instead a deliberate political choice that reflected the New Labour disassociation from the social democratic state towards acceptance of the ascendant neoliberal globalised world.

Increasing the number of regulators and augmenting their strength is a characteristic of the neoliberal state, which represents a reregulated state rather than a deregulated one. The growth of regulatory bodies has often accompanied privatisation of public goods and services. Their role has been to replace the democratic mechanisms and institutions that had previously monitored and held accountable public goods and services. However, in the case of Scotland's WWS, there was no privatisation, yet a regulatory framework that mimicked the English and Welsh model was constructed. One can only speculate why this is the case, however what is clear is that the current framework would enable a seamless transition if Scotland's WWS were to go one step further and shift from a strong corporatised model to full removal from public ownership, whatever the form that change took.

However, in considering the current configuration of Scotland's WWS from another perspective it can be legitimately argued that neoliberalism is not fully ascendant and that local conditions might prevent a fully realised neoliberal arrangement. It is arguable that the public response in 1993 and 1994 to UK Government privatisation proposals, the Strathclyde referendum being its obvious expression, prevented water privatisation in Scotland. It may also be the case that politicians are sensitive to any explicit proposals to privatise WWS presently. Political sensitivities are also at play within the new competition framework insofar as the market was not extended to domestic customers.

Yet, the overall framework has changed and neoliberal principles have undoubtedly influenced that change. Strong corporatisation of Scotland's WWS has followed Hall and

Lobina's description (2014). The components of that model include: the regulatory framework and the strength of the regulators and diminution of political and democratic involvement, the introduction of competition, the deep penetration by private firms in delivering operations, the application of hard budget constraints, the use of incentives encompassing exorbitant levels of 'public sector pay' and bonus culture, initially significant price rises (though since those rises prices have remained relatively stable) and cost recovery policies and the emergence of the water sector as a locus of significant profit maximisation and capital accumulation. All of these have intensified the commodification of WWS and transformed Scotland's WWS.

A utility that reflects the concept of strong corporatisation raises wider philosophical questions including what constitutes a public good and service. It is appropriate, for example, to consider if a commercialised and corporatised body, operating with a market logic and ethos, with minimal public involvement and limited accountability, can still be described as a public service. Especially if there is an increasing distance and disconnect between the utility and the public it serves.

In Scotland a balanced appraisal of the efficacy of the new corporatised model in WWS is urgently required. Evaluation of the success or otherwise is dependent on how one measures success; is it measured by meeting a wide variety of needs (health, environment, amenity etc) or should it instead be judged on financial performance or a balance of both? Prominent stakeholders extol the success of the current framework; but arguably they chiefly do so through the prism of narrow financial considerations. However, there is a compelling case for other factors (social and environmental) to also be taken into account when assessing the success of the current model. Problems that do exist must be publicly acknowledged and in an honest and open way. Likewise, remediating efforts/mechanisms must also be shared publicly so that problems that may emerge are solved in a milieu of public scrutiny and accountability.

The Politics of Water

There is little doubt that the legislative changes effecting WWS in Scotland have been consistent with the wider political context both in Britain and globally. In examining

that context I have sought to consider the production of policy ideas, the actors promoting and pursuing neoliberal ideas, their networks and their interests. In the WWS sector across the world I have noted some of the main supra-national institutions, water think tanks, other generalist think tanks and the global water industry and researched their inter-locks with one another. Likewise in Scotland I identified the central protagonists in the local policy battleground over the future of Scotland's WWS.

Hence, an important dimension of this research is the linkage between global policy entrepreneurs and epistemic communities operating across the global and EU levels of governance and local actors and policy networks in Scotland. By chronicling global policy agenda setters and their ideas I was able to assess how local actors interpreted and promoted the thoughts and writings circulating in global policy networks through their application in the local political and social context in Scotland. It would appear that Scotland has been a site for struggle and experimentation over the future direction of water services. Changes to the governance and regulation of WWS in Scotland have undoubtedly corresponded with recommendations made by the predominant global water lobby, while other changes, such as the introduction of competition in the non-domestic sector are said to be a world first.

Some of the key tenets of neoliberalism in water policy making have been adopted in Scotland's WWS, including: incorporating minimal government (separation of politics from delivery, manifested in de-democratised boards and economic regulation); private involvement (PFI/ SWS); commercialisation (Scottish Water operations, hard budget constraint); commoditisation of public goods and services and low taxation (cost recovery rather than taxation) and market environmentalism (governing nature, including water) through market mechanisms.

WWS in Scotland represents an interesting crucible for neoliberalism in that many of the principles have been introduced within, what is still, a public framework. Yet Scotland forcefully rejected this type of model in 1994. The Strathclyde Referendum informed the political classes that privatisation was not a policy that commanded popular support or legitimacy. The consequence has been a different and more patient approach to change.

Arguably, this last barometer of public opinion has informed the policy strategy in WWS in Scotland ever since. Changes to WWS in Scotland correspond, in part, with Teeple's (2000) argument that where privatisation is seen as politically problematic an incremental legislative change often takes place instead. Since 1994 the legislation in Scotland has arguably cumulated in a drastically changed WWS sector in Scotland, which has seen (strong) corporatisation occur from the various tranches of Acts passed. Whether deliberate or not this has also created the framework for a seamless transition from the current ownership model, still retained in the public sector, to a transfer out of public ownership if there was the necessary political support and willingness for that change.

Highlighted in this thesis is how the changes that have taken place since 1994 have largely taken place without any wider public debate. Public interest or involvement has been minimised to a focus on operations and 'customer issues' than wider governance and potential ownership changes. Perhaps because each piece of legislation on its own did not appear to radically alter Scotland's WWS, each act was passed without too much fuss. Yet, historically, providing WWS has been a highly political issue.

A key conclusion therefore is how WWS in Scotland has effectively been de-politicised as a topical issue of general concern. Perhaps this is a result of a general satisfaction through universal coverage, but also because of the various legislative changes and the consequent corporatisation. It could be argued that the structural changes examined above have stymied public and political inputs given that a central part of the institutional change has separated politics from delivery. Key political decisions and discussions over water are not aired publicly. There is no political representation in either regulation or operational matters. What political input that exists, in the Scottish Parliament, is negligible and any policy development that occurs is outside the political arena and, therefore, not debated or scrutinised publicly.

Consistent with a general de-politicisation of WWS was the policy development process discussed in Chapter 3 and 6. Apart from the involvement of a few ministers and a handful of officials in the Scottish Government there was no participation by other

political parties, or indeed even of the grass roots membership of the governing party. There was little public knowledge of this elite driven policy development process, let alone any public involvement. It was select contributions from regulatory and industry stakeholders that were solicited by the Government, leading to the involvement of corporate consultants KPMG. Such involvement by the corporate sector is a feature of developing policy in Scotland's WWS since the late 1990's.

From the research carried out by Environmental Research Management for the Scottish Office in the late 1990's, to LECG for the WICS in 2007 through to the corporate involvement in 2010 it is clear that much of the policy work has been carried out by the corporate sector. Observing an employee of Veolia involved in 'Project Checkers' illustrates the point. His company may have been a potential beneficiary from the policy recommendations he and others produced. The prominent role afforded to the corporate sector in policy development stands in contrast to the reduced role given to the public at large and their elected representatives.

A Public and Commercial Utility: Feasible and Serving Public Ends?

An often unheralded triumph of neoliberalism is arguably the increasing marketisation of public goods and services. Where a publicly owned service has little or no public input; selects a board almost exclusively from the corporate sector; lacks the capability or desire to respond to some public needs as a consequence of tight budgetary policies; rewards its senior management with gratuitous salaries whilst cutting its workforce; and outsources significant tranches of its programme to the private sector, it is justifiable to question just how 'public' that organisation is. Moreover, if all of this occurs within a still publicly owned organisation it is legitimate to question the notion of the 'publicness' of that public organisation as well as the power of neoliberal ideas in policy making.

Having elite stakeholders centrally involved in developing WWS policy in Scotland, with little public or political input, raise questions over what constitutes publicness. A key component of policy making in public service must surely necessitate public participation, or at least the involvement of their elected representatives. Hence, the

reduced public involvement and participation in key positions, for example in the board of Scottish Water, calls into question the public character of Scottish Water. Indeed, as reported in Chapter 3 the current model in Scotland is seen as a 'public' replication of the privatised model in England.

Privatisation has not occurred in Scotland but it is apparent that Scottish Water has significantly commercialised its operations and customer relations. It is important to provide a good service and engender good relations with the people you serve. It is also a vital duty to ensure a satisfactory and sustainable environmental stewardship of water resources and the wider landscape as a result of discharging wastewater. How these duties are fulfilled should not solely be decided on cost considerations.

Hence, it is also important to be responsive to all needs when they emerge, not just so-called customer concerns as guided, in the case of WWS in Scotland, by the OPA. The OPA have been arbitrarily introduced by an unelected regulator without any public input. OPA targets, in addition to meeting the requirements of each regulatory contract, tends to become the narrow focus of Scottish Water (not least as these help achieve bonuses for senior management), which can result in a hamstrung Scottish Water if and when unforeseen problems emerge that lie outside both the contract and OPA. An example of this is the issue of external sewage flooding as discussed in Chapter 7.

Evidence was outlined in the thesis that suggested legislative changes and the economic regulation of Scottish Water have orientated it towards a commercialised path. This is a path being promoted by another newly ensconced set of agents, the Scottish Water board who are now recruited almost solely from a business background. Legislation has also encouraged Scottish Water and their board to enter partnerships with the private sector, as well as inspiring the development of its own separate, non-core, commercial organisations. This 'encouragement' has been further entrenched in the Hydro-Nation policy direction.

The Hydro-Nation schema is the latest step in commercialising both the utility and indeed the resource of water itself. It appears to be stimulated by the Scottish Government, in a water scarce world, seeking to exploit our water resources for

monetary gain. This market environmentalist vision sees Scotland exporting water, expertise and technical know-how and attracting inward investment by seeking to exploit our plentiful water supplies.

Undoubtedly Scottish Water, at least at senior management level, perceives itself as a business rather than public service. Developing its commercial operations is now at the heart of the organisation. Scottish Water are also active agents in planning for potential changes to the ownership model, this is in contrast to how Scottish Water previously perceived of political debate over its future. Initially, Scottish Water officials informed this research that whatever was said or proposed by politicians was a matter for the democratic process and not for Scottish Water who would stay out of that debate (Axford 2010, Ponton, 2006).

The governance framework resembles the privatised English model and Scottish Water is akin to a quasi-private WWS operator. However, it is also correct that the current framework distinguishes itself from a full private utility by reinvesting the significant profits that it makes. This would be an important consideration for parliamentarians and the public at large if it was proposed to privatise Scottish Water, as surpluses rather than being invested would be allocated instead to shareholders instead. Nevertheless, the lack of substantive public and political involvement and the commercial orientation of Scottish Water questions the democratic character of Scottish Water. Thus there is merit in re-appraising what constitutes a public service and assessing how well Scottish Water is performing in key areas of operations to provide a more holistic gauge as to whether the wider framework is as successful and effective.

A defining characteristic of any public organisation is how it engages with the people it serves. The data gathered for this research suggests Scottish Water places a strong emphasis on cultivating good customer relations. To achieve this Scottish Water often deploy a PR approach with customers when operations go wrong. Individuals and communities affected by performance failures and who question Scottish Water are often treated as PR problems to be managed. This often means giving an appearance of fixing operational problems whilst, in essence, not actually doing so. Arguably, taking

this approach has resulted in partial information being given to active citizens concerned at problems occurring in their communities.

Private Good, Public Bad?

Informing much of the global discourse in the realm of WWS policy making has been the view that private actors can deliver public services more effectively than the public sector. This view corresponds with neoliberal thinking that the state should create and maintain the conditions for markets to operate and that the supposedly more effective private sector should deliver public services. This thinking has been applied extensively in Scotland's WWS.

Assumptions that the private sector is more effective than the public sector have been challenged in this thesis. Documents obtained from FOI have revealed that PFI operated WWTW's have often performed poorly and that solving the problems required public investment and the active involvement of the public operator. The transfer of risk was a key justification for the PFI model. But, it is clear from the evidence gathered for this research that risk is retained by the public sector when investment is required to fix operational difficulties.

The hitherto unseen internal papers analysing PFI performance examined for this research also expose differences between the public and the private interest. They reveal Scottish Water to be anxious about (the lack of) commitment by PFI operators to solving operational problems. The data gathered also highlights the weak contractual arrangements of some PFI plants with the balance of power in some contracts leaving Scottish Water often unable to ensure PFI operators' plants were compliant or fit for purpose. PFI has in many cases resulted in the privatisation of profits when things go well but socialisation of risk when operations are problematic.

Tensions between the public and private interest is also uncovered by the apparent diminishing commitment of PFI operators as time runs out on contracts. Scottish Water explicitly stated this concern in their business plan during the last SRC process, and suggested that these contracts should be bought out. Despite the WICS also being

critical over the value for money of PFI contracts they rejected the proposal on the grounds of cost. This rejection by the WICS, not the national legislature, and the lack of information and awareness that this discussion was taking place at all, once again illustrates lack of openness and de-politicisation within the current framework and the powerful role of economic regulation.

Economic Regulation

Epitomising the separation of politics from delivery and the de-politicisation of WWS in Scotland is the establishment of an economic regulator. While no privatisation of Scotland's WWS has occurred there is nevertheless a regulatory framework resembling that of the privatised English WWS. Ironically, this reassignment of both responsibility and influence over Scotland's WWS was decided by elected politicians. It was they who reduced their own power and gave it to an unelected body, apparently conceding the view that democratic mechanisms and institutions are ill-placed to govern Scotland's WWS.

Perhaps an unintended consequence of creating new regulatory actors is their interpretation of their role and remit beyond what is prescribed in legislation. For instance, evidence reveals that the role and influence of the WICS has strayed beyond what many observers would recognise as their statutory duty. 'Project Checkers', the WICS commissioned LECG research considering new and different ownership structures, arguably went beyond their statutory duty. Their active promotion of competition for WWS retail services and advocacy of competition being rolled out to domestic water users in Scotland and for a new British competitive market also highlight an agency that is purposeful in exploiting what they deem to be opportunities as they arise.

The 2005 Water Services Act states that the 'Commission has the general function of promoting the interests' of, what amounts to, all Scottish Water customers (Part 1, Sec 1, (2)). Arguably, this leaves sufficient space for a purposeful regulator to shape and set policy in a way they believe fulfils the customer interest. Given the evidence of their activities and how they have exploited their position in ways that remain electorally

unaccountable it is legitimate to suggest how, 'At the heart of the effective regulation of utilities sits the question of trust: the extent to which consumers, employees and the government can trust the individuals selected to act as regulators' (Lapsley and Kilpatrick, 1996: 44). Having trust in regulators I would contend requires robust regulation/monitoring of the regulators themselves. Yet, aside from a cursory annual appearance before a Scottish Parliamentary committee to present their annual report there does not appear to be a detailed monitoring of the WICS and their activity by elected representatives.

Promoting competition wherever possible, including the creation of artificial competition via the OPA, financial incentives and bonuses for 'out-performing' the regulatory contract and the consequent encouragement of a hard budget approach are testament to the WICS approach towards economic regulation. Senior stakeholders proclaim the success of the current model as a result of applying these principles. There is almost a perverse incentive not to report any detrimental impacts and as such they are often not publicly reported. The knowledge produced and disseminated by official stakeholders, particularly Scottish Water, almost never reports problems. Hence, there is little by way of any critical consideration of whether problems are caused, or not solved, by the current model and its application of a hard budget constraint.

Future Research

A key component of this research has been to understand the corporatised nature of Scotland's WWS and to assess its merits and costs. More broadly this research has raised far-reaching questions on the nature of publicness, and whether the application of a corporatised model diminishes the public character of public services and the fate of public involvement and accountability under corporatised conditions.

Emerging from my research are other areas that I was unable to examine in detail but which are also worthy of future enquiry. For example I did not scrutinise in sufficient detail SWS, who are a significant player within the current framework. Difficulties in accessing information from SWS and the ambiguity over whether FOI laws applied to this joint venture, which includes many private firms, resulted on my focusing on other

areas such as PFI where it proved (relatively) easier to get information. However, given the levels of public funds spent via SWS, the cost of the projects and the leading role of the private sector within SWS it is clear that SWS deserves far greater scrutiny than it has received to date. A dedicated review of SWS capital investment delivery is needed.

A comparative study considering policy development processes requires further investigation. In particular the role of senior civil servants and their part as co-ordinating agents and policy agenda setters is needed. Evidence here showed how policy development is an elite domain, including civil servants, but that very little is known of this by the public, an unsurprising finding given the lack of any involvement from the public. The implication for democracy and accountability of this style of governance merits further research, not just in WWS provision but its application across the whole of the Scottish Government. How elected representatives hold civil servants and regulators to account is also a pressing academic and policy matter. The Lobbying (Scotland) Bill currently passing through the Scottish Parliament (2015) is one such way to hold civil servants to account. Currently they are not captured in the legislation however I would strongly suggest that their activities should be open to the public just as it is suggested Ministers and MSP's should.

More detailed research to understand the implications of the Hydro-Nation policy agenda is also needed. In particular the implications for the future cost of WWS for the people of Scotland and Scotland's future water resources should Scotland become a water exporter. Similarly, the decision to sell its expertise (through Scottish Water International) and attract inward investment due to plentiful water supplies requires evaluation. The ownership of water resources and assets becomes increasingly significant under such scenarios and the associated equity issues become even more acute, especially when one considers that there have been occasions, in areas in Scotland, where water shortages have occurred.

What impact such an approach will have on both the resource and the service remains to be seen. Placing a value on Scotland's water and selling access to water may have long term implications for all users of water in Scotland. Given the increasing commercial orientation of Scottish Water, questions about pricing and supply and demand are

pressing and require further analysis. A fuller public debate on these aspects of commercialisation than has hitherto not occurred is very much needed.

The Hydro Nation agenda entrenches the commercialisation of Scottish Water, prioritises, diversification into other commercial enterprises and partnership working in non-core areas as well as continuing the key activities of providing water and wastewater services. How, or if, these non-core services impact on core services remains to be seen, but concerns persist that surpluses made from their core activities could be re-invested in non-core activities, rather than in upgrading water assets and infrastructure or even just in helping reduce costs for the users of water. As the Hydro-Nation agenda was initiated at the end of my fieldwork I could not pursue in detail these questions. My research provides important context to understand and analyse the current policy trajectory, and the concerns about ownership, regulation and accountability raised in this thesis could inform future critical research into how the public interest and public benefit is secured under the Hydro-Nation agenda. That work becomes even more pressing given the political context in Scotland, where more powers will accrue to Holyrood, and where the constitutional question is far from settled despite the result of the independence referendum in September 2014, which voted for Scotland to remain within the United Kingdom.

Policy Recommendations

How public services are paid for and owned is a vital policy question with far-reaching importance to both individuals and society. Public services are most often paid for through the collective pooling of resources manifested in general taxation, with many services universally provided to all in society no matter their financial circumstances. In relation to WWS if no social safeguards are put in place then a private system can exclude those without the means to pay for water services, and this can have significant public health and welfare impacts.

WWS delivery models vary but looked at globally the involvement of private providers (in terms of finance, infrastructure and customer metering and billing) is presently en-vogue amongst policy makers influenced by neoliberal thinking. Some critics suggest

that private interests operating public services results in an inherent conflict of interest between protecting the wider public interest (defined in terms of universal access to a socially essential good or service) and private profit. These concerns are perhaps encapsulated by Polanyi in his influential book *The Great Transformation* in which he memorably described the dangers of 'marketising' public services:

To allow the market mechanism to be sole director of the fate of human beings and their natural environment, indeed, even of the amount and use of purchasing power, would result in the demolition of society.....Robbed of the protective covering of cultural institutions, human beings would perish from the effects of social exposure; they would die as the victims of acute social dislocation through vice, perversion, crime, and starvation. Nature would be reduced to its elements, neighbourhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed (Polanyi, 1944: 73).

The multiple water crises outlined in the early part of this thesis have intensified a search for workable and sustainable policies relating to how WWS are provided. Given how mainstream thinking in politics and economics has been influenced by neoliberal discourse it is little surprise that the policy agenda is often characterised by market environmentalist solutions. Market led solutions, for example cost recovery policies (rather than taxation paying for the service) and increased private sector involvement is two examples of this change. In Scotland policy changes to WWS have mirrored the global thinking that introducing market disciplines represents the best model for the delivery of WWS.

It is without question that an increase in investment of Scotland's WWS infrastructure and asset base has occurred. However, as Hall and Lobina noted in relation to England's WWS, this investment would have to have taken place no matter the model of delivery (2001) as compliance with various EU directives necessitated new investment. Hence, the model and funding chosen was entirely a political decision. One of the contributions made by this thesis is questioning the efficacy of the current 'marketised' direction of travel in Scotland.

As noted the de-politicisation and de-democratisation of Scotland's water services are two outcomes from the current framework which, arguably, invite further change in Scotland's WWS sector. De-politicisation has resulted in a lack of substantive knowledge and involvement by the public and their elected representatives as operational and political control has moved towards expert led governance. A group of elite stakeholders effectively control this policy domain in Scotland.

Allocating such power to democratically unaccountable regulators is not without risk. The regulatory framework of WWS in Scotland has been and is currently overseen by regulators predisposed to market solutions. Some of the evidence presented above indicates that policy development under their aegis (for example the competitive framework) is likely to entrench, or even advance, marketisation. Against the global backdrop of increasing water usage, unequal allocation and water scarcity a reduction in democratic accountability of Scotland's water system, presents some risks in terms of equity of access, policy priorities, and responsiveness to public needs. An overarching conclusion of this research is that those responsible for the governance and operations of Scotland's WWS should have stronger links and accountability to democratic institutions and to the public they serve.

Better democratic oversight of the current regulatory and operational framework appears necessary. The board of Scottish Water should be transformed to include a cross-representation of Scottish society within it. There should, of course, be a level of knowledge and expertise but that expertise should be expanded into areas other than just that of business. A reformed Scottish Water board, therefore, could include, community activists and leaders, local councillors, trade unionists⁴⁶, technicians, engineers, business people, academics and other experts from fields other than that of finance and business including those from a public health, environmental and social inclusion background.

⁴⁶ Pat Kelly former leader of the PCS union currently sits on the board. He was only one person however and there were concerns, expressed by trade unionists currently working at Scottish Water that having just one trade unionist on the board was more tokenistic than substantive

Having board members with a focus on these areas would promote and entrench an ethos more concerned with achieving social and environmental benchmarks and outcomes and less concerned with an ethos focused on making Scottish Water Scotland's *most trusted and valued business*. This recommendation runs counter to the currently dominant orthodoxy, as discussed earlier in the thesis, that creates a governance framework concerned with the economic dimension and which is left almost solely to experts with little, if any, input from ordinary people and where the involvement of workplace and elected representatives is excluded altogether.

Economic regulation should also be democratised with a much more holistic input into regulation and with statutory duty passed onto a regulatory board, albeit with advice from a range of expertise and elected representatives to ensure the WICS board is informed by a balance of views and opinion. Currently the economic regulators appear to go about their work essentially unchecked due to their supposed superior 'inside' knowledge and expertise. A consequence of this has been the WICS has enjoyed unparalleled power and influence in Scotland's WWS.

Political processes have failed in this regard. Ceding power to the WICS and thereafter paying scant attention to their activities has meant very weak political oversight with little scrutiny, at least at the parliamentary level, of either regulatory or operational processes. Scottish Water and the WICS are invited to speak to the relevant Scottish Parliament committee to answer often banal and shallow questions, put to them by uninformed MSPs, in relation to their annual reports. This is the extent of the current political scrutiny by the Scottish Parliament. A greater scrutiny of WWS in Scotland is required and having elected representatives involved at the board levels of operations and economic regulation, or indeed during the SRC process, would provide a better and broader oversight.

Ownership of Scottish Water and its retention in the public sector or sale to the private sector is a lingering dynamic amongst some commentators in Scotland, despite the recent changes that have seen its corporatisation. Countries such as Uruguay and the Netherlands have laws stipulating WWS cannot be privatised. A similar law for Scotland

may also be desirable, particularly within a global context of multiple water crises and on-going debates about Scotland's fiscal powers and resourcing Scotland's public sector.

There can and should be some form of democratic appraisal of the effectiveness of private involvement. Greater parliamentary scrutiny would increase democratic engagement, oversight and ensure some public deliberation on matters of spending and performance. The notion that private operators are better than public equivalents is increasingly being challenged. The Scottish Parliament should take stock of private contracts and, for example, consider operational performance, the transfer of risk and value for money. An inquiry to consider whether these contracts offer value to the public they serve appears long overdue. Such an assessment could also be broadened to include other parts of the public sector that are increasingly dependent on private contractors.

Parliamentary and democratic scrutiny of these contracts would run counter to the current de-democratisation and de-politicisation of WWS. This was exemplified when the unelected WICS rejected a suggestion by Scottish Water to buy back some PFI contracts (such decisions should be made by the national legislature not the unelected economic regulator). In relation to specific PFI contracts it would appear that Governmental and Parliamentary appraisal (with the information made available to the public), of PFI and the SWS contracts, is required particularly where operator commitments are likely to diminish. At present there is no such assessment, which is arguably quite unsatisfactory, considering the public monies spent and emerging evidence of operational concerns regards the PFI contracts.

It is apparent that Scotland's water governance framework is influenced by the dominant global discourse on how best to govern WWS. It is also clear that key policy actors in Scotland now see water as an economic resource and envision opportunities for commercial exploitation of our resources and export of our knowledge and expertise. However, Scotland could, indeed should, see itself as a global citizen rather than a global competitor. Scottish Water International typifies the current corporatised framework. It is a commercial company set up in order to sell Scottish Water capabilities and knowledge to foreign buyers.

If promoting an international arm Scottish Water should use Scottish Water International not just as a commercial entity but also as an arm of operations assisting public utilities in third world countries that need to access technical expertise but cannot afford it. Essentially, Scottish Water could seek to enter partnerships with utilities in countries in need of certain capabilities to help boost their capacity to help provide WWS to their populations. Scottish Water could do what is done in the Netherlands and ask if the Scottish people are prepared to pay a small levy to fund this activity. Bilateral arrangements could be one way they seek to develop this arm. Another would be for Scottish Water International to join the Global Water Operator Partnership (GWOPA), which is a UN-Habitat sponsored initiative that seeks to match mature and developed utilities, such as Scottish Water, with utilities in third world countries. Critically, however this is done on a not for profit basis.

These options are suggestive of a different path that Scottish Water might pursue – whether it chooses to do so is perhaps worthy of wider debate in policy and civil society circles in Scotland. While complimentary of the scale of the investment made in recent times and understanding of the scale of the task facing Scottish Water this thesis has been critical of the current status quo in relation to WWS in Scotland. But, an ambition that underpins this research is to inform new thinking on how national resources and assets might be better organised and managed. In particular this research argues for a wider set of social metrics and priorities to be included in evaluating the successes and performance of this strategically important national corporation.

Conclusion

The changes to Scotland's WWS raise fundamental questions over the nature of public services and what constitutes the intrinsic characteristics of a public corporation. WWS are too important to be left to market devices alone. Without clean water and satisfactory sanitation services, societies can and do break down. Conditions in 21st century Scotland, needless to say, are not those of the 19th century. Nevertheless if we embrace marketisation and privatisation public control over these resources is undermined and reversing this policy path may either be too costly to buy back.

Therefore, my strongest conclusion is that Scotland should democratise WWS and in so doing protect water, and the national provider Scottish Water, as a public resource. A more democratic and publicly accountable system is timely, possible and sustainable.

Bibliography

A

Abelson, D. E. (2012). Think-Tanks, Social Democracy and Social Policy. *Parliamentary Affairs*, 66, pp. 894-902.

Abu-Zeid, M., Shady A. & Coulomb R. (1998). The World Water Council in Three Years-1994-1997. *Water International*, 23, (2), pp. 97-106.

Ackroyd, R. (2009). *Chief Executive Report*. Scottish Water Board Paper 70/09. [Document Obtained Through Freedom of Information]. 1 July 2009.

Ackroyd, R. (2011). *Evidence Presented to the Scottish Parliament Infrastructure and Capital Investment Committee*, 21 September 2011. [Online] Available at: <http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6694&mode=pdf> [Accessed 25 April. 2014].

Adler, J. (2001). Free and Green: A New Approach to Environmental Protection, *Harvard Journal of Law and Public Policy* 24(2), pp. 653-694.

Aertgeerts, R. (2008). Water and Public Health. In: *Water Europe Conference*. Brussels: NP.

Agarwal, A, Delos Angeles, M.S, Bhatia, R, Chéret, I, Davila-Poblete, S, Falkenmark, M, Gonzalez Villarreal, F, Jønch-Clausen, T, Aït Kadi, M, Kindler, J, Rees, J, Roberts, P, Rogers, P, Solanes, M, Wright, A, (2000). *Integrated Water Resources Management* Global Water Partnership, Technical Advisory Committee (TAC), Stockholm.

Aitkenhead, G. (2006). *Strategic Review of Charges 2006-2010 Final Determination – Water Quality Programme*. Letter to Colin McLaren, Drinking Water Quality Regulator for Scotland, [Document obtained under the Freedom of Information Act]. 25th January 2006.

Alexander, A. (2006). *Evidence to the Audit Committee of the Scottish Parliament Session, Overview of the Scottish Water Industry*, January 10 2006. Available at: <http://archive.scottish.parliament.uk/business/committees/audit/or-06/au06-0102.htm#Col1390> [Accessed on 20th January 2011].

Allan, T. (2003). *Virtual water – the water, food, and trade nexus useful concept or misleading metaphor?* *Water International* 28 (1), pp. 106-113.

Allan, J.A. (1998) *Virtual Water: A Strategic Resource: Global Solutions to Regional Deficits*. *Groundwater* 36, No. 4: 546

Allardyce, J. (2006). Holyrood 'squanders £ 4.5 billion. *The Sunday Times*, p.21.

Anderson, T. L. (1983). *Water Crisis: Ending the Policy Drought*. Baltimore: The Johns Hopkins University Press.

Anderson, T. L. and Leal D. R. (1988). *Going with the Flow: Expanding the Water Markets*. [Online] Available at: <http://www.cato.org/pubs/pas/pa104.html>. [Accessed 15 March. 2012].

Anderson, T. L. and Leal D. R. (2001). *Free Market Environmentalism*. New York: Palgrave.

Anderson, T. L (1983) *Water Crisis: Ending the Policy Drought*, The Johns Hopkins University Press, Baltimore

Anon. (2010). *Anonymous Text to Tommy Kane*. [n/d].

Aquafed. (2009a). *Bridging the real water divide between haves and have-nots More ambition, more projects, no limitations that slow progress*. [Online] Available at: http://www.aquafed.org/pdf/bridgingtherealwaterdivide_aquafed_press%20release_final_pd_eng_2009-03-17.pdf. [Accessed 12 March. 2010].

Aquafed. (2009b). *Key Messages for the Istanbul World Water Forum*. [Online] Available at: http://www.aquafed.org/pdf/keymessagesforwwf5_press%20release_final_pd_eng_2009-03-17.pdf. [Accessed on 12 March. 2010]

Archer, M. (1982) *Morphogenesis Versus Structuration: On Combining Structure and Action*. *British Journal of Social Science* 33, pp. 455–83.

Archer, M. (2000a). *Being Human*. Cambridge, Cambridge University Press.

Armstrong, J. (2006). *Raising the Return, Scotland's Public Assets*. Glasgow: University of Strathclyde Business School and the Scottish Council Foundation.

Armstrong, J. (2007). *Improving productivity in Scotland's public services*. Edinburgh: David Hume Institute.

Armstrong, J., McLaren, J., Harris, R, and Moffat, J. (2008). *CPPR Analysis of Scottish Government Targets: A critique of the existing targets and a presentation of some alternatives*. Edinburgh: CPPR.

Armstrong & Armstrong Ltd. (2009). *Implications of the Introduction of local income tax on Scottish Water*. [Document obtained through Freedom of Information].

Armstrong, H., Armstrong, P. and Connolly, P. (1997). Introduction: The Many Forms of Privatization. *Studies in Political Economy*, 53, pp 3-9. [Online] Available at: <file:///D:/Downloads/6860-10767-2-PB.pdf>. [Accessed 10 March. 2012].

ARUP, Scott Moncrieff and Strategic Management Consultants Limited (2006) *Transfer pricing in the Scottish water industry: Scottish Water's compliance with*

Regulatory Accounting Rule 5, A report to the Water Industry Commission for Scotland

Asenova, D. and Hood, J. (2006). PFI and the Implications of Introducing New Long-Term Actors into Public Service Delivery. *Public Policy and Administration*, 21(4),pp. 23-41.

Audit Scotland. (2005). *Overview of the Water Industry in Scotland*, Edinburgh: Audit Scotland.

Axford, T. (2009). *Note/Response to T. Kane*. [Information Obtained Through Freedom of Information Act].

Axford, T. (2012). *Correspondence to Tommy Kane relating to Request for Review in Relation to Information Provided in connection with requests dated 21st January 2011, 5th March 2012*. [Document Obtained as Part of a Freedom of Information Review Process].

B

Baietti, A et al, (2006). *Characteristics of Well-Performing Public Water Utilities*, Water supply and Sanitation Working Notes, Note no 9.

Bakker, K. (2004). *An Uncooperative Commodity: Privatizing Water in England and Wales*. Oxford: Oxford University Press,

Bakker, K. (2005). Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales. *Annals of the Association of American Geographers*, 95, pp. 542–565.

Bakker, K. (2007). The “Commons” Versus the “Commodity”: Alter-globalization, Anti-privatization and the Human Right to Water in the Global South. *Antipode*, 39, pp. 430–455.

Bakker, K. (2010). *Privatizing Water: Governance Failure and the World's Urban Water Crisis*. Ithaca and London: Cornell University Press.

Baldwin, R., Cave, M. (1999). *Understanding Regulation: Theory, Strategy and Practice*. Oxford: Oxford University Press.

Balen, M. (2006). *Water for Life: The case for private investment and management in developing country water systems*. [Online] Available at: <http://web.archive.org/web/20071011073040/www.globalisation.eu/publications/waterforlife.pdf>. [Accessed 15 March. 2012].

Banks, C. (2006). *Scottish Water Procurement Overview*. [Document Obtained from Freedom of Information]. n/d.

Barlow, M. and Clark, T. (2002). *Blue Gold the Battle against Corporate Theft of the World's Water*. London: Earthscan.

Barlow, M. (2007). *Blue Covenant: The Global Water Crisis and the Fight for the Right to Water*. Toronto: McClelland & Stewart.

Bartram, J, Prüss-Üstün, A Bos, R, Gore, F, (2008). *Safer water, Better Health: Costs, benefits and sustainability of interventions to protect and promote health*. Geneva: WHO Press.

Bate, R. (2006). *All the Water in the World*, Center for Independent Studies. Australia: Southwood Press.

Baty, R., J. (2008). *Report on Marine Esplanade Pumping Station Failure, Seafield Waste Water Treatment Works*. Edinburgh: Scottish Water.

BBC. (2007). *Water Mutualisation Rejected*. [Online] Available at: <http://news.bbc.co.uk/1/hi/scotland/6688399.stm> [Accessed 10 January. 2010]

Becker, H., S. (1967). Whose Side Are We On? *Social Problems*, 14,(3),pp. 239-247.

Becker, H. (1998). *Tricks of the Trade, How to Think about Your Research while you're Doing It*. Chicago: University of Chicago Press.

Becker, H.,S. and Horowitz, I., L. (1972). Radical Politics and Sociological Research: Observations on Methodology and Ideology. *American Journal of Sociology*, 78(1), pp.48-66.

Beder, S. (2001). Neoliberal Think Tanks and Free Market Environmentalism. *Environmental Politics*, 10(2), pp. 128-133

Beder, S. (2002). *Global Spin, The Corporate Assault on Environmentalism*. Devon: Green Books.

Beesley, M. (1997). *Privatisation, Regulation and Deregulation* (2nd ed). London: Routledge.

Beesley, M. and Littlechild, S. (1997a). The Regulation of Privatised Monopolies in the United Kingdom. In: M. Beesley. (1997). *Privatisation, Regulation and Deregulation* (2nd ed). London: Routledge.

Beesley, M. and Littlechild, S. (1997b). *Privatisation; Principles, Problems and Priorities* In Beesley. M. (1997). *Privatisation, Regulation and Deregulation* (2nd ed).London: Routledge

Bell, D. and Mackay, D. (2006). *The Political Economy of Devolution*. The Policy Institute, Series Economy No 12, September 2006.

Bell, D. (2010). *Email Correspondence from David Bell to Richard Ackroyd.* [Document Obtained Through Freedom of Information]. 24 August 2010.

Bell, S. and Quiggin, J. (2008). The limits of markets: the politics of water management in rural Australia. *Environmental Politics*, 17, (5), pp. 712-729.

Benn, R. (2010). *E-mail from Robin Benn to Judy Wakker.* , [Document Obtained Through Freedom Of Information]. 11 May 2010.

Benner, T., Reinicke, W., Witte, M. (2002). Shaping Globalisation, The Role of Global Public Policy Networks In: C., Bertelsmann, (ed). *Transparency: A Basis for Responsibility and Cooperation.* Gutersloh: Bertelsmann Foundation Publishers.

Björkdahl, A. (2002). *From Idea to Norm Promoting Conflict Prevention.* Lund: Department of Political Science. Lund University.

Blue Planet Project (2010) *WIN! Water referendum appeal accepted by the Colombian Congress.* [Online]. Available at: <http://www.blueplanetproject.net/index.php/win-water-referendum-appeal-accepted-by-the-colombian-congress/> [Accessed 10 January. 2013]

Blundell, J. (2003). *Is There Something in the Water in Scotland*, IEA. [Online] Available at: <http://www.iea.org.uk/record.jsp?type=news&ID=145>. [Accessed 25 March. 2009].

Blundell, J. (2006). *Loch Ness Monster Found: The sale of Scottish Water'* , IEA. [Online] Available at: <http://www.iea.org.uk/record.jsp?type=pressArticle&ID=201>. [Accessed 25 March. 2009].

Brenner, N. and Theodore, N. (2002). Cities and the Geographies of “Actually Existing Liberalism”. *Antipode* 34(3)p. 351.

Bell, A. (2009). *Peak Water.* Edinburgh: Luath Press.

BIAC. (2013). *BIAC Views on the OECD Horizontal Water Project*, OECD, BIAC, Annual Report 2013. [Online] Available at <http://biac.org/wp-content/uploads/2014/05/FIN08-04-OECD-WATER-PROJECT.pdf> [Accessed 12th December. 2013].

Biswas, A. (2008). *Integrated Water Resources Management: Is It Working? Water Resources Development*, 24,(1),pp. 5–22.[Online] Available at <http://thirdworldcentre.org/iwrmjournal.pdf>. [Accessed 30 December. 2013].

Biswas, A. (2004). Integrated Water Resources Management: A Reassessment A Water Forum Contribution, International Water Resources Association. *Water International*, 29, (2), pp. 248–256.

Black, M. and Fawcett, B. (2008). *The Last Taboo: Opening the Door on the Global Sanitation Crisis*. London: Earthscan.

Black, S. (1994). What's Happening to Water and Sewerage Services in Scotland. *Scottish Affairs*, 6, (1), pp. 25-35

Boas, C.,T. and Gans-Morse, J. (2009). *Neo-Liberalism: From New Liberal Philosophy to Anti-Liberal Slogan*. [Online] Available at: people.bu.edu/tboas/neoliberalism.pdf [Accessed 10 June. 2013]

Bond, P. (2006). Water Commodification: Can Human Rights Trump the Market? *Asian Exchange*, 22, 1, pp., 39-59.

Bond, P. and Dugard, C. (2008). Water, human rights and social conflict: South African experiences. *Law, Social Justice and Global Development*, 10, 1, [Online] Available at: http://www2.warwick.ac.uk/fac/soc/law/elj/lgd/2008_1/bond_dugard [Accessed 10 March, 2012]

Booth, A. (2009). *Innovative Uses of the Freedom of Information Act (2000) for Research*. Sheffield: Research Information Network.

Borzel, T. A (1997). *What's so Special about Policy Networks? – An Exploration of the Concept and its Usefulness in Studying European Governance*. *European Integration online Papers*,1: 16. [Online] Available at: <http://eiop.or.at/eiop/texte/1997-016.htm>. [Accessed 10 March. 2011].

Bouguerra, L. (2006). *Water under Threat*. London: Zed Books

Bourdieu, P. (1998a.). *Acts of Resistance: Against the Tyranny of the Market*. New York: Free Press.

Bourdieu, P. (1998b). Utopia of endless exploitation, The Essence of Neo-liberalism. *Le Monde Diplomatique*. [Online] Available at: <http://mondediplo.com/1998/12/08bourdieu>. [Accessed 15 January. 2013].

Bourdieu, P. and Wacquant, L. (2001). New Liberal Speak, Notes on the new Planetary Vulgate. *Radical Philosophy*. [Online]. Available at: <http://loicwacquant.net/assets/Papers/NEOLIBERALNEWSPEAK.pdf>. [Accessed on 10 March. 2013].

Bowers, S. (2008). Former Severn Trent Executives Attack SFO After Leak Court Case. *The Guardian*. [Online] Available at: <http://www.theguardian.com/business/2008/jul/01/severntrent.utilities>. [Accessed 30 August. 2008].

Bowers, S. (2008). Severn Trent executives attack SFO after leak court case. *The Guardian*. [Online] p.21. Available at:

<http://www.theguardian.com/business/2008/jul/01/severntrent.utilities>
[Accessed 8th August. 2008].

Boyfield, K. and Ambler, T. (2005). *Route Map to Reform: Deregulation*. [Online] Available at:
<http://www.adamsmith.org/sites/default/files/images/uploads/publications/Deregulation.pdf>. [Accessed 15 May. 2012]

Braid, P. (2008a). *Letter to John Telfer, Without Prejudice, Seafield Inlet Works*. [Document Obtained Through Freedom of Information]. 1 April 2008.

Braid, P. (2008b). *Letter to John Telfer, Without Prejudice Seafield Inlet Project*. [Document Obtained Through Freedom of Information]. 20 March 2008.

Brand, U. and Gorg, C. (2001). The Regulation of the Market and the Transformation of the Societal Relationships with Nature. *Capitalism, Nature, Socialism*, 12,(4), pp.67-94.

Brennan, B, Balanyá, B, Hoedeman, O, Kishimoto, S and Terhorst, P (ed's) (2005). *Reclaiming Public Water Network Book, Achievements, Struggles and Visions from around the World*. Amsterdam : Transnational Institute/Corporate Europe Observatory.

Brubaker, E. (2008). *Water and Wastewater Treatment in Canada: Tapping into Private Sector Capital, Expertise, and Efficiencies* in Schneider, N. *A breath of fresh Air The state of environmental policy in Canada*. Canada, Fraser Institute. [Online]. Available at: <file:///D:/Downloads/BreathofFreshAir2008rev.pdf> [Accessed 15 March. 2012]

Bruch, C., Jansky, L., Nakayama, M. & Salewicz, K. D. (Eds) (2005). *Public Participation in the Governance of International Freshwater Resources*. Tokyo: UNU Press.

Brudenell, J. and Sandy, G. A. (2000) Yarra Valley Water: A Successful Change Programme for Corporatized Water Utility. In: *ECIS 2000 Proceedings*. Paper 152. [Online] Available at <http://aisel.aisnet.org/ecis2000/152> [Accessed 14 March 2012]

Brundtland, G. (1987). *Our Common Future, Report of the World Commission on Environment and Development, UN*. [Online], Available at:
http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf
[Accessed 10 January. 2013]

Bryman, A. (2004). *Social Research Methods* (2nd ed), Oxford: Oxford University Press.

Bulloch, J. and Darwish, A. (1993). *Water Wars: Coming Conflicts in the Middle East*. London: St. Dedmundsbury Press.

Buie, E. and Macleod, C. (1997). Dewar in hot water with MP's. *The Herald*. [Online] Available at: <http://www.scotland.gov.uk/News/Releases/1997/12/2d48e704-9ff9-42f2-a656-6f87cd88a0d6> [Accessed 10 January 2012].

Burgin, A. (2012). *The Great Persuasion: Reinventing Free Markets since the Great Depression*. Cambridge: Harvard University Press.

Business Europe, *About Us, 41 Members in 35 Countries*, 2012. [Online] Available at: <http://www.businesseurope.eu/content/default.asp?PageID=600#GR> [Accessed November 16 2012]

Byatt, I. (2009), *WICS Annual Report*. [Online] Available at: http://www.watercommission.co.uk/view_Annual_reports.aspx. [Accessed 20th March 2011].

Byatt, I. (2006). *Changing the Taps: Regulating Water in Scotland*. Comiston Lecture, [Obtained from Freedom of Information] [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Comiston2006.pdf> [Accessed 23 April. 2014].

Byatt, I. and Sutherland, A. (2006). *The Utility Perspective*. Presentation to the Regulatory Policy Institute. [Document Obtained Through Freedom of Information].

Byatt, I and Sutherland, A. (2007). *Next Steps in Water Competition*. Presentation to European Policy Forum. [Document Obtained through Freedom of Information]. 19 November 2007.

Byatt, I. (2007a) *Do the Taps Need Changing? Or the Washers Renewed?* London: European Policy Forum.

Byatt, I. (2007b). Regulating Public Owned Utilities – Outputs Owners and Incentives. In: *The Centre for the Study of Regulated Industries*. [Online] Available at: http://www.bath.ac.uk/management/cr/cri/pubpdf/Occasional_Lectures/20_Byatt.pdf. [Accessed 20 April. 2014].

Byatt, I. (2008a). Chairman's Foreword, In: *WICS Annual Report 2007-2008*. [Online] Available at: http://www.watercommission.co.uk/UserFiles/Documents/WICS%20Annual%20Report%202007-08_3.pdf. [Accessed 21 April. 2014].

Byatt, I. (2008b). Regulation of Water in Scotland. *Presentation to the Adam Smith Institute* [Document Obtained Through Freedom of Information] 22 January, 2008.

Byatt, I. (2008c) *Competition in Water Services: Is the Scottish Model Exportable?* RPI Hertford Seminar. [Document obtained through Freedom of Information]. N/d.

Byatt, I. (2009a). *Competition, Conservatives & Climate Change; what will the Water Industry look like in 10 years time?* In: Address to Investors, Royal Mint Court

London, 26 October 2009. [Online] Available at:
[http://www.watercommission.co.uk/UserFiles/Documents/Sir%20Ian%20Byatt%20College%20Hill%20\(2\).pdf](http://www.watercommission.co.uk/UserFiles/Documents/Sir%20Ian%20Byatt%20College%20Hill%20(2).pdf). [Accessed 21 April. 2014].

Byatt, I. (2009b) *The Design of Regulatory Institutions and Consumer Empowerment in the UK*. In: *The Corporate Governance, Regulatory Institutions and the Empowerment of Consumers, International Conference*. Lisbon: np. [Document Obtained Through Freedom of Information].

C

Cann, V. and Jones, T. (2006). *Down the Drain, How Aid for Water Reform Could Be Better Spent'*. London: World Development Movement, FIVAS.

Carter, S.,M. and Little, M. (2007). Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research. *Qualitative Health Research*, 17, (10), pp. 1316-1328.

Castree. N. (2001). Socializing nature: theory, practice, and politics In: Castree, N. and Braun, B. (eds) *Social nature: theory, practice, and politics*. London: Blackwell.

Castree, N.(2010.) Neoliberalism and the Biophysical Environment, A Synthesis and Evaluation of the Research. *Environment and Society: Advances in Research*, 1,(5), p45.

Castro, E. (2007). Poverty and citizenship: Sociological perspectives on water services and public-private participation. *Geoforum*, 38, (5), pp. 756-771.

Castro, J., E. and Heller, L. (2009). *Water and Sanitation Services Public Policy and Management*. London: Earthscan.

Cap-Net. (2005). Integrated Water Resources Management Plans, Training Manual and Operational Guide.[Online] Available at:
www.sswm.info/sites/default/files/reference_attachments/CapNet%202005%20Integrated%20Water%20Resource%20Management%20Plans.pdf. [Accessed 10 March. 2010].

Camdessus, M., Winpenny, J. (2003). *Financing Water for All, Report of the World Panel on Financing Water Infrastructure summary, World Water Council & GWP*. [Online] Available at:
http://www.worldwatercouncil.org/fileadmin/world_water_council/documents_old/Library/Publications_and_reports/CamdessusSummary.pdf [Accessed 10 November. 2013].

CBI. (2008). *CBI Scotland's response to the Scottish Government's consultation on its Draft Budget 2009-10*. Edinburgh: CBI.

CBI. (2006). *The Scottish Economy: The Priority of Priorities CBI Scotland Manifesto*. Edinburgh: CBI.

CBI. (2010). *Independent Budget Review, Submission from CBI Scotland*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/919/0102139.pdf>. [Accessed 5 May. 2014]

CEO. (2012). *Commission urged to stop pushing water privatisation*. [Online] Available at: <http://corporateeurope.org/pressreleases/2012/commission-urged-stop-pushing-water-privatisation>. [Accessed 11th January. 2014].

Chapman, R. and Cuthbertson, S. (1996). Sydney's Water: A Suitable Case for Private Treatment. *Agenda*, 3, (1), pp. 45-58.

Christensen, J.G. and Pallesen, T. (2001). The Political Benefits of Corporatisation and Privatisation. *Journal of Public Policy*, 21, (3), pp. 283-309.

Chomsky, Noam. (1999). *Profit over People – Neoliberalism and Global Order*. New York: Seven Stories Press.

Clancy, R. (2013). *UK Water Companies Avoid Paying Tax*. *The Daily Telegraph*. [Online] Available at: <http://www.telegraph.co.uk/finance/newsbysector/utilities/9872063/UK-water-companies-avoid-paying-tax.html>. [Accessed 30 December 2013].

Clarke, J. (2004a). *A Consuming Public?* In: ESRC/AHRB Cultures of Consumption Series. NC: Royal Society.

Clarke, J. (2004b). *Creating Citizen Consumers; The Trajectory of an Identity*. In: the CASCA Annual Conference. London, Ontario.

Clarke, J. (2004c). Dissolving the Public Realm? The Logics and Limits of Neoliberalism. *Journal of Social Policy*, 33, pp 27-48.

Clarke, J. and Newman, J. (2005). *What's in a Name? New Labour's citizen-consumers and the remaking of Public Services*. In: The CRESC Conference. Culture and Social Change. Manchester: Disciplinary Exchanges.

Clover, C. (2001). Water Firms Top Polluters. *Daily Telegraph*. [Online] Available at: <http://www.telegraph.co.uk/news/uknews/1357927/Water-firms-top-polluters.html>. [Accessed 30 June. 2008].

Cocket, R. (1994). *Thinking The Unthinkable, Think Tanks and the Economic Counter Revolution, 1931-1983*. London: Harper Collins Publishers.

Coen, D. (2007). Empirical and Theoretical studies in EU Lobbying. *Journal of European Public Policy*, 14(3),pp. 333-345.

- Conant, J. (2009). *Fifth World Water Forum Marked by Violence and Repression*. [Online] Available at: http://www.alternet.org/story/132066/fifth_world_water_forum_marked_by_violence_and_repression. [Accessed 10th March. 2011].
- Conka, K. (2006). *Governing Water Contentious Transnational Politics and Global Institution Building*. London: MIT Press.
- Connor, R, and Webber, A. (2014). Water: Demands, energy requirements and availability. In: *The United Nations World Development Report 2012. Water and Energy*, 1, United Nations World Water Assessment Programme. Paris: UNESCO.
- Connor, R, Gallopin, G, Hellmuth, M and Rast, W (2009) Understanding what drives pressure in water. In: O, Unver, and W. Cosgrove, W. *The United Nations World Water Development Report 3: Water in a Changing World*. Paris and London: Earthscan.
- Construction News. (2004). *Nevis Water Defence Deal*. [Online] Available at: <http://www.cnplus.co.uk/news/nevis-water-defence-deal/411040.article#.U2Hg-4FdXK0>. [Accessed 26 April. 2014].
- Cook, G. and Edwards T. (2004). *Water Services Etc (Scotland) Bill* Spice Briefing. Edinburgh: Scottish Parliament.
- Cooper, C. and Taylor, P. (2005). Independently verified reductionism: prison privatization in Scotland. *Human Relations*, 58, (4),pp, 497-522.
- Cooper, C, Dinan, W, Kane, T, Miller, D and Russell, S (2006). *Scottish Water The drift to privatisation and how democratisation could improve efficiency and lower costs*. Glasgow: Public Interest Research Network.
- Corporate Watch. (2013). *Leaking Away the Financial Costs of Privatisation*. [Online] Available at: <http://www.corporatewatch.org/?lid=4685>. [Accessed 30 December. 2013].
- Corral, V., Hall, D., Lobina, E., Hoedeman, O., Kishimoto. S., Pigeon, M., Terhorst. P. (2009). *Public-public partnerships (PUPs) in Water*. Greenwich: PSI-TNI-PSIRU.
- Cosgrove, W. and Rijsberman, F. (2000). *World Water Vision: Making Water Everybody's Business*. London: Earthscan.
- Crooks, K.A, (1996) *Water Warfare in Scotland*. Graduation Thesis, University of Florida
- Crouch, C. (2011). *The Strange Non-death of Neoliberalism*. London: Wiley.
- Christie, B. (2012). Blackout at PFI hospital forces surgeon to operate by torchlight. *BMJ*, 24. [Online] Available at:

<http://211.144.68.84:9998/91keshi/Public/File/38/344-7854/pdf/bmj.e2949.full.pdf>. [Accessed 28 April. 2014].

Cumming, W. (1980). *The Greenock Cut and the Story of Greenock's Water Supply*. Glasgow: Strathclyde Regional Council, Leisure and Recreation Department.

CUPE. (2003). *Civil Society Delegations Break from World Water Council Consensus*. [Online] Available at: <http://cupe.ca/news/3827> [Accessed 12th March. 2011].

Cuthbert, J.R., Cuthbert, M. (2006a). How the Strategic Review of Charges 2002-06 Casts a Long Shadow over Future Water Charges in Scotland. *Fraser of Allander Institute Quarterly Economic Commentary*, 30, (4) pp. 12-15.

Cuthbert, J.R., Cuthbert, M. (2006b). *Risk and Profit: Unanswered Questions about the Strategic Review of Water Charges 2006-10*. *Fraser of Allander Institute Quarterly Economic Commentary*, 31, 1. pp.124-143.

Cuthbert, J.R., Cuthbert, M. (2007a). Fundamental Flaws in the Current Cost Regulatory Capital Value Method of Utility Pricing. *Fraser of Allander Institute Quarterly Economic Commentary*, 31(3), pp. 1-12.

Cuthbert, J.R., Cuthbert, M. (2007b). PFI: The Need for an Urgent Enquiry. *Scots Independent*, Issue 944, pp.1-3.

Cuthbert, J.R., Cuthbert, M. (2007c). Scottish Water Solutions: is this what we want from a Public Corporation? *Scots Independent*, Issue 945, pp. 1-6.

D

Dalmuir OIP. (2007). *Scottish Water and Scotia Water Ltd, Odour Improvement Plan, Dalmuir Wastewater Treatment Works*. [Document Obtained Through Freedom Of Information]. n/d.

Daily Record. (2007). *Sewage Floods Garden*. *Daily Record* June 25 2007.

Danilenko, A and Child, A. (2005). *Water Market Europe: Opportunities in EU Accession, the Framework Directive and the CIS*. Oxford: Global Water Intelligence.

David Hume Institute. (2008), About Us. In: *Powerbase, Ian Byatt*. [Online] Available at: http://powerbase.info/index.php/Ian_Byatt#cite_note-21 [Accessed 7th August. 2008]

David Hume Institute, (2009) About Us, [Online] <http://www.davidhumeinstitute.com/DHI%20Website/About%20Us/Mission%20statement%20and%20history.htm> [Accessed 15 November 2010]

Davidson, N. (2010). Introduction. In: N., Davidson, P., McCafferty, and D. Miller, (eds) *Neoliberal Scotland, Class and Society in a Stateless Scotland*, 1st ed. Newcastle: Cambridge Scholars Publishing.

Davis, A. (2013). *Promotional Cultures, The Rise and Spread of Advertising, Public Relations, Marketing and Branding*. Cambridge: Polity Press.

Debretts. (2010). *Biography Neil William Summerton*.
<http://www.debretts.com/people-of-today/profile/4281/Neil-William-SUMMERTON>. [Accessed 10 May. 2010].

De Gooijer, G., Rast, W. and Tropp, H. (2009). Responses and Choices. In: O., Unver and W. Cosgrove. *The United Nations World Water Development Report 3: Water in a Changing World*. Paris and London: Earthscan.

Deloitte. (2010a). *Email from Deloitte to Richard Ackroyd; then Chief Executive of Scottish Water*. [information obtained via Freedom of Information Request]. [10 August. 2010].

Deloitte. (2010b). *Email from Deloitte to Richard Ackroyd; then Chief Executive of Scottish Water*. [Information Obtained through Freedom of Information request]. [24 August. 2010].

Demi, S. and Simanjuntak, T. (2013). Jokowi to cancel contracts with water firms. *Jakarta Post*. [Online] Available at:
<http://www.thejakartapost.com/news/2013/03/28/jokowi-cancel-contracts-with-water-firms.html>. [Accessed 28th March. 2013].

Denham, A. and Garnett, M. (1998). *British Think-Tanks and the Climate of Opinion*. London: UCL Press.

Denham, A and Garnett, M. (1999). Influence Without Responsibility: Think Tanks In Britain. *Parliamentary Affairs*, 52, (1), pp. 46-57.

Denzin, N.K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods*. 2nd ed. New Jersey: Prentice-Hall.

Dépelteau, F. (2008). Relational Thinking: A Critique of Co-Deterministic Theories of Structure and Agency. *Sociological Theory*, 26, pp. 51–73.

Desai, R. (1994). Second-Hand Dealers in ideas: Think Tanks and Thatcherite Hegemony. *New left Review*, [Online] I, p.203. Available at:
<http://newleftreview.org/I/203/radhika-desai-second-hand-dealers-in-ideas-think-tanks-and-thatcherite-hegemony> [Accessed 25 November 2011].

Devine, T. (2012). *The Scottish Nation: A Modern History*, 3rd ed. London: Penguin.

Dietz, G, & Gillespie, N. (2012). Rebuilding trust: When sympathy dried up for Severn Trent Water. *The Guardian*. [Online] Available at:
<http://www.theguardian.com/sustainable-business/severn-water-trust-ofwat-data> [Accessed 28 December. 2013].

Dinan, W. Miller, D and Watterson, A. (2003) *A review of Consultation, customer relations and communications in the Scottish Water industry* Water Customer Consultation Panels (WCCPS)

Dinwoodie, R. (2006). Water ownership debate begins First minister faces calls to give industry mutual status. *The Herald*, p.13.

Doogan, K. (1997.) The Marketization of local services and the fragmentation of labour markets. *International Journal of Urban and Regional Research*, 21, (2), pp. 286-302.

Downie, G. (2007). *e-mail from Gordon Downie to Alan Sutherland* [Document Obtained Through Freedom of Information]. [15 March. 2007].

Douglas, J.D. (1976) *Investigative Social Research, Individual and Team Field Research*. London: Sage.

Drape, J. (18 April 2007). Aussie firm launches global water fund. *The Australian*, p.20.

Dryzek, J. (1997). *The Politics of the Earth. Environmental Discourses*. New York: Oxford University Press.

DWQR. (2013a). *Ten Key Parameters*. [Online] Available at: <http://www.dwqr.org.uk/public-supply/national-water-quality/top-ten-parameters>. [Accessed 10 February. 2013].

DWQR (2013b) *Other Parameters*. [Online] Available at: <http://www.dwqr.org.uk/public-supply/national-water-quality/other-parameters>. [Accessed 10 February. 2013]

Dumenil, G. and Levy, D. (2004). *Capital Resurgent: Roots of the Neoliberal Revolution*. Cambridge and London: Harvard University Press.

Dur, A. and De Bievre, D. (2007). The Question of Interest Group Influence. *Journal of Public Policy*, 27, (1),pp. 1-12.

E

Economic Affairs. (1998). The Crisis in Water, 18 (2), June.

Edwards, R. (2011). Exposed The PFI Sewage Scandal. *The Sunday Herald*. [Online]. Available at: <http://www.robedwards.com/2011/03/exposed-the-pfi-sewage-scandal.html#more> [Accessed 20 April. 2014].

Edwards, R. (2009). *Revealed: Scottish Water condemns thousands to pongs and pollution*. [Online] Available at: <http://www.robedwards.com/2009/06/revealed->

scottish-water-condemns-thousands-to-pongs-and-pollution.html [Accessed 12 June. 2010].

Edwards, R. and Mackay, N. (2002). Revealed: The Cancer Chemicals in Our Water. *Sunday Herald*, p.15.

Ends Report. (2014). Scottish Water panned over 'unacceptable' cryptosporidium. [Online] Available at: <http://www.endsreport.com/19491/crypto-levels-in-scotlands-water-unacceptable>. [Accessed 20 May. 2014].

EPSU. (2012). *Why water is a public service: exposing the myths of privatization*. Greenwich: PSIRU.

European Commission. (2004). *Analysis of the strategies of the water supply and sanitation Operators in Europe*. Euromarket: Water Liberalisation Scenarios.

European Services Forum. (2012). *Who We are, Members*. [Online] Available at: <http://www.esf.be> [Accessed 12th November. 2012].

Evans, G.W. (2001). Environmental Stress and Health In: A., Baum, T., Revenson, and J. Singer, eds. *Handbook of Health Psychology*. New York: Psychology Press.

Everett, S. (2002). *Corporatisation Legislation: The Key to Effective Port Management*. In: International Association of Maritime Economists. Panama: IAME.

F

Fee, E. and Brown, T. (2005). The Public Health Act of 1848, Public Health Classics. *Bulletin of the World Health Organisation*. 83 (11), pp. 866-867. [Online] Available at: <http://www.who.int/bulletin/volumes/83/11/866.pdf> [Accessed 10 January. 2014]

Feyerband, P.K. (1975). *Against Method: Outline of an Anarchistic Theory of Knowledge*. London: New Left Books.

Findlay, J. (2004). *Financing the Scottish Water and Sewage Industry*. Research Paper for the STUC. [Online] Available at: <http://www.unison-scotland.org.uk/water/Findlay%20Water%20Report%20May%202004.pdf> [Accessed 25 March 2010]

Finger, M., Tamiotti, L. and Allouche, J. (2006). *The Multi Governance of Water*. Albany: State University of New York Press.

Flinn, A. and Jones, H. (2009). *Freedom of Information, Open Access, Empty Archives?* London: Routledge.

Flinders, M. (1999). 'Realising the Democratic Potential of Quangos' In: M., Flinders, & M., Smith, *Quangos, accountability and reform*. Basingstoke: Macmillan Press Ltd.

Foucault, M. (1980). Truth and Power. In: M., Foucault. And C. Gordon. ed *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. Hemel Hempstead Harvester: Wheatsheaf.

Fountain, J. (2001). Paradoxes of Public Sector Customer Service, Governance: *An International Journal of Policy and Administration*, 14(1), pp. 55-73.

Friedman, M. (1962). *Capitalism and Freedom*. Chicago: University of Chicago Press.

Frontier Economics. (2008). *The concept of 'virtual water', a critical review*. (A report prepared for the Victorian department of primary industries). Melbourne: Pty Ltd.

Frost and Sullivan. (2002) *Strategic Profiles of Market Leaders in the European Water Industry*. Cape town: Agile.

Frost and Sullivan. (2005). *Outsourcing Opportunities in the European Industrial Water Markets*. Industry Report.

Frost and Sullivan. (2006). *European Residential Water Treatment Equipment Market – Investment Analysis and Growth Opportunities*. Industry Report.

Frost And Sullivan. (2003). *Outsourcing of Asset Management in European Water and Wastewater Utilities Markets*. Industry Report.

G

Gasson, C. (2008). *Down and Out in Paris*, Global Water Intelligence. Oxford: Media Analytics

George, S. (1999). A Short History of Neo-Liberalism. In: *The Conference on Economic Sovereignty in a Globalising World*. Bangkok. [Online] Available at: <http://www.tni.org/article/short-history-neoliberalism> [Accessed 20 December. 2012].

Gilbert, J. (2009a). Sewage Works Verdict. *Clydebank Post*, p.5.

Gilbert, J. (2009b). Action Plan For Sewage Stink. *Clydebank Post*, p.8.

Gilbert, J. (2009c). Dalmuir Stench Could Take 8 Years to Fix. *Clydebank Post*, p.24.

Gillespie, P. (2008.) Stark risks of looming global water crisis. *Dublin Irish Times*, p.12.

Global Water Intelligence. (2002). *Water Sector Neglected in EU Accession Countries*. Oxford: Media Analytics.

Global Water Intelligence, (2009a), *Veolia Slashes Investments To Boost Profits*, Oxford, Media Analytics

Global Water Intelligence. (2009b). *GWI 2009 Zurich: Where do Water and Money Meet?* [Online] Available at: <http://www.environmental-expert.com/events/gwi-2009-zurich-where-do-water-and-money-meet-4466> [Accessed 14 March. 2014].

Gleick, P. (2004). *The World's Water 2004-2005: The Biennial Report on Freshwater Resources*. Washington D.C: Island Press.

Global Water Intelligence. (2004a). *Europe Takes Centre Stage in Suez Revival*. Oxford: Media Analytics.

Global Water Intelligence. (2004b). *Suez's Pragmatic Evolution*. Oxford: Media Analytics.

Global Water Intelligence. (2008). *GWI/OECD 2008 Global Water Tariff Survey, World Water Prices Rise by 6.7%*. Oxford: Media Analytics.

Global Water Intelligence. (2009). *Chart of the Month, Global Water Market*. Oxford: Media Analytics.

Goldman, M. (2007). How "Water for All!" Policy became Hegemonic: The Power of the World Bank and its Transnational Policy Networks. *Geoforum*, 38, pp.786-800.

Goldman Sachs, (2008) *Top Five Risks: Critical Perspectives on the Global Economy*. London: Global Markets Institute.

Gonzalez-Villarreal, F. and Solanes, M. (1999). *The Dublin Principles for Water as Reflected in a Comparative Assessment of Institutional and Legal Arrangements for Integrated Water Resources Management*. Stockholm: Global Water Partnership.

Gow, B. (1996). *The Swirl of the Pipes. A History of Water and Sewerage in Strathclyde*. Glasgow: Strathclyde Regional Council.

Goldman, M. (1998). *Privatising Nature: Political Struggles for the Global Commons*. London: Pluto Press.

Goldman, M. (2002). Notes from the World Summit in Johannesburg: "History in the Making?" *Capitalism Nature Socialism*, 13(4), pp., 68 - 79.

Gough, C. and Shackley, S. (2001). The Respectable Politics of Climate Change, the epistemic communities and NGO's. *International Affairs*, 77(2), pp. 329-345.

Grant, W. (2001). Pressure Politics: From 'Insider' Politics to Direct Action? *Parliamentary Affairs*, 54, pp. 337-348.

Griffiths, K. (2006). Row brews over £2billion plan to float Scottish Water. *Daily Telegraph*, p14.

Grossart, A. (2009). *Correspondence from Sir Angus Grossart to John Swinney*. [Document Obtained from Freedom of Information] [9 March. 2009].

Guerquin, F. (2003). *World Water Actions, Making Water Flow for All*. World Water Council. Marseille: Earthscan.

Gupta, J. (2009) In: Huitema and Meijerink (2009) *Water Policy Entrepreneurs: A Research Companion to Water Transitions Around the Globe*. Cheltenham: Edward Elgar Publishing.

Gurria, A. (2006). *Task Force on Financing Water for All: Enhancing access to finance for local governments, financing water for agriculture*. Marseille: World Water Council/Global Water Partnership.

GWP. (2006). *GWP's First Ten Years: Reflecting Back and Looking Forwards The Global Water Partnership's Consulting Partners Meeting*. [Online] Available at: http://www.gwp.org/Global/Activities/News/GWP_CP_report.pdf [Accessed 17 October. 2013].

GWP. (2006a). *The Boldness of Small Steps, 10 Years of the Global Water Partnership*. Global Water Partnership.

H

Haas, P. (1992). Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, 46(1), pp. 1-35.

Hacque, S. M. (2001). The Diminishing Publicness of Public Service under the Current Mode of Governance. *Public Administration Review*, 61 (1), pp. 65-82.

Hall, D. (2001a). *Water privatisation – global problems, global resistance*. Greenwich: PSIRU.

Hall, D (2001b), *Water in Public Hands Public Sector Water Management, a Necessary Option*. Greenwich: PSIRU.

Hall, D. and Lobina, E. (2001). *UK Water Privatisation – A Briefing*. Greenwich: PSIRU.

Hall, D. (2003). *Water Multi-nationals, No Longer Business as Usual*. Greenwich: PSIRU.

Hall, D. and Lobina, E. (2003). *Problems with private water concessions: a review of experience*. Greenwich: PSIRU.

- Hall, D. & Lobina, E. and , Le Motte, R. (2003). *Water privatisation and restructuring in Central and Eastern Europe and NIS countries, 2002*. Greenwich: PSIRU.
- Hall, D., le Motte, R. and Davies, S. (2003). *Terminology of Public-Private Partnerships (PPPs)*. Greenwich: PSIRU.
- Hall, D., Lobina, E. and Le Motte, R. (2004). *Making water privatisation illegal: - new laws in Netherlands and Uruguay*. Greenwich: PSIRU.
- Hall, D. and Lobina, E. (2005). *The relative efficiency of public and private sector water*. Greenwich: PSIRU.
- Hall, D. and Lobina, E. (2006). *Pipe Dreams - failure of the private sector to invest in water*. Greenwich: PSIRU.
- Hall, D and Lobina, E. (2007a). *Water as a Public Service*. Greenwich: PSIRU.
- Hall, D and Lobina, E. (2007b). *From a private past to a public future? The problems of Water in England and Wales*. Greenwich: PSIRU.
- Hall, D, and Lobina, E. (2008). *Water Privatisation*. Greenwich: PSIRU.
- Hall, D. and Lobina, E. (2009). *Thinking inside the box: the World Bank position on the private and public sector*. Greenwich: PSIRU.
- Hall, D. and Lobina, E. (2014). *Corporatisation in the European Water Sector: Lessons for the Global South*. In: D. McDonald, ed. *Rethinking Corporatization and Public Services in the Global South*. London and New York: Zed Books.
- Hall, D. and Hoedman, O. (2009) *Aquafed - another pressure group for private water*. Brussels: EPSU.
- Hansford, M (2009). Scottish Water puts 17 firms on £2bn capital investment framework, *New Civil Engineer*. [Online] Available at: <http://www.newcivilengineer.com/scottish-water-puts-17-firms-on-2bn-capital-investment-framework/5207139.article> [Accessed August 24 2011]
- Hargreaves, J. (2006). *Evidence to the Audit Committee of the Scottish Parliament Session, Overview of the Scottish Water Industry*. [Online] Available at: <http://archive.scottish.parliament.uk/business/committees/audit/or-06/au06-0102.htm#Col1390> [Accessed January 10. 2006].
- Harvey, D. (2003). *The New Imperialism*. Oxford: Oxford University Press.
- Harvey, D. (2010). *The Enigma of Capital*. , London: Profile Books.
- Harvey, D. (2005). *A Brief History Of Neo-Liberalism*. Oxford: Oxford University Press.

Hawkes, S. (2013). MP Calls For A Windfall Tax on Water Companies. *The Telegraph*, [Online] p.25.
<http://www.telegraph.co.uk/finance/newsbysector/utilities/10204626/MP-calls-for-a-windfall-tax-on-water-companies.html> [Accessed 12th January. 2014].

Hawkins, N. (2008). *Privatization- Reviving the Momentum*. London: Adam Smith Institute.

Hayeck, F. (1944). *The Road to Serfdom.*, London: Routledge.

Hayeck, F. (1949). *Individualism and Economic Order*. London: Routledge.

Hayeck, F. (1967). *Studies in Philosophy, Politics and Economics*. New York: Schuster and Schuster.

Heard-Laureote, K. (2005). Transnational networks: informal governance in the European political space. In W. Kaiser, and P. Starie, eds., *Transnational European Union: towards a common political space?* London: Routledge.

Heffernan, R. (1996). Blue Print for a Revolution? The Politics of the Adam Smith Institute. In M., K and A. Seldon, eds. *Ideas and Think Tanks in Contemporary Britain*. London: Frank Cass Publishing.

Heffernan, R. (2000). *New Labour and Thatcherism*. Basingstoke: Macmillan Press.

Held, D. & McGrew, A. (2002). *Governing Globalization: Power, Authority and Global Governance*. Oxford: Wiley.

Hellowell, M. and Pollock, A. (2006). *The Impact of PFI on Scotland's NHS: a briefing*. In: The Centre for International Public Health Policy [Online] Edinburgh University. Available at:
<http://www.nhscampaign.org/uploads/File/PFI%20in%20the%20Scottish%20NHS%2006-12-06.pdf> [Accessed 26 April. 2014].

Hellowell, M. and Pollock, A. (2007). New Development: The PFI: Scotland's Plan for Expansion and its Implications. *Public Money & Management*, 27(5), pp. 351-354.

Hellowell, M. and Pollock, A. (2009). Non-Profit Distribution: The Scottish Approach to Private Finance in Public Services. *Social Policy & Society*, 8(3), pp. 405-418.

Henderson Global Investors. (2005). *Henderson Private Capital raises heavily oversubscribed £330m (485m euros)*. Infrastructure Fund, Press, Press Release, 10 October 2005.

Hendry, S. (2001). Scotland's Water, Open for Business. In: *Dundee IWA Conference*. Dundee: IWA.

Hendry, S. (2003). Scotland's Water – Safe Clean Affordable. *Public , Natural Resources Journal*, 43,pp. 491-517.

Herald. (2009). *Raise a Glass to Glasgow's Water Pioneers*. [Online] Available at: http://www.heraldscotland.com/news/12610021.Raise_a_glass_to_Glasgows_water_pioneers/ [Accessed 20 April. 2012].

Hertz, N. (2001). *The Silent Takeover: Global Capitalism and the Death of Democracy*. London: Harper.

Heynen, N. and Robbins, P. (2005). The neoliberalization of nature: Governance, privatization, enclosure and valuation. *Capitalism Nature Socialism* 16(1),pp. 5-8.

Hickel, J (2012). A Short History of Neo-Liberalism and how we Can Fix it. *New Left Project*, [Online] Available at: http://www.newleftproject.org/index.php/site/article_comments/a_short_history_of_neoliberalism_and_how_we_can_fix_it [Accessed 10 January. 2014].

Hickman, M. (2006). Water industry comes under fire as 3.6 billion litres are lost every day. *Independent*, [Online] Available at: <http://www.independent.co.uk/environment/water-industry-comes-under-fire-as-36-billion-litres-are-lost-every-day-478512.html> [Accessed June 30. 2008].

Hobson, S. (2009). *New Boss Confident Scottish Water Can Match the Private Sector*. [Online] Available at: http://www.utilityweek.co.uk/news/New-boss-confident-Scottish-water-can-match-the-private-sector/771892#.U3-b_oFdXK0 [Accessed 20 May. 2014].

Hodge, N. (2008). US Water Crisis to Unleash Flood of Profits. *Green Chip Review*. [E-Newsletter].

Hoey, P. (2009). *West Dumbartonshire Council FOI Requests*. [Information Obtained Through Freedom of Information]. [18 November. 2011].

Holland. A., S., J. (2005). *The Water Business, Corporations Versus People*. London: Zed Books.

Hood, J. and McGarvey, N. (2002). Managing the risks of Public-Private Partnerships in Scottish Local Government. *Policy Studies*, 23(1), pp. 21-35.

Horsburgh, F. McGregor, S. and Robertson, L. (1997). War of Words on Water, Dewar Accused of Betrayal. *The Herald*, [Online] p.20. Available at: <http://www.heraldscotland.com/sport/spl/aberdeen/war-of-words-on-water-dewar-accused-of-betrayal-1.394967> [Accessed 10 January. 2010].

Howatt, B. (2006). *Choices for a purpose*, Review of Scottish Executive Budgets, Report of the Budget Review Group. Edinburgh: Scottish Executive.

Hudson, R. (2001). *Producing Places*. London: Guilford.

Huitema D. and Meijerink. H. (2009). *Water Policy Entrepreneurs: A Research Companion to Water Transitions Around the Globe*. Cheltenham: Edward Elgar Publishing.

Hutcheon, P. (2010) Scottish Water pays out £273,000 in 'ridiculous' bonuses. *Sunday Herald*, [Online] Available at: <http://www.heraldsotland.com/news/home-news/scottish-water-pays-out-273-000-in-ridiculous-bonuses-1.1037507> [Accessed 10 August. 2012].

I

IMPACT Trade Union. (2012). *Euro-wide citizen's petition launched in Ireland amid fears that Irish Water Services Could be Privatised*. [Online] Available at: <http://www.impact.ie/12/05/17/Euro-wide-citizen-s-petition-launched-in-Ireland-amid-fears-that-Irish-water-services-could-be-privatised.htm> [Accessed 11 January. 2014]

Iornis, A. (2008). Water Institutional Reforms in Scotland: Contested Objectives and Hidden Disputes. *Water Alternatives* 1(2), pp. 253-27.

J

Jacques, P. L, Dunlap, R.E, and Freeman, M. (2008). The Organisation of Denial: Conservative Think Tanks and Environmental Scepticism. *Environmental Politics*, 17(3), pp. 349-385.

Jamieson, B. (2009). Salmond must act fast to halt slump. *Scotland on Sunday*, Business Section, p.34.

Jamieson, B. (2007a). Public sector waste should be priority. *Scotland on Sunday Business Section*, p.36.

Jamieson, B. (2007b). *Productivity: how the public sector could learn from Scottish Water*. *The Scotsman*, p.18.

Jane, A. and Dollery, B. (2006). Public Sector Reform in Australia: An Evaluation of the Corporatisation of Sydney Water, 1995 to 2002. *Australian Journal of Public Administration*, 65 (4), pp.54-67.

Jackson, B. (2012). The Think Tank Archipelago: Thatcherism and Neo-Liberalism. In B. Jackson and R. Saunders ,eds. *Making Thatcher's Britain*. Cambridge: Cambridge University Press.

Jessop, B. (1997). Capitalism and its future: remarks on regulation, government and governance. *Review of International Political Economy*, 4(3), 561-581.

Jessop, B. (1998). The Rise of Governance and the Risks of Failure: the Case of Economic Development. *International Social Science Journal*, 50 (155), pp. 29-45.

Jessop, B. (2002). *Liberalism, Neo-Liberalism and Urban Governance: A State Theoretical Perspective*. *Antipode*, 34(3), pp. 52-472.

Jessop, B. (2003). Governance and meta-governance. On reflexivity, requisite variety, and requisite irony. In: H. Bang., ed., *Governance as Social and Political Communication*. Manchester: Manchester University Press.

Jessop, B. (2007). *State Power: A Strategic-Relational Approach*. Cambridge: Polity.

Jick, T.D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action . *Administrative Science Quarterly*, 24(4), pp. 602-611.

Johnson, S. (2010). Alex Salmond's £35 billion budget approved. *The Telegraph*, [Online] Available at: <http://www.telegraph.co.uk/news/uknews/scotland/7129574/Alex-Salmonds-35-billion-budget-approved.html> [Accessed 15 March. 2011).

Johnston, J. (2003). Who Cares About the Commons? *Capitalism, Nature, Socialism*, 14 (4), pp.1-41.

Jones, H. (2009). *Open access, Empty archives? A word of warning*. [pdf] Session 3 Research Information Network.[Online] Available at: <http://www.rin.ac.uk/system/files/attachments/RIN-FOI%20H%20Jones.pdf> [Accessed 20 April. 2011].

Jones, R., A.(2013). A Rising Tide of Water Bills....and Profits. *The Guardian*,[Online]p.35. Available at: <http://www.theguardian.com/money/2013/feb/09/rising-water-bills-profits> [Accessed 30 December. 2013].

JP Morgan. (2008). *Watching water A guide to evaluating corporate risks in a thirsty world*. New York, Hong Kong & London: Global Equity Research.

K

Kane, T.(2009). *Managing Scotland's Water: Balancing the Challenges*. Edinburgh: Holyrood Magazine.

Kandiah, M.D. and Seldon, A. (1996). *Ideas and Think Tanks in Contemporary Britain, 1*. London: Frank Cass Publishing.

The Koran, [Online] Available at: <http://qurango.com/english//021.qmt.html#021.030> [Accessed 10 April 2011]

Kaika, M. (2003). The Water Framework Directive: A New Directive for a Changing Social. *Political and Economic European Framework, European Planning Studies*, 11(3), pp.299 – 316.

- Kane, B. (2010). *Correspondence from Bill Kane to Richard Ackroyd*. [Document Obtained Through Freedom of Information]. [10 August. 2010].
- Kane, T (2006) Unpublished masters dissertation, University of Strathclyde
- Kane, T. (2009). Managing Scotland's Water: Balancing the challenges. In: *Holyrood Conference*, 2 October 2009. Edinburgh: Scottish Government.
- Kane T., & Mitchell, K. (2008). Money in Water. *Scottish Left Review*, 48, pp. 22-23.
- Kane T., & Mitchell, K. (2010). A Steady Flow of Venality. *Scottish Left Review*, 60, pp. 25-27.
- Kane, T. & Russell, S. (2007). Is Anything Public Anymore. *Scottish Left Review*, 40, pp. 14-15.
- Kaplan, A. (1964). *The Conduct of Inquiry: Methodology for Behavioural Science*. San Fransisco: CA Chandler.
- Karunanathan, M. & Hall, D. (2012). Our Right to Water, Case Studies on Austerity and Privatisation. In: *Europe, Blue Planet Project*. [Online] Available at: <http://www.blueplanetproject.net/documents/RTW/RTW-Europe-1.pdf>. [Accessed 11th January. 2014].
- Keating, M. (2007). *Scottish Social Democracy, Progressive Ideas for Public Policy*. Brussels: P.I.E Peter Lang.
- Keynes, J.M. (1936). *The General Theory of Employment, Interest and Money*. London: Palgrave Macmillan.
- Khagram, S. and Waddell, S. (2007). *Multi-Stakeholder Global Networks: Emerging Systems for the global common good* In: *Partnerships, Governance and Sustainable Development: Reflections on Theory and Practice*, Glasbergen, P, Bierman, F and Mol, A. P. J, Gloucester, Edward Elgar Publishing,
- Klein, N. (2007). *The Shock Doctrine: The Rise of Disaster Capitalism.*, Toronto: Knopf Canada.
- Knight, Z, Miller-Bakewell, R, (2007) *Water Scarcity a Bigger Problem Than Assumed*, Merrill Lynch
- Know, D. (2008). Bowled out by Sewage Floods. *Peebleshire News*. 22 August 2008.
- Kooiman, J. (2003). *Governing as Governance*. London: Sage Publications.
- Kotz, D. & McDonough, T. (2010) Global Neoliberalism and the Contemporary Social Structure of Accumulation. In: T., McDonough, M., Reich, and D. Kotz (eds). *Contemporary Capitalism and its Crises: Social Structure of Accumulation Theory for the Twenty-First Century*. Cambridge: Cambridge University Press.

Kotz, D. (2002). Globalization and Neoliberalism. *Rethinking Marxism*, 14(2), pp. 64-79.

KPMG. (2009). *Scottish Futures Trust: Options Development, Alternative Structures and Funding Options for Scottish Water, November 2009*. [Document Obtained Through Freedom of Information].

KPMG. (2010). *Independent Budget Review – KPMG contribution*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/919/0102192.pdf>. [Accessed 5 May. 2014].

Kundzewicz, Z.W., L.J. Mata, N.W. Arnell, P. Döll, P. Kabat, B. Jiménez, K.A. Miller, T. Oki, Z. Sen and I.A. Shiklomanov. (2007). Freshwater resources and their management. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 173-210

Kuttner, R. (1997). *Everything For Sale: The Virtues and Limits of Markets*. Chicago: University of Chicago Press.

L

Lapsley, I. and Kilpatrick, K. (1996). *Trust us – regulators and the governance of privatized utilities*. *Public Money & Management*, 16 (2),pp. 39-46.

Larner, W. (2000). Neo-Liberalism; Policy, Ideology, Governmentality. *Studies in Political Economy*, 63,pp. 5-25.

Laws, G. (1998). Privatisation and the local Welfare State: The Case of Toronto's Social Services. *Transactions of the British Geographers*, 12, pp. 43-48.

Lavelle, A. (2008). *The Death of Social Democracy: Political Consequences in the 21st Century*. Aldershot: Ashgate Publishing Limited.

LECG. (2010). *Experts, Michael J Oaten Affiliate*. [Online] Available at: <http://www.lecg.com/> [Accessed 14th May. 2010].

Le Strat, (2010) Paris: An Example of how Local Authorities Can Regain Control of Water Management [Online] Available at: http://www.municipalservicesproject.org/sites/default/files/Paris%20Chapter%200by%20Anne%20le%20strat%20En_final_0.pdf [Accessed 12 April 2012]

Levine, M. E., & Forrence, J. L. (1990). Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis. *Journal of Law, Economics, & Organization*, 6, 167–198. [Online] Available at <http://www.jstor.org/stable/764987> [Accessed 20 April 2014]

- Leys, C. (2003). *Market Driven Politics, Neo-Liberal Democracy and The public interest*. London: Verso.
- Lincoln, Y. S. and Guba, E. G. (1987). *Ethics: The Failure of Positivist Science*. In: *The Annual Meeting of the American Educational Research Association*. [Online] Washington DC: AERA. Available at: <http://files.eric.ed.gov/fulltext/ED282918.pdf>. [Accessed 15 March. 2012].
- Linton, J. (2010) *What is Water? The History of a Modern Abstraction*, Vancouver, UBC Press
- Lisle, J., Downie, G., Smith, G. (2007). *Organisation of the Water Industry in Scotland*, LECC, Shepperd and Wedderburn & ING Barings, Research Commissioned by the WICS, [Document obtained through Freedom of Information]
- Lisle, J (2007). *Draft Organisation of the Water Industry in Scotland, Survey of Options*, LECC, [Document obtained through Freedom of Information]
- Lisle, J., Downie, G. and Smith, G. (2007). Organisation of the Water Industry in Scotland. In: *LECC presentation to the WICS*. [Document Obtained through Freedom of Information]. [2 May. 2007].
- Littlechild, S. (1978). *The Fallacy of the Mixed Economy, an Austrian Critique Of Recent Economic Policy and Thinking*. London: Institute of Economic Affairs.
- Mitchell Library. (2009) Loch Katrine Exhibition. Glasgow:
- Lobina, E. and Terhorst, P. (2005). *D19, Watertime Case Study – Edinburgh UK*, watertime.net Research commissioned by the European Commission
- Lobina, E. and Calvallo, R. (2011). The campaign against water privatisation in Italy: democratising water from below. In: *The Challenge of Sustainable Water Futures Workshop*. Newcastle.
- Lobina, E. (2010). *Analytical Framework – enabling factors for Sustainable urban water management*, Sustainable Water Management Improves Tomorrow's Cities Health Project. Greenwich: University of Greenwich, p1-25. [Online] Available at: http://www.switchurbanwater.eu/outputs/pdfs/W6-1_GEN_RPT_D6.1.5D6.1.6a_Analytical_Framework_Enabling_Factors_for_SUWM.pdf. [Accessed 30 December. 2013].
- Loftus, A. (2009). Rethinking Political Ecologies of Water. *Third World Quarterly*, 30(5), pp. 953-968.
- Logomasini, A. (2010). Affirm the Role of Property Rights In:. Crews, W and Osorio, I., eds., *Liberate to Stimulate, A Bipartisan Agenda to Restore Limited Government and Revive America's Economy*. , Washington D.CP: Competitive Enterprise Institute.

[Online] Available at:
<http://cei.org/sites/default/files/CEI%20%20Liberate%20to%20Stimulate.pdf> .[
Accessed 15 March. 2012]

Lourey, (2007), *New MFS fund to tap \$460bn global water market*. The Australian, [Online] Available At: <http://www.theaustralian.com.au/business/new-mfs-fund-to-tap-460bn-global-water-market/story-e6frg8zx-1111113365147> [Accessed 16th March. 2011].

M

Macdonald, L. (2005). *Explanatory Note; Investing in Water Services: Objectives for 2006-2014: The Statement by the Scottish Executive in WICS, Scottish Ministers' Directions on objectives for Scottish Water*, Appendix 3. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Appendix%203.pdf> [Accessed 20 April. 2012].

MacMahon, P. (2005). *Privatise Scottish Water – Or Scotland Will Go Broke*. *The Scotsman*, p.17. [Online]. Available at: <http://www.scotsman.com/news/politics/top-stories/privatise-water-or-scotland-will-go-broke-1-674608>. [Accessed 10 January. 2010]

MacMahon, P. (2006). Free Scottish Water from state to avoid surge in bills, ministers told. *The Scotsman*, p.23.

Macmillan, I. (2008). Water. In: *Turning the Tide Conference*. Edinburgh: Kane Fieldwork Notes.

Macnab, S. (2008). Water Bosses Have Highest Public Sector Pay Packets. *Press Association*, PA Newswire, 2 December 2008.

Madra, Y., M. and Adaman, F. (2014). Neoliberal Reason and Its Forms: De-Politicisation Through Economisation. *Antipode*, 46, pp. 691–716.

Magdahl, J. (2012). *From Privatisation to Corporatisation*. Oslo: Fivas.

Majone, G. (1996). *Regulating Europe*. London: Routledge.

Maloney, W. (2001). Regulation in an Episodic Policy-Making Environment: The Water Industry in England and Wales. *Public Administration* 79 (3), pp. 625-642.

Mansfield, B. (2008). *Introduction: Property and the Re-Making of Nature-Society Relations in Privatization: Property and the Remaking of Nature-Society Relations*. Oxford and Malden: Blackwell Publishing

Marin, P. (2009). *Public-private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries*. *PPIAF trends and policy options*. World Bank Publishing. [Online] Available at:

<https://openknowledge.worldbank.org/bitstream/handle/10986/2703/530170PUB0Tren101Official0Use0Only1.pdf?sequence=6>. [Accessed 12 March. 2013]

Flinders, M, & Smith, M,J. (1999). *Quangos, accountability and reform*. Basingstoke: Macmillan Press Ltd.

Martin, S., Parker, D. (1997). *The Impact of Privatisation: Ownership and Corporate Performance in the UK*. London: Routledge.

Marx, K. and Engels, F. (1845). *The German Ideology, Part One with Selections from Parts Two and Three, Together with Marx's 'Introduction to a Critique of Political Economy'*, Arthur C.J (ed) (1970). New York: Lawrence and Wishart.

Maxx Water. (2007). *Water is the Oil of the Twenty First Century: Expected Returns in the Water Sector*. [Online] Available at: <file:///C:/Users/Tommy/Desktop/Removable%20Disk/Private%20Equity/Water%20Business/Maxx%20Water%20Expected%20Returns%20in%20the%20Water%20Sector.htm>. [Accessed 21st November.2007]

Mazey, S. and Richardson, J. (2006). Interest Groups and EU Policy Making: Organisational Logic and Venue Shopping. In: J. Richardson, ed. *European Union: Power and Policy Making*. Abingdon: Routledge.

McCarthy, J. (2005). Commons as counter-hegemonic projects. *Capitalism Nature Socialism*, 16(1), pp. 9 – 24.

McCarthy, J. & Prudham, S. (2004). Neoliberal Nature and the Nature of Neoliberalist. *Geoforum*, 35(3), pp. 275-283.

McChesney, R. (1999). Noel Chomsky and the Struggle against Neoliberalism. *Monthly Review*, 50 (11), pp.12-19.

McConnell and Harkin, *Councillors Lead Revolt Against Privatisation of Water Supply*, (2014). *Irish Independent*, [Online] available at: <http://www.independent.ie/irish-news/councillors-lead-revolt-against-privatisation-of-water-supply-29900882.html> [Accessed 11th January. 2014].

McCrone, D. (1992). Understanding Scotland, the *Sociology of a Stateless Nation*. London: Routledge.

McGann, J.G. (2007). *The Global Go-To Think Tanks 2007*, Foreign Policy Research Institute, Think Tanks and Civil Societies Programme

McMurty, J. (1999). *The Cancer Stage of Capitalism*. London: Pluto Press.

McDonald, D. and Ruiters, G. (2005). *The Age of Commodity, Water Privatisation in Southern Africa*. London: Earthscan.

McDonald, D. and Ruiters, G. (2005). *Rethinking Privatisation, Towards a Critical Theoretical Perspective in Public Services Yearbook*. [Online] Available at: http://municipalservicesproject.org/sites/municipalservicesproject.org/files/uploadsfile/Archive/McDonaldRuiters_Rethinking_Privatization_Towards_a_Critical_Theoretical_Perspective_2006.pdf [Accessed 10 March. 2013]

McDonald, D. and Smith, L. (2004). Privatising Cape Town: From Apartheid to Neo-Liberalism in the Mother City. *Urban Studies*, 41 (8), pp. 1461-1484.

McDonald, D. (2014). *Public Ambiguity and the Multiple Meanings of Corporatisation*. In: D. McDonald. (ed). *Rethinking Corporatization and Public Services in the Global South*. London and New York: Zed Books.

Mcfee, G. (1992). Triangulation in Research: Two Confusions, 34, (3), pp. 215-219.

McFee, G.(2009). *Ethics, Knowledge and Truth in Sports Research: An Epistemology of Sport*. London: Routledge.

McInnes, P. (2005). Entrenching Inequalities: The Impact of Corporatization on Water Injustices in Pretoria. In D. McDonald, D and G. Ruiters, eds. *The Age of Commodity, Water Privatisation in Southern Africa*. London: Earthscan.

McKay, J. (2005). Water Institutional Reforms in Australia. *Water Policy*, 7, pp. 35-52.

McLaren, J. (2009). We're Sleepwalking to Disaster. *Sunday Times*, p.14.

McLaren, J., Armstrong, J. and Harris, R. (2010). *Scottish Water Threats and Opportunities*, CPPR, Options. Briefing Series No 2. Edinburgh: Scottish Government.

Mercer, R. (2010). *Evidence Presented to the transport and Infrastructure and climate change committee*. Edinburgh: Scottish Government.

Mega & Jacobson. (2013). *Dead in the Water*. [Online] Available at: <http://en.tempco.co/read/news/2013/09/11/057512275/Dead-in-the-Water> [Accessed September 30. 2013].

Meggison, W. and Netter, J. (2001). From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature*, 39, (2),pp. 321-389.

Menon and Sa'Pinto (2010), *Water Funds on the Rise*. [Online] Available at: <http://www.reuters.com/article/2012/10/10/us-water-investment-idUSBRE8990SH20121010> [Accessed 7th January. 2014].

Miller, D and Dinan, W (2008) *Century of Spin*, London: Pluto

Miller, D and Dinan, W. (2015). *Resisting Meaningful action on climate change: Think tanks, 'merchants of doubt' and the 'corporate capture' of sustainable development*. In: Hansen A, Cox R (ed.). *The Routledge Handbook of Environment and Communication*, London: Routledge, pp. 86-99.

Miller, D. (2010). *Neoliberal Scotland, Class and Society*. In Davidson, N. McCafferty, P. and Miller, D. (eds) *In a Stateless Scotland*. Newcastle: Cambridge Scholars Publishing.

Miller, J. and Glassner, B. (1997) The 'Inside' and 'Outside': Finding Realities in Interviews. In D. Silverman (ed.) *Qualitative Research: Theory, Method and Practice*. London: Sage.

Millican, D. (2009). *E-mail Correspondence Between Douglas Millican and Peter Reekie*. [Document Obtained Through Freedom of Information]. [25 November. 2009].

Millican, D. (2010). *Evidence Presented to Scottish Parliament Transport, Infrastructure and Climate Change Committee*. [Online] Available at: <http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=5708&i=51199&c=1105283&s=Ronnie%20Mercer> [Accessed 20 April. 2014]

Millican, D. (2011). *Evidence Presented to Scottish Parliament Infrastructure and Capital Investment Committee*. [Online] Available at: <http://www.scottish.parliament.uk/parliamentarybusiness/28862.aspx?r=6694&mode=pdf> [Accessed 20 April. 2014].

Mills, C.W. (1959). *The Sociological Imagination*. Oxford: Oxford University Press.

Millward, R. (2000). *State Enterprise in 20th Century Britain* In Toninelli, P.M *The Rise of State Owned Enterprises in the Western World*. Cambridge: Cambridge University Press.

Mintrom, M. (2000). *Policy Entrepreneurs and School Choice*. Washington D.C: Georgetown University Press.

Mintrom, M. and Norman, P. (2009). Policy Entrepreneurship and Policy Change. *The Policy Studies Journal*, 37, (4), pp.649-667.

Mirowski, P. (2009). Defining Neo-liberalism. In: P., Mirowski, and D., Plehwe, (eds). *The Road from Mont Pèlerin: The Making of the Neoliberal Thought Collective*. Cambridge: Harvard University Press.

Missiroli, A. and Ioannides, I. (2012). *European Think Tanks and the EU, European Commission*. Berlaymont Paper, 2, [Online] Available at: http://ec.europa.eu/bepa/pdf/publications_pdf/brief-policy/berl_papers_issue_2.pdf [Accessed 24 March. 2013].

Mitchell, J. (2007). *Letter to Douglas Millican, Services Contract: Almond Valley, Seafield and Esk Valley Project, Notice of Defects and Defaults, Stirling Water's responses to the issues raised*. [Document Obtained Through Freedom of Information]. [22 August. 2007].

Mitchell, K (2011) *The political economy of freshwater: reinvigorating the question of property in Sultana. F and Loftus. A, The right to water: politics, governance and social struggles*, (Eds) Taylor and Francis: London

Moulton, S. (2009). Putting Together the Publicness Puzzle: A Framework for Realized Publicness. *Public Administration Review*, 69, pp. 889–900.

Moya, E. (t 2010). Water Funds Tempt investors with Booming Growth. *The Guardian*, p.13. [Online] Available at: <http://www.theguardian.com/business/2010/aug/08/water-funds-investors-booming-growth> [Accessed 7th January. 2014].

Mulas (2009). Public Policy Analysis in the Water and Sanitation Sector. In: J., E. Castro, and L., Heller, L, (eds). *Water and Sanitation Service, Public Policy and Management*. London: Earthscan.

Muller, C. (1996). The Institute of Economic Affairs: Undermining the Post-War Consensus. In: M., D. Kandiah, and A., Seldon, (eds) *Ideas and Think Tanks in Contemporary Britain*. London: Frank Cass Publishing.

Muir, H & Booth, R (2006). Water firm's plan for drought order faces challenge after level of leaks revealed. *The Guardian*, [Online]p.16. Available at: <http://www.theguardian.com/business/2006/jun/23/water.environment> [Accessed 25th June. 2008].

Munck, R. (2005). Neoliberalism and Politics, and the Politics of Neoliberalism. In: A., Saad-Filho, and D., Johnston, *Neoliberalism – A Critical Reader*. London: Pluto Press.

Murray, P. (2010). *Doubts over the Future of Scottish Water*. [Online] Available at: <http://www.express.co.uk/news/uk/190481/Doubts-over-the-future-of-Scottish-Water> [Accessed 16 April. 2014].

N

Nicholson-Lord, D. (1993). Water disconnection increases 'alarming': Ofwat says companies are resisting privatisation guidelines. *The Independent*, [Online], p.12. Available at: <http://www.independent.co.uk/news/uk/water-disconnection-increases-alarming-ofwat-says-companies-are-resisting-privatisation-guidelines-2322304.html> [Accessed 30th June. 2008].

Nickson, A. and Franceys, R. (2003). *Tapping the market: the challenge of institutional reform in the urban water sector*. Basingstoke: Palgrave Macmillan.

Nozick, R (1974). *Anarchy, State and Utopia*. New York. Basic Books

O

- Oaten, M. (2007) *e-mail to Geoffrey Smith and John Lisle*. [Document Obtained through Freedom of Information]. [16 February. 2007].
- O'Connor, J. (1996). The second contradiction of capitalism. In: T, Benton, (ed) *The greening of Marxism*. London: Guildford Press.
- O'Connor, M. (1994). *Is Capitalism Sustainable?* New York: Guildford Press.
- OECD. (2009a). Managing Water for all: An OECD Perspective on Pricing and Financing. [Online] Available at: <http://www.oecd.org>. [Accessed 21 June 2010].
- OECD. (2009b). *Private Sector Participation in Water Infrastructure: Checklist for Public Action*. [Online] Available at <http://www.oecd.org>. [Accessed 21 June 2010].
- OECD. (2009c). *Privatisation in the 21st Century: Recent Experiences of OECD Countries*. [Online] Available at: <http://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/48476423.pdf>. [Accessed 21 February 2013].
- OECD. (2003). Public Private Partnerships in the Urban Water Sector. OECD, Policy Brief. [Online] Available at: <http://oecd.org/env/outreach/44576275.pdf>. [accessed 7th March 2009].
- OFWAT. (2009). *Future water and sewerage charges 2010-15: Draft determinations*. [Online] Available at: http://www.ofwat.gov.uk/pricereview/pr09phase3/det_pr09_draftfull_v2.pdf [Accessed 25th March .2011].
- Okenden, K. (2004) The melting point: Scottish Water Solutions has its work cut out trying to get eight groups of people working together. *Utility Week*, April 1 2004.
- Okonski, K. (2006). *The Water Revolution, Practical Solutions to Water Scarcity, Sustainable Development Network*. London: International Policy Press.
- Osborne, D. and Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*. Massachusetts: Addison-Wesley, Reading,
- Odour Abatement Steering Group. (Seafield) (2005a). *Note from 14 June Meeting*. [Document Obtained Through Freedom of Information]. n/d.
- Odour Abatement Steering Group. (Seafield) (2005b). *Odour Abatement Measures at Seafield WWTW, Report by the Seafield Odour Abatement Steering Group*. [Document Obtained Through Freedom of Information]. n/d.
- Our Water Commons (2009). *Ask the UN to convene the next Global Water Forum*. [Online] Available at: http://org2.democracyinaction.org/o/5475/t/6746/petition.jsp?petition_KEY=533 [Accessed 9th October. 2009].

Overbeek, H. and Van Der Pijl. (2002). *Restructuring Capital and Restructuring Hegemony, Neo-Liberalism and the Unmaking of the Post-War Order*. In: H, Overbeek, (ed) *Restructuring Hegemony in the Global Political Economy, The Rise of Transnational Neo-Liberalism in the 1980's*. London: Routledge.

Owen, G. (2006). *Sustainable development duties: New roles for UK economic regulators*. *Utilities Policy*, 14, pp. 208-217.

Oxfam. (2012). *On the Brink: Israeli settlements and their impact on Palestinians in the Jordan Valley*. [Online] Available at: http://www.oxfam.org/sites/www.oxfam.org/files/bp160-jordan-valley-settlements-050712-en_1.pdf [Accessed 22nd March. 2013].

P

Paterson, G. (2008). *Odour Survey of Dalmuir Residents*. [Information provided by Gil Paterson]. n/d.

Paterson, N. (2007). *Letter to Douglas Millican, Services Contract: Almond Valley, Seafield and Esk Valley Project, Notice of Defects and Necessary Steps for Remedy*. [Document Obtained Through Freedom of Information]. n/d

Parker, D. (1999). Regulation of privatised public utilities in the UK: Performance and Governance. *International Journal of Public Sector Management*, 12, (3), pp. 213 – 236.

Parker, D. (2012). *The Private Finance Initiative and Intergenerational Equity*, The Intergenerational Foundation. [Online] Available at: <http://www.if.org.uk/wp-content/uploads/2012/02/PFIs-and-Intergenerational-Equity.pdf> [Accessed 21 April. 2014].

Parker, D. (2012). *The Official History of Privatisation*. Abingdon: Routledge.

Pautz, H. (2005). *Think Tanks In Scotland*. In :*The 55th Political Studies Association Annual Conference*. 4-7 April 2005. University of Leeds:np.

Payen (2008) *Managing freshwater better. Private operators' contribution to public policies. Paper for Zaragoza Expo*, http://www.aquafed.org/pdf/Payen_AquaFed_ManagingFreshwaterBetter_FullText_Zaragoza_2008-07-15.pdf [Accessed 25th October. 2011].

Peck, J. (2012). *Constructions of Neo Liberal Reason*. Oxford: Oxford University Press.

Penman, J. (2006). *Scottish Agenda: When it comes to R&D we play catch up*. *Sunday Times*, p.92.

Penman, J. (2008). CBI: privatise Scottish Water to boost business. *Sunday Times*, p.27.

Perard, E. (2008). *Private Sector Participation and Regulatory Reform in Water Supply: The Southern Mediterranean Experience*. OECD Development Centre, Working Paper, No 265.

Perard, E. (2011). *New trends in private participation in water infrastructure*. [Online] Available at: <https://www.ppiaf.org/sites/ppiaf.org/files/documents/PPIAF-PPI-Trends-In-Water.pdf> [Accessed 12 March. 2014].

Perard, E. (2012). *Private sector participation in water infrastructure Review of the last 20 years and the way forward A deliverable from the PPI Database to IFC, PPIAF*. [Online] Available at: <http://www.ppiaf.org/sites/ppiaf.org/files/documents/Review%20of%20PSP%20in%20water%20infrastructure%20over%20the%20last%2020%20years.pdf> [Accessed 12 March. 2014].

Perreault, T. and Martin, P. (2005). Geographies of Neo-Liberalism in Latin America. *Environment and Planning*, 37, (2), pp.191-201.

Pesch, U. (2008). The Publicness of Public Administration. *Administration & Society*, 40, (2), pp. 170-193.

Petrella, R. (2001). *The Water Manifesto: Arguments for a World Water Contract*. London: Zed Books.

Petras and Veltmayer (2003)

Global Water Intelligence. (2008). *Europe Takes Centre Stage in Suez Revival*. Oxford: Media Analytics.

Pigeon, M., McDonald, D.A., Hoedeman, O. and Kishimoto, S. (2012) *Remunicipalisation: Putting Water Back into Public Hands*. Amsterdam: TNI.

Plehwe, D., Walpen, B. and Neunhoffer, G. (2006). *Neo-Liberal Hegemony: A Global Perspective*. London: Taylor and Francis.

Polanyi, K. (1944). *The Great Transformation*. New York: Farrar & Rinehart.

Pollock, A. and Price, D. (2008). Has the NAO Audited Risk Transfer in Operational Private Finance Initiative Schemes? *Public Money & Management*, 28 (3), pp. 173-178.

Owen, D. (2009). *Pinsent Masons Water Yearbook 2008-2009*. London: Pinsent Masons LLP.

Power, M. (1997). *The Audit Society, Rituals of Verification*. Oxford: Oxford University Press.

Powerbase. (2011). *Sir Ian Byatt Profile*. [Online] Available at: <http://powerbaseinfo/index>. [Accessed 12th March. 2012].

Powerbase. (2011) *Alan Sutherland Profile*. [Online] Available at: <http://powerbaseinfo/index> [Accessed 12th March. 2012].

Powerbase. (2009). *Gdf-Suez Profile*. [Online] Available at: <http://powerbaseinfo/index> [Accessed 15th April. 2011].

Prasad, N. (2006). *Privatisation results: Private sector participation in water services after 15 years*. *Development Policy Review* 24 (6) 669-92.

Pratt, L. and Montgomery, W. (1997). Green Imperialism: Pollution, penitence and profit. *Socialist Register* 33, pp. 75-95.

Seafeld Project Risk Register. (2009). *Seafeld Odour Project*. [Document Obtained Through Freedom of information].n/d.

Sklair, L. (2000). *The Transnational Capitalist Class*. London: Wiley.

PSI. (2000). *Controlling the Vision and Fixing the Forum: The Politburo of Privatisation*. [Online] Available at: www.psir.org [Accessed 20th May.2012]

Q

Queensland Treasury. (1992). *Corporatisation in Queensland; Policy Guidelines*. Melbourne: Queensland Treasury.

R

Raco, M. (2013). *State-led Privatisation and the Demise of the Democratic State: Welfare Reform and Localism in an Era of Regulatory Capitalism*, Farnham, Surrey, Ashgate Publishing

Rees, G. (1996). *Debate 1 – Paper 3, Disconnections and Diseases: Water Supply and Health*. [Online] Available at: http://www.edgedebate.com/?page_id=285 [Accessed January 15th. 2012].

Rees, J. (1998). *Regulation and Private Participation In the Water and Sanitation Sector*. Global Water Partnership Technical Advisory Committee (TAC), TAC Background Paper No 1.

Lora, E. (2008). *Washington Consensus* In: K., Reinert, and R. Rajan. (eds) *The Princeton Encyclopedia of the World Economy*. Princeton: Princeton University Press.

Reinicke, W and Witte J.M. (1999). Globalization and Democratic Governance: Global Public Policy and Trisectoral Networks. In: C., Lankowski. *Governing Beyond the Nation-State Global Public Policy, Regionalism or Going Local?* Washington: American Institute for Contemporary German Studies.

- Reinicke, W. (1999-2000) The Other World Wide Web: Global Public Policy Networks. *Foreign Policy*, (Winter), pp. 44-57.
- Rhodes R. A. W.(1994). The hollowing out of the state. *Political Quarterly*, 65, pp. 138-51.
- Rhodes R.A.W. (1996). The New Governance, Governing Without Government. *Political Studies*, 44, (4),pp. 652-667.
- Richardson, J. (1994). EU water policy: Uncertain agendas, shifting networks and complex coalitions. *Environmental Politics*, 3, (4), pp. 139-167.
- Richardson, J. (2006). Policy Making in the EU: Interests, Ideas and Garbage Cans of Primeval Soup. In: J. Richardson, (ed). *European Union: Power and Policy Making*. Abingdon: Routledge.
- Richardson, J. (2000). *Government, Interest Groups and Policy Change*. *Political Studies*, 48, (5), pp. 1006-1025.
- Robinson, C. (2005). Reviving the Scottish Water Industry. *The Policy Institute*, Series: Economy No. 9.
- Rogers and Hall (2003). *Effective Water Governance*. Global Water Partnership: Technical Advisory Committee (TAC), Background Paper No 7.
- Rosie, G. (2002). Network Scotland: the Power of the quango state. In: G., Hassan, (ed) *Anatomy of the New Scotland: Power Influence and Change*. Edinburgh: Mainstream Publishing.
- Rothschild. (2014). *Governments*. [Online] Available at: http://www.rothschild.com/gfa/our_clients/governments/. [Accessed 16 May. 2014].
- Rouse. M. (2009). The Market-Centred Paradigm. In: J., E. Castro, J and L., Heller, L (eds). *Water and Sanitation Services: Public Policy and Management*. London: Earthscan.
- RSG. (2006a). *Scottish Water and Scottish Water Solutions, Reputational Steering Group*. [Document Obtained Through Freedom of Information]. [10 March. 2006].
- RSG. (2006b). *Scottish Water and Scottish Water Solutions, Reputational Steering Group*. Document Obtained Through Freedom of Information]. [9 June. 2006].
- RSG. (2007). *Reputational Steering Group. Briefing Note*. [Document Obtained Through Freedom of Information]. [3 July. 2007].
- RSG. (2008a). *Reputational Steering Group, Briefing Note*. [Document Obtained Through Freedom of Information]. [26 May. 2008].

RSG. (2008b). *Reputational Steering Group. Briefing Note*. [Document Obtained Through Freedom of Information] [11 March. 2008].

RSG. (2009). *Reputational Steering Group, Briefing Note*. [Document Obtained Through Freedom of Information]. [19 March. 2009].

Ruiters, G. (2007) Contradictions in municipal services in contemporary South Africa: Disciplinary commodification and self-disconnections. *Critical Social Policy*, 27, pp. 487-508.

S

Saad-Filho, A. and Johnston, D. (2005). *Neo-Liberalism A Critical Reader*. London: Pluto Press.

Sabatier, P.A. and Jenkins-Smith, H., (1993). *Policy change and learning: An advocacy coalition framework*. Boulder: Westview.

Sabatier, P.A. and Jenkins-Smith, H.C. (1994) 'Evaluating the Advocacy Coalition Framework', *Journal of Public Policy*, 14(2), pp. 175–203

Said, E. (1991). *Orientalism*. London: Penguin.

Said, E. (1994). *Culture and Imperialism*. London: Vintage.

Saiz, I. (2012). *Risk of water wars rises with scarcity*. [Online] Available at: <http://www.aljazeera.com/indepth/features/2011/06/2011622193147231653.html> [Accessed 28th December. 2012].

Salaman M.A and Bradlow, D. (2006). *Regulatory Frameworks for Water Resources Management*, The International Bank for Reconstruction and Development. [Online] Available at: http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2006/05/17/000012009_20060517150456/Rendered/PDF/362160rev0Regulatory0water01PUBLIC1.pdf [Accessed 30th March. 2011]

Santos, C. and Villareal, A. (2005). Uruguay: Direct democracy in Defence of the right to Water. In: Brennan, B, Balanyá, B, Hoedeman, O, Kishimoto, S and Terhorst, P (ed's) *Reclaiming Public Water Network Book, Achievements, Struggles and Visions from around the World*. Brussels: Transnational Institute/Corporate Europe Observatory.

Sarantakos, S. (1988). *Social Research*. Basingstoke: Palgrave.

Saur. (2014). *Saur Glasgow*. [Online] Available at: http://saurglasgow.com/saur-glasgow/saur_glasgow/. [Accessed 25 April. 2014].

Sawkins, J. and Dickie, V. (1999). Regulating Scottish water: regulatory reform in the Scottish water industry: Recent progress and future prospects. *Utilities Policy* 8 (4), pp. 233-246.

Sawkins, J. and Dickie, V. (2005). Affordability of Household Water and Sewerage Services in Great Britain. *Fiscal Studies*, 26, (2), pp. 225–244.

Sawkins, J. and Dickie, V. (2007). *Social Policies and Private Sector participation in water supply – the case of Great Britain*. Paper prepared for the United Nations Research Institute for Social Development. Switzerland: UNRISD.

Schmeier, S. (2013). *Governing International Watercourses: River Basin Organizations and the Sustainable Governance of Internationally Shared Rivers and Lakes*. Oxon: Routledge.

Scholte, J (2000), *Globalisation: A Critical Introduction*. Palgrave: London.

Schubert (1960) *The Public Interest; a Critique of the Theory of a Political Concept*. Free Press: Glencoe.

Scotland on Tap. (2014.) *Competition in the Water Industry*. [Online] Available at: <http://www.scotlandontap.gov.uk/> [Accessed 23 April. 2014].

Scotsman. (2009). Interview: Alexander Bell: Author of Peak Water: Civilisation and the World's Water Crisis. [Online] Available at: <http://www.scotsman.com/lifestyle/books/interview-alexander-bell-author-of-peak-water-civilisation-and-the-world-s-water-crisis-1-1220839>. [Accessed 10 May. 2014].

Scotsman. (2011). *Scottish Water Chiefs Under Fire for 'Obscene' Bonuses*. [Online] Available at: <http://www.scotsman.com/news/scottish-water-chiefs-under-attack-for-obscene-bonuses-1-1714495>. [Accessed 10 August. 2012].

Scott. M. (2009). *40 shocking facts about water*. [Online] Available at: <http://matadornetwork.com/change/40-shocking-facts-about-water/> [Accessed 10th March. 2011]

Scott, S. (2008). *Scottish Workers Vote to Strike for Fair Pay*. Unison Press Release, 12 November 2008. [Online] Available at: <http://www.unison-scotland.org.uk/news/2008/novdec/1211a.htm> [Accessed 17 November. 2008].

Scottish Consultative Steering Group. (1998). *Report of the Consultative Steering Group on the Scottish Parliament 'Shaping Scotland's Parliament'*. Presented to the Secretary of State for Scotland December 1998. Edinburgh: The Scottish Office.

Scottish Executive. (2005a). *Investing in Water Services 2006-2014: Scottish Water Assets*. A Report for the Scottish Executive by the Quality and Standards 3 Project Board. [Online] Available at:

<http://www.scotland.gov.uk/Resource/Doc/36496/0014268.pdf> . [Accessed 9 February. 2009].

Scottish Executive. (2005b). *The Scottish Water (Objectives for 1st April 2006 to 31st March 2010). Directions 2005*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/1057/0022201.pdf>. [Accessed 21 April. 2014].

Scottish Office. (1997). *Outcome of the Scottish Water Industry Review*. [Online] Available at: <http://www.scotland.gov.uk/News/Releases/1997/12/2d48e704-9ff9-42f2-a656-6f87cd88a0d6>. [Accessed 10th January. 2012].

Scottish Government. (2009). *Draft Statement of Ministerial Objectives Priority 1 (essential) Objectives for the Period 1 April 2010 to 31 March 2014*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/1057/0078492.pdf>. [Accessed 21 April. 2014].

Scottish Government. (2010a). *Letter to Tommy Kane, in response to Freedom of Information Request*. [Freedom of Information Request]. [Received 26 August. 2010].

Scottish Government. (2010b). *Letter to Tommy Kane, in response to review of Freedom of Information Request*. [Freedom of Information Request - Ref Foi/1 0101, 037]. [24 November. 2010].

Scottish Government. (2010c). *Building a Hydro Nation – A Consultation*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/335029/0109551.pdf>. [Accessed 21 April. 2014].

Scottish Government. (2010d.) *Independent Budget Review*. [Online] Available at: <http://www.scotland.gov.uk/Topics/Government/Finance/18127/independent-review>. [Accessed 26 April. 2014].

Scottish Government. (2010e). *Letter to Tommy Kane in response to review of Freedom of Information Request. [Freedom of Information Request - Ref Foi/10/01035]*. [26 August. 2010].

Scottish Government. (2010f). *List of Meetings, 26 August 2010*. [Freedom of Information Request]. [n/d].

Scottish Government. (2012). *Making Scotland A World Leading Hydro Nation*. [Online] Available at: <http://www.scotland.gov.uk/News/Releases/2012/06/scotland-water28062012>. [Accessed 10 May. 2014].

OSIC. (2010). *Decision Notice, Decision 008/2010 Mr Tommy Kane and Scottish Futures Trust, Correspondence on Water Industry*. [12 January. 2010]

OSIC. (2011a). *Decision Notice, Decision 050/2011 Mr Tommy Kane and the Scottish Ministers, Project Checkers*. [11 March. 2011].

OSIC. (2011b). *Decision Notice, Decision 140/2011, Mr Tommy Kane and the Water Industry Commissioner Scotland, Making notes, minutes and correspondence*. [14 July. 2011].

OSIC. (2011c). *Decision Notice, Decision 084/2011, Mr Tommy Kane and the Water Industry Commission for Scotland, Information Relating to Meetings*. [12 May. 2011].

Scottish Liberal Democrats. (2011). *Scottish Liberal Democrats Manifesto 2011*. [Online] Available at: <http://www.scotlibdems.org.uk/files/SLD2011manifesto.pdf>. [Accessed 28 April. 2014].

Scottish Water. (2010d). *Leading Infrastructure and Renewable's*, Scottish Water Products and Services. [Online] Available at: http://intranet.scottishwater.co.uk/portal/page/portal/SWE_PGP_COMMERCIAL/SWE_PGE_COMMERCIAL/PROD_SERV_HOR. [Accessed 1 March. 2010]

Scottish Government. (2012). *Scotland the Hydro Nation, Prospectus and Proposals for Legislation*. Edinburgh: The Scottish Government.

Scottish Government. (2013). *How are My Charges Set*. [Online] Available at: <http://www.scotland.gov.uk/Topics/Business-Industry/waterindustryscot/watercharges/chargesset>. [Accessed 21 March. 2011].

Scottish Water. (2004-2005) *Spend to Save Annual Report. [Freedom of Information Request]*. [n/d].

Scottish Water/ (2002a). *Scottish Water PFI Projects*, Scottish Water Board Paper 97. [Document Obtained through Freedom of Information]. [02 November. 2002].

Scottish Water. (2002b). *Note from Seafeld Community Liaison Group Meeting*. Document Obtained Through Freedom of Information]. [12 December. 2002].

Scottish Water. (2003a). *Scottish Water Draft Minutes of the Commercial Committee Meeting*. [Document Obtained Through Freedom of Information]. [23 April. 2003].

Scottish Water. (2003b). *Scottish Water Draft Minutes of the Commercial Committee Meeting*. [Document Obtained Through Freedom of Information]. [24 July. 2003].

Scottish Water. (2003c). *Scottish Water Draft Minutes of the Commercial Committee Meeting*. [Document Obtained Through Freedom of Information]. [24 July. 2003].

Scottish Water. (2004). *Scottish Water Draft Minutes of the Commercial Committee Meeting*, [Document Obtained Through Freedom of Information]. [6 October. 2004].

Scottish Water. (2005). *Scottish Water Draft Minutes of the Commercial Committee Meeting*. [Document Obtained Through Freedom of Information]. [13 September. 2005].

Scottish Water. (2006a). *Contributing to Sustainable Development – A Consultation on Ofwat’s Approach*, Letter from Scottish Water to OFWAT. [Document Obtained Through Freedom of Information]. [n/d].

Scottish Water. (2006b) *Scottish Water Business Transformation Report*, Document Obtained Through Freedom of Information

Scottish Water (2007a). *Scottish Water – A Sustainable Development Policy*. Paper Approved by Scottish Water Board. [Document Obtained through Freedom of Information]. [2 May 2007].

Scottish Water. (2007b). *Scottish Water PFI projects*, Scottish Water Board Paper 100/07. [Document Obtained Through Freedom of Information]. [August 2007].

Scottish Water. (2008a). *Management and Control of PFI Contracts*, Paper 113/08. [Document Obtained through Freedom of Information]. [2nd September 2008]

Scottish Water. (2008b). *First Draft Business Plan, Strategic Review of Charges 2010-14*. [Online] Available at; <http://www.gov/Resource/Doc/1057/0050088.pdf>. [Accessed 20th March 2011].

Scottish Water. (2008c). *Annual Water Quality Report 2008*. <https://www.scottishwater.co.uk/assets/domestic/files/you%20and%20your%20home/water%20quality/annualwaterqualityreport2008.pdf>. [Accessed 15 May. 2014].

Scottish Water. (2009a). *Sustainable Development Strategy 2 Final, Approved by Board*, Document Obtained through Freedom of Information

Scottish Water. (2009b). *Scottish Water Staff Numbers and Agency Staff*, Information Obtained Fromm Freedom of Information

Scottish Water. (2009c). *Scottish Water Annual Report and Accounts, 2008-2009*, Accessed 20 April, <https://www.scottishwater.co.uk/assets/about%20us/files/key%20publications/scottishwaterannualreport200809.pdf>

Scottish Water. (2009d). *Customer Service Delivery Report*. Scottish Water Board Paper 31/09.[Document Obtained Through Freedom of Information]. [March. 2009]

Scottish Water. (2009e). *Customer Service Delivery Report*. Scottish Water Board Paper 85/09. [Document Obtained Through Freedom of Information]. [August 2009].

Scottish Water. (2009f). *Reputational Steering Group – Terms of Reference*. [Document Obtained Through Freedom of Information]. [n/d].

Scottish Water.(2009g). *Overall Performance Related Deductions*. [Information Obtained through Freedom of Information]. [n/d].

Scottish Water. (2009h). *Dalmuir PFI Annual Performance Related Deductions*. Glasgow: Scottish Water.

Scottish Water. (2009i). *Seafield PFI Annual Performance Related Deductions*. [Information Obtained through Freedom of Information]. [n/d].

Scottish Water. (2009j). *Scottish Water Second Draft Business Plan: Strategic Review of Charges*. Glasgow: Scottish Water.

Scottish Water. (2009k). *Chief Executive Report*, Scottish Water Board Paper 83/09. [Document Obtained Through Freedom of Information]. [August. 2009]

Scottish Water. (2010a). *Scottish Water Annual Report, 2009-2010*, <http://www.scottishwater.co.uk/assets/about%20us/files/key%20publications/annualreport0910.pdf> [Accessed 20 September. 2010].

Scottish Water. (2010b). *Expenditure On Consultants*. [Information Obtained by Mr Steve Martin through FOI]. [Online] Available at: https://www.whatdotheyknow.com/request/expenditure_on_consultants_13#incoming-68699. [Accessed 16 February. 2011].

Scottish Water. (2010c). *Independent Budget Review Initial Call for Evidence Submission by Scottish Water*. [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/919/0102240.pdf> [Accessed 5 May. 2014].

Scottish Water. (2010d). *The Scottish Water of the Future – Water Super-Agency, Scale and Remit*. [Document Obtained Through Freedom of Information]. [n/d].

Scottish Water. (2012). *Sustainability Report, 2012*. <http://www.scottishwater.co.uk/assets/about%20us/files/corporate%20responsibility/sustainabilityreport2012.pdf> [Accessed 5 January. 2013]. [Accessed 5 January. 2013].

Scottish Water. (2012a). *Scottish Water Annual Report and Accounts 2011-2012*. http://www.scottishwater.co.uk/assets/about%20us/files/key%20publications/annual_report_accounts_201112.pdf. [Accessed 20 September. 2012]

Scottish Water. (2012b). *Scottish Water Launches International Arm*. Scottish Water Press Release. [Online] Available at: <http://www.scottishwater.co.uk/business/about-us/media-centre/news-archive/scottish-water-international-arm>. [Accessed 25 June. 2012].

Scottish Water and Stirling Water. (2004). *Directors Liaison Meeting, Notes of Meeting, 14 April 2004*. [Document Obtained Through Freedom of Information]. [Accessed 25 June. 2012].

SDAG. (2003). *Minutes of Sustainable Development Advisory Group*. [Document Obtained from Freedom of Information]. [5th December 2003].

SDAG. (2004a). *Minutes of Sustainable Development Advisory Group*. [Document Obtained from Freedom of Information]. [December 10 2004].

SDAG. (2004b). *Minutes of Sustainable Development Advisory Group*. [Document Obtained from Freedom of Information]. [1st June 2004].

SDAG. (2008). *Minutes of Sustainable Development Advisory Group*. [Document Obtained from Freedom of Information]. [February 12. 2008].

SDAG. (2003). *Minutes of Sustainable Development Advisory Group*. [Document Obtained from Freedom of Information]. [August 29. 2003].

Seafeld OIP. (2008). *Scottish Water and Stirling Water Odour Improvement Plan*. Seafeld Wastewater Treatment Works, [Document Obtained Through Freedom of Information] [n/d].

Segal, G. and Moore, A. (2003). *Frequently asked questions about water/wastewater privatization*. Reason Foundation, Policy Brief No. 26. [Online] Available at: <http://reason.org/files/db5c3e3e5365eb334855d7d818ef53d9.pdf>. [Accessed 15 March. 2012].

Segerfeldt, F. (2005). *Water for Sale: How Business and the Market Can Resolve the World's Water Crisis*. Washington DC: Cato Institute.

Sells, S. (2003). *Private Power Public Law, The Globalization of Intellectual Property Rights*. Cambridge: Cambridge University Press.

SEPA. (2009). Prosecutions, FOI 38037. [Document Obtained Through Freedom of Information]. [n/d].

Sewell W. R. D., Coppock, J., T., Pitkethly, A. (1985). *Institutional Innovation in Water Management: The Scottish Experience*. Norwich: Geo Books.

SFT. (2010a). *Scottish Water: Future Funding Options*. [Online] Scottish Futures Trust. Available at: http://www.scottishfuturestrust.org.uk/files/publications/SW_future_funding_options.pdf. [Accessed 26 April. 2014].

SFT. (2010b). *SW/SFT Agenda*, 7 January 2010. [Document Obtained Through Freedom of Information]. [n/d].

Shaoul, J. (2005). The Private Finance Initiative or the Public Funding of Private Profit? In: G, Hodge, and C, Greve, (eds), *The challenge of public private partnerships: learning from international experience*. London: Edward Elgar.

Shaoul, J., Stafford, A. and Stapleton P. (2007). Private control over public policy: financial advisors and the private finance initiative. *Policy and Politics*, 35, (3), pp. 479-496.

Shaoul, J., Stafford, A. and Stapleton P. (2007). The Cost of Using Private Finance to Build, Finance and Operate Hospitals. *Public Money and Management*, 28, (2), pp.101-108.

Shepherd, E. (2008). Kicking up a Stink over Sewage in Cornhill. *Banffshire Journal*, 19 August 2008.

Shiva, V. (2002). *Water, Wars: Pollution, profits and privatization*. London: Pluto Press.

Silverman, D. (2001). *Interpreting Qualitative Data, Methods for Analysing Talk, Text and Interaction*. London: Sage.

Smith, G. (2007) *e-mail from Geoffrey Smith to Michael J Oaten*. [Information Obtained from Freedom of Information]. [2 March. 2007].

Smith, L. (2004). *The Murky water of the second wave of neo-liberalism corporatization as a service delivery model in Cape Town*. *Geoforum*, 35, pp. 375-393.

Smith, L and Hanson, S. (2003). Access to Water for the Urban Poor in Cape Town: Where Equity Meets Coast Recovery. *Urban Studies*, 40, (8), pp. 1517-1548.

Snowdon, L. (2007). Think Tank: We asked the finest minds in Scotland for big ideas to transform the nation... this is the result. *Scotland on Sunday*, 1 April 2007.

SPICE. (2001). *Water Industry (Scotland) Bill*. Research Paper, 01/16. Edinburgh: Scottish Parliament.

SPICE. (1999). *The Water Industry Devolved*. Series/21. Edinburgh: Scottish Parliament.

SPICE. (2011). *Figures Calculated from Scottish Water Annual Reports*. Report Compiled for Neil Findlay MSP. Edinburgh: Scottish Parliament.

Stewart, J. and Noble, R. (2009), *Scottish Futures Trust; Option Development: Alternative Structures and Funding Options For Scottish Water*. Glasgow: KPMG

Stedman-Jones, D. (2012). *Masters of the Universe, Hayeck, Friedman and the Birth of Neo-liberal Politics*. Princeton New Jersey: Princeton University Press.

Stedman, L. (2005). *The Good and not so good of Scotland's Road to Reform in Water Utility Management*.

Steel, R. and Heald, D., A. (1982). Privatising Public Enterprise: An Analysis of the Government's Case. *The Political Quarterly*, 53, pp. 333–349.

Scottish Water. (2008). *Corporate Responsibility and Sustainability*. [Freedom of Information Request]. [n/d].

Stevenson, S. (2008) *Retail Market for Non-Domestic Sector*, Scottish Government Press Release. [Online] Available at: <http://www.scotland.gov.uk/News/Releases/2008/04/31111127>. [Accessed 21 April. 2014].

Stone, D. (2004). Transfer Agents and Global Networks in the 'Transnationalization' of Policy. *Journal of European Public Policy* 11, pp. 545–66.

Stone, D. (2008). Global public policy, transnational policy communities, and their networks. *Policy Studies Journal*, 36, (1), pp. 19-38.

Stiglitz, J. (2006). *Making Globalization Work*. Ew York: W.W. Norton and Company.

Strauss, A. and Corbin, J.M. (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park: Sage.

STUC. (2001). *Submission from the Scottish Trades Union Congress*, Scottish Parliament Transport and the Environment Committee Inquiry into Water and the Water Industry, 30 April 2001.

STW and Scottish Water. (2008). *Seafield Community Newsletter*. [Received through Freedom of Information Request]. [24 October 2002].

STV. (2008). *Scottish Water Industrial Action Called Off*. 24 December 2008. [Online] Available at: <http://news.stv.tv/scotland/67021-scottish-water-strike-called-off/> [Accessed 20 April. 2014].

Suez. (2008). *Prospectus for the Listing of the Shares of Suez Environnement Company For Trading on the Euronext Paris exchange as part of the distribution of Suez Environnement Company Shares to Suez shareholders*. Paris: Suez Environnement.

Sundstrom, M. (2000). *A Brief Introduction: What is an Epistemic Community?* [Online] Available at: <http://www.svet.lu.se/joluschema/epistcomm.pdf>. [Accessed 20th March. 2001].

Sutherland, A. (2004). *Evidence Received for, the Water Services Etc. (Scotland) Bill*. Environment and Rural Development Committee, 27 September 2004. [Online] Available at:
<http://archive.scottish.parliament.uk/business/committees/environment/inquiries/wsb/env-wsb-wic.htm>. [Accessed 17th March. 2012].

Sutherland, A. (2006). *Efficiency incentives for public sector monopolies – the case of Scottish Water*. Beesley Lecture 2006. [Online] Available at:
<http://www.watercommission.co.uk/UserFiles/Documents/WICS%20Beesley%20Lecture%20typeset%20final.pdf>. [Accessed 25 April. 2014].

Sutherland, A. (2007). *Delivering Water Services: The Scottish Model*. UNESCO Lecture, 22 March 2007. [Received Through Freedom of Information].

Sutherland, A. (2008a). Alan Sutherland Gives a Progress Report on Water Competition in Scotland. *Utility Week*, September 2008.

Sutherland, A. (2008b). *Water and Sewerage Competition in Scotland*. In: Presentation to Delegation from Kosovo. [Document Obtained Through Freedom of Information]. [28 May. 2008].

Sutherland, A. (2008c) *Introducing Competition to the Water and Sewerage Industry: The Current Position; Our future Initiatives and some lessons for England Wales*. IEA Conference. [Document Obtained Through Freedom of Information]. [23 October. 2008].

Sutherland, A. (2008d). *Water competition comes to Scotland, WICS Press release*, April 1 2008. [Online] Available at:
http://www.watercommission.co.uk/view_Press_Releases_2008.aspx?ArticleId=33 [Accessed 23 April. 2014].

Sutherland, A. (2008e). *Economic Regulation, Presentation to Delegation from Kosovo*. [Document Obtained Through Freedom of Information]. [28 May. 2008].

Sutherland, A. (2009a). *EPF: Roundtable on Competition*, European Policy Forum. [Online] Available at:
[http://www.watercommission.co.uk/UserFiles/Documents/EPF%20speech%20-%2027%20Jan%2009%20\(2\).pdf](http://www.watercommission.co.uk/UserFiles/Documents/EPF%20speech%20-%2027%20Jan%2009%20(2).pdf) [Accessed 21 April. 2014]

Sutherland, A. (2009b). *Introduction to IEA Lunch*. [Document obtained through Freedom of Information]. 18 November. 2009.

Sutherland, A. (2009c). *Letter from Alan Sutherland to Richard Ackroyd*. [Document Obtained Through Freedom of Information]. [26 June. 2009].

Swanson, A. (2003). *Memo to Cheryl Black/Douglas Millican Almond Valley Seafield and Esk – Seafield Odour Nuisance Meeting with Stirling Water*, [Document obtained through Freedom of Information]. [n/d].

Swinney, J. (2009). E-mail correspondence from John Swinney to Sir Angus Grossart, [Document Obtained Through Freedom of Information]. [18 March. 2009].

Swyngedouw. (2000). *Authoritarian Governance, Power and the Politics of Rescaling. Environment and Planning: Society and Space*, 18, (1), pp. 63-76.

Swyngedouw, E. (2004). The Water Mandarins: Turning Water into Global Money. In: Arena Magazine, The Free Library. [Online] Available at: <http://www.thefreelibrary.com/The+water+mandarins%3A+turning+water+into+global+money.-a0123707392>. [Accessed 17 October. 2013].

Swyngedouw, E. (2005). Dispossessing H2O: The Contested Terrain of Water Privatization. *Capitalism Nature Socialism* 16, (1), pp.1-5.

Swyngedouw, E. (2006). *Power Water and Money, Exploring the Nexus*. In: Castro, E. and Heller, L. (2009). *Troubled Waters, The Political Economy of Essential Public Services* in Castro, E and Heller, L (ed's) *Water and Sanitation Services: Public Policy and Management*, London, Earthscan

Sultana, F. and Loftus, A. (2011). *The Right to Water: Politics, Governance, and Social Struggles*. London: Earthscan.

T

Tait, I. (2008). *Investment and Ouput Monitoring*. Presentation to Delegation from Kosovo. [Document Obtained Through Freedom of Information]. [27 May. 2008].

Teeple. G. (2000). *Globalization and the decline of social reform*. Aurora: Garamond Press.

Teeple, G. and McBride, S. (2010). *Relations of Global Power: Neoliberal Order and Disorder*. Toronto: University of Toronto Press.

Telfer, J. (2007). *Letter to Peter Braid, Almond Valley, Seafield and Esk PFI Project, Notice of Defects and Defaults.*, [Document Obtained Through Freedom of Information]. [6 November. 2007].

Telfer, J. (2008a). *Description of PFI Projects*, [Information Provided to this Research by Scottish Water Head of PFI, John Telfer]. [n/d]

Telfer, J. (2008). *Letter to Peter Braid, Seafield Wastewater Treatment Works – Inlet Works Project*. [Document Obtained Through Freedom of Information]. [n/d].

Tinson, A. and Kenway, P. (2013). *The Water Industry: A Case to Answer*. London: New Policy Institute.

The Water Industry (UK) Act. (1999). London: The Stationery Office.

The Water Industry Act. (Scotland). (2002). Edinburgh: The Stationery Office.

This is Money. (2008). *Just £2m fine for Severn Trent lies over Water Leaks'*. [Online] Available at: <http://www.thisismoney.co.uk/money/markets/article-1634358/Just-pound2m-fine-for-Severn-Trent-lies-over-water-leaks.html> [Accessed August 30. 2008].

Thorsen, D. E., & Lie. A. (2007). *What is Neoliberalism?* [Online] Available at: <http://folk.uio.no/daget/What%20is%20Neo-Liberalism%20FINAL.pdf>. [Accessed January 28. 2012].

Tomlinson, J. (1991). *Cultural Imperialism: A Critical Introduction*. London: Printer Publisher Ltd.

Tomlinson, J. (1999). *Globalisation and Culture*. Chicago: University of Chicago Press.

Thorson, D. (2009). *The Neo-liberal Challenge, What is Neoliberalism?* University of Oslo Working Paper, October 10, 2009. [Online] Available at: <http://folk.uio.no/daget/neoliberalism2.pdf> [Accessed 10 January. 2013]

Tortajada, C., Varis, O., Lundqvist, J. and Biswas, A. (2006). *Water Management for Large Cities*. Oxon: Routledge.

U

UNISON. (2007). *At What Cost? A UNISON report on the aggregate costs of PFI/PPP projects in Scotland – and some suggestions on a way forward*. UNISON Scotland. [Online] Available at: <http://www.unison-scotland.org.uk/comms/atwhatcostoct07.pdf> [Accessed 10 April. 2010].

UNISON. (2011). *PPP/PFI Projects In Scotland*. UNISON Scotland, Briefing No. 16. [Online] Available at: http://www.unison-scotland.org.uk/briefings/b016_PolicyBrief_PPPFIinScotland_December11.pdf. [Accessed 26 April. 2014].

UNESCO and UN World Water Assessment Programme. (2009). *Water in a Changing World. The United Nations World Water Development Report 3*. Paris and London: Earthscan.

UNDP. (2006). *Human Development Report 2006: Beyond scarcity: Power, Poverty and the Global Water Crisis*. New York: Palgrave Macmillan.

UNESCO and UNWWAP. (2006). *Water a Shared Responsibility, The United Nations World Water Development Report 2*. Paris and New York: Berghahn Books.

UN-Water. (2014). *The United Nations World Water Development Report 2014. Water and Energy Volume 1, pp.1-24*. Paris: UNESCO.

V

Varady, R.G., Meehan, K. and MCGovern, E. (2008). Charting the emergence of Global Water Initiatives' in World Water Governance. [Online] Available at: <http://www.udallcenter.arizona.edu/publications/epp/2008>. [accessed 20March.2010].

Vass, S. (2010). Salmond's secret talks on Scottish Water sell-off. *The Herald*. 28 February 2010. [Online] Available at: <http://www.heraldscotland.com/business/corporate-sme/salmond-s-secret-talks-on-scottish-water-sell-off-1.1009804>. [Accessed 15 May. 2011].

Vibert, F. (2007). *The Rise of the Unelected, Democracy and the New Separation of Powers*. Cambridge: Cambridge University Press.

Vickers, J and Yarrow, G. (1988) *Privatization: An Economic Analysis*. Cambridge, Massachusetts. MIT Press

W

Wallace, C. (2011). *Email from Chris Wallace to Tommy Kane. [Response to request for Freedom of Information]*. Received 15 April 2011.

Waterwatch. (2008a). *Private Finance Initiatives/Public Private Partnerships*. Alloa: Waterwatch Scotland.

Waterwatch. (2008b). *Position Statement: External Sewer Flooding*. Alloa: Waterwatch Scotland.

Watson, D. (2011). *Water PFI*. [Online] Available at: <http://unisondave.blogspot.co.uk/2011/03/water-pfi.html>. [Accessed 4 April. 2011].

WBCSD. (2006.) *No Water No Business*. [Online] Available at: <http://oldwww.wbcd.org/Plugins/DocSearch/details.asp?DocTypeId=1&ObjectId=MjExMTM&URLBack=result.asp%3FDocTypeId%3D-1%26SortOrder%3Ddoctype+desc%26CurPage%3D21>. [Accessed 25th October. 2007]

WBCSD. (2002). *Water for the Poor*. [Online] Available at: http://oldwww.wbcd.org/DocRoot/rb0fiAtRuPY7fCmLkPEB/20020821_water.pdf. [Accessed 26th October. 2007].

White, B. (2007). *E-mail correspondence between Barry White and Richard Ackroyd, [Freedom of Information Request]*. 7 September. 2009.

World Water Council. (2013). *About Us*. [Online] Available at: <http://www.worldwatercouncil.org/about-us/vision-mission-strategy/>. [Accessed 17TH October. 2013].

Water Footprint Network. (2011a). *National Water Footprint networking: Moving Beyond Traditional Statistics*. [Online] Available at: <http://www.waterfootprint.org/?page=files/NationalWaterAccountingFramework>. [Accessed 15th December. 2011].

Water Footprint Network. (2011b). *National Water Footprints, UK*. [Online] Available at: <http://www.waterfootprint.org/?page=files/UnitedKingdom>. [Accessed 15th December. 2011].

Water Integrity Network. (2008). *Global Corruption Report 2008, Corruption in the Water Sector*. Cambridge: Cambridge University Press.

Wegerich, K., & Warner, J. (2010), *The politics of water*. London: Routledge.

Wells, N.M, Evans, G.W and Yang, Y. (2010). Environments and Health: Planning Decisions as Public Health Decisions. *Journal of Architectural and Planning Research*, 27(2), pp. 124-143.

Weible, C. M., Sabatier, P. A., Jenkins-Smith, H. C., Nohrstedt, D., Henry, A. D. and deLeon, P. (2011), *A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue*. *Policy Studies Journal*, 39: 349–360

Weir, S. and Hall, W. (1995). *Ego Trip. Extra Governmental Organisations in the UK*. In: F., Ridley and D., Wilson. *The Quango Debate*. Oxford: Oxford University Press.

Whitfield, D. (2006). *A Typology of Privatisation and Marketisation*. [Online] Available at: <http://www.european-services-strategy.org.uk/publications/essu-research-reports/essu-research-paper-1/essu-research-paper-1-2.pdf>. [Accessed 10 March. 2012].

WHO/DFID. (2009). *Summary and Policy Implications Vision 2030, The Resilience of Water Supply and Sanitation in the Face of Climate Change*. Geneva: WHO Press.

WHO. (2005). *Trihalomethanes in Drinking-water: Background document for development of WHO Guidelines for Drinking-water Quality*. [Online] Available at: http://www.who.int/water_sanitation_health/dwq/chemicals/THM200605.pdf. [Accessed 20 May. 2014].

WHO/UNICEF. (2005). *Joint Monitoring Programme for Water Supply and Sanitation, Water For Life: Making it Happen*. Geneva: WHO Press.

WHO/UNICEF. (2013). *Progress on sanitation and drinking-water - 2013 update*. Geneva: WHO Press.

WIC. (2004). *Submission by the Water Industry Commissioner Scotland*. Environment and Rural Development Committee. Evidence For Water Services Etc (Scotland) Bill, 27 September 2002. [Online] Available at:

<http://archive.scottish.parliament.uk/business/committees/environment/inquiries/wsb/env-wsb-wic.htm>. [Accessed 17 September. 2009].

WICS. (2005). *The Strategic Review of Charges 2006-10: The final determination*. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/final%20determination.pdf>. [Accessed 17 April. 2009].

WICS. (2006a) *Commission Decision Paper*. CP46-06.[Document Obtained Through Freedom of Information]. [n/d].

WICS. (2006b). *Investment and asset management report 2003-06, Detailed findings*. [Online] Available at: http://www.watercommission.co.uk/UserFiles/Documents/IAM_Detailed_Findings.pdf [Accessed 21 April. 2014].

WICS. (2007a). *Minutes of WICS Board Meeting, March 2007*. [Online] Available at: <http://www.watercommissioner.co.uk/Documents/Minutes/Approved%20minute%20of%20meeting%20March.pdf> [Accessed 10 January. 2009].

WICS. (2007b). *Commission Discussion Paper*., [Document obtained through Freedom of Information- CP06-07]. Obtained 30 January. 2007.

WICS. (2008a) *Price Setting: The Strategic Review of Charges*, WICS, Information Note 4, [Online] Available at: http://www.watercommission.co.uk/UserFiles/Documents/InfoNote4_1.pdf [Accessed 20 March 2010]

WICS. (2008b). *WICS Response to Cave Review: Competition and Innovation in Water Markets*. [Document Obtained Through Freedom of Information]. [n/d].

WICS. (2008c). *Commission Information Paper, CP34/08*. [Document Obtained Through Freedom of Information].

WICS. (2008d). *Commission Information Paper, 66/08*. [Document Obtained Through Freedom of Information].

WICS. (2008e). *Confidential: Notes of an Informal Discussion Between Sir Angus Grossart, Chairman of the Scottish Futures Trust*. [Document Obtained Through Freedom of Information]. 1 December. 2008.

WICS. (2009a). *Strategic Review of Charges 2010-14: Stakeholder information workshops 2009: Governance and incentives*, Stirling, 15 January 2009. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Governance%20and%20incentives%20summary%20of%20discussion%20APPROVED.pdf> [Accessed 21 April. 2014].

WICS. (2009b). *Strategic Review of Charges 2010-14: Stakeholder information workshops 2009: Scottish Water's levels of service*, Stirling, 26 February 2009. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/February%202009%20-%20v2.pdf> [Accessed 21 April. 2014].

WICS. (2009c). *Commission Information Paper, CP26/09*. Document Obtained Through Freedom of Information].

WICS. (2009d). *Breakdown of Expenses, FOI 09 23*. [Information obtained from Freedom of Information].

WICS. (2009e). *WICS Annual Report 2008-2009*. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Annual%20Report%202008-09-%20FINAL.pdf>. [Accessed 20 April. 2014].

WICS. (2009f). *WICS Correspondence to T. Kane* with regard to FOI 9/11. [March 19 2009].

WICS. (2009g). *List of Meetings in Relation to FOI 09/23*. [Information Obtained From Freedom of Information]. [n/d].

WICS. (2009h). *Who's Who, Sir Ian Byatt*. [Online] Available at: http://www.watercommission.co.uk/view_Sir_Ian_Byatt.aspx. [Accessed 15 February. 2009].

WICS (2009i) *The Strategic Review of Charges 2010-2015: The Final Determination*. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Final%20Determination%20document.pdf>. [Accessed 25 April. 2014].

WICS. (2009j). *An Assessment of Scottish Water's current performance in Delivering the 2006-2010 Investment Programme*, Board Paper. [Document Obtained Through Freedom of Information]. [June. 2009].

WICS. (2009k). *Commission Discussion Paper, CP119/09*, Strictly Private and Confidential, Price Sensitive. [Document Obtained Through Freedom of Information].

WICS. (2009l). *Staff Paper 5, Public Private Partnership Costs*. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Staff%20paper%205.pdf>. [Accessed 25th June. 2012].

WICS. (2009m) *The Strategic Review of Charges 2010-2015: The Final Determination*. Stirling: WIC for Scotland.

WICS (2009n) Staff Paper 8, Capital Enhancement. [Online] Available at: <http://www.watercommission.co.uk/UserFiles/Documents/Staff%20paper%208.pdf>. [Accessed 20th May. 2014].

WICS. (2011). *Email Correspondence to Tommy Kane, Re FOI Review request made by Tommy Kane to the WICS*, 2 February 2011.

WICS. (2014). *Who's Who, Professor Gordon Hughes*. [Online] Available at: http://www.watercommission.co.uk/view_Professor_Gordon_Hughes.aspx [Accessed 24 April 2014].

Williamson, J. (2004). A Short History of the Washington Consensus, In: "*From the Washington Consensus towards a new Global Governance*," Barcelona, September 24–25. <http://www.iie.com/publications/papers/williamson0904-2.pdf> [Accessed 13th December. 2013].

Witte, J., Streck, C. and Benner, T. (2002). *The Road from Johannesburg: What Future for Partnerships in Global Environmental Governance*. In: J., Witte, C., Streck, and T. Benner, (eds). *Progress or Peril – Partnerships and Networks in Global Environmental Governance: The Post Johannesburg Agenda*. Berlin: The Global Public Policy Institute.

Woll, C. (2007). Leading the Dance? Power and Political Resources of Business Lobbyists. *Journal of Public Policy*, 27, (1), pp. 57-78.

World Bank. (1993). *Water Resources Management, International Bank for Reconstruction and Development*. Washington :World Bank.

World Bank. (2004). *Operational Guidance for World Bank Group Staff: Public and Private Sector Roles in Water Supply and Sanitation Services*. Washington: World Bank Group.

WWF. (2009). *About the World Water Forum*, 5th World Water Forum Istanbul, <http://www.worldwaterforum5.org/index.php?id=1875>. [Accessed 10th March. 2010].

World Water Week. (2007). *World Water Week in Stockholm, Progress and Prospects on Water: Striving for Sustainability. In: a Changing World*. Stockholm: Stockholm International Water Institute.

WWS. (2008). *Waterwatch Scotland Annual Report 2007-2008*. Alloa: WWS.

Y

Yarrow, G, et al (2008) *Competition in the Provision of Water Services*, Regulatory Policy Institute, Oxford

List of Interviews

1. Tom Axford (2010)
2. Anon (2010)
3. Anon (2007)
4. Alan Sutherland (2013)
5. Iain Smith (2007)
6. Colin McLaren (2009)
7. Rob Kirkwood (2009)
8. Dave Watson (2008)
9. Richard Leonard (2008)
10. Steve Scott (2008)
11. Andy Nisbet and Steve Scott (2012)
12. Gordon Munro (2009)
13. John Sawkins (2010)
14. Jim Black (2008)
15. Anonymous Waterwatch Board Members (2007)
16. John Telfer (2009)
17. Jack Lord (2009)
18. Tom Harvie-Clark (2009)
19. George Ponton (2006)
20. Judy Wakker (2007)
21. Striking Scottish Workers (2008)
22. Tom Verjeicken (2008)
23. Bill Hughes (2008)

Fieldwork Notes

Meetings

Strathclyde University Sociology Seminar, Michael Burawoy, Public Sociology, (2008)
Glasgow, Scotland

Water Industry Commission Stakeholder Event (2009) Stirling, Scotland

Waterwatch Community Meeting (2007) Kirkcaldy, Scotland

Waterwatch Meeting with Scottish Water (2007) Edinburgh Airport, Scotland

Scottish Water Open Board Meeting (2008) Inverness, Scotland

Scottish Water Open Board Meeting (2009) Dumfries

Scottish Parliament Infrastructure and Capital Investment Committee (2011),
Edinburgh, Scotland

Conferences

International Meeting for the Human Right to Water (2006) Marseille, France

World Water Week (2007) Stockholm, Sweden

World Water Week (2008) Stockholm, Sweden

World Water Week (2009) Stockholm, Sweden

Alternatives to Privatisation and Commercialisation of Water delivery in Europe (2008),
Brussels, Belgium

Saving Europe's Water, Its Place in the EU's Green Strategy Friends of Europe (2008)
Brussels, Belgium

Turning the Tide, The Future of Scotland's Water, (2008) Edinburgh, Scotland

Managing Scotland's Water, (2009) Edinburgh, Scotland

Appendix A

CHIEF EXECUTIVE REPORT

28 JANUARY 2009

1 Performance (PAAG draft – Appendix 1)

The report is based on December results; November PAAG has also been appended for information.

1.1 Customer Service

In November and December contacts continued to settle at 43k and 40k respectively, compared to the high of 58k in August. Positive feedback was received from customers on Scottish Water's handling of customer issues during the interruption to supply incident in Helensburgh.

Preparation for the potential Industrial Action and the holiday season across Customer Service ensured that we maintained our service levels as we delivered services to our customers in the period.

Phase 2 of the Customer Experience training programme started in November targeting Customer Delivery operational staff who meet and deal with customers. The training will run across Scotland until April 2009. The main objectives of the training is to ensure that customers are treated as individuals and to ensure that all staff have the skills required to engage in difficult conversations with customers. The training is complemented by improvement action plans across all relevant teams with a clear focus of improving customer transactional satisfaction.

Details of operational incidents have been appended (Appendix 2).

1.2 Quality and Environment

1.2.1 Sewage Works Compliance

The number of sewage works that failed their consent in December is 31 with a population equivalent of 10.42% served by the non compliant works. The greatest contributor is Dalmuir PFI works which remains a failing works, however work is ongoing to bring it back into compliance and active discussions are ongoing with the operator. Indicator, however, remains on an amber status. The works which failed their consent in December were:

- Lamlash Septic Tank (Ayr) - Failure due to lack of emptying over the last two years (ongoing issue between SW and SWS)
- Brechin (Tay) - Now being reported as a disputed failing works, if dispute is lost then can still become compliant prior to year-end.
- Dunnswood (Nith) - Reported as a disputed works, if dispute is lost it will be failing at year end.

The works which came back into consent in December were:

Shotts (Nith) - OPA only

1.2.2 Drinking Water Quality

The number of microbiological failures, measured at WTW, for December stands at 5. This measure, which is based on a calendar year, is on a green status with the total for the year to December being 76 against a target of 80.

1.3 OPA

December's rolling OPA result is at 266 with year to date at 247 and predicted year-end of 253. This continues to be well above plan.

1.4 Q&S Capital Investment to December at £522.0m was £8.8m higher than budget.

1.5 Financial (December 2008)

To December, PBT for Scottish Water at £157.8m was £3.3m higher than budget. Regulated PBT at £157.3m was £3.7m higher than budget due to improved sales of £5.2m and lower interest costs of £3.1m partially offset by higher expenditure of £4.6m. SW Horizons profit after tax was £0.2m above budget at £1.9m. Net cash outflow, before inter-company loans, was £49.3m higher than budget at £124.4m due principally to higher capital payments of £53.5m.

A detailed analysis is provided in the Finance Director's report.

1.6 People

There was one reportable incident in December which occurred at the Seafeld WWTW, PFI site, Edinburgh which is operated by Veolia Water. A high voltage (HV) breaker failed whilst in service causing extensive damage to equipment in the surrounding part of the building. No one was injured; however, as required under RIDDOR, Veolia Water has reported the incident to the HSE as a dangerous occurrence. Details of the incident are contained within the Health and Safety Report.

3 Prosecutions

Convictions:	
Campbeltown Sheriff Court	Scottish Water pled guilty on the 20 November to a charge that on various dates between 1 January 2007 and 5 June 2007 it failed to comply with the Water Use Licence by failing to pass flows to Slaty Farlan WWTW at the consented level (75 litres/second). Sentence was deferred until 13 May 2009. Scottish Water will be required to report to the Sheriff the progress of the short term solution at Campbeltown and its plans to deliver a long term solution at that time.

Ongoing Prosecutions:		Trial Date
Tain Sheriff Court	Scottish Water has pled not guilty to a charge of using a lorry which was overloaded at Blairlaith Industrial Estate on the 14 March	12 February 2009

	2008. The procurator fiscal is considering evidence provided by Scottish Water.	
--	---	--

APPENDIX 1 (From Chief Executive Report)

Water Quality Incidents

Elphin Knockan – Cryptosporidium – 26 Nov 2008 to 8 Jan 2009

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Boil Water	25	25	6 wks

Routine samples from the works supplying **Elphin Knockan**, north of Ullapool, indicated significantly raised levels of Cryptosporidium in the water supply. This followed a period of heavy rainfall. On **26 November**, a boil restriction was placed on the supply and leaflets delivered to the **25 properties** affected.

In early January, the levels of Cryptosporidium fell considerably, however there is little confidence that the levels will not rise again, particularly after heavy rainfall. A letter was issued to residents on 8 January by the CPHM advising that there was an ongoing risk of raised levels of Cryptosporidium in the water supply. It pointed out that the quality of the supply had not changed and the awareness was due to more stringent sampling being undertaken by Scottish Water. The letter sets out the risks and advises residents to determine their own risk control measures. Similar notification has been issued previously for other high risk supplies.

Elphin WTWs currently provides only rudimentary treatment. It is scheduled to be upgraded as part of the SR10 Program. An interim temporary treatment solution is being considered.

Waterstein WTW - Cryptosporidium – 6 to 24 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Boil Notice	12	12	18 Days

On **6 Dec 2008**, after a period of heavy rain, a routine sample at **Waterstein WTW**, on the **Isle of Skye**, revealed high levels of cryptosporidium in the water. A boil water restriction was issued to the **12 properties** affected.

On 24 December, the works was decommissioned. The properties are now supplied from Glendale WTW. The restriction was duly lifted.

Aboyne - Cryptosporidium – 18 to 28 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact

Boil Water	1100	1100	10 Days
-------------------	-------------	-------------	----------------

After a period of heavy rainfall, a routine water sample at Tanarside WTW revealed raised levels of Cryptosporidium in the water supply. The works supplies **1100 properties** in **Aboyne, Aberdeenshire**. A boil water restriction was immediately placed on the supply on the **18 December**.

Bottled water was delivered to special need customers and made available from two bottled water distribution points established in the village. This was maintained for the duration of the incident.

The CPHM removed boil restrictions on the 28 December.

Investment is earmarked for the SR10 investment period to reduce the crypto risk at this site. Options include upgrading and maining out the works. In the interim, work is to be undertaken to ensure the existing basic pressure filters are operating as effectively as possible.

Loss of Supply Incidents

Glen Convinth WTW – Control System Failure – 19 November 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply	2,500	Nil	N/A

At mid day On Wednesday **19 November** the control software at Glen Convinth WTW failed to re-boot following a planned shut down. The works cannot readily be run on manual. Glenconvinth supplies **2,500 properties** in the **Beauly and Drumnadrochet** areas.

A tankering operation was put in place to augment the levels in the Service Reservoirs.

A specialist instrumentation team managed to get the works re-started at around 6:30pm the same day. There was no customer impact.

Stobhill SR – Burst Inlet Main – 30 November

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply	10,000	Nil	n/a

On Sunday **30 November** at 10:30am, a burst occurred on the 12 inch inlet main to Stobhill Service Reservoir. The Reservoir supplies **10,000 properties** in the **Gorebridge, Laswade, Newton Grange, and Bonnyrigg** areas.

An incident team was established in the Fairmilehead office and the repair completed with no impact to customers.

Fairmilehead WTW – Burst Raw Water Main – 1 December

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply Flooding	100,000 -----	0 2	n/a 6 hrs approx

On Monday **1 December** at around 10:30pm, a burst occurred on one of the two inlet mains to Fairmilehead WTW on the A702 Bigger Rd just south of the City Bypass.

The works supplies some **100,000 properties** in the **West of Edinburgh**. An incident team was established in Fairmilehead by 1:00am on Tuesday and the repair completed by mid afternoon that day.

There was significant damage to the road which remained closed until the morning of Thursday 4 December for reconstruction and reinstatement. This caused significant traffic disruption in the Penicuik and surrounding areas.

In addition two properties were flooded under their solum. Clean up contractors and loss adjusters were arranged to support the property owners.

Rutherglen - Burst Main - 21 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply	2600	4	4 hrs

On **21 December**, at 9.38am a burst occurred on a 4" main. The burst caused some localised flooding to the highway and to 4 gardens.

Kingskettle - Failure of Pipework - 22 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply	800	200	5 hrs

On the **22 December** in the **Kingskettle area of Fife**, 200 properties suffered an interruption to supply when a planned repair to a water main failed.

The Local Authority was advised and updated.

Kilmarnock - Burst Trunk Main - 23 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Loss of Supply	2500	11	12 hrs

A burst to a 14" trunk main in **Kilmarnock**, supplying 2500 properties, was reported at approximately 6.30am on **23 December**. Flooding from the burst caused some disruption to traffic and **11 properties** experienced an immediate loss of supply.

Bottled water was provided for the affected properties and the local Authority was advised of the situation

The repair was completed by 18.00hrs and the 11 properties affected were back in supply by 20.00hrs.

Stevenston, Ayrshire – Burst Main – 25 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
No Water/Low Pressure	5,000	< 200	6 hours approx
Discoloured Water		< 200	4 hours approx

On **25 December, Christmas Day**, at around 5 am, a burst occurred on a 21” main supplying some **5,000 properties** in the **Stevenston, Kilwinning and Saltcoats area of Ayrshire**. The problem was contained to approximately 200 properties suffering loss of supply and the same number affected by discolouration.

Due to this bottled water was mobilised and deployed to four drop off points in the affected area.

By 19:40 the burst was repaired and the system restored to its original configuration.

Waste Water Incidents

Seafield WWTW PFI – Power Failure – 27 December 2008

Customer Impact

Impact Type	Prop Potentially Affected	Prop Actually Affected	Duration of Impact
Environmental	Impact on bathing amenity on Forth	None	N/A

On Saturday 27 December 2008, the electricity supply to Seafield WWTW failed. This affected the treatment and pumping capability. There was approximately 4hrs storage capacity in the sewer system before a discharge of sewage from Albert Street Pumping Station occurred. SEPA were advised of the situation.

A temporary repair was put in place within a few hours and the supply restored. There was no emergency discharge to the environment.

The City of Edinburgh Council, Environmental Health Department was advised of the incident as a courtesy.

The fault, which was within the PFI site, resulted in one of the two available sources of power being unavailable and the inability to use the on site stand-by generation.

As a consequence, and due to the sensitivities surrounding this site, contingency plans were put in place to mitigate the risks from a further power failure including bringing pumping and stand-by generation onto the site

Other Events

Industrial Action - 27 / 28 November

In response to the planned industrial action over the 24 hour period from noon on Thursday 27th to noon on Friday 28 November. Significant preparatory planning was undertaken across the business to minimise the consequence of the action. This included ensuring cover for critical assets via non striking staff and the engagement of repair and maintenance contractors on a stand-by basis as well as the establishment of monitoring teams across the operational regions.

During the period of action, these teams closely monitored customer contacts and telemetry alarms and managed the resources available to respond to events on a priority basis. In addition non essential activity on the network and at treatment works was suspended over the period of the action.

A command team was established in Fairmilehead to monitor the overall impact and deal with any operational events that occurred.

The arrangements in place worked well and there was a high degree of confidence in the operational status of the assets across Scottish Water. All bursts, plant alarms, chokes etc were dealt with through the regional operational teams. There were no significant events over the period of the Industrial Action.

A second period of industrial action, which was to take the form of a Stand-by and overtime ban over the Christmas and New Year period was avoided. However, significant planning had been put in place including identifying resources from within Scottish Water and from a variety of contractors to cover the potential work activity over the period. These were all stood down on Christmas Eve as normal arrangements were fully reinstated.

Severe Weather - 3 / 4 December

On Wednesday 3 December, the Met Office issued a number of severe weather warnings for across Scotland predicting heavy snow and high winds on Wednesday night and through into Thursday. The power companies were contacted and they assessed a significant risk to power supplies in certain areas due to ice on the lines and strong winds. Staff were put on stand-by and generators checked and made ready.

In the event the snow was mainly confined to the high ground and no significant disruption to Scottish Water's service occurred.

End

Appendix B

Reputational Steering Group Meeting – Terms of Reference

Mission:

To take action to provide guidance, direction and safeguard the business on any subject that may have a material impact on the reputation of Scottish Water.

1.1 Membership

Peter Farrer (Chair) – Customer Service Delivery Director
Alan Thomson, Head of Strategic Liaison
Ken Hutchieson, General Manager – Asset Planning
Mark Dickson, General Manager – Customer Service
Judy Wakker, Public Affairs and Community Relations Manager
Leo Petch, General Manager – Long Term Asset Strategy
Helen Lennox – Head of Corporate Affairs
Sharon Hamilton – Regional Communities Team Leader

1.2 Frequency

Bi-monthly (however the group can be brought together as required i.e emergency conference call.)

2.1 Review Potential Impact on Scottish Water's Reputation

What are the key issues that have arisen in the past month and/or are there any trends developing that the Steering Group needs to discuss? E.g high profile capital projects, media interest, recurrent operational issues, contractor behaviours, key messages to customers, emergency incidents.

2.2 Strategy Adjustment and Re-alignment

Given the above, what action needs to be taken to alter the current strategy, either at a global level or issue specific? E.g changes to communication strategies, stakeholder engagement, strategies to ensure customer satisfaction, preparation for the Commonwealth Games.

2.3 Identifies Key Influencers and Actions Required

Who is best placed to help improve/recover our reputation and how can we best engage with them in relation to particular issues. Also what influencing strategies should be adopted to deliver the best results to enable us to achieve the mission?

2.4 Forward Planning (6 months +)

Overview of forthcoming projects and identification of the key reputational milestones over the next 6 months and what tactics and plans are in place to achieve those milestones e.g. final determination, run-rate on Capex spend, project deferrals, etc.

2.5 Guidance on Decision Parameters

In order to ensure that the steering group does not become a “clearing house” for localised issues – what are the boundaries within which staff and Regional Reputation Groups can operate and what are the escalation trigger points?

3.1 Reporting – Setting and Monitoring KPI's

What is the Reputational KPI's that the steering group will monitor, what frequency and how should they be reported? E.g positive media index, percentage of outstanding issues, monitoring of stakeholder opinions.

3.2 Final Decision Point for Escalations

The group must give direction on resolution of major complex issues to Regional Reputation Groups and the rest of the business. Decisions should include: required course of actions, issue owner, timescale for resolution, feedback requirements.

3.3 Feedback on Lessons Learned

It is a key role of the group to ensure decisions taken (particularly in 3.2 above) are communicated to the rest of the business to ensure that lessons are learned and similar types of issues are not raised again.

Also it is important that good practice and reputational successes are shared with the rest of the business.

