



**SHEFFIELD UNIVERSITY MANAGEMENT SCHOOL**

**TOPPING UP OR WATERING DOWN?**

**CAN REGULATION SUPPORT SUSTAINABILITY: THE  
CASE OF THE WATER INDUSTRY OF ENGLAND AND  
WALES**

A thesis in fulfilment of the requirements for the degree of Doctor of Philosophy in  
Accounting at the University of Sheffield

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## GLOSSARY

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AMP	Asset Management Programme
AWG	Anglian Water Group
BitE	Business in the Environment
BS	British Standards
CA	Consumers Association
CAMS	Catchment Abstraction Management Strategy
CC	Competition Commission
CO <sub>2</sub>	Carbon Dioxide
CSC	Customer Service Councils
CSERGE	Centre for the Study of Economic Research in the Global Environment
Defra	Department for the Environment Food and Rural Affairs
DETR	Department of Environment Transport and Regions
DG	Director General (Ofwat)
DoE	Department of the Environment
DWD	Drinking Water Directive
DWI	Drinking Water Inspectorate
EA	Environment Agency
EAC	Environmental Audit Committee
EC	European Community
EN	English Nature
EPS	Environmental Protection Strategy
ETRA	Environment Transport and Rural Affairs (Parliamentary Committee)
EU	European Union
FfF	Forum for the Future
FoE	Friends of the Earth
HMIP	Her Majesty's Inspectorate of Pollution
ICC	International Chamber of Commerce
ISO	International Standards Organisation
LEAP	Local Environmental Action Plan

<b>MSR</b>	<b>Mode of Social Regulation</b>
<b>NAO</b>	<b>National Audit Office</b>
<b>NEF</b>	<b>New Economics Foundation</b>
<b>NGO</b>	<b>Non Governmental Organisation</b>
<b>NRA</b>	<b>National Rivers Authority</b>
<b>Ofwat</b>	<b>Office of Water Services</b>
<b>ONCC</b>	<b>Ofwat National Consumer Council</b>
<b>PAC</b>	<b>Public Accounts Committee</b>
<b>PPP</b>	<b>Polluter Pays Principle</b>
<b>PR</b>	<b>Price Review</b>
<b>QSR NVivo</b>	<b>Name of qualitative software programme</b>
<b>RSPB</b>	<b>Royal Society for the Protection of Birds</b>
<b>RWA</b>	<b>Regional Water Authority</b>
<b>SAS</b>	<b>Surfers Against Sewage</b>
<b>SSSI</b>	<b>Site of Special Scientific Interest</b>
<b>UCL</b>	<b>University College London</b>
<b>UEA</b>	<b>University of East Anglia</b>
<b>UK</b>	<b>United Kingdom</b>
<b>UKWIR</b>	<b>United Kingdom Water Industry Research</b>
<b>UWWT</b>	<b>Urban Waste Water Treatment Directive</b>
<b>WASC</b>	<b>Water and Sewage Companies</b>
<b>WCED</b>	<b>World Council for Economic Development</b>
<b>WFD</b>	<b>Water Framework Directive</b>
<b>WLD</b>	<b>Water and Land Directorate (in DETR)</b>
<b>WOC</b>	<b>Water Only Companies</b>

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## ABSTRACT

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Water is one of the most invisible of the visible means of existence in our society. It is a defining characteristic that unites our natural, social and economics world and is fundamental for life and health. However, given its multiple characteristics the management of water is a complex and often contradictory task that has led to an on-going quest for acceptable solutions. As if this were not problem enough, the last few decades have seen concepts of sustainability become overtly important principles, impacting on the governance of the water sector. A consequence of this rise in importance of sustainability to society, business and the state has been the enclosure and accommodation of sustainability within modes of governance, regulation and accountability. Instead of treating sustainability, regulation and accountability as separate centres of enquiry this work treats them as a complex set of interrelated systems that both respond to and produce change. The work therefore draws on a variety of theoretical perspectives that together broadly outline the contours of the political economy of water management. The theoretical framework has been used to provide an interpretation of the data gathered from fieldwork interviews from across the water sector and documentary sources. In doing so the inquiry has focused on a particular period of time, 1997 – 2001, in order to illuminate the processes and forces at work in the evolution of modes of regulation with respect to sustainability. The inquiry indicates the multi-level nature of the development of governance and regulatory processes. It is argued that how sustainability issues are resolved depends upon institutional structures. For progress towards a more sustainable future civil society must be re-embedded in economic activities in order to bring about change in cognitive knowledge, values and norms.

## CHAPTER I: INTRODUCTION

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*'The thing can be done,' said the Butcher, 'I think.*

*The thing must be done, I am sure.*

*The thing shall be done! Bring me paper and ink.*

*The best there is time to procure.'*

Lewis Carroll, *The Hunting of the Snark*

### I.1 INTRODUCTION

#### I.1.1 Background

How often have we heard the phrase – Water is vital for Life? Few of us though ponder on the enormity of what that means for water is one of the most invisible of the visible means of existence in our post-industrial society. It spreads its subtle web through each and every one of our individual and collective lives, nourishing in its many forms our bodily and spiritual needs. It is a defining characteristic that unites our natural, social and economic world, so much so that the United Nations Committee on Economic, Social and Cultural Rights issued General Comment No.15 of 2002:

“Water is a limited natural resource and a public good fundamental for life and health. The human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights.”

It went on to say:

“In order to prevent abuse, the State is required to set up an “effective regulatory system” that will function in accordance with the Covenant and this General Comment. Such a system should include independent monitoring, genuine public participation and the imposition of penalties for non-compliance. Public participation includes “the right to seek, receive and impart information concerning water issues”. Women are expressly required to have a place in the decision making process.” (Rajepakse, 2003).

In England and Wales up to 1973 water utilities were largely under local authority control, the result of the efforts of local councils in the 19<sup>th</sup> century to both improve public health and hygiene and provide the infrastructure required to underpin local economies. It also provided a limited degree of local, democratic oversight of the service provision. Since the 1980's two major changes have taken place in the utility

sector: privatisation and technological change. These changes have had a profound effect on the approach to and provision of water services and their relationship with the social and natural environment. At the same time there has been a growing and influential debate regarding sustainability and sustainable development that has provided a deeper context and space within which to locate water as a right, a resource and a good. Privatisation has done as much as any other structural change to alter the complex character of water from one taken as a right to its commodification as an economic good. Whilst water services have been paid for by customers, privatisation served to legitimise the pursuit of profit. By placing the provision of such services in the 'market' it privileged the short-term profit taking at the expense of the longer term considerations that had previously guided the industry, such as maintenance of assets. This has challenged the focus and purpose of regulation as well as the relationships between stakeholders.

Privatisation has generated a new set of private property rights (Graham, 1997) and concomitantly the role of state has changed from one of government to governance (MacKinnon, 2000, p. 293). This has given rise to the advent of new agents of the state exercising arms length regulation because "companies cannot be trusted." (Wilks, 1997, p.279). The emergent institutions and modes of governance therefore represent a re-regulation rather than a liberalisation. Indeed the growth in the number of regulatory bodies within the water sector that mediate its workings, at local, national and international scales, has contributed to "a 'thick' regulatory structure, with ambiguously defined responsibilities and an imprecisely defined accountability." (Swyngedouw et al, 2001). At the same time the State's continued involvement in regulating the economic functioning of the water industry has been matched by the growth of involvement of formal and informal communities (Cocklin and Blunden, 1998, p.52) that together have subjected "a wider range of economic activities to governance mechanisms other than and in addition to market exchange and managerial prerogative" (Crouch and Streeck, 1997, p.3). Overall the regulatory environment has been and is subject to processes of change through interaction and knowledge formation in much the same way as is a social system (Garrod, 2000, p.239). And if the regulatory environment has changed so too has the nature of accountability.

Thus the capacity of the State for direct intervention may be limited either because of its structural relationships with the distribution of power in capitalist societies (Dryzek, 1995) or because its own institutional structures militate against it doing so. Furthermore, there are shifting agendas arising as a result of electoral and economic

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cycles that determine the momentum and direction of particular issues (Gandy, 1999) or even their absence. However, media attention and public debate in the mid-1990's did have the effect of focusing attention on utilities and water companies in particular. It was acknowledged that there was a need for re-examining utility regulation (Dickie, 1996) and to address aspects of sustainability, such as social equity, that the institutions and regulatory framework had failed to adequately tackle.

As the water sector has responded to structural change and re-regulation so too governance has evolved alongside it. As governance has evolved so concepts of accountabilities – who is responsible for what and to whom, have changed as well. Sustainability as a (new) reality and imperative implies a new set of accountabilities. At the same time new regulatory relationships arising from the implications of structural change have extended concepts of reciprocal, democratic and managerial/procedural accountability into new areas. With changing relationships comes both changed responsibility and accountability.

## 1.2 RESEARCH INTEREST

The broad area of inquiry of this thesis is regulation, sustainability and notions of accountability within the context of the water sector in England and Wales. It includes an exploration of the conditions necessary to support progress towards sustainable development. It is not about seeking definitions of sustainable development though an understanding of how sustainable development may be conceptualised collectively and individually and how we perceive the world is necessary. In the process of seeking explanation we inevitably and intuitively construct versions of reality that are (in)formed and interpreted through knowledge, discourse, dialogue, experience and beliefs. Interpretations and behaviour are influenced by the milieu within which organisations and individuals are located. Our explanations are formulated and flow from inquiry and a quest to answer questions that we believe are important or of interest. Through discourse we seek understanding and through understanding to a rationalisation of the lifeworld (Habermas, 1984 & 1987) we experience, forming the basis of our actions as a society and as persons. Thus while there may be a scientific or physical reality it is in the conditions and interpretation of the implications of that reality that the social construction of our worlds becomes of critical interest.

In the context of the water sector I am conscious of the way in which society has utilised the water environment, reconstituting it through the law, technology, economy and the exercise of power, often to the benefit of a few and the detriment of many. The

legacy of past use and abuse of our global environment rises up to haunt and challenge us. There is for some a sense of impending doom and a need for action (Porritt, 2002), acknowledged by governments. The mantra of sustainable development seems to offer a way forward, a new way of doing business, a means to challenge and change that legacy, some point to the benefits that this has already made – we are told that our rivers are now cleaner than at any time since before the industrial revolution (Blackburn, Nov. 2001). The notion of sustainable development touches and resonates in us all at an intimate level, connecting with a sense of right and the desire to strive for a better future. But the difficulty that faces us is understanding what sustainable development is and at a practical level, how it can be achieved when it is socially located within a liberal market economy. It seems an inevitability that this means some form of regulation or governance.

The answers to such questions must, I believe, involve us in an examination of the context within which the water sector operates - for this will broaden our understanding of the constraint and opportunities that confront us along a path to sustainable development. An historical perspective seems to indicate strongly that sustainable development will not of itself happen as a result of overwhelming conviction by sections of society as to its rightness. Its achievement may be located and rooted within the existing capitalist economic system, which while it is preponderantly free market in character, does not operate free of all constraints. There are controls that the State imposes and exercises over the economic system, doing so through a series of instruments and agencies. A prime instrument is the law and legislation, through which the State seeks to establish and impose moral authority over the markets on behalf of the constituencies it purports to represent (Cocklin and Blunden, 1998). Regulation follows legislation providing a framework, operating procedures and agency for regulating the affairs and conduct of the market in question. It is in the regulation that substance is given to the intentions of the State, society and the market. It plays a fundamental role. But this also implies not just a set of formal relationships and obligations but also a complementary set of informal relationships and obligations. Together they may be said to constitute governance or mode of (social) regulation.

In the case of the water sector there is a particularly close relationship between the State and the provision of water services. This is based partly on the history of the water industry and in part on the unique characteristics of water as a multiple attribute resource (Hassan, 1998). The fundamental importance of water means that the State must take a close interest in all matters related to it and must act to mediate the

inevitable conflicts that arise from competing demands and interests. It has a duty to ensure a balance between the demands of the market for water as an economic good, the needs of the environment and to ensure its equitable provision to all individuals for an acceptable quality of life. Thus the issues that surround water can be seen as being intimately associated with sustainability, regulation and accountability.

Researchers concerned with questions of sustainability and sustainable development within industries have tended to accept as given the operational and institutional framework. Inquiry is focused on the question of how, within that framework, a company or an industry can become more sustainable or move towards a state of sustainable development, the conditions and tools necessary as well as some judgement of success or failure. There is within this an implicit acceptance of the institutional framework, of the status quo, leading to a focus on legitimisation and transparency within the operational framework. I believe that we have to move beyond these assumptions and consider the institutional framework itself as the point of focus of enquiry. Within these terms it is not sustainable development itself that is being questioned. It is rather the question of how the framework has been arrived at, how it addresses the themes of sustainability and accountability, how stable it is and whether or not it is fit for purpose.

### 1.3 THE RESEARCH QUESTION

The points highlighted above lead to the formulation of the inquiry, which considers ***whether the form of regulation of the water sector in England and Wales encourages progress towards sustainability?***

Although the research question itself maybe simply framed, it needs to be taken apart in order for it to be answered. There are four parts to the question, these centre on: regulation, sustainability, the institutionalised nature of the regulatory framework and accountability. Regulation raises questions of purpose; why do we have it, what is the current form, what is its intent and who is it for. Secondly, there should be an understanding as to what, for the purposes of this thesis, sustainability and sustainable development may be taken as. Without such an exploration it becomes problematic to enter into a discourse in which the meaning(s) of the object of the discourse constantly change(s). The institutionalised nature of the regulatory framework raises the need to conceptualise and understand the framework of regulating for sustainability not just in terms of the objectives and objects of regulation but also the need to consider how and in what way the structures are changing and why. Part of the governance

arrangements of the institutional framework also concerns accountability. This too has a bearing on the discursive construction of sustainability and how it might be realised. In other words we have to set a context within which the research question itself can operate and derive meaning.

In exploring what lies behind this overarching question there is a premise that peoples' and organisations' world views and beliefs – how they see, understand and interpret reality - will have a determining influence not only on how they do business and what factors are regarded as important but will also determine the nature of the framework within which they operate – the institutional framework. This in turn affects the relationships that organisations enter into and the attitudes to the relationships. The water industry is now generally said to have a good environmental record (Blackburn, O., Nov. 2001), what is less clear is why. It may be a genuine internally generated commitment to develop and implement sustainable business practices, or a response to the government's sustainability agenda driven by the regulatory framework, or a response to other externally imposed forces that may have little connection with progression to sustainability.

It could be argued that there is little to be gained from the proposed exploration of the research question posed above. After all, great strides have been made by the water industry in improving the water environment. Compared with just 15 years ago the state of English rivers is remarkably better. But what of social conditions, such as the level of water debt or the goal of public participation and stakeholder involvement (as championed by the European Union)? This suggests that the situation is not as clear cut as would at first appear. Firstly, environmental improvement is not the same as greater sustainability. Sustainable development is a much richer, fuller concept than that. Secondly, the drivers behind any improvement require exploration as they may have resulted from forces that are undermining the achievement of sustainable development. In other words there is a gain but at the expense of loss in other areas such that there maybe perverse incentives at work. Lastly, the institutional and regulatory structure of the sector is in transition, new forces are at work creating tensions, tensions that the State and the exercise of regulation have fostered. There is a need therefore to seek a greater level of understanding of the forces at work and the trajectory of regulation.

The study seeks to make a contribution to the understanding of the interrelationship between sustainability and regulation and the role of accountability and governance in that relationship. Previous studies of the water industry have focused on the impact of

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privatisation whilst other studies have considered 'real' regulation and the changes in the water industry over time. At a theoretical level there has been some work that has sought to apply Regulation theory to either sustainability or to water management. Few studies though have attempted to bring together sustainability, regulation and accountability within a single framework. This inquiry seeks to address that project.

## **1.4 LANDSCAPE OF THE THESIS**

For ease of reading the thesis is divided in to three main sections. Section A provides the background to the research and as such may be said to be setting the scene for the main body of the research that follows. It includes an historical context and discussions of both regulation and sustainability. In Section B the theoretical perspectives and methodology are presented. Section C presents an analysis and discussion of the data gathered through the fieldwork and other sources as well as the conclusions reached.

### **1.4.1 Section A - Setting the Scene**

The purpose of chapters II to IV is to introduce and establish a broad background to the inquiry. Chapter II describes the historical context of the development of the water industry and its association with the State. The beginnings of a formalised water industry initially in the private sector but gradually subsumed by local government and the State in the nineteenth century are set out. Of particular relevance is the gradual concentration of water service functions in support of the Fordist state and its transition from the public to the private sphere, through privatisation, in response to what might be characterised as a crisis in and of capitalism in the 1980's and 1990's. Chapter III considers 'real' regulation; the nature and purpose of regulation as it pertains to the water sector as well as the institutions and instruments of regulation. It is clear from this that the exercise of regulation is one that has evolved in breadth and complexity over time. It now involves a hierarchy of networks with overlapping relationships and often opaque competencies. The central point of Chapters II and III is that the various structures of the water sector are historically situated and have evolved through the need to adapt, often existing mechanisms, to new challenges. Chapter IV tackles sustainability, drawing on a broad literature from the technical to the philosophical. The aim is not so much one of seeking to define and tie down a particular concept of sustainability but rather to sketch some of the many facets that the concept encompasses and the way in which these inform people's choices and actions. At heart, it is argued, sustainability is rooted in beliefs, values and morality and for it to

matter these must enter into the ordinariness of everyday life. Within our current paradigm it does this through governance and institutional frameworks.

#### **1.4.2 Section B - Theoretical Paradigms and Methodology**

Chapters V and VI present the theoretical perspectives that underpin the research and its interpretation. The approach centres on an exploration of the political economy of regulating for sustainability in the water sector. It draws on two theoretical strands, the Régulation Theory approach and discursive practices, which are brought together in the later chapters. Chapter V considers the development of Régulation Theory, a Marxist informed approach, as a possible lens with which to examine the institutional framework of regulation and regulating for sustainability in the water sector. In Chapter VI Foucault's ideas and insights into power, knowledge and discipline and the role of discourse in their formation have also been developed as a complement to Régulation Theory. Chapter VII outlines the research process by first presenting the philosophical underpinnings of the research and then going on to outline how the actual research inquiry was carried out. The philosophical underpinnings may be summarised as being: ontologically - historically relativist; epistemologically - subjective transactional and; methodologically - dialogic. The research inquiry is qualitative and substantially based on the use of semi-structured interviews with a cross section of water sector stakeholders. Given the multifaceted nature of governance and regulation of the water sector it was considered appropriate to involve stakeholders other than those from industry or the State, as all affect or are affected by regulation.

#### **1.4.3 Section C – Analysis, Discussion and Conclusions**

In Chapters VIII to X the fieldwork data are analysed and interpreted as discursively constructed practices that operate within and are constituents of a particular mode of (social) regulation that is peculiar to the water sector. It is argued that with respect to sustainability, the current institutional framework of water service provision has evolved and given rise to a stable mode of social regulation. Such a mode seeks to reconcile the erosion of social and environmental resources with the maintenance of the capitalist forces of production, within a free market based economic system. Thus these three chapters concentrate on the analysis of the underpinnings and processes that support and constitute some of the governance structures (modes of social regulation). Chapter XI draws on the fieldwork data and other documentary sources to examine the overall structure of regulating for sustainability. It identifies the period of the first new Labour government (1997 – 2001) as emblematic of this and traces some

of the key events that have given rise to the particular mode of social regulation. It thus provides a superstructure, built on the earlier underpinnings, and draws on Régulation Theory for its theoretical inspiration. It is historically based in contrast to the ahistorical approach of chapters VIII to X.

Chapter XII discusses some of the implications of the approach adopted and its interpretation. In particular it considers the research question as to whether the form of regulation of the water sector in England and Wales encourages progress towards sustainability both in the light of the ideals set forth in Chapter IV and the practices and performance outlined in chapters VIII - XI.

## SECTION A

Section A contains three chapters: Historical Context, The Regulatory Framework and Sustainable in Theory. Their purpose is to provide the foundations on which the main work of inquiry is built. The need for and form of regulation in the water sector of England and Wales is historically rooted. Its understanding requires some insight into that history as well as of what is meant by 'regulation'. Sustainability, by contrast, is a more recent, topical concern. It is a dynamic concept, which changing circumstances and societal pressures have led to the requirement for forms of intervention. The forms of intervention are contingent on how sustainability is conceptualised and on (historically rooted) institutional frameworks. Thus understanding developments in the water sector with respect to regulation and sustainability, which form the focus of this inquiry, is built from the insights that deliberation and reflection on the history, on regulation and on sustainability can provide.

## CHAPTER II: HISTORICAL CONTEXT

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*'Come, listen my men, while I tell you again*

*The five unmistakable marks*

*By which you may know, wheresoever you go,*

*The warranted genuine Snarks.'*

Lewis Carroll, *The Hunting of the Snark*

### II.1 INTRODUCTION

This chapter considers the historical origins of the water industry and the period prior to privatisation through to the present day. It briefly introduces the genesis of a formal organised water industry during the early part of the nineteenth century and then considers the historical circumstances of the change from private to public ownership that took place during the 1980's. The influence of both the European Union and domestic political agendas are referred to and in the final section the current constitution of the water industry is outlined. This is not intended to be an exhaustive historical exposition but rather to be more of a scene setting exercise to provide a backdrop for later chapters. It is intended to aid the understanding of how the current institutional framework has come about through responding changing circumstances.

It is a truism that what we are today depends on where we have come from and the influences that have shaped the journey. To understand the operation of the water sector, the forces and circumstances that shaped it need to be appreciated. It would be possible to describe the current water sector framework without any reference to its past. This approach may give rise to questions of why the sector is constituted in the way it is and why there are constraints and limitations on the way it goes about its business. Thus by understanding the past we can understand the context of the present and, through the present the limits on the future. To understand the nature of regulation and the way in which it operates it is instructive to have an insight into the forces and circumstances that led to the formulation of its institutional framework, powers and duties. This aids the understanding of why different systems emerge. The way water companies operate and respond to regulation owes as much to the duties and expectations placed on them at the time of privatisation as it does to their commercial circumstances. The present realities are rooted in past concerns and issues that institutionalised arrangements were designed to address as much as how they have evolved since. Legislation and regulation often seek to address yesterday's issues (the known) rather than anticipating what might happen (the uncertain).

Although the supply of water services had long been a function exercised by institutions of the State, its origins lie in the private sector. The reasons for State intervention/control are of some interest in that they illustrate that there is a history of political tensions associated with service provision that stretches back over time and are as much with us today as they were 150 years ago. It also highlights how intimate the State's involvement has been and the forms and instruments that have evolved to meet changing economic, social and political circumstances. It is the very nature of water and its multiple use attributes that gives rise to the need for mediation of an organic system characterised by physical linkages and interdependencies which translate into economic ones. Such interdependencies lead to policy dilemmas generated by the exploitation of the water environment. As Hassan (1998, p.4) observed;

'The difficulty of developing policies which efficiently and fairly satisfy most interests may be illustrated by problems relating to the ownership structure....Time and again, the central and local authorities have given greater consideration to private-industrial interests than to the wider, social costs....Consequently, attempts to reform....were invariably incomplete, if not harmful, in impact; only when the resultant costs became unendurable was society prepared to undertake the by now enormous expenditure to remedy past neglect....and to thereby ensure sustainable use of the water environment.'

The management of water resources is a complex task having to meet a number of different and often contradictory goals; economic, social and environmental. The organisational structures required for delivery of water as a private good that once consumed by one customer cannot then be (immediately) consumed by another and the nature of the costs involved in delivery and falling long-run average costs, have strong natural monopolistic tendencies. It is technically inefficient to introduce competition through duplication of infrastructure, a situation that lies at the heart of the structure of the water industry since its emergence as a commercially organised enterprise. At the same time water has equally strong public and common good characteristics in its support for environmental services such as ecology, wildlife, amenities and aesthetics. As with many public goods and their associated externalities, there will be the 'free rider' problem with consumers unwilling to pay for the services provided, especially where there are difficulties associated with enforcing exclusion.

'Water's multiple characteristics create almost unique problems in devising appropriate market and regulatory structures to govern the delivery of water services. The search for an acceptable solution to these problems is a central theme running through the history of water since the industrial revolution.' Hassan, 1998, p.9.

It is for these reasons that the State has had a pivotal role to play as a shaper and mediator in the provision of water services.

## II.2 GENESIS OF THE WATER INDUSTRY

The origins of what can be considered as a water industry in the UK can be traced to the Industrial Revolution and the change from a predominately agricultural to an urbanised, industrial society. Economic and technological development induced fundamental changes in employment patterns and social conditions as well as the creation of new demands for goods and services such as housing, and water. The growth of towns and cities was staggering, in the ten years after 1821 the population of Manchester and Salford grew by 48% and Bradford by 78%. Water supply provision was totally inadequate to meet such increases. Those who were able to pay were supplied with water, a service that only the more prosperous could afford. There were however, social and political forces at work that were to bring about change; the introduction of municipal status for towns in 1833, a growing concern with more efficient and more positive (interventionist) government and the activities of reformers who had witnessed local conditions at first hand and were able to give them the oxygen of publicity through the newspapers to press their case.

The demand for supply services to towns and cities was largely met by private companies and in some cases by improvement commissioners, on a commercial basis. An Act of Parliament was required in order to authorise the works proposed by a public company, which was then responsible for raising adequate capital, arranging for the works to be carried out and its subsequent operations. Indeed, some of the water companies that are with us today can trace their origins back to early Victorian times and the rise of what may be regarded as classical industrial capitalism, as observed by Marx and Engels.

The poor living conditions in towns became the focus of growing attention and this was to result in far reaching organisational changes for the water industry, which have lasted in many ways until recent, pre-privatisation times. It marked the transfer of control from being exclusively in the hands of the private sector to the organs of the

State at a localised level. In 1842 the Poor Law Commission published *The Sanitary Conditions of the Labouring Classes in Britain in 1842*. The conditions that it revealed were horrifying and one of the conclusions of the report was;

“The primary and most important measures, and at the same time the most practical, and within the recognized province of public administration, are drainage, the removal of all refuse of habitations, streets and roads, and the improvement of the supplies of water.”

The effect of the report was to force the government to set up the Health of Towns Commission. The inquiry revealed that many councils were oblivious of the sanitary conditions in their towns and had neither the desire nor the ability to introduce improvements. For some this was an opportunity to make profits from water and there were moves on the part of some capitalists to form the first nationwide utility company, a move that was in part undermined by the even greater enthusiasm of investors for railway shares – there just wasn't enough private capital to go round. However, the publication of the Second Report of the Health of Towns Commission foreshadowed public control of water supplies at some future date. A consequence of the failure of the private sector to capitalise on the opportunities, which were evidently there to be had in the provision of water and sewerage services, was the progression to public control through the arms of the State.

In 1847 a Bill was introduced into Parliament, which would have required town councils and commissioners to supply water to every house, and either to construct the necessary waterworks or make contracts with existing water companies. Importantly, it removed the need for an Act of Parliament for the authorisation of works. Although, when passed many of the provisions of the Bill had been watered down, it did establish the Central Board of Health with permissive powers. In the same year, 1847, Edwin Chadwick<sup>1</sup> secured a model Waterworks Clauses Act, which limited the profits of a company to 10% and also that ensured it must comply with a reasonable demand for

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<sup>1</sup> Edwin Chadwick, a follower of Jeremy Bentham, is perhaps better remembered today as the author of the Poor Law. However, he was one of the first to realise in the 1830's that proper sanitation was a prerequisite for any improvements to living conditions. He also realised that aid must come from 'applications of the science of engineering, of which the medical men know nothing; and to gain power for the application, and to deal with local rights which stand in the way of practical improvements, some jurisprudence is necessary of which engineers know nothing.' It wasn't until the 1860's that the ideas of adequate water supply and sanitation gained general acceptance.

water. The Central Board of Health encouraged the formation of local boards and, more importantly, conducted enquiries into sanitary conditions, recommended works and, sanctioned mortgages for the construction of waterworks. A measure of the success of the Board, quite apart from its physical achievements was the intense criticism it attracted from a wide variety of vested interests; water companies, parliamentary agents, civil engineers, physicians and Treasury. However, the government's control over water companies was exceptionally weak and poorly defined, and the rights of individuals so hedged by bureaucracy as to be little more than of notional value. In spite of this it placed the responsibility for the majority of the provision of water services under some form of State ownership and control up until privatisation. By 1913, municipally owned authorities provided 80% of the water supplied. This remained the case until the 1973 Water Act, which restructured the industry. It created ten water and sewage authorities in England and Wales based on geographic rather than administrative or political boundaries. In doing so it removed a significant element of what some have perceived to be local political control and accountability (Bakker, 2002).

Although the assumption of responsibility for water supply and more especially sewerage by corporations and local authorities resulted in greater accessibility to these services it had little effect on pollution or pollution control. The reasons for this are partly down to the technology available and how pollution was perceived but also due to entrenched political and economic interests. It was in the Midlands and the north of England that the sharpest division in the debate over pollution took place. It was the land owning classes that wanted measures to compel manufacturers to adopt less environmentally harmful practices and municipalities to treat sewage. Because of the failure of common law to limit these harmful effects they argued for the need to introduce national legislation to redress the situation. Manufacturers, liberal politicians and laissez faire capitalists argued that this would raise costs, interfere with innovation and alter the balance between capital and labour, and opposed this.

Attempts to introduce improvement measures were vigorously opposed as both impractical and a threat to continuing trade. Industry continued to manage to subvert and out manoeuvre those that sought to improve environmental conditions and limit pollution. For example, the 1876 Rivers Pollution Prevention Act, was the fundamental environmental legislation until the mid 20<sup>th</sup> century. Under this legislation, it was impossible to bring a successful prosecution if it could be shown that to do so would inflict injury on industry and interfere with property rights and the rights of capital.

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## II.3 METAMORPHOSIS OF THE WATER INDUSTRY

### II.3.1 Introduction

In 1989 the ten Regional Water Authorities (RWA) in England and Wales were privatised and the assets sold into private ownership with shares quoted on the Stock Exchange. In the view of some, water privatisation arrived suddenly on the political agenda (Kinnersley, 1994; Jordan and Greenway, 1998) though there is general agreement that the decision was largely a political one by the Thatcher government (Shaoul, 1997; Hassan, 1998). The question arises as to whether the decision was purely based upon a political ideology that wished to see the role of the State pushed back and the private sector taking greater responsibility for the provision of public services. Some commentators have stressed primarily ideological motivation as being behind the decision (Schofield and Shaoul, 1997; Shaoul, 1998a; Shaoul, 1998b), others have attributed more complex reasons (Jordan and Greenway, 1998). What does emerge from a consideration of the circumstances leading up to the event is that whatever the reasons that lay behind privatisation a crisis was looming. Some change to the way the water sector was constituted and operated would have had to take place. It was the form and nature of the change that was dictated by political considerations.

### II.3.2 The Impact of Government: 1973 – 1989

The 1973 Water Act saw what was hoped to be the establishment of integrated water resources management in England and Wales, reconciling the interests of water supply, amenity and environmental improvements. In this there was a recognition of the inter-relatedness of water supply, sewage treatment, river quality and environmental protection. Taken as a whole there was certainly the potential to achieve these objectives, and in fact there were some real initial gains made in the areas of water supply and improvements to sewerage services. In spite of this by the early 1980's there was growing public unease over the performance of the industry (Hassan 1998, p.143); a perceived failure to achieve environmental objectives, failure to halt the collapse of the infrastructure and, rising water bills.

One of the reasons for the failure to achieve the environmental improvements heralded by the 1973 Act was the defective regulatory framework (Lynk, 1993) that resulted in a degree of regulatory capture by the RWAs. As constituted the RWAs were responsible for service delivery as well as regulatory control and enforcement. Although

government set environmental objectives there was no provision for arrangements to be made to monitor or measure compliance. Thus there was a tendency on the part of RWAs to loosen consent conditions in order to remain compliant and to avoid the spectre of legal proceedings, a process which some have regarded as evidence of regulatory capture. The financial targets and controls introduced by government, especially after 1983 were claimed to act as a surrogate market. The Conservative government eventually saw such attempts as poor substitutes for competitive discipline and this was one factor leading to the introduction of privatisation proposals in the mid 1980's. However, to attribute the blame to the RWAs would be wholly unfair, the political and economic conditions of the time had an overarching influence that created the conditions and shaped the privatisation proposals.

There is evidence that after the 1983 Water Act there were significant improvements in operating efficiencies and cost savings. The 1983 Act removed the requirement for local authority representation on RWA boards and had the effect of ushering in a much more business orientated managerial style. Lynk's (1993) study indicates that the tough financial targets set by government for operating costs throughout the 1980's were generally met. However, although there was a change in management culture and the industry became more efficient, this was being driven by a narrow government agenda. This was to bring about a change from public service delivery to a business organisation ripe for privatisation, with little or no thought given to the consequences of how the environmental and other long term objectives set in 1973 could be realised (Hassan 1998, p156).

Spending in the water industry was influenced throughout the 1970's and 80's by the macro-economic position in which Britain found itself. In response to the economic crisis, the Treasury exercised strict controls over public sector borrowing and spending. This resulted in cuts in capital expenditure, which hit the water industry particularly badly. In 1979 the new government instructed the industry to reduce its planned investment for the following year by 11.2%. At the same time government wanted the industry to increase the proportion of capital expenditure financed out of current surplus. In the inflationary times of the 1970's loan and fixed charges consumed most of the budget. In such circumstances it was difficult to finance new investment other than to increase charges well above the rate of inflation, a move that was not at all welcome. Under the pressure of these forces investment fell, the fabric of the infrastructure worsened and water quality deteriorated.

“There is little doubt the Water Authorities are now more efficient than previously, however.....the methods of achieving this had ‘dire’ consequences for the renewal and replacement of assets.” Hassan 1998, p.159

Spending controls halted works which would have led to the achievement of environmental and water quality objectives. To accommodate this the Department of the Environment in the run up to privatisation, encouraged RWAs to apply for the relaxation of consent conditions thus masking the extent to which they were operating illegally. As Hassan (1998, p.160) observed, “The chief causes of the comparative failure of the RWAs lay less with regulatory defects, which certainly existed. The main problem was the damaging and arbitrary effects of the government’s financial policies.” Arguably an example of a crisis that brought about the need for a restructuring of the economic system of governance of the water industry in order to avert more serious problems and possible collapse.

### **II.3.3 European Union and Environmental Policies**

Water protection is the oldest sector and most complete package of the European Commission’s environmental policies. It is expressed and given legal force through the various water related Directives, with which all European Union member States must comply. The requirement to adopt and comply or face legal proceedings has arguably been the single most important driver behind environmental protection and improvement policies as well as one of the factors that prompted the fundamental changes in the water industry. European directives, of themselves may not have been sufficient to force the structural changes if it had not also been for the absence of ability by the water industry to be able to respond and meet the obligations encompassed by successive European Directives. For this absence of ability it is the State that must take a very large share of the responsibility.

Although the decision was a political one the form and timing of the 1989 sell off of the water industry, or more correctly the RWAs, was greatly influenced by growing concerns for the deterioration of the environment and by the growing obligations under various European Community (EC) directives that the government had signed up to. For a long time there was a tendency on the part of both government and the water industry to misunderstand and more significantly underestimate the nature of the commitments entered into in adopting directives.

There are three broad types of water directive. The first details quality objectives to be met; such as the Bathing Water Directive, Drinking Water Quality Directive and Shellfish Directive. The second type seeks to control or eliminate dangerous emissions into the aquatic environment. The third aim to protect the water environment against general risk: such as the Urban Waste Water Treatment Directive (1991) and more recently the Water Framework Directive (2000).

During the 1970s the EC began to take a growing interest in the environment. One of the first directives was the Bathing Waters Directive, which although viewed with a great deal of suspicion by the British government, was eventually adopted unanimously. It soon became apparent that the government's attempts to circumvent the provisions of the directive were inadequate. It faced the embarrassment of formal legal proceedings in 1986 in respect of the beaches at Blackpool and Southport. At a time of reducing capital expenditure on water and sewerage services, the government was faced with a dilemma as non-compliance with EU environmental law was recognised as an undesirable option. The Drinking Water Directive (1980) had for the first time specified standards in relation to a wide range of parameters for drinking water. When the target date of 1985 loomed the water industry was not in a position to meet the specified standards, especially with regard to tap water. The British government responded by attempting to get the deadline moved to 1995, which only served to publicise the failure to meet water quality standards and on-going and unwanted publicity.

At the same time the 1980s were a time of increasing public awareness and concern with environmental issues. Membership of voluntary environmental organisations such as Greenpeace, Friends of the Earth and the Wildlife Trusts increased dramatically. There was a greater awareness and debating of issues such as environmental degradation as well as concerns over greenhouse gas emissions. There was also mounting, supranational, concern over issues such as pollution in the North Sea. Greenpeace for example, mounted a high profile campaign labelling Britain as 'The Dirty Man of Europe'.

The net result of these influences was that the British government came to accept that there was no alternative and that there would have to be greater investment in order to meet and comply with EU directives. By the late 1980s the investment programme required to meet EU standards was estimated at £24 billion (Kinnersley, 1994), although much of this investment would be required to meet the backlog in infrastructural maintenance. The public also desired an improvement to the water

environment. The government would not be in a position to sanction public expenditure on such a scale. One of the effects of this was therefore to increase the attractiveness of privatisation of the RWAs.

### **II.3.4 Privatisation of the Water Industry**

In 1985 the Department of the Environment issued a discussion paper on water privatisation. Although the stated objectives of privatisation included; the promotion of competition, the spreading of share ownership, involving staff in companies, reducing the size of the public sector and freeing enterprise from State controls, it was the last of these that was the most important factor. The act of privatisation itself was promoted as ensuring enhanced efficiency for the benefit of consumers, employees, the industry and the nation (Shaoul 1997, Ogden 1995). It would resolve the growing problem of how to adequately finance the water industry, part of which was the need to redress decades of neglect and under-investment in the infrastructure. Indeed, one of the ways in which the government of the nineteen eighties managed to sell privatisation of the water industry to the public was to suggest the market would bear this substantial cost burden (Letza and Smallman, 2001).

Although the decision to privatise may have been made on a mixture of ideology and expediency, there remained the question as to what form privatisation should take. The decision to opt for the wholesale transfer of the RWAs to the private sector with minimal reorganisation was probably prompted by a number of factors. A sense of haste to accomplish the transfer favoured minimal change, which the devising of alternative forms would entail. Secondly, the viability of other models, principally franchising were not evident at the time and this might have led to reluctance on the part of the capital markets to accept profit threatening competition (Hassan 1998, p169). The City also wanted to know the full liabilities of the industry before it would support the sale, which in turn implied a realistic interpretation of EU obligations. Furthermore, franchising might not raise the same amount of cash for the Treasury (Kinnersley, 1994) and might even involve a degree of public or municipal control. Something that was an anathema to Margaret Thatcher's government.

It is interesting to note that initially senior management in the RWAs were opposed to privatisation but were quickly won around to it and indeed became some of its strongest supporters. Several reasons have been advanced for this support. Freedom from the dictates of the Treasury was certainly a strong factor but equally the proposals provided for new managerial freedom with little change in organisational structure or

introduction of competition – in other words maintenance of the status quo. Escape from the commercial and social objectives associated with nationalised industries was another factor. As a result when privatisation eventually came to pass in 1989 it was relatively well supported from within the industry's managerial echelons.

Because privatisation of the industry in the form preferred by government would create private natural monopolies with great market power it was realised that great care would have to be exercised in devising an appropriate regulatory system. It would have to meet the twin challenges of ensuring that the environmental protection and policies would be effective and also prevent abuse of the natural monopoly position. Initially it was proposed that the regional companies would retain their regulatory environmental protection role, as this would also promote integrated water management. This proposal ran into strong opposition outside of the industry among environmental groups and the opposition. The first set of proposals were withdrawn and replaced by a solution that was eventually adopted in 1987, operational and regulatory functions were separated. The RWAs were set up as regional monopolies providing water supply and sewerage services while the regulatory functions were conferred on two new statutory bodies (EU rules do not permit private companies to discharge regulatory functions); the Office of Water Services (Ofwat) and the National Rivers Authority (NRA), which became the Environment Agency (EA) in 1995.

Owing to what economists call its natural monopoly characteristics, and the water companies sole responsibility with their respective geographic areas for the distribution, maintenance and treatment of what is essentially a natural resource, the water industry is a highly regulated industry. Indeed it has been claimed as one of the toughest regulatory systems in the world (Hassan 1998, p170).

## II.4 THE PRIVATISED WATER INDUSTRY

### II.4.1 Introduction

Since 1989, 14 of the Water Only Companies have been brought under six single licences:

- Colne Valley, Rickmansworth and Lee Valley became Three Valleys Water plc;
- Mid Sussex, West Kent and Eastbourne became South East Water Ltd;
- Sunderland & South Shields and Newcastle & Gateshead became North East Water plc;
- Bournemouth and West Hampshire were replaced by Bournemouth & West Hampshire plc;
- Essex and Suffolk became Essex & Suffolk Water plc;
- Mid Southern and South East Water became South East Water plc.

On the 1<sup>st</sup> September 1989 the assets and liabilities of the ten regional water authorities were transferred to ten companies as subsidiaries of ten holding companies prior to shares in the holding companies being sold in November 1989. Each appointed company holds a Licence for 25 years from 1<sup>st</sup> September 1989, which may be terminated at any time on expiry of the twenty-five years, provided at least ten years notice is given. The conditions of

an appointment may be varied subject to agreement between the parties concerned and the Director General of Water Services (DG), although under certain circumstances this may be referred to the Competition Commission. Similarly, if the DG considers that an appointed company operates in a manner contrary to the public interest there can also be reference to the Competition Commission, including requirements about corporate structure and management. Thus there are strong elements of regulation and governance in place that theoretically guide and constrain not only the performance of the industry but also the way in which it conducts itself. Setting up procedures and mechanisms of accountability to the regulator enables government to use these mechanisms as surrogate means of control, if it so wishes. Thus privatisation, whilst placing operational control in the hands of the private sector, has still not freed the industry from government's ability to exercise direction and control over it.

In addition to transferring the ten regional water authorities in to the hands of the private sector, the 1989 Act removed the existing statutory controls over the Water Only Companies and brought them under the same regulatory framework.

The DG regards comparative competition as a powerful regulatory tool and therefore any loss of a comparator arising from a merger that dilutes the ability to make comparative judgements is said to be against the public interest (Ofwat, 2000). Although this does not necessarily mean there can be no mergers, the fact is that since

1989 there have been none among the ten water and sewage companies. Even take-overs have been scrupulously examined by the DG and the businesses 'ring fenced' in order to maintain the ability of the regulator to use them as a comparator. This has had the effect of removing still further the benefits and disciplines that a "free market" was supposed to bring to the industry.

Since 1989 there have been a number of changes affecting the structure of the water industry and the companies not least being the change of ownership of some of the water companies. In the first few years after privatisation there was a tendency for water companies, especially the water and sewerage companies to diversify and develop non-regulated business ventures. This posed particular problems for the economic regulator in order to ensure that customers were not disadvantaged by such activities. The strong financial performance of water companies attracted business interests and led to a number of take-overs, often by foreign owned interests, though the DG was also careful to ensure that there was no loss in the ability to continue to use the companies as comparators through 'ring fencing' of their operations.

In response to regulatory pressure to achieve efficiency savings there were moves away from the vertically integrated company model with certain functions and activities being outsourced. In the period after the 1999 Price Review more fundamental

#### **Changes in Ownership of Water Companies**

- In 1993 Severn Trent took over East Worcestershire Water.
- In 1995 East Surrey Water and Sutton Water become Sutton and East Surrey Water.
- In 1995 Northumbrian Water took over North East Water.
- In 1996 Scottish Power acquired Southern Water.
- In 1997 Anglian Water took over Hartlepool Water.
- In 1998 Enron acquired Wessex Water.
- In 1999 Yorkshire Water took over York Waterworks.
- In 2000 Cambridge Water were acquired by Union Fenosa SA.
- In 2001 Dŵr Cymru was acquired by Glas Cymru.

restructuring proposals, some of which have been approved by the regulator and some not, emerged. However, in March 2002, Ofwat noted that "The pace of restructuring proposals has slowed since our last City briefing although there have been a number of twists and turns on a couple of them" (Fletcher, 2002). In

spite of these moves the water industry of the early 2000s is still largely unchanged from what it was in 1989. Much the same can be said of the regulatory framework.

The ten water and sewage companies set up in 1989 are still in place, trading in the same geographical locations. The ownership of the companies has undergone change and in some cases radical restructuring, notably Dŵr Cymru/Welsh Water. Details of

the Water and Sewage Companies as well as the Water Only Companies are given in Appendix I.

One of the main benefits of privatisation was expected to be the ability of the water industry to deliver the investment in assets and infrastructure required to improve services and to meet the conditions laid down in various EU directives. Although there continues to be argument over the scale, pace and effectiveness of the investment that has been made, there can be no doubt that the water industry has undertaken significant expenditure to the extent of several billion pounds since 1990. In 2000 the Environment Minister reported,

“The billions being invested in cleaning up our rivers are already bearing fruit. These are the best ever water quality results and reflect the Government’s firm commitment to delivering a cleaner, better quality environment for everyone to enjoy.” (Environment Agency, 2000).

At the same time the above inflation price increases, allowed by the regulator, that were to be used to pay for these improvements also resulted in levels of profits for water companies and increases in executive’s pay that the public found unacceptable (Corporatewatch, 1996). So much so that when the Labour Party came into government in 1997, it introduced proposals for a one-off windfall tax, especially on water companies, which came into effect in 1998. Further shortcomings of the industry, the regulator and the efficacy of market forces to deliver improvements were highlighted by the 1995/96 drought and the resulting attention given to leakage.

Schofield and Shaoul (1997) have also questioned whether the way the industry operates is sustainable in the long term. They see the privileging of shareholders over customers as exerting an adverse influence on investment programmes leading to increased levels of borrowing. Such a situation they argue, would result in “jeopardising future levels of service.” and if debt levels increase companies would “in time come to mirror the position the water industry was in before it was privatised.” In spite of what many see as a success, there are doubts as to whether the framework of the water sector is capable of adequately fulfilling the environmental, social and economic demands placed on it, given the privileging of the economic viability of companies enshrined Ofwat’s remit.

## II.5 SUMMARY

This chapter has provided an historical context of the water industry in England and Wales over the last 150 years, focusing on its beginnings and on the last 25 years. The Industrial Revolution in Britain in the nineteenth century saw the rise of commercial water enterprises in the towns and cities as traditional sources became inadequate. However, the failure of the commercial enterprises to provide adequate water services gave rise to concerns for public health and the debilitating effects on public and commercial life. Through the reform of local government, water services came to be regarded as a local government responsibility from the mid to late 1800's until the 1970's, with a particular construction of accountability. Environmental legislation as it pertained to water pollution and water quality lagged far behind such enlightenment. In 1973 changes in the organisation of water services were introduced but political and economic circumstances undermined any chance of them being substantially realised. Indeed, these pressures together with the growing influence of EU directives and the need for compliance with them brought about fundamental and far-reaching changes in the nature of the water sector in the form of privatisation. This was coupled with an expanding, arms length, regulatory environment that included not just environment and quality issues but matters such as surrogate market competition and conceptions of customer service. And, by extension it is coupled to changes in the nature, scope and purpose of accountabilities. The nature of the transfer of ownership of the sector from the public to the private sphere set the institutional and regulatory framework of the sector that remains in essence unchanged up to the present. The framework is characterised by: a separation of operation and supply functions in private hands from those of regulation and compliance in public hands; regionally based, vertically integrated, monopolies subject to arms length regulation of economic, environmental and quality aspects by the State exercised through parastatal agencies. It is a framework that has succeeded in addressing the causes of the crisis that gave rise to it by embedding liberal market capitalism as an essential part of the institutional framework's ethos. The historical context of the water industry plays a defining role in the shaping of governance structures and relationships, of which the regulatory framework is a part. It circumscribes what can be done and how, for example with respect to the conception, place and role of sustainability and accountability in the water sector. The historical context is necessary for a better understanding of what follows.

## CHAPTER III: THE REGULATORY FRAMEWORK

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*'And when quarrels arose – as one frequently finds*

*Quarrels will, spite of every endeavour -*

*The song of the Jubjub recurred to their minds,*

*And cemented their friendship for ever!'*

Lewis Carroll, *The Hunting of the Snark*

### III.1 INTRODUCTION

This chapter has two main aims. The first is to consider the purpose of regulation and what is meant by the term regulation and what it tries to achieve. This provides an introduction to the inter-relationship and interaction between economic, environmental and social regulation as well as to regulating for sustainability. It indicates that formal regulation is a part of wider framework that is governance. The second part of the chapter introduces the formal regulatory structure of the water industry in England and Wales, building on the introduction provided by chapter II. It gives a description of the main players and their respective jurisdictions. A discussion of the changes that have taken place in the duties and responsibilities provides the focus of a later chapter but the main features are touched upon here. It would not be possible to consider the research question of whether or not the current regulatory framework promotes sustainability without knowing what the framework is. Only by knowing the framework can the extent of its accommodation of sustainability be investigated, its potential as a support and how this has come about.

The question of what does regulation try to achieve must include why there is a need for regulation. It is through these questions and a knowledge of the recent political, social and economic history of the water industry that an understanding of the current form of regulation can emerge. In considering regulation there is a tendency to focus on one or other particular aspect, such as economic regulation. Regulation however, relates to and impacts on a wide range of (governance) activities carried out by the water industry. A narrow focus can obscure the inter-dependent nature of the different aspects and how they affect and are affected by each other. The importance accorded to a particular form or focus of regulation is more often than not dependent upon the commentator and the question considered. In other words there is a degree of subjectivity about what should be considered important in regulation. Any reading of the regulatory literature would tend to lead one to believe that economic matters are of greater significance (Beesley, 1997, 1999, Newberry, 1999), even the non-economic

aspects of regulation are often couched and presented in economic terms (Polluter Pays Principle for example). Regulation however, does not exist of itself, it is subject to the formal pressures that gave rise to it and to informal forces that shape it, oppose it and change it. It is not just a technical, mechanistic process. It is part of the functioning of society and therefore in considering the nature of regulation we need to understand how it is used and the forces that use it. Important themes are the role of power and how it is constituted and the effect that this has on accountabilities, compliance and on mechanisms of change. This chapter concentrates on the formal aspects of regulation, what some have referred to as 'real regulation' (Jessop, 1995).

## **III.2 RATIONALE FOR REGULATION IN THE WATER SECTOR**

### **III.2.1 Introduction**

Regulation can be expressed as the exercise of control through the setting of rules and standards. In this respect it shares a number of commonalities with ideas of governance. Its usage contains implicit suggestions of a set of norms governing what is to be regarded as acceptable conduct. Exercise of control suggests the existence of power relationships and the presence of a number of participants and therefore goes beyond a one-way process of communication to one of interaction. There are other elements within regulation that need to be identified and explored so that when looking at the formal structures and their workings we may discern the influence, importance and role that they play in the exercise of regulation.

It is suggested above that regulation relies on a set of norms and rules. How are the norms formed, whose norms are they and what is their legitimacy? The rules could be seen as a formalisation of a dominant discourse such that actions and outcomes are interpreted in the light of that discourse. Thus there is the idea of judgement and competence to judge as well as boundaries (spheres of influence and control) within which this competence can be exercised. If there is judgement then there is the suggestion that there are means of sanction and coercion to counter deviation from norms and re-establish the required harmonious relationships. Regulation seeks to remove tension through ensuring conformity to rules and norms.

Facilitating the interchange between those who regulate and those who are regulated (against) there are many mediums of exchange. In many instances, what is being exchanged are accounts, the various parties are giving accounts - being accountable to each other. Accountability in the informal sense that the parties acknowledge that they

are required to render and use accounts as a means of demonstrating conformity to the rules and norms. Such accounts are contestable, become the focal point of judgement and instruments in the exercise of power.

In a more formal sense however, regulation is an outcome of a legislative process. The legislative process expresses what are to be regarded as acceptable norms, it establishes the framework for the implementation of its rules and lays out the formal structures that give expression to that framework. In other words legislation seeks to establish regulatory practices. What goes on in practice may of course differ from that which was envisaged, especially given the forces that usually govern the introduction and drafting of legislation. Regulation and regulatory practices are not static concepts but rather dynamic and interactive processes. They are processes through which power and discipline are exercised, implying a set of reciprocal relationships and legitimacies, formalised through legislation but given substance through regulatory practices. Regulation and regulatory practices mirror and represent the interplay and reinterpretation of norms and challenges to norms and, the construction of acceptable social behaviour that markets alone cannot reconcile. Regulation is at the foundation of a liberal market economy.

### **III.2.2 Rationale**

There are a number of reasons advanced as to why there is a need for regulation in the water sector. They may arise from economic, social or environmental reasons though it should be appreciated that often these are interconnected. The most often cited reason arises from economic considerations, the fact that water companies are natural monopolies within their geographic area of operation (Rees, 1988). All consumers have to make use of their services regularly and the efficient supply affects the whole economy. Thus effective regulation, or direction, can be beneficial to the economy. There is also a widespread view that the water sector is special and as such should not be subject solely to commercial considerations (Currie, 1997). The characteristics of a natural monopoly include the existence of economies of scale, which acts as an effective barrier to the entry of competition, a case of market failure than leads to sub-optimal outcomes in terms of technical and allocative efficiency. In addition to this there are other characteristics such as capital intensity, non storability with fluctuating demand, locational specificity, production of necessary or essential commodities and, direct connection to customers (Farrer, 1902 cited in Newberry, 1999).

It is the last two of these reasons perhaps more than the others that ensure some form of public interest in the production and supply of water. For mainstream economists market failure is an anathema that must be addressed, if market forces cannot be introduced directly then regulation is a second best option. The concern is that without regulation (preferably by market forces) the monopolist would exploit the dominant position by providing a poor quality service at a high cost to consumers. By extension of the same argument, the absence of markets for social and environmental goods and services means that they too will be exploited, without regard for the potential damage that this may cause. Social and environmental goods and services become externalities, whereby a producer incurs no cost in exploiting the services that they provide but society does. Regulation is a means of internalising such externalities. Market failure thus becomes the rationale for intervention, of whatever form, and it emphasises the dependence of the regulators on political process and what is politically acceptable. Regulators are therefore interdependent on government and the State (Robinson, 1999). Implicit in this is the premise that the State knows how to make things better than they are and that on this basis it is able to institut(ionalis)e regulation.

The State now seeks to balance competing claims. On the one hand there are the claims of industry and 'capital' to a return on investment in assets that cannot be moved and that its rights will be protected against arbitrary (political) interference. On the other the 'rights' of workers, voters and consumers need to be protected. At the same time water companies must satisfy both consumers and investors; consumers have a voice through the political process and investors through their market activities. As Robinson (1999) observed, regulation is imposed by government (as the policy monopolist) while in power, using market failure as the intellectual justification. It posits a benevolent government acting altruistically to detect failures and then acting in the public interest. What may be termed government, the act of governing.

However, what has been put in place is governance - regulatory frameworks. This being more than structures and which consist of organisations that regulate, are regulated or contribute to regulation as well as the web of rules, procedures and relationships. Institutions encompass sets of rules (*formal and informal*) that organise and constrain human interactions and they include established laws, custom and practice (Newberry, 1999). A complex web of norms, expectations, and sanctions supports these (discourses). Regulatory institutions/frameworks have by their nature, great inertia and are historically dependent. One view of regulation would suggest that

the institutions of regulation result from a demand for regulation and a process of bargaining between parties. Customers require regulation as a means of countering the commercial power of industry and limiting the scope for exploitation, whether that be economic, social or environmental. On the other hand regulation is seen by industry to grant it rights to act in a certain manner, create conditions of relative certainty and protection of their commercial interests. The State becomes a willing participant as it wishes to enjoy the reflected kudos that securing the benefits expected by the various participants would give it.

However, if we see regulation as the outcome of bargaining between parties there is a dynamic element involved. Bargaining suggests it will be in the interests of each of the parties to critique the system in order to gain further advantages. This can be observed in the debate concerning the regulation of the utilities sector and by extension of the water industry. It has been argued that regulation is inefficient due to problems arising from asymmetric information and commitment by the parties to the process (Newberry, 1999). Others have argued that the whole premise on which regulation is founded is flawed (Robinson, 1998 and 1999) and that it contains such perils as bureaucratic expansionist tendencies, increasing costs, restriction of entrepreneurship and managerial development and, ossification (Water UK, 2001). To counter this the introduction of greater competition is said to be necessary and a lightening of the regulatory burden. Competition is good, it relies on market forces to achieve efficient outcomes that all will benefit from. Even the regulators themselves and the State are wedded to the idea of the introduction of greater competition and the virtues of the market place (Currie, 1997, Robinson, 1999, Ofwat, 1998, DETR, 2000). It would seem that we are in danger of completing a circle and ignoring the reasons for introducing regulation in the first place. It is clear from this that the process of bargaining over the institutions of regulation is still on-going.

It is perhaps fair to say that it is not the rationale for regulation that is being questioned but rather the practice. Evidence of this questioning can be seen in the decision of the Labour Party when it came into government in 1997 to set up a review examining utility regulation (Dickie, 1996). This arose out of the concerns of the party whilst in opposition and contained in the 'Vision for Growth' (1996) document, a quarter of which was devoted to utilities.

**III.3 REGULATORY FRAMEWORK**

When the water industry was privatised in 1989, it had been recognised by the State that there would have to be a separation of operational and regulatory functions (Rees and Synnott, 1988; Hassan, 1998). The Water Act 1989 saw the creation of two statutory bodies charged with the principle responsibility of regulating the affairs of the water industry, the National Rivers Authority (NRA) and the Office of Water Services (Ofwat). The form of regulation and its institutions put in place are peculiarly British. In Britain it is possible for legislation to be introduced into Parliament that will over rule past Acts of Parliament making legislative commitment low in certain cases. However, the judiciary and courts are independent of Parliament and are able to adjudicate and uphold matters of contract without, overt, political interference. Therefore the Water Act 1989 set out the granting of Licenses to the privatised water companies. It is in the Licenses that the main body of the regulations are set out, as part of the contract entered into, and typically such Licenses to operate run for 25 years before coming up for renewal. Such a system removes the threat of party political interference via Parliamentary Acts. It relies on the courts and, any changes to the conditions of the License have to be negotiated. This protects the interests of capital and provides a stable contract between all parties, though one that can be adapted to changes in conditions and circumstances. There have been a number of changes to License conditions negotiated between Ofwat and License holders, often claimed by Ofwat to strengthen the conditions that the holder must meet.

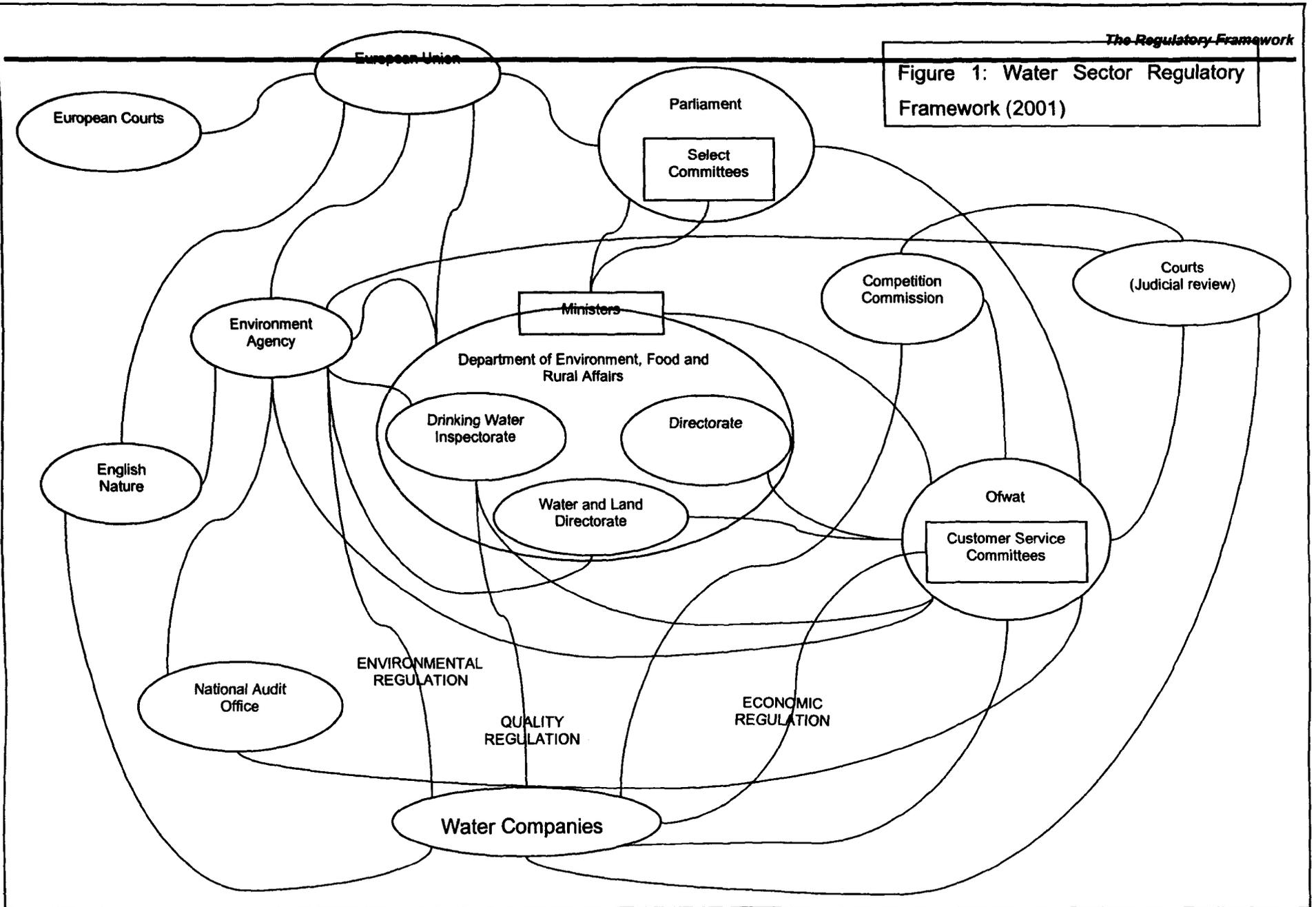
The regulatory framework has emerged out of legislative processes that have created new institutions and at the same time involving other established institutions as well as drawing in others with which there are some commonalities. Given the high political profile of water, its characteristics and importance as an economic and environmental good, it is inevitable that the activities associated with it would be subject to a myriad of regulations and regulatory instruments. For the same reasons it is no wonder that regulation is seen as too complicated and overbearing<sup>2</sup>. The Figure 1 indicates some of the main features of the current regulatory framework. The main features will be discussed further but it can be noted that there are four main spheres of regulation; economic, social, environmental and quality, each with their own, differing, regulator.

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<sup>2</sup> <http://www.cabinet-office.gov.uk/regulation/taskforce/index.htm>

Though it is fair to say that with respect to the social this is more often than not exercised through economic regulation.

Figure 1: Water Sector Regulatory Framework (2001)



Although Figure 1 is only intended to give an idealised understanding of the framework and not all of the linkages have been included, it should be evident that the framework of regulation is complex. The three principle regulators, environment, water quality and economic have been highlighted. Absent from this is social regulation, which is exercised at arms length by the State in a number of different forms, mostly through Ofwat. What is clear though is that regulation is carried out at 'arms length' from the State; the organs of the State are not directly involved with the hands on application of regulation across all the different spheres. It should also be apparent from this that no one sector of regulation, be it economic, environmental or social, can be exercised independently or in isolation of the others, even though the institutional structure is far from integrated.

The following sections outline some of the main characteristics of the regulating bodies. The interrelationships between the various bodies indicates the lines of responsibility and accountability of the various bodies, though some of these axes of accountability are far from explicit and often lacking in any formal powers of action and redress.

### III.4 ECONOMIC REGULATION

#### III.4.1 Ofwat

Given the conditions prevailing in the second half of the 1980's it was almost unavoidable that some form of tough regulatory regime would be put in place alongside privatisation. The very nature of a natural monopoly per se and the decision to retain regional monopolies meant that there would be severe difficulties in introducing competition into such an industry. Lack of competition means that the regulator cannot discover, through the market, what the efficient costs are for the industry and so they have to rely on information supplied by the utilities, giving rise to the problems of asymmetry of information. Regionalisation, part of the form adopted, confers market power on the utility but can at least provide comparative information on performance. It allows *yardstick competition* to be introduced whereby the targets set for one utility depend on the performance of all the others. Further, there is still the possibility of take-over, another incentive to efficient management.

The Office of Water Services (Ofwat) was established as the economic regulator for the industry which owing to its remit, the ability to cap water charges and to set required levels of serviceability for key performance indicators, arguably, has the main influence over water companies. Certainly, water companies are dependent on Ofwat for the

determination of prices that can be charged to consumers and are responsible for submitting detailed returns to meet Ofwat's prescribed expenditure reporting requirements. On the basis of these returns Ofwat assesses whether companies have and can maintain the required levels of service provision as well as achieving mandated targets, the results of which are published annually (Ofwat, 2001). Expenditures including the cost of financing investment have to be achieved within the revenue received from the sale of water, at the price determined by Ofwat. Hence water companies are keenly aware of the power of the economic regulator and the need to ensure cost efficiency whilst maintaining levels of service.

In status Ofwat is a non-ministerial governmental department responsible directly to Parliament with independent powers under the 1991 Water Industry Act. The primary duties laid down in the Act of the Director General of Ofwat are twofold. These are to ensure that:

- The functions of a water and sewage company, as specified in the Act, are properly carried out; and,
- companies are able to finance their functions, in particular by securing a reasonable rate of return on their capital.

In addition the Director General's secondary duties are that:

- No undue preference nor undue discrimination in the way charges are fixed and recovered;
- Other aspects of consumer's interests are protected;
- Companies to promote the efficient use of water by consumer's (introduced in the Environment Act 1995);
- Provide incentives to reduce costs and pass the resulting savings on to the customers;
- Facilitate competition between existing and potential suppliers;
- To further the conservation, enhancement of flora, fauna and geological or physiographical features of special interest, but only in so far as they are consistent with the primary duties.

Price capping has an important influence on a water company in terms of controlling expenditures and the amount of capital investment that it is willing to undertake. It was designed with the belief that price capping:

“would limit prices and provide managers with the pressure and incentives to deliver greater efficiency and quality, reduced costs and effective investment and promote the welfare of the consumer. Furthermore the existence of a number of companies would enable comparison to be made of their relative efficiency and therefore determine differential prices which would require efficiency savings based on best practice.” (Shaoul 1997, p.484).

In other words price control would be achieved through “yardstick competition” based on the Director General of Ofwat making comparisons between water companies in relation to operating costs, capital investment and outputs such as levels of service, as a means of determining best practice.

Parliamentary Acts set out the duties and responsibilities of the regulator but the actual practice of economic regulation is not prescribed, in line with the philosophy of arms-length regulation espoused by the State. Ofwat, under the guidance of the first Director General, Ian Byatt, developed its own working practices over the years to give effect to discharge of those duties. This has taken the form of issuing position papers and guidance notes to industry setting out what the regulator expects of the industry with respect to certain matters. On the other hand such documents may be issued in response to some external initiative, such as an Act of Parliament, which will have an impact on the industry and must be accounted for by the regulator. Whilst the regulator might argue that this merely gives clarification to the regulatory process others have seen it as part of the growing burden of regulation. The insights of procedural rationality models are relevant in this respect. Decision makers are only rational within the bounds set by their skills, knowledge and habitual modes of thought and secondly, management goals are set subjectively, being determined by an individuals value system, range of experience and knowledge. The conclusion might be reached that the dominance of personalities has probably had much to do with the system of economic regulation that has emerged in the water sector during the first decade since privatisation.

An obvious weakness of this comparative approach is that no allowance is made for the differing regional and historical conditions faced by the various water companies nor for the variable conditions of the water networks that each company inherited (Hassan 1998, Ogden and Anderson 1999, Shaoul 1997). However, there continues to be a strong held belief that comparative competition (Fletcher, 2000) and a system of price capping provides management with the incentive to control and reduce costs if

they wish to improve profit margins whilst maintaining levels of services to consumers. That this has not always been the case is highlighted by the problem of leakage, which in the end required external intervention to bring about improvements that the market forces failed to achieve (NAO 2000, p.2).

Inefficiencies in performance which increase costs mean the resultant incremental costs cannot be passed on to customers. A problem with the comparative approach necessary to create a competitive environment is the way it may stifle companies in being innovative or in attempts to dramatically improve levels of service or even in taking initiatives for improving sustainable development. The regulator in setting price caps will err on the side of caution and thus favour rates that will yield above-average profits to the companies, rather than risk an investment strike. This is unsustainable unless periodically the price cap is reset in line with costs and better performance information. This form of profit sharing reduces the incentives to reduce costs and is not helped when utilities can lay claim to special circumstances that only pertain to their operations. Thus there are weak incentives and few rewards, especially if the regulator is of the opinion that the level of service provided exceeds that which the customer expects and not what the customer requires (Cowan, 1994). Though quite how robust the methodology used to determine customer preferences is open to question and was much debated at the 1999 Price Review.

It would be wrong to assume that all regulatory institutional development has come about as a result of the economic regulator. In this respect the outcome of the regulatory review and subsequent initiatives by government have been just as important and have moved it in directions which the regulator alone would not have been able to. The review noted that economic regulators have wide discretionary powers on social and environmental issues, which are pursued in ways that do not always reflect Minister's objectives. It suggests that there is a need for a framework to reflect these objectives and proposes legislation to issue statutory guidance which regulators would have a duty to have regard for (Robinson, 1999). These recommendations have been followed up in some cases by legislation with the Competition Act in 1998, the Water Industry Act in 1999 and the draft Water Bill in November 2000.

Of these the Water Industry Act, 1999 is of interest as it contained a number of provisions that are of a social nature. This in effect makes the economic regulator responsible for the implementation of the government's social policy. For example, it allows the Secretary of State to provide guidance to Ofwat on the treatment of

vulnerable customers. It also removed companies' abilities to disconnect household customers for non-payment of charges. There does appear to be a tendency for the government to use the economic regulator to address social policy issues, through guidance from the Secretary of State. Such matters, it could be argued are more properly dealt with through the tax and welfare system.

The primary duties of Ofwat clearly state that it must ensure companies are able to finance their functions (Water Industry Act 1991, Water Industry Act 1999). These also include a number of duties designed primarily to protect consumers. There should, for example, be no discrimination in the way charges are fixed and incentives should exist to guarantee any cost savings are passed on to customers. Specific and indicative of these duties is that Ofwat must facilitate competition, as this was one of the justifications for privatisation in the first place. The secondary duties of Ofwat are to promote efficiency in the use of water by consumers and significantly, 'to further the conservation, enhancement of flora, fauna and geological or physiographical (landscape) features of special interest, **but only in so far as they are consistent with the primary duties**' (Ofwat, 1997, emphasis added). Clearly, and with deliberate intent, the economic duties are to be held supreme for Ofwat in keeping with it as the economic regulator.

Ofwat, through its Director General is openly responsible to Parliament for its actions. In exercising its duties, Ofwat consults with, and receives advice from, other government agencies as well as the water companies themselves though it is under no legal obligation to take such views into account when exercising its function as an economic regulator. Guaranteeing the financial viability of water companies by the regulator is essential to ensure that the water companies do not fall prey to the ultimate sanction of the market through bankruptcy (Schofield and Shaoul 1996). It has to be inferred from this that wider issues of sustainability, reflecting social, environmental and ecological concerns, through the introduction and promotion of appropriate schemes and actions will receive little support from Ofwat if they contribute to rising water bills or diminished financial performance by water companies (Cashman, Lewis & Birkin, 2003). The last water price determination process by Ofwat in 1999, whilst endorsing the implementation of the government's environmental quality programme (National Environmental Programme, EA, 1999), only gives water companies the means to carry out *statutory* environmental improvements. The Wildlife Trust's response to this was, "In tightly limiting the resources available for environmental improvements, Ofwat is

jeopardising the future of much of the vital discretionary conservation work carried out by water companies.” (Wildlife Trust, 1999).

### **III.4.2 Competition Commission**

The Competition Commission, taking over from the Monopolies and Mergers Commission in 1999, is not a frontline economic regulator. However, it is there to exercise oversight of the economic regulator in respect of the conditions contained within a companies’ license. Appeal to the Commission is open to both parties with respect to changes in license conditions; the basis of referral is whether amendments to license might be expected “to operate against the public interest”. The Commission takes evidence from a wide cross section of parties and produces a report on its findings with recommendations. The economic regulator’s discretion as to whether to accept the recommendations or not is limited, it has been the case that they are accepted.

The cases referred to the Commission have been over the Periodic Price Reviews, challenging the regulator’s determination. A particular problem from the point of view of those regulated is that they cannot refer specific aspects of a determination to the Commission. It has to be all or nothing. This they contend constitutes an unreasonable restriction and one that has deterred many from embarking on this course of action. In the opinion of some in the water industry this is a matter that requires attention. A view not shared by the economic regulator (Fletcher, 2002, pers. comm.).

In a certain respect given the terms of reference it could be said that the Commission acts in a normative manner, looking at the way regulation ought to work in order to maximise some concept of social welfare for the good of society.

Although the Minister retains power of veto over the economic regulator as well as the ability to instruct the regulator not to make reference to the Commission this has never been employed. The Minister can only act after a decision is published and the spectre of political interference would under these circumstances certainly cause problems. As a means of pre-empting appeals the regulator has taken to publishing a great deal more information regarding price determinations and have sought to argue that they are following the “Commissions methodology” (Green, 1999, p.3).

### III.5 NON-ECONOMIC REGULATION

In the non-economic field of regulation there are a number of other bodies, some statutory some not, that have a role to play, see Figure 1. These include 'front line' bodies such as the Environment Agency, Drinking Water Inspectorate and English Nature as well as a host of others that form part of the institutions of regulation in the water sector. Some of these also perform a regulatory function, acting as a check on the activities of the participants in the water sector through the setting and enforcement of rules. The second line regulators include (though not exhaustively) the National Audit Office, Parliamentary select committees, the judiciary, Customer Services Committees, Planning Inspectorate, DEFRA as well as organs of the European Union. It is not the intention to dwell on each of these but rather to refer to what are considered to be the major non-economic bodies. The 'front line' regulators are seen as performing a specific range of regulatory functions (e.g. environmental or water quality related) whilst the others provide either policy direction (e.g. DEFRA or EU) or perform an oversight role (i.e. accountability, transparency or equity of regulation).

#### III.5.1 The Environment Agency

The 1995 Environment Act created the Environment Agency (EA) bringing together the former National Rivers Authority, Her Majesty's Inspectorate of Pollution, Local Waste Regulation Authorities and some units of the Department of Environment. The Act, section 4 specifies the principle aim and objectives of the EA, which are:

'It shall be the principle aim of the Agency (subject to and in accordance with the provisions of this Act or any other enactment and taking into account any likely cost) in discharging its functions so to protect or enhance the environment, taken as a whole, as to make the contribution that Ministers consider appropriate towards attaining the objective of achieving sustainable development.'

The Agency must take into account any likely costs, which are defined as including costs to the environment. The government, through the Secretary for State, has a responsibility to issue statutory guidance to the EA on its objectives and its contribution to sustainable development. In addition Ministers have issued Management Statements that summarise their aims and objectives for the EA. Together these set the policy framework for the EA, which it is then responsible for translation into practice. Within this the EA has broad discretionary freedom to exercise its responsibilities (Streeter, 1998). In addition to this, the EA also advises government on

the development and implementation of environmental objectives and targets and, provides assistance on national and international regulatory issues. It has therefore assumed a central role not only in implementing, but also in formulating, environmental policies.

Responsibilities of the EA include pollution control, management of water resources, flood defence, fisheries, conservation and recreation. Fundamentally, the EA has responsibility for all “controlled waters” under the Water Resources Act (1991) and can take action against unauthorised pollution discharges. As noted above, in carrying out its duties the EA has to have regard for costs and benefits and any effect on the economic and social well-being of local communities. It also compiles reports on the state of the environment.

In contrast to Ofwat, the EA is a non-departmental public body having a Board appointed by Ministers through whom it is accountable to Parliament (Environment Agency, 1999). The Agency has devolved regional structure to allow for flexibility at local level with the head office dealing with policy and standards. The main instruments for managing activities affecting the environment are authorisations (consents) and licenses, typically command and control regulation, it has yet to develop (in conjunction with DEFRA) and implement regulation based on economic instruments. One of the objectives of the EA is to develop relationships and links locally with the public and customers. Literature produced by the EA suggests that a consultative approach is taken to achieve this objective reflecting the statutory duties that when exercising power it must take into account the likely costs and benefits, unless unreasonable or unlawful to do so. Thus there appears to be the ability to exercise greater discretion at regional and local levels. Recourse to legal action and the imposition of fines seems mainly to relate to pollution incidents and the regulation of industrial processes (Environment Agency, 2004), in contrast with the more legalistic approach of the DWI. Increasingly statutory environmental obligations are originating from the European Union with the EA having the responsibility for the implementation and application of these obligations, noting that often the EA has played a role in the negotiations regarding environmental directives. What is also of interest is that the scope and impact of EU directives is bringing more and more aspects of economic activity within the ambit of environmental regulation and control, the Water Framework Directive being a case in point (EU, 2000).

The work of the EA has an enormous impact on water companies' capital expenditure and on Ofwat's Periodic Review process. For the quinquennial Asset Management

Programme (AMP) the EA prepares an environmental programme based on its interpretation of the environmental obligations it considers should be placed on water companies. The environmental obligations arise from both EU directives (the principle source) and UK legislation, and are prepared in consultation with DEFRA and English Nature. Endorsement of this programme has in the past been sought from the Secretaries of State, reinforcing the institutional legitimacy of its submissions. The extent and hence the cost of meeting the EA's environmental programme has been a source of tension between the EA and Ofwat (Kinnersley, 1998, p71). It could also be said that this represents a situation that gives rise to criticism of regulatory institutions and their perceived expansionist tendencies. The regulator opportunistically imposes their interpretation of obligations on industry while not having to bear the cost of meeting the obligations (Newberry, 1999).

### **III.5.2 Drinking Water Inspectorate**

The DWI is part of DEFRA, which means it is responsible to the Secretary of State. As the name suggests the DWI is the water quality regulator and ensures that companies comply with their statutory duty to supply wholesome water. Water companies are prosecuted if they fail to comply with the water quality standards. However, as well as taking a reactive role in applying standards, the DWI has developed a number of proactive strategies such as launching requirements for water companies to prepare water quality management plans (DWI, 2000). In addition, the DWI not only monitors compliance by water companies but it also provides information about that compliance to Ofwat. Ofwat uses the information as part of its decision as to whether a company has maintained serviceability to customers and thus what price limits to provide for the maintenance of serviceability. Economic regulation is, therefore, partly governed by statistics compiled by a third party and neither party has any accountability towards each other.

### **III.5.3 English Nature**

English Nature (EN) is a statutory non departmental government funded body whose purpose is to promote conservation of England's wildlife and natural features. The main duties of EN are to give effect to the provisions of various Acts of Parliament such as Environmental Protection Act 1990 and these include:

- the establishment and management of National Nature Reserves;

- notification and safeguarding of Sites of Special Scientific Interest (SSSI's);
- advocacy of policies to promote nature conservation;
- guidance and advice concerning nature conservation;
- promotion of nature conservation research.

It works to try to ensure that the nature conservation goals derived from the various Acts are integrated within other policies, practices and programmes of other government agencies and implementation departments. It has special responsibility for Sites of Special Scientific Interest (SSSI), 1300 under its control, and it is in this respect that it works closely with the EA and the water industry. Indeed, freshwater has been identified as one of six key sectors in which it is seeking to make a contribution to biodiversity and prevention of damage. It has particular responsibilities in these areas that to some extent overlap those of the EA and go beyond it. However, it has limited regulatory and enforcement powers, and has to rely on consultation and the duties of other bodies such as EA, Ofwat and water companies to consult with it on matters and activities affecting SSSI's. In its own view the adoption of Biodiversity Action Plans in 1995 and the implementation of the EU Directive on the Conservation of Natural Habitats and of Wildlife Fauna and Flora have tilted the balance in favour of greater commitment conservation action (EN, 2000). Particular areas of interest of EN are the reduction of pollution of freshwaters, floodplain management, shoreline management as well as sustainable development, nature conservation issues and impacts on SSSI's.

### **III.5.4 Other Regulatory Bodies**

There are quite a number of other bodies which it could be argued also have a regulatory role and therefore are part of the institutional framework of regulation. For the most part these bodies play a peripheral role that comes into occasional play and when it does with a limited scope. The exception to this is DEFRA which it could be argued plays a key role in the development of policy and the policy framework. As part of government it has a responsibility to advise ministers and at the same time give substance to the political wishes of ministers. It is responsible for the development of legislation that forms the legal basis for regulation. The one area where it perhaps has a prime role to play is in giving effect to social policies as this is an area of regulation and sustainability that is not explicitly covered by any of the other regulatory bodies. Given that it is difficult to separate social matters from economic circumstances and the

principle of independence of the economic regulator, it is unsurprising that government regulates through legislative action, laying down specific conditions (e.g. Water Industry Act, 1999). As such measures have an economic impact, they have to be taken into account by the economic regulator and allowed for in his dealings with the water industry.

It is also significant that it is from this particular Ministry that the promotion and monitoring of sustainable development emanates and is the lead Ministry for the 'Greening of Government' initiative. DEFRA provides further evidence of the highly regulated state of the water industry in that as well as these front-line regulators, there are two Directorates within an Environmental Protection Group that play a policy formulation role. One is the Environmental Protection Strategy (EPS), which has an important co-ordinating role for the Group. It examines the Government's environmental policies and provides economic and statistical advice and analytical support to the whole Group. The EPS is the base for the Sustainable Development Unit, which is responsible for promoting sustainable development. Significantly, EPS has policy and financial oversight for the Environment Agency. The co-ordinating role of the EPS is also apparent in the way it acts as the focal point for the European Environment Agency and has responsibility for the co-ordination of the UK's interests in the United Nations Commission on Sustainable Development and the United Nations Environment Programme among other roles.

The second directorate within the Environment Protection Group is the Water and Land Directorate (WLD), which is responsible for all aspects of water policy in England, including water supply and resources and the regulatory systems for the water environment and the water industry. The apparent integration of these different bodies is illustrated in the way the WLD works closely with the EA, which enforces water quality standards other than drinking water quality, and with Ofwat. In this sense, there would seem to be a circularity to the regulation impacting on operating companies within the water industry. Ofwat acts as the economic regulator (and by default social policy) and the other regulators attend to quality and a wide range of environmental concerns in terms of the extraction of water, waterways, water quality, the treatment of waste water and indirectly, sustainable development. In theory, through a government ministry and in particular the EPS, the various pieces of regulation are co-ordinated and integrated. However, it still remains that DEFRA is a department of the environment rather than *the* department for the environment and certainly the 2001 ministerial reorganisation of government departments was seen by some

commentators as a regressive move for the importance of the environment and sustainability in government policy.

The EU, as noted, is an important source of regulation, albeit that such regulation is not directly applied by the EU itself but rather through national implementing agencies such as the EA. It was the threat of non-compliance with EU regulations that provided an important impetus for the restructuring of the water industry in England and Wales. Its practical influence therefore cannot be underestimated even though the development of regulation policy appears to take place remotely and with little contact with the sector. An appearance that would seem to benefit some parties though it conveniently ignores the active but often unseen role played by bodies such as DEFRA and the EA in EU policy formulation.

Amongst other bodies that perform some form of regulation over the affairs of the water industry there are also the Planning Inspectorate and local authorities, among others. Such bodies usually have a limited and specific role to play and as such do not have a strategic influence on the conduct of the industry.

### **III.5.5 Oversight**

The oversight bodies provide a degree of accountability and an opportunity to question the governance and actions of the various regulators. There are three main bodies of interest: the National Audit Office; Parliamentary select committees; and Customer Service Committees.

The National Audit Office's (NAO) work concentrates on auditing government departments, agencies and other public bodies. In addition to the traditional role of financial auditing and more recently value for money audits, it investigates the economy, efficiency and effectiveness with which departments and other public bodies have spent public money. The Parliamentary Committee on Public Accounts (PAC) investigates a significant proportion of NAO reports and issues its own reports. In most cases these result in the implementation of NAO and PAC recommendations. The value for money studies are said to lead to improved quality of public service while financial audits to improvements in compliance with corporate governance (NAO, 2002). Over the past ten years the NAO has produced reports associated with the water sector ranging from an investigation of the pricing regime used to regulate privatised utilities, to the leakage and water efficiency work of Ofwat, to regulating and monitoring quality of service to customers and, the work of the Director Generals. The

NAO appears to restrict itself to investigating matters as it finds them rather than passing any normative judgements about the activities of the bodies it audits.

Select committees are appointed by Parliament to scrutinise the work of government departments, the composition of the committees approximately reflects the party proportions in the House of Commons. Other than departmental committees, there are three committees that consider external matters; Public Accounts and Environmental Audit being two of them. The Environmental Audit Committee was only established in 1997. It considers the extent to which the policies of government departments and non-departmental public bodies contribute to environmental protection and sustainable development. It also seeks to audit their performance against targets they have been set.

Departmental select committees shadow each Department of State and are there “to examine the expenditure, administration and policy” of the departments. The committee will select a topic for inquiry take advice and evidence and issue a report to the House. The committees have powers to “send for persons, papers and records” and appoint specialist advisers to assist them in their work. The government is expected to publish a reply to such reports within two months. Since 1995, provision has been made for committee reports to be debated on three Wednesday mornings of each session of Parliament<sup>3</sup>. Select committees have no formal powers to order a regulator (or company) to undertake actions or comply with recommendations but if a regulator rejects a committee’s recommendation the reasons for doing so must be given in writing. Committee recommendations can be powerful means of change. It is evident then that such committees can exert a powerful influence over government departments, agencies and non-departmental bodies and have wide powers of investigation but have no powers outside of the institutions of government. On the downside given their limited number, the pressure on members’ time and the wide range of potential topics that could be investigated limits the effectiveness of their oversight role. It also raises questions about the basis on which topics for investigation are selected, as there will be a temptation to be seen to be dealing with topical rather than perhaps more fundamental issues.

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<sup>3</sup> (<http://www.publications.parliament.uk/pa/cm/cmhome.htm>)

The Customer Service Committees (CSCs) are statutory bodies established under the Water Act 1989 and Water Industry Act 1991. Their duties are to keep under review all matters that affect the interests of customers and, to consult, investigate such matters and make representations to water companies. Such matters as it can deal with must relate to any of the functions of a water company. The members of the CSCs are local people appointed by the Director General of Ofwat and Ofwat as part of its own budget funds the activities of the CSCs. Ofwat provides legal and technical support advice as well as other support (Ofwat, 2000). By themselves they have no compulsive power (ONCC, 2000 p9) and rely on persuasion to achieve their aims and objectives but they do, through their actions, hold water companies accountable and require them to account for their actions and behaviour. Under the current set up the CSCs are seen as an extension of Ofwat with little scope for independent action, a situation that has been criticised and led for calls for reform (Water Voice, 2002,). The government has indicated that it intends in any future Water Bill to establish an independent national Consumer Council for Water supported by regional committees. However, it is still unclear as to what enforcement powers it would be able to exercise on behalf of customers, its relationships with other regulators and its accountability.

Under English law any branch of government, including regulators, can be subject to judicial review following a complaint. The courts concern themselves with determining if proper procedures were followed and if the decision reached was reasonable. In this respect they could be considered as having a limited normative role. Generally the recourse to judicial review is avoided by most parties and is considered to be a course of last resort.

### III.6 COORDINATION

Regardless of which ministry has named responsibility, rationality suggests regulators for the environment would be working in concert with other regulators towards achieving the overall aim of sustainability. It has to be observed, however, that the regulatory framework when applied to the water industry is quite complex. It involves a number of regulators with different remits and powers. Once these remits and the organisational structures of the regulators are investigated the complexity becomes more apparent.

Of more importance is the concern that however committed the people within these structures are towards combining the economic with social and environmental concerns, doubts are raised about how the regulatory bodies are co-ordinated in

moves towards sustainable development when each has to be primarily focused on its own remit. Such concern for co-ordination of the overall goal of sustainability is more attributable to how the economic regulator is positioned in the framework, with its primary duties seeming to override all others. The complexity of the framework raises question about how effective it is in practise with the companies to some extent caught in the middle.

Certainly, on the face of it, the water industry is highly regulated but this regulation is also bureaucratic to the extent that there might be too many actors (interests) involved in relation to actioning and achieving real sustainability. In other words, though there is a clear intent to ensure that environmental and economic concerns are addressed, the bureaucracy created involves so many parties with so many different remits and professional autonomies (Egeberg, 1995) it seems inevitably to lead to difficulties in terms of how the regulation is implemented or best practice disseminated. It may even, in practice, lead to conflicts between the different actors (Egeberg, 1995), in this case the regulators, or at least different interpretations or different degrees of enforcement depending upon the individuals responsible for policing the regulation and regional variations.

More importantly, it is how the industry, in the form of the water companies are able to respond and comply satisfactorily with the regulation and at the same time perform as commercial organisations. This raises the issue of accountability (Ogden, 1995) as well as that of sustainability. Needing to satisfy a range of interests reflected by shareholders, economic regulators, environmental regulators and government who are the means of promoting and enforcing sustainability as well as other stakeholders affected by the activities of water companies is a difficult balancing act. The more so if the interpretation as to what sustainability is and how it is best promoted varies between organisations.

The institutional structure of the water sector is replete with tensions, often focused around particular nexus points - such as periodic price reviews, legislation or other issues that require the interpretation and balancing of multiple societal goals. These draw parties into the debate as to how to accommodate and resolve these tension with the formal bodies of regulation making some of the most significant contributions.

**III.7 SUMMARY**

This chapter, building on the previous chapter, has given an outline of the main regulatory bodies within the water sector of England and Wales. A distinction has been made between economic and non-economic regulators, acknowledging the predominant importance that the current regulatory framework, developed since privatisation in 1989, has given to economic matters. With respect to non-economic regulation it has been shown that there are a variety of other regulatory bodies that form part of institutions of regulation. These range from those in the 'front line' such as the EA and DWI to others that play a more select and limited role. Also important is the oversight of the practice of regulation, which touch on issues of governance and accountability. The outline provided illustrates the complexity of the regulatory framework, not only in its formal structure but also carried over into its informal relationships that exist with and alongside it. The often overlapping and interconnectedness of regulatory organisations, even given some form of sustainability remit, is problematic as each will have its own envisioning of sustainability and their role. It is the role of the State to provide an overall vision and guidance but the exercise of regulation at arms length inhibits the development of coherent and coordinated approaches. Thus the development of regulating for sustainability is a more fluid than focused process. It is the fluid, non-deterministic nature of regulation that makes it a suitable subject for inquiry.

## CHAPTER IV: SUSTAINABLE IN THEORY

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*'In one moment I've seen what has hereto been  
Enveloped in absolute mystery,  
And without extra charge I will give you at large  
A Lesson in Natural History.'*

Lewis Carroll, *The Hunting of the Snark*

### IV.1 INTRODUCTION

This chapter through a review of literature investigates the meaning of sustainability and how it is being operationalised with particular reference to the water industry in England and Wales. Sustainability does not exist of itself, it is largely an interpretation built from the observation of the interplay between science and society, and the implications as to what this might mean for future actions. It is in the interpretation of meanings and the carry over into policy that leads to the observation that sustainability is a socially constructed rather than an underlying perception of a scientific reality. The interpretations that are given to sustainability and their power to inform and shape link directly to regulation, in terms of what is to be regulated and by what means. The conceptualisation and interpretation of sustainability coupled with systems of political and social beliefs provide the rationale for incorporating sustainability into regulation. There is recognition that without regulatory processes it would be difficult if not impossible to provide the safeguards necessary to mutually maintain and improve social and natural environments. Without forms of regulation it would be difficult to address the inadequacies of a free market based system that is built on a particular concept of the utility maximising individuals that tend to see nature and society as resource. It provides a basis for the critiquing of interpretations of sustainability that form the basis of some of the chapters that deal with the presentation and analysis of the field data.

The first part of the chapter attempts to look at some of the ways in which sustainability has been conceptualised and how it has informed thinking. This is considered important because conceptualising sustainability implies a set of normative beliefs and values that have the ability to exercise political influence over policy formation and implementation. The ideas concerning the formulation of weak and strong sustainability concepts are introduced and the difficulties that arise from them are touched upon. It is not the intention to discuss the various definitions of sustainability or to critique them with the idea of arriving at some ideal formulation of sustainability. It

is rather to indicate the breadth of the subject and the way in which definitions reflect the background and interests of those doing the defining. Thus recognising the different interpretations of sustainability should lead to a richer understanding of sustainability as a concept. It also enables us to go beyond definition and to examine praxis in the light of theory.

The second part provides a brief outline of the actions in the UK indicating how sustainability has provided a particular focus for the State. Of particular interest has been the growing trend for formal duties towards sustainable development to be placed upon new statutory bodies (such as the Welsh Assembly) and introduced for existing bodies (such as Ofwat). There is a growing use of sustainability reporting and of indicators by the State and its various agencies and this has been mimicked by the water industry.

## IV.2 APPROACHING SUSTAINABILITY

In considering sustainability and the role of regulation a natural starting point is the concept of sustainability itself, for how can there be an exploration of the impact of regulation on sustainability without first considering what might be meant and understood by sustainability. The nature of sustainability, its perceived importance and the understandings of it mean many different things to many different people. The importance accorded to sustainability would seem to depend on understanding as much as on other factors. Lastly, there is the question as to how sustainability is being transformed from a concept into a working ethos that permeates thinking on social, environmental and economic matters. This indicates the institutionalisation of sustainability as a site of contest and exercising of power.

The literature review takes a very broad approach. It is held that there is no one absolute or correct theoretical approach to sustainability but rather any number of theoretical perspectives that could be used. What is of importance is their ability to inform and enlighten the understanding of observed behaviour and practice. Theory is like the lightening for a play, without it we would remain in the dark, with it we are presented with an array of possibilities to have our understanding of the actions shaped and guided – illuminated. Each light or bank of lights enables the observers to see the action in a different light, adding to comprehension and engagement leading to understanding (an interpretive act). No one light reveals all, each can add or subtract from our understanding. It is in this vein that the literature review of various theoretical perspectives has been approached. Through the literature this chapter seeks to

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explore the various frameworks for the understanding and interpretation of the political economy of sustainability. At one end of the spectrum there is the Marxian interpretation of the present system whilst at the other is a market based or liberal capitalist approach.

## IV.3 SUSTAINABILITY

### IV.3.1 Background

So much has been written about sustainability that it is hard to imagine that anything new is left to be said. Yet in spite of so much having been written or perhaps because of this it remains a contested concept, its meaning remaining far from clear (Bebbington, 2001, Lele, 1991, Pezzoli, 1997, Redclift, 1992). The lack of clarity is in part due to the broadness of the concept as well as to the formulation and the way it has entered into contemporary culture. It may be noted that sustainability is increasingly being used and applied in a range of circumstances – sustainable growth, sustainable business, sustainable cities, sustainable societies, sustainable institutions etc. and a swelling transdisciplinary literature on its meaning(s) (Pezzoli, 1997). The appropriation of sustainability in a variety of contexts is not just a reflection of academic interest, the complexity of themes but it also illustrates “the fluidity of conceptual categories and boundaries in the relatively open-textured context of political and social debate.” (Meadowcroft, 1999). More significantly it says something about the importance placed on it as principles that have something vital and important to say about our lives and the world we live in.

In many people’s minds the definition of sustainable development is associated with the Brundtland Commission and its report *‘Our Common Future’* (WCED, 1987) and the memorable phrase defining sustainable development to be that which “meets the needs of the present without compromising the ability of the future generations to meet their own needs”. Sustainability was formulated in terms of growth and development, of economic activity meeting human needs rather than protection and conservation of ecosystems. Such a formulation represented a step change from the conservationist approaches of the past to natural resources and its tendency to place Earth’s other species above people (Jamieson, 1998). The joining of the words ‘sustainable’ and ‘development’ enabled a broad coalition to emerge embracing those concerned with poverty to environmentalists. The ambiguous meaning of ‘sustainable’ in the expression is what enables such a wide and disparate discourse to emerge; it can mean almost anything one wants it to:

“The earliest meaning of sustain is to “support”, “uphold the course of” or “keep into being”. What corporate chief, treasury minister, or international civil servant would not embrace this meaning? Another meaning is “to provide with food and drink, or the necessities of life”. What underpaid urban worker or landless peasant would not accept this meaning? Still another definition is “to endure with out giving way or yielding”. What small farmer or entrepreneur does not resist “yielding” to the expansionary impulses of big capital and the State, and thereby take pride in ‘enduring’?” (O’Connor, 1994)

More recently sustainability has begun to take over from sustainable development as an overarching term while sustainable development together with expressions such as sustainable society and environmental sustainability are used to describe different aspects of sustainability. Perhaps it also reflects the difficulty of balancing the ambiguity against contradiction in sustainable development. Some have attributed the shift in part to the appropriation of the term by business and awareness that sustainable development should perhaps be directed towards social enablement rather than development as an end in itself (Jamieson, 1998). A key point that underlies these discourses is that, whether one talks of sustainable development or sustainability, the terms have taken on ideological and political content as well as ecological and economic content. As such, organisations associate and enter into its discourses as a means of enhancing their power, legitimacy and moral standing. In doing so they reinforce and shape not just those discourses but also the importance of its political content.

### **IV.3.2 Conceptualising Sustainability**

Meaning and interpretation cannot be free of the nature of the underlying assumptions made, they are not neutral or value free. The kinds of problems and solutions one sees are epistemologically and culturally based. To theorise about sustainability is to prescribe particular ways of conceptualising it and its relations, “conceptual systems concern not only what we (think we can) observe, or what we think exists yet cannot observe, but what we can do and how we can do it” (Sayer, 1992, p.59). By and large the dominant paradigm of sustainability is rooted in a western philosophy of science that only recognises the application of scientific principles to the discovery of knowledge. It has parted ways with earlier traditions in which technical control is just one element of basic human questions, such as “how should we live?” (Howe, 2000, p.13). Part of the tension seen in the various debates concerning the nature and

meaning of sustainability is the challenge it might pose to the dominant paradigm of a liberal democracy and rational, market based society, through the questioning of the nature of knowledge and value.

Sustainability inevitably becomes associated with normative principles such as preoccupation with human well-being, provision of basic needs, welfare of future generations, preservation of environmental resources and global life-support systems, integrating economics and environment in decision making and popular participation in development processes (Meadowcroft, 1997, p.429). Normative in the sense of not whether sustainability is a good thing but rather how, in what form and by what means it should inform policies and practices. Sustainability is also associated with boundaries and constraints, mostly it has to be said environmental, either through some idea of carrying capacity or brought about by human activities and agency. Such activities may be conceptualised as threatening life-supporting systems on which human welfare depends. Sustainability therefore carries within it the notion that it is not some form of present environmental or societal status quo that is sought but rather the potential transformation and evolution of both to something that has the ability to add to its richness and completeness, as a form of development. This is not some form of stable or even meta-stable state in which the forces of sustainability are in harmony with each other. As Meadowcroft (1997, p.430) observed, "Over time a society experiencing sustainable development will trace a social trajectory that reflects both an increase in social well-being and continued options for further advance." This captures the idea that as time goes on we are presented with an array of choices, opening up new sets of options and foreclosing on others. The challenge is to ensure that movement is along a path, which preserves future opportunities, and avoids deterioration of social, environmental and economic states.

### **IV.3.3 Role of the State**

It is unlikely that the preservation of opportunities will come about as a result of chance, given that it is the social, political and economic activities that are engaged in that have brought about unsustainable states. Human agency has brought the present condition about and it is human agency that will be required in order to move towards sustainability. The State inevitably plays a key role. It has the capacity and certain power to act across a broad spectrum as well as a range of instruments at its call. The State's actions will be guided by its own episteme and ontological construction of sustainability, reflecting (its) collective ideals and values.

This poses a dilemma. At one level we ascribe to the State the power to dictate and direct, for this is its role. What though is contested is not its power but rather the content, substance and instruments. The content of sustainability is contested and contestable and by extension so too is how different policies contribute to its realisation. The State has the power to operationalise the conceptualisation of sustainability, however the dominant discourse has been and is being woven. Sustainability, as discourse, draws diverse parties into its formation, complicating the active role of the State because as Jamieson (1998) observed “we can always ask what should be sustained, for what period, in what region; and even why sustainability is good, and if good, how good it is”. This is hardly likely to result in consensus about long-term issues; a concept does not of itself provide the motivation to act.

“A definition of whether any particular development path is technically sustainable does not, by itself, carry any special moral force. The definition of a straight line does not imply that there is any particular moral virtue in always walking in straight lines” (Beckerman, 1994)

Much of the discussion of sustainability as policy is conducted at a level of abstraction, technical complexity and philosophical obscurity that its practical uses become severely constrained. Yet it is at this level that guidance is most earnestly sought. Conversely, sustainability has proved to be most powerful in highly contextualised cases, for while it may be difficult to reach any consensus about what sustainability means globally it is far easier to have concrete ideas about what it would be like in a specific instance. Constraining a problem to one in which specific choices and trade-offs can be confronted and rendered intelligible increases the chances of consensus and action. It is the unconstrained nature of sustainability, its myriad of linkages and interconnectivity that baffles our fractured and fragmented understandings of it.

#### **IV.3.4 Nature and Sustainability**

The widespread implication of the literature is that at its most basic sustainability is an ecological concept. Ecosystems, even under pristine conditions do not evolve to a steady state point of equilibrium but are turbulent systems in constant flux (Worster, 1993, p.138). Under such conditions there is no constancy. If this is indeed the case then it begs the question as to what ‘sustainable’ can mean with respect to the environment – output from nature becomes ambiguous and arbitrary, adaptation is intrinsic and natural at many scales of time and space in nature. As Worster (ibid.) observes “What can sustainable use, let alone sustainable development, mean in a

natural world subject to so much disturbance and chaotic turbulence?" With such a view of the ecological environment the impact of human activity becomes problematic. At one level it might be seen as another factor adding to the turbulence of nature, a further complication but at another level the scale and magnitude of human disturbance appears to go beyond that natural systems' resilience and stability as well as its ability to accommodate the rates of change that are currently being experienced. Humans are a part of the natural world, relying on it and using it, and as such they must recognise the need for conscious participation. It is as much in man's own interest that this participation be responsible as Nature's, man and nature cannot be separated – biodiversity and ecological health are not optional extras. The unprecedented scale of the potential threats to continued human existence holds our attention and fears for the future.

However, human exploitation of nature raises significant problems for our understanding of sustainability. This calls into question the assumption that it is possible to determine sustainable carrying capacity in a changing world and how threats to nature might impinge on society. In the absence of clear ideas we end up relying on a utilitarian, econocentric definition of sustainability, values arise from use and those that do not are discarded in an attempt to make sense of the confusing ebb and flow of nature. In this one dimensional view, sustainability becomes a concept rooted in political economy and one with which business can be comfortable. There is a dualism in which sustainability poses a deep seated challenge liberal free-market systems but that at the same time provides the means of supporting its continued existence. "Economic growth provides the conditions in which protection of the environment can best be achieved, and environmental protection, in balance with other human goals, is necessary to achieve growth that is sustainable." (ICC, 1991). Environment and human (social) goals have become commodified outputs rather than intrinsic elements of a process of sustainable development. The idea of 'limits' has been subverted and dropped in this interpretation. Sustainability is now reinterpreted, it is no longer something that provides boundaries and underpins business but rather the other way around – sustainability has become business and economics.

This should come as no great surprise. For as Welford (1998, p.2) noted; "industry is firmly wedded to the system that caused the environmental crisis in the first place" and in embracing sustainability "industry has sought a discourse on the environment which fits within its other [econocentric] aims and objectives". Its response is framed within a

traditional capitalist paradigm of growth and ideals of maintaining “the wealth of the rich in terms of both individuals and countries” (ibid).

Sustainability recognises that growth is an element but there are different kinds of growth. This encompasses production growth - economic as well as non-monetary denominated growth, environmental growth – the productive capacity of the environment, growth of utility or welfare – covering things like leisure, income distribution, health and safety (Ekins, 1993, p.95). The first two encompass ideas of eco-efficiency whilst the last relates to or implies eco-justice.

#### **IV.3.5 Weak and Strong Sustainability**

In trying to make sense of sustainability and to provide means to translate what it means into a blueprint for action, two conceptualisations have been projected, weak sustainability and strong sustainability (Pearce and Atkinson, 1993). These terms have become widely used to describe a framework of ideas of sustainability each of which are not free of value judgements. In essence they attempt to describe a state of the world as it should be. The key points include an emphasis on efficient and equitable allocation and use of natural resources, both intra- and intergenerational and a scale of economic activity commensurate with (ecological) life support systems of the planet. Because they are an expression of a vision of the world as it should be not only are they contestable and contested but they are also based on different conceptualisations of knowledge and philosophical stand points.

Strong sustainability seeks to not only maintain natural capital<sup>4</sup> but also some critical minimum endowment whilst weak sustainability seeks to maintain well-being, conceived in anthropocentric terms. Strong and weak sustainability are often presented in the form of two different, opposite and conflicting conceptualisations of sustainability. It is probably fairer to view them as being at different ends of a continuum as there are with each of them shades of opinion and interpretation. Bebbington (2001, p.140) has presented responses to eight key questions that contrast the weak and strong sustainability positions.

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<sup>4</sup> Natural capital, as distinct from human capital, is said to consist of non-renewable resources, renewable resources and environmental services.

**Table 1: 'Strong' and 'Weak' sustainability (after Bebbington, 2001)**

ASPECT	'STRONG' SUSTAINABILITY	'WEAK' SUSTAINABILITY
Focus of the pursuit of sustainability and the impetus for change	Fundamental examination of the relationship between humans and their environment and with each other	Concerned to prevent an environmental catastrophe which would threaten human society.
View of nature-human interaction	Humans and nature are not separate from each other and harmony between the two is sought	The nature environment is a resource, humans need to better master the environment to solve present problems.
What do we wish to maintain?	Other species, not just the human species are to be maintained.	The human species is what we are seeking to maintain.
The gap between a present and sustainable future.	Present situation is a long way from a sustainable one, it is so far away it is almost impossible to imagine what sustainability looks like. The time span of change may take 150-200 years.	Present situation is near to a sustainable one, over the next 30-50 years it should be reached.
Extent of change required.	Fundamental, structural change is likely to be required.	Sustainability is achievable with incremental adjustment of the current system.
Nature of the process of getting to a sustainable path.	Likely to require a participatory, transparent and democratic process. Technical fixes may generate more side effects than they solve.	Authoritative and coercive structures can be utilized (for example market forces). Greater technological development will allow problems to be solved.
Relevance of eco-justice concerns-Who is to be sustained?	Intragenerational equity is an integral and essential part of sustainability. Focus on third world conditions and aspirations cannot be avoided.	Intragenerational equity is a separate issue, sustainability focus is primarily on environmental issues, equity issues will follow from them. Primary focus is on sustaining Western populations.
Sustainable in what way?	The nature of economic growth may need to be redefined or abandoned as a dominant goal. This raises questions about how we currently measure and view development.	Sustainability of Western civilisation at, at least, current level of economic development. There is a belief that economic development is actually essential for the pursuit of sustainability.

Turner (1993) has also provided a summary of definitions of sustainability though he introduces the idea of a spectrum that moves from very weak to very strong sustainability.

**Table 2: Definitions of sustainability (after Turner, 1993)**

<i>Very weak sustainability</i>	Stock of natural capital and human capital constant over time, but freely substitutable.
<i>Weak sustainability</i>	Protection of critical natural capital, but with measures to allow room for ignorance over thresholds of tolerance.
<i>Strong sustainability</i>	Precautionary principle applies to safeguarding critical natural capital: all developments follows the doctrine of public trust through planned measures and environmental improvement.
<i>Very strong sustainability</i>	Steady-state economy; local social, economic and political self-reliance; global citizenship through educational entitlements; redistribution of property rights through burden sharing and a paying off of legacies of ecological damage.

#### **IV.3.6 Weak Sustainability**

Weak sustainability is the concept of choice of conventional economists and policymakers as it does not question the present mode of economic development and market-based capitalism, believing in an evolution of current institutional structures capable of accommodating the changes required to meet sustainability requirements. Even among its supporters, weak sustainability does not entirely satisfy. One source of unease is that it makes little reference to environmental goods and services. Human induced species extinction would be acceptable from a weak sustainability point of view if human welfare did not decline through the development and exploitation of substitutes. It is often the case that there are no direct substitutes but rather complements for environmental goods as they contain elements of both. Characterising sustainability in terms of welfare rather than resources (as does strong sustainability) leads to problems with inter- and intra- generational equity. A generation has little control over a future generation's welfare but a great deal of influence on the resources left for it. For all its limitations weak sustainability has found greater acceptability. This is particularly the case with industry and government where they seek to define the concepts of sustainability in a way that adds a degree of legitimacy to their activities and practices (Welford, 1998). It does not question the basis on which our society and economic system is founded but rather accepts it and believes that within itself it has the capacity for its own salvation. It is based on the assumption that it is possible to substitute one form of capital (usually natural capital) with another in

order to offset the diminishing capacity of the natural environment. This preserves aggregate capital.

If on the other hand there are limitations on substitution of one form of capital for another then the strong sustainability criterion whereby natural capital and its services flows must be maintained becomes more relevant. Pearce and Atkinson (1995) noted that much of the ecological literature denies substitutability, at least across some classes of natural capital whilst economists have so far not been capable of capturing all ecosystem functions. It was for these and other reasons that they believe that weak sustainability is limited in scope and that strong sustainability needs to be emphasised.

#### **IV.3.7 Strong Sustainability**

Strong sustainability implicitly questions the current socio-political system, seeing in it the seeds of destruction of nature. It throws into question the way in which development is defined and the goals that human society should have. To many it would seem to be idealistic and almost by implication, unworkable. Its power lies in its ability to challenge deeply held views and assumptions about market capitalism and its institutions and to set up alternative paradigms, as for example the conclusion that envisaging the sustainable corporation “implies nothing less than a radical redefinition of the social contract that business maintains with society” (quoted in Bebbington, 2001, p.142).

A problem with the idea of natural capital that is seldom discussed is that the terminology is anthropocentric and embedded in it is the idea of human transformation. Non-renewable resources are only natural capital if they are capable of being extracted, whilst renewable resources are such only if acted on by humans. Distinguishing natural capital from human capital, in these terms, becomes problematic. Such a situation is problematic given the ambiguous nature of the powers of the State to effect change. On the one hand the State may exercise power both at ideological and operational levels but that is contingent on the acquiescence of those acted upon. Furthermore, it is circumscribed by the interactive manner in which discourses come into being and become dominant in policy formation, influenced as they are through various policy networks.

Strong sustainability includes the idea of maintenance of a critical or minimum stock of natural capital, that there should be no reduction in the stock of Earth's natural resources. The reason for this is to be found in the idea that natural and human

produced capitals are complements, not substitutes and that therefore reduction of one cannot be substituted by an increase in the other, though the degree to which this holds has been questioned (Jamieson, 1998). For all this we do treat natural and human made capital as substitutable but the nub of the matter is not that we do treat them as substitutes but rather that we ought not to, so that this becomes a normative claim rather than a descriptive one. Some environmental economists have explored the theoretical implications of non-substitutability between natural and human capital and concluded that the maintenance of natural capital was critical (Barbier and Markandya, 1990) even with efficiency criteria (competitive markets etc.). A conclusion supported by the work of others such as Common and Perrings (1992) who provided a rationale for emphasizing preservation of natural capital as a necessary condition for economic sustainability. However, O’Riordan (1996) believes that contemporary society is not yet even on the very weak sustainability mode and that all that can be done is to ensure that obvious cases of worsening the state of non-sustainability must be avoided. For O’Riordan very strong sustainability remains shrouded in mystery, it would include equality of opportunity and civil rights and a culture of sharing and mutual sacrifice or gain – individualism would be defined in a context of community well-being. A state far removed from the present free market capitalist model that it is almost impossible to imagine.

#### **IV.3.8 Scales and Boundaries to Sustainability**

The concepts of weak and strong sustainability concern questions of what should be sustained and the conditions for achieving the ability to sustain. Problematic within this is the question of scale. Experience and understanding teach us that nothing lasts forever and so we need to face up to the questions of the temporal goals of sustainability. Policies and attitudes will be very different depending on timescales and this has also to do with trying to reconcile the differing timescales on which economics, ecology and society work and are able to conceive. Similar questions arise with geographic scale; sustainability will not be the same at local, regional, national or global levels, for one thing the complementary and substitution possibilities will differ. Sustainability is more likely to be capable of being conceived at a local scale rather than a global one. It leads to questions such as whether a species can be reduced in one area so long as it is increased in another. Focusing on national or sub-national sustainability can also lead to very different policies (Jamieson, 1998).

Sustainable development therefore does not necessarily imply the preservation of existing environmental systems or of prevailing social structures, practices of use and

reproduction. Just what should be sustained or exploited and in what manner is open to debate, a debate framed in part by the boundary parameters chosen as part of the focus of the debate. Such boundaries are often a consequence and related to the spheres of actions and competencies of those involved. Thus they may refer to sustainable industries, sustainable cities or sustainable companies. Different boundary choices may well result in different and contradictory conclusions. The more so given the shifts over time of the nature of society, configurations of natural systems, their dynamic and complex behaviour and their interrelationships. It can be questioned as to how helpful it is to have sector specific sustainability debates, where this leads to policies that transfer problems to other sectors or compartmentalise thinking and solutions. There is a school of thought that argues that natural capital is neither wholly substitutable nor wholly complementary but rather an amalgam depending on circumstances. There are degrees of substitutability between natural and human capital. Thus sustainability does not necessarily depend on the adoption of perfect sustainability. Indeed following from some of the arguments presented above about the turbulent nature and our state of understanding of ecology there is no such thing. Rather sustainability traces a trajectory that reflects both increased social well-being and continued options for further advance (Meadowcroft, 1997, p.430).

As Gorz (1980) pointed out "The point is not to deify nature or to 'go back' to it, but to take account of a simple fact: human activity finds in the natural world its external limits. Disregarding these limits sets off a backlash whose effects we are already experiencing in specific, though still widely misunderstood, ways". In his view ecology is concerned with external limits which economic activity must respect in order to avoid producing effects incompatible with its continuation, a strong sustainability perspective.

The concepts of strong and weak sustainability are concerned with limits and their converse, opportunities. They find themselves differing in as much as what these limits are and how the boundaries are defined, they raise different sets of challenges and thus ways to respond to those challenges. The weak sustainability tradition of which the Brundtland Commission and Rio Earth Summit are part see limits in terms of the limitations imposed by the present state of technology and social organisation on environmental resources and by the ability of the biosphere to absorb the effects of human activity. It sees the overcoming of these opportunities as the key to further growth. As a result weak sustainability is to the fore in the thinking of many policy makers and analysts, as highlighted in *The Economist* (July, 2002) "Many economists now accept the idea that natural capital has to be valued, and that we need to account

for ecosystem services. Many ecologists now accept that prohibiting everything in the name of protecting nature is not useful, and so are being selective. They think the debate is narrowing to the more empirical question of how far it is possible to substitute natural capital with the man-made sort, and specific forms of natural capital for one another." (Arrow and Goulder, cited in *The Economist*, 2002). And, "In practical terms, it means that you have to take economic cost-benefit trade-offs into account in environmental laws, and keep environmental trade-offs in mind with economic development." (Graham, cited in *The Economist*, 2002). This presents a one-dimensional view of sustainability that reduces its richness, its ability to inform and preserve options.

Strong sustainability with its belief in the limits imposed by nature and ecology has fewer advocates. It poses a different set of questions. It does not believe that efficiency alone is the key to sustainability; rather there are issues of justice, morals, ethics and values to be considered with respect to the natural world. The limitations are externally imposed and therefore cannot be overridden rather than internally derived.

#### **IV.3.9 Human Agency**

Whatever the conception of sustainability, its implementation is unlikely to be achieved spontaneously or as a consequence of disinterested actions. It would require the explicit attention of human agents; and more particularly be pursued deliberately by governments and the State (Meadowcroft, 1997 p.430). Progression from a current state arises out of the interaction of a vast array of complex factors, ranging from individual choices to choices made by organisations and institutions across different temporal and spatial spheres. Of interest are the implications that the nature of any concept of sustainability adopted has for the actions and institutions put in place to operationalise that concept. It has to be recognised that there are limitations on human ability to channel development (Hayek, 1960) that there is not a set of choices that can guarantee sustainability into the far future. Human perversity and inventiveness together with technological development rooted in current socio-economic structures will ensure that new practices, products and processes will inevitably disrupt any equilibrium. If this is accepted then a role for the State would be to act as not only an agent within the process of change/development but also as the facilitating mechanism through which sustainability can be approached. The State and regulation become a site of contest. But a mechanism may only be used, effectively, for the purpose for which it was designed. For this to happen the flaws in state/democracy would need to

be addressed as failure to do so will privilege the status quo and foreclose on any reasonable possibility of change. It is not just the flaws in democracy that have to be addressed but at the same time there has to be a more far reaching change in personal and social values, change that would distance itself from the market based mentality of values and the culture of wants rather than needs.

The problem is though that the conceptualisation of sustainability in any of its forms is a human construct based on a spectrum of contested socially constructed views of the nature of sustainability epistemologically and ontologically. However sustainability is constructed two broad points of agreement would seem to emerge. Firstly, that the current organisation and practices are unsatisfactory as they are broadly conceived as being unsustainable and that there is a need to move towards greater sustainability. Secondly, that this will only come about as a result of human agency. Because human agency is a pre-requisite the actions, measures and institutions that bring about as well as result from intervention will reflect the dominant normative system of beliefs and values of the implementing agencies. In this respect any move in the direction of more sustainable actions is a political act, and as such is governed by political process of debate, consensus building and legitimation. The processes of politics and sustainability cannot be separated from each other and can therefore be seen as part of the ongoing debate about the nature of social progress which has concerned political decision-makers and the social sciences throughout the twentieth century (Meadowcroft, 1999).

It should therefore be possible to deduce the dominant normative beliefs and value systems that underlie the institutions and coalitions that are in place working towards sustainability from the way they have been constituted and their actions. This provides insights into the ways in which they construct sustainability and their legitimation. The conceptualisation of sustainability and implementation will remain contested within institutions as well as between them as knowledge and experience is gained and changed, opening up new sites for contest. The nature of the debate will reflect not just the what and how but also the extent of capacity to change and evolve within limits set by politics and beliefs. It encompasses accepted understandings and challenges, those that have been or are being legitimised, the evolution of institutions and who and what can be considered as stakeholders and by extension participants. The processes also by implication pass judgement on other conceptualisations and beliefs through their non-recognition or exclusion. Whether this is a truly democratic process or one that contains flaws the purpose is the same. It aims to provide a forum by which to

examine the options and pathways to sustainability. Such is the power and influence of some parties that there is a need to balance this in order to protect the less powerful and provide them with the means to become equal participants. As is implicit in most understandings of the empowering nature of sustainability.

The terms of the debate are set usually by a dominant institution, such as the State with its access to a range of coercive mechanisms and powers. Though it does need to be questioned where such institutions derive their power from as this does place limits on the capacity of such institutions to act freely. Changes regarding the understanding and implementation of sustainability will come about through the action of democratic processes and spheres of communicative action. These become a prerequisite for informed debate and pathway choice regarding sustainability rather than an outcome of an imposition of a particular social, economic or political ideology. It is also about ideas of accountability and stewardship, for what should society be accountable to or for?

But at the end of the day debate is informed and framed by the epistemologies and ontologies of sustainability and the human actions that flow from them, with human agency being conceived as a political process of choice and decision-making.

#### **IV.4 SUSTAINABILITY IN ACTION IN THE UK**

##### **IV.4.1 Introduction**

"If the causes of environmental degradation lie in the workings of the economy, then so does the solution" (Pearce & Warford, 1993, p.4) but unless the legal parameters, which regulate economic activity, are modified then any economic solution however clever will remain a toothless curiosity. Such changes result from political processes and decisions and provides an arena to consider options, to transform perceptions of individual and collective interests, and to modify regulatory frameworks that govern individual and collective actions (Lafferty & Meadowcroft, 1996, p.3). The close of the twentieth century has seen the ideas of sustainability and more particularly sustainable development progressively taken up and institutionalised by the State. This has given a degree of practical effect beyond that of voluntary adoption but at the same time regularising it within existing institutional frameworks. The debates around sustainability have broadened to now include not just the concepts and mechanisms to promote or achieve sustainability but also debates about the appropriateness, effectiveness, strengths and weaknesses and other aspects of the mechanisms

themselves or institutions, their operation and form. The operationalisation of sustainability has become a new arena of debate and conflict.

In the process of subsuming sustainability the State acts to pro(im)pose a common ethos, belief and value system on those it seeks to regulate. This is based on both the State's common understanding or conceptualisation of sustainability, socially constructed from its knowledge of existing 'world' conditions and perceptions of those conditions and its own system of beliefs.

A question to consider is the manner in which the State in Britain has responded to the challenge of sustainability and what mechanisms and institutions have been modified or put in place to address the perceived needs placed on the 'system' arising from sustainability? How far do these mechanisms and institutions go in responding to the challenges and to what extent do they incorporate and reflect the constituent parts of sustainability? What there will be will inevitably be a mediated outcome based on an idealised institutional framework reflecting dominant normative claims and discourse springing from ideas of liberal democracy and market capitalism. In a manner the coercive powers of the State (its institutions) appropriate sustainability in order to define and to regulate what is acceptable and what is not – establishing the rules of the game as it were, legitimacy of its actions and of the players.

For O'Riordan (1996) the key to moving towards sustainable pathways would be the role of various institutions set up to monitor and create the transition to sustainability and the linking of these bodies to Parliament. In this way greater attention would be paid to policy, accountability and the ability to review strategies and progress. There would be a realignment of the State and business and the development of alliances between business, environmental NGO's and the social welfare and civil rights organisations. Such a grand realignment of policy and the State is unimaginable and such an abandonment of market capitalism and current liberal democratic practices in the absence of overwhelming imperatives for change on this scale cannot be envisioned at present. Industrial capitalism and the liberal democratic State are not heading for the exit marked 'ecology' on present evidence, which even O'Riordan acknowledges. However, this is not to say that there has been no take up by the State.

#### **IV.4.2 Institutional Arrangements**

Following the 1992 Rio Conference the UK developed a long term national strategy for sustainable development, based on Agenda 21, which built on an earlier White Paper,

'This Common Inheritance: Britain's Environmental Strategy', published in 1990. The White Paper was criticised as merely re-iterating some existing 350 policy promises to "review", "consider", "examine" and "further study" with few concrete commitments. On the positive side, the Prime Minister and 11 ministers signed up to it (Jänicke & Jörgens, 1999). In 1994 'Sustainable Development: The UK Strategy' was published and 'green ministers' were established inside all government departments with the Department of the Environment being the lead agency. Although there are annual reports on the implementation of the UK Strategy as well as inclusion of environmental sections in annual reports of all government departments, the Strategy lacks any legal or legislative basis leaving it open to the vagaries of political climate and will.

The Department for Environment, in its various guises<sup>5</sup> as the lead agency within government has produced a number of sustainability initiatives over the years. Indeed it could be said that sustainability and sustainable development, as in many other spheres of life, is firmly entrenched in government rhetoric. The Department of Trade and Industry talks of its Sustainable Technologies Initiative and the Office of the Deputy Prime Minister with its responsibility for regional affairs frames discussion of urban regeneration and neighbourhood management within a discourse of sustainability. Within the Department not only does it have direct responsibility for various environmental matters but it also sponsors various initiatives such as a sustainable development website that reports on activities and the UK Round Table on Sustainable Development (DEFRA, 2001a) as well as a Government Panel on Sustainable Development (now together the Sustainable Development Commission within government). One of the initiatives that is of relevance to the water sector has been the development of sustainability indicators in 1996 and again in 1999, 'Quality of Life Counts' (DETR, 1999a) that describes some 150 indicators and followed from public consultations in 1995. In 2001 a second annual report (DEFRA, 2001a) was published following on from the 1999 report (DETR, 1999a) charting progress towards sustainable development according to the various headline indicators developed by the government.

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<sup>5</sup> From 1997 to 2001 it was part of the Department of the Environment Transport and the Regions and in the government reshuffle following the 2001 election and the Foot and Mouth crisis in agriculture it became the Department for Environment, Food and Rural Affairs.

In doing so the State seems to be indicating that it has gone beyond the realm of concepts and has been able to put measures and policies in place whose progress can be measured in terms of indicators –even though, as noted above these have no statutory standing. It is in the nature of a managerialist approach to achieving sustainability. A theme that seems to run through many of the more recent publications by DEFRA talks of sustainable development in terms of how it supports economic growth and prosperity without any mention of limits or restrictions other than the need for wise use of natural resources “Sustainable development ...includes.... economic prosperity through sustainable farming, fishing, food, water and other industries that meet consumer’s requirements” – one of DEFRA’s Aims and Objectives (DEFRA, 2001b) and “achieving (sustainable development) requires ....maintaining high and stable levels of economic growth and employment.” (DEFRA, 2002).

There is another, legalistic strand based in environmental protection, that gives substance to government policy as it relates to sustainability. This is the creating of statutory bodies such as the Environment Agency and English Nature that have their duties of environmental protection framed in terms of contributing towards sustainable development. In the case of the Environment Agency its ‘contribution towards attaining the objective of achieving sustainable development’ flows from guidance given by the Minister as to what is considered to be appropriate as set out in the Statutory Guidance and accompanying commentary. There is therefore the platform for close political involvement in not just aims and objectives but also the operationalisation of sustainability.

During the hearings on the draft Water Bill in 2001 it was suggested by a number of parties that there should be an explicit sustainable development duty on Ofwat. The argument was that its existing, secondary, duty towards the environment was not strong or explicit enough. The Director General indicated that he had no objections to such a primary duty being placed on Ofwat. The effect of this would be, at least symbolically, to bring Ofwat in line with the other regulatory bodies in the water sector in having a common goal with respect to sustainability, even if they were to disagree on its implementation. This duty has yet to pass into law.

In 1999 Water UK published ‘UK Water Industry Environmental Sustainability Indicators 1998/99’ (Water UK, 1999) based on the government’s report ‘Quality of Life Counts’ (DETR, 1999a). The study concentrates on the environmental component of sustainability with the intention to expand it in the future to encompass social and economic components as indicators. It provides a national overview (masking regional

and structural differences) using data supplied by the water industry and is updated on an annual basis.

#### **IV.4.3 Conclusions**

It is clear from this overview that there can be no doubt that sustainability has been adopted and entered into the workings of government, certainly at the level of informing and framing policy. As far as the operationalisation of the concept of sustainability or the transforming of policy statements into action a number of developments have occurred during the 1990's. A range of statutory bodies has come into being to regulate whole swathes of the social, political and economic landscape, bodies as diverse as the Welsh Assembly, the Countryside Agency and the Environment Agency. The one thing that they have in common is the inclusion in their various aims and objectives some form of duty towards achieving sustainability; their activities in whatever field are being framed (legitimised) in those terms. Being statutory bodies they have certain powers and sanctions available to them to ensure that they are able to perform their regulatory functions. These may be the sorts of bodies that O'Riordan (1996) was referring to as necessary to create the transitions to sustainability, but whether they have connected to civil society in the way he envisaged and whether they are able to shape and influence progress is another question.

#### **IV.5 SUMMARY**

Since 1987 and the Brundtland Commission's report sustainability (WCED, 1987) has spawned numerous discourses that draw on a variety of beliefs about the place of nature, the role of society in human development and the relationship between them. The role and power of discourses of sustainability should not be underestimated, it is human agency that has created the world that we live and it is human agency that will change this world. Any change will be guided by both individual and collective beliefs expressed through political and societal interaction and will be incorporated into policy formation. Sustainability discourses matter. Weak sustainability poses the least challenge to the current conception of a liberal democracy within a market-based economy but even this conception of sustainability provides for various shades of interpretation. Weak sustainability does appear to be informing policy formation and implementation, perhaps privileged by the power of the State and the absence of the possibility of radical change at an abstract highly conceptual policy level.

Sustainability does not exist as an abstraction or in a vacuum. It informs policy and has the potential to impact on the way in which we go about our lives. It is not just something that is freely adopted but is something that has entered into regulation. Thus different conceptualisations of sustainability and accountability will have differing impacts on governance and regulation and the frameworks that society deems necessary for its support and operationalisation. Thus there is a direct link between concepts of sustainability, accountability and regulation. Hence in order to address the research question of whether the form of regulation supports sustainability and the nature of what that sustainability might be is important. Sustainability, accountability and regulation depend on what core beliefs they are based on and how these are related to and influenced by current conceptions of the economy, society and nature.

At the level of the State it is the influence of State agencies such as DEFRA, the Environment Agency and English Nature that is of importance as they are in the front line of the implementation of sustainability policy. What is also of interest is the manner in which sustainability as a touchstone has entered not just other State based agencies, such as Ofwat, but is also being increasingly appropriated by those being regulated as a way of redefining and realigning themselves alongside the precepts of a particular discourse, in this case of sustainability. These are matters that are explored further through the fieldwork and its analysis and interpretation, in the light of the foregoing literature review.

## SECTION B

Section B presents the theoretical perspectives as well as the methodological location of the thesis. The theoretical perspectives outline the theories that have informed the research into regulating for sustainability in the water sector and that have been drawn upon to provide an interpretation of the data. Complementing this the research process presents the philosophical underpinnings of the research and outlines how the actual research inquiry was carried out. The chapters in this section stand alongside those of Section A. The theoretical and methodological approaches employed provide the instruments with which it is possible to build on the foundations of Section A to provide an interpretive structure that can be employed in Section C.

## CHAPTER V: RÉGULATION THEORY

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*'He had brought a large map representing the sea,  
Without the least vestige of land:  
And the crew were much pleased when they found it to be  
A map they could all understand*

Lewis Carroll, *The Hunting of the Snark*

### V.1 INTRODUCTION

This chapter addresses itself to the question of developing an appropriate theoretical framework within which the functioning of the water sector particularly with respect to sustainability and how this has been taken up in governance and regulation can be understood. The challenge that a theoretical framework must meet is that it must be substantial enough to encompass the aspects touched on in Part A and provide sufficient insights for the interpretive analysis and discussion of Part C to be undertaken. It must be capable of reflecting and understanding of the practices of regulation in relation to the conceptualisation and operationalisation of sustainability. In doing so the theoretical framework should be capable of accommodating the genealogy of the water sector, the web of organisational influence, formal and informal relationships, and be capable of reflecting the influence and importance of conceptualising sustainability. It is for these reasons that this chapter takes a broad, overarching structural approach to theoretical perspectives. What is required is the development of theoretical perspectives that have the ability to shed light on the processes and forces at work in order to better understand the observed phenomena. There are potentially many theoretical frameworks available and each of them has their proponents, strengths and weaknesses. Choice of framework will be determined by the efficacy with which one can provide appropriate insights and understandings and be guided by factors explored in the previous chapter.

In the period leading up to and subsequent to the privatisation of the water industry in 1989 there has been recognition on the part of all water sector actors that 'the environment' and the water industry's impact on the environment is an important issue. At the same time the idea of environment has been increasingly associated with and incorporated into sustainability, thus extending the potential meanings of 'environment'. Sustainability and environment are seen as integral to the functioning of the water sector rather than add-ons and therefore require specific and explicit governance and regulatory interventions. For reasons explored in Chapter IV, sustainability cannot be

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divorced from other civil, economic or political processes and therefore it has democratic and social implications.

A Political Economy approach is adopted that utilises Régulation Theory to provide a platform for understanding the socio-political functioning of the water sector in England and Wales. In particular Régulation Theory is used to provide an understanding of how and why sustainability and sustainable development have been accommodated as an important focus in the functioning of the water sector. The complex persona of sustainability and perceptions of its importance inevitably mean that it is influential in the functioning and the governance of the water sector. The role and influence of sustainability cannot be predetermined as it depends on the interaction and intersection of forces that seek to reconcile their own normative conceptions and aspirations with organisational self-interests and within the institutional frameworks. The evidence would suggest that the State is a site and an agent of intervention, through discourse and interactions and as such has been a focus for the evolving of legal measures, modes of governance and regulation in response to changing circumstances and practices. The State is a key participant within these processes and any attempt at understanding the political economy of the water sector must explicitly include the State.

This chapter provides a review of Régulation Theory, and its Marxist roots, with particular reference to the water sector. It also seeks to extend the review to include discussions of its relevance to and ways in which the approach might be extended to cover the sector.

## V.2 POLITICAL ECONOMY

The major social and environmental problems of today are grounded in the history of cultural, philosophical, social, economic and political practices of the past. Political economy regards society as a dynamic and evolving system that impacts on the lives of all its members and seeks to understand how society's problems have evolved, how they are interweaved and overlapping, how and why decisions around them have been made and how these issues impact on the quality of life. Political economy refers to the 'economy' of a community, a larger geographical unit, or a nation state, in contrast to the 'economy' of an individual. Political economy is not a set of dogmas but the relationship of a set of facts that draws on the insights provided by disciplines such as economics, political science, philosophy and sociology, and in doing so seeks to re-integrate them to offer greater understanding of the economic, social and political world

and provide tools to analyse contemporary public problems and social change. Land, labour and capital are factors of production that when combined produce wealth, primarily distributed as rent, wages and interest. Early political economists such as Locke, Smith, Hegel examined how wealth was produced and distributed and the close relationship between these processes and the part played by the State and its institutions (Jessop & Sum, 2001). As Gray et al (1996) observed, political economy provides the social, political and economic framework within which human life takes place, it is the study of the collective/political process through which public economic decisions are made - it is a very broad church.

Whilst early contributors to political economy such as Smith examined the functioning of the market as an abstract concept in order to determine the 'natural' laws (of economics) governing the way they functioned Marx argued that the functioning of markets could only be understood within a social and political dimension. Some political economy theorists have placed structural conflict, inequality and the role of the State at the centre of its analysis of social, economic and political situations and circumstances. Thus the operation of the market rather than being 'free' and governed by 'natural laws' needs to be seen in the context of a historically bound social formation, which has the capability of change that would supersede current social formation.

Other political economy thinkers have ascribed a less central and domineering role to the State and focus rather on the interactions between groups in society. It also allows for social change but as part of a gradualist approach that is still situated within a capitalist centred economy but premised on reform of markets and the relationship between labour and capital. Thus social change is enabling for the capitalist system, recognising the necessity of social and environmental change in order to maintain rather than challenge. This variant of political economy tends to view the State as part of the solution rather than part of the problem, accepting that there is nothing wrong intrinsically with the current order of society and that what is wrong may change and improve given the right set of circumstances. As such it is more narrowly focused drawing on the work of later economists with their emphasis on the welfare maximising individual, marginal utility, Pareto optimality and society represented by the sum of individual behaviour.

Given its broad acceptance of the general soundness of the system, this approach to political economy is particularly useful in its ability to envisage solutions to systemic social, economic and environmental problems. In contrast, classical political economy

sees little point in offering what it sees as 'end-of-pipe' solutions as it views the current system as fundamentally flawed, requiring radical restructuring rather than tinkering at the edges. It is however useful in that it provides a powerful alternative and critical analysis that leads to insights into the role of the State, the structures of society and capital and the exercise of power to maintain the domination of entrenched interests. It assists with a greater understanding of how these are manifested and how these might be challenged. Though the two approaches offer contrasting understandings of sustainability and the role of regulation this work has adopted a critical approach that is rooted in the classical political economy. The approach draws on the works of Marxist based Régulation theorists in order to provide a framework within which to comprehend the functioning of the water sector and the State, and how sustainability has been accommodated within the functioning of a liberal, market based economy.

A particular challenge is understanding the ways in which western, market-based economic systems; capitalism, has adapted to changing economic and social circumstances and not been superseded by a 'better' system. This point is addressed via the Régulation Approach (Aglietta, 1979), which recognises that capitalism is a flexible system that can change with circumstances and conditions. Recent work in Régulation Theory has explored the links between regulation approaches and sustainability (Lipietz, 2002) and of particular interest, the regulation approaches has been used to interpret developments in the UK water industry. The regulation approach inspired works focus mainly on two aspects, firstly on the privatisation of the water industry and the accompanying changes in modes of regulation that accompanied it and secondly, on the so-called Yorkshire Drought of 1994/95. It thus has particular relevance to the research question of this thesis.

## V.3 CLASSICAL POLITICAL ECONOMY

### V.3.1 Introduction

The relevance of Marxist informed political economy lies both in the way it seeks to offer a 'totalising perspective on social relations' (Jessop & Sum, 2001) and on its openness to other influences. The political critique is based on the premise that values such as freedom and justice cannot be attained simply through the democratisation of the State. Such values pertain to the entire organisation of society and especially to work. Social analysis arising from this recognition has provided a degree of understanding of aspects of the capitalist mode of production and the effects and dislocations to which it gives rise. As Burawoy (2000, p.151) noted, the appeal of

Marxist based approaches lies in the way they offer a compelling account of capitalism, outlining possible challenges to capitalism and envisioning alternatives to capitalism.

Capital is not neutral but socially conditioned, existing within a network of social relationships (institutions) that allow and facilitate the formation of capital through the accumulation of labour – such as takes place in bourgeois societies. Labour is embedded as a constituent of value and assimilated into the process of commodification, not just in the work place but through products, services, as well as the conditions and circumstances necessary to reproducing the relations of capital accumulation. In this schema people become customers, consumers, members of vulnerable groups, environmentalists, recreational users, designated and commodified according to an implicit relationship with the processes of production. Conflicts over the price and quality of water and water services and the legislation regulating the supply of these services are an expression of the contradiction inherent in the commodity form. The antagonisms latent in the commodity form underlie a spectrum of contemporary crises (Tinker, 2001) and suggest a tendency to re-conceptualise sustainability through commodification rather than breaking with it.

Material production and the exchange of products constitute the basis of all society. The mode of production – the way production is organised – provides a means of interacting with nature and the environment, in production raw materials are transformed into socially desirable and useful forms. Within the water industry both water supply and wastewater disposal are organised such that they are constituted as services that are fundamental to meeting basic human needs. In doing so people interact with each other, organise themselves in order to produce these goods and products of collective action and labour. Thus the relationship between people (labour) and nature is strongly determined by the way in which production is organised to provide the basis of material and by extension social life. Thus a capitalistic mode of production implies capitalistic relations between humans and between humans and nature, to which correspond particular political, institutional and legal arrangements that underpin these relationships of production. The regionalised monopoly nature of the water industry is a case in point. There are legal and regulatory barriers that prevent any serious challenge to this institutional set up both in terms of access to resources, control over quality and the allowable forms of competition. Thus the relations of production become reinforced by the institutional arrangements and ideas in society – which tend to maintain the dominant socio-economic and political arrangements in society (Pepper, 1993). The challenge of sustainability and its regulation would

therefore be addressed and sought to be accommodated from within existing arrangements.

Conflicts of interest between capitalists, between capitalists and capitalism, and between interests specific to the maintenance of the capitalist system and generalisable interests of the population are displaced into the State apparatus (Habermas, 1976). The State becomes increasingly involved in efforts to resolve political conflict.

### **V.3.2 The State**

A central feature of Marx's analysis of society is the conflictual and exploitative relationship between capital and labour premised on the exploitation of humans by humans in the process of living out their daily lives and dominated by the process of material production. The structures of exploitation have been built up in layers through society, partly to reinforce itself and partly to defend itself against its opponents and contradictions (Aronson, 1985, cited in Low, 1991). The contradictions inherent in the capitalist mode of production lead to crises in which the State comes increasingly into play as a mediator.

Thus forces of production become increasingly socialised, giving rise to the need to match the degree of organisation of the forces of production with a similar degree of organisation of the relations of production: the relations between different capitals, between capital and labour and between various classes of labour – the social mode of regulation. It is in this field that we can locate regulatory State agencies such as Ofwat, DEFRA and the Environment Agency as means of organising the relations of production. The tensions between these relations and the interpenetration of business and State help to ensure that the State will respond to modulate and mitigate these tensions. The problem with this formulation is that it treats, capital, labour and the State as monolithic institutions and neglects the evidence of complexity within these institutions and the influence of other causal factors such as bureaucracy on the dominant relationship (Low, 1991). The State system can be treated as a political community with its own specific boundaries, conditions of existence, developmental tendencies and sources of legitimacy. Struggles over the boundaries between the economic and the extra-economic become central to the redefinition of the role of the State, State interventions and its transformations (Jessop and Sum, 2001, p. 96). In this we may also interpret the interplay between Ofwat located within the economic field and its Customer Service Committees along with the Environment Agency as

extra-economic agents, struggling over boundaries of jurisdiction that overlap the economic.

There is however, a tension between the analysis of power and the pragmatics of political practices that require political ideas, ideology to motivate, give direction and provide visions of alternative social orders. What they have in common is the belief that the crisis tendencies of capitalism act as a motive force for the construction of various forms of the State and the institutionalisation of the State within capitalism, as in the case of the water industry, providing a regulating mechanism between capital, labour and the State. Local circumstances, social circumstances and historic development all contribute to the emergence of reflexive and differentiated forms of the State. For some this leads to the State becoming the focus of the struggle and resistance rather than between class and capital. Hence a focus upon the State and/or its agencies to resolve social issues arising as a consequence of the functioning of a particular mode of production. The State appears as a functional necessity for the reproduction of capitalist social relations, which underplays the role of State institutions as mediating contradictory social relations (Low, 1991, p. 222). The State therefore is central as an organising force, institutionalising and constantly reinterpreting power relationships between capital, labour and the State. The intervention of the State, through its agencies, in the issue of leakage and its moves to address this as an issue may be taken as an example.

This becomes necessary as it is in the common interest of all capitalists to ensure the reproduction of the capitalist system even at the expense of individual capitalists. The State through its mediating and coordinating role seeks to protect capitalism against capitalists as well as against workers. The State provides the necessary infrastructure for capitalist relationships and practices to flourish and at the same time limits the capitalistic compulsion to exploit resources and labour. As part of this strategy the State is responsive to certain demands and does work to improve conditions for those other than capitalists. It follows then that measures such as the creation of the welfare state, the adoption of health and safety measures, anti-discriminatory regulations, family support, public health and environmental improvement measures would be introduced by the State. In the same vein we see the improvements in water quality, the setting of performance measures as well as protection for vulnerable groups and schemes to ameliorate pollution and low flows in rivers. State sponsored capitalism delivers material concessions. At the same time it has a complementary relationship with an expanding civil society through which it seeks to organise the working classes

(Burawoy, 2000, p.162). Though as Gramsci observed civil society tends to have a complex and to a degree independent relationship with the State, so that society actually lends consent to its own exploitation. States not only mediate economic transactions but are also central to mediating aspects of social and civil life. It expands itself in civil society in order to mediate the whole gambit of relationships that make up modes of production (the forces and relations).

Within the water sector an example of this can be seen in the way that the State through the agency of Ofwat and its customer service committees has expanded into the civic realm. It mediates relationships between customers and service providers by taking on an 'independent' role. A similar critique may be made of others such as the Environment Agency, which might be viewed as not just a means of achieving environmental change but also of responding to concerns of certain groups within society and mediating those conflicts through the use of civil structures of interaction.

### **V.3.3 Nature, Environment and Sustainability**

#### **V.3.3.1 Crisis Tendencies**

Recent Marxist based analysis of the environment and sustainability places emphasis on production for social needs and environmental quality, the acceptance of the State and the need to define the environment as a socially constructed concept as well as in natural terms. The problems facing the world, including those of an environmental nature, are seen as the inherent consequence of the nature of capitalism. This suggests that environmental crises can be analysed as either a crisis within capitalism or a crisis of capitalism (Pepper, 1993). As a crisis within capitalism it manifests itself as rising costs of production and lower profits due to the additional costs arising from the decrease in productivity of environmental services such as assimilation capacity and increased costs of raw materials. For example, the rising cost of water treatment that results from the Urban Waste Water Treatment and Water Framework Directives that in effect place limits on the availability of environmental services and assimilative capacities. In response capitalism seeks to reorganise itself not just economically for example through redesigning operational structures but ideologically as well such as for example through the adoption of eco-modernisation.

Privatisation, the need to bring about environmental, social improvement and the need to manage the process of change may be also understood in this way. It now embraces ideas of ecological limits and the reality of externalities, all of which it has

itself produced, and seeks to displace these problems geographically, economically and temporally rather than solving them i.e. addressing their root cause. Eventually, displacement rather than solution of environmental problems will come up against the twin forces of ecological limits and social and ethical resistance. Emergent examples of this are the debates over the impact of higher water treatment standards on CO<sub>2</sub> production and the use of chemicals (fluoride in water). Historical developments such as water scarcity in terms of quantity and quality that have resulted from pollution of local sources and the provision of sanitation are examples of a process that still goes on. Changes in the means of treatment and disposal of waste and the impacts these might have both on the environment and on society form a continuum with earlier historical events. In being unable to contain the problems of sustainability within capitalism it inevitably becomes a crisis of capitalism.

It is within this framework that certain approaches to sustainability such as Ecological Modernisation, Legitimacy and Stakeholder theories as well as the developments over the last decade or so within the water sector can be understood<sup>6</sup>. These may be characterised as attempts to displace the environmental and social problems, carried out from within the dominant paradigm of capitalism. They are a result of a crisis within capital as it seeks to extend spheres of control and exploitation through the rhetoric of problem solution. Thus we see the employment of environmental economics as a means to address social and environmental impacts, resource costing and market based mechanisms of pesticide control to prevent water pollution as a means of extending titular control and the impression of problem solving. Continued failure comes to be explained as a failure of knowledge or technology rather than a failure of the system and thus the site of contest becomes displaced, creating distance between the manifestation of the problem and its root causes.

The environmental crisis of capitalism refers to the disjuncture between the capitalist mode of production and the necessary conditions of production. This holds that there are three conditions: the 'personal condition' – human labour power, 'communal general conditions' – urban space, communications, infrastructure and, 'external conditions' – environment (O'Connor, 1991). Capitalism in its exploitation of resources

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<sup>6</sup> It also throws light on possible reasons why in certain industries, those more dependent on environmental resources and services, environmental accounting has been more readily adopted.

destroys the environmental basis on which it is built; the crisis is one of 'external conditions', conditions that it cannot itself produce or reproduce. The role of the State is in regulating access to these resources and ensuring their availability to capital, hence the imposition of measures such as air quality, discharge licences and other controls that relate to the assimilative capacity of the water environment.

The crisis within capitalism can be seen as the inability of capitalism to sustain itself internally due to the contradiction between socialised production and individual appropriation (free rider problem). Capitalism brings this about by exploiting the non-capitalistic social world and the commodification of the environment. The crisis of capitalism extends from this and is caused by the exploitation of the non-human world, the alienation of society and nature and as such is part the wider economic and political contradictions of capitalism (Barry, 1999). It is not just the greed of the capitalist or consumer that is the root cause but rather the mode and the relationships of production. Thus we see a focus by the economic regulator on economic efficiency and non-deterioration of assets resulting in job losses and long-term deterioration of water network assets as investment is curtailed to reduce costs.

#### **V.3.3.2 Responding to Crises**

A proper understanding of unsustainable behaviour requires the understanding of the analysis of environmental problems and politics in terms of the underlying crisis tendencies of capitalism and the structural causes that underlie the tendencies. It is the way in which human attitudes to, interaction with and use of the environment is managed under capitalism that lies at the root of environmental problems rather than the exploitation itself (Johnson, 1989, cited in Pepper, 1993). The way that water for example is reconfigured as an economic good rather than a right that influences attitudes and behaviour. In fact the way these are constituted under capitalism facilitates such exploitation as it provides both a rationale for doing so and a legitimacy. Environmental problems arise in the form of increased costs as the conditions of production are degraded as a result of the cumulative actions of individual producers. "Limits to growth" thus do not appear, in the first instance, as absolute shortages of labour, power, raw materials, clean water and air, urban space and the like, but rather as high-cost labour, power, resources, infrastructure and space' (O'Connor, 1994, p.163).

When such conditions arise, as a result of profit maximising tendencies, the State takes on a more interventionist role in regulating the terms and conditions of access to the

'external conditions of production'. The causes of environmental degradation are now reconfigured as 'market failure' and lack of private property rights so as to become the responsibility of the State, through its various agencies. In response the State promulgates legislative measures and creates State sponsored agencies to regulate the conditions of production, for example through the attachment of attributes such as water quality, biodiversity, pressure or any number of metrics. The State takes upon itself the role of regulating and managing the longer-term collective interests of capitalism seeking to minimise the costs inherent in maintaining the conditions of production (Barry, 1999, p.264). The State thus displaces potentially system-threatening economic and ecological-economic crises both in time and into a political realm (Hay, 1994, p.219) through the creation of institutional structures premised on technological manipulation.

Ideologically, the State does this by extending and being required to extend economic rationality to cover environmental goods and services and formulating conditions for achieving sustainability. Hence, there is a growing tendency to embrace market based mechanisms and within this to commodify nature and the environment enabling the social dimensions of exploitation arising from the mode of production to be ignored. Thus in the water industry there is a growing use of aggregate indicators and reporting that tends to obscure both the individual as well as the divisive elements of exploitation. Virtual markets for environmental commodities (goods and services) become the mechanisms whereby these are rendered as capital in the form of their exchange-value and hence accessible to the capitalist mode of production, reality becomes an image (Nelson, 2001, p.504). Thus descriptions, through social and environmental accounting and reporting, of environmental goods and services as exchange-value both present a one-dimensional image and transform the understanding of eco-system functioning obliterating other social and ecological qualities (Nelson, 2001). At the same time it enables the institutions of the State to acquire a perceived ability to manage sustainability and environmental problems. Such approaches de-politicise sustainability by turning it into a matter of extending the State's mandate for management on behalf of society.

Thus capitalist economies do not seek to solve the problems of external conditions of production as this would require challenging the whole edifice that has given rise to them but rather to reconfigure them and displace them. For example, implementation of the Urban Wastewater Treatment Directive aimed at reducing the pollution of watercourses and other water bodies displaces the problem to one of solid waste

disposal through increase generation of sludge. It is premised on the use of more efficient technology based solutions rather than on addressing the sources of the problem, societal values, beliefs and behaviour. Negative effects are 'removed' from one sphere only to be relocated to another, thus presupposing that there is somewhere else that such problems can be sent where absorptive capacity is available. Such a strategy of discretising and displacing enables problems of sustainability to be reconfigured, for example as technical or bureaucratic problems rather than systemic. As Gorz (1993, p.5-7) observed,

"In the context of industrialism and market logic... recognition of ecological constraints results in the extension of techno-bureaucratic power. It abolishes the autonomy of the political in favour of the expertocracy, by appointing the State and its experts to assess the content of the general interest and devise ways of subjecting individuals to it."

What can be seen in this is an environmental restructuring that has given rise to quasi-corporatist institutions (e.g. the Environment Agency) that are expert based institutions that act outside of direct democratic systems of control and accountability. Furthermore, weak sustainability of the kind espoused by most market-based liberal democracies is essentially a reformist strategy that aims to increase the scope and legitimacy for the State to manage the 'environmental commons'. Ecological modernisation is part of a strategy of achieving a compromise between capital, labour and other environmental (political) forces (such as the Green Party or RSPB, Forum for the Future, etc.). How far this accommodation goes fluctuates with the fortunes of capital, individual profitable operations can afford to be more environmentally friendly or embrace 'sustainable' practices more readily than unprofitable ones<sup>7</sup>.

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<sup>7</sup>It has been noted that if capital as a whole behaved rationally it would work for the longer term sustainability of the system, including the conditions of production and the environment in particular. The state would look out for the interests of capital as a whole and would introduce rational policies. The result would be that the cost of production and capital would rise and profits would fall. However, individual capitals would have no incentive to do this. There is a contradiction in that a firm that does behave in a 'sustainable' manner is doing so in a way that goes against its own interests as a capitalist – profit maximising firm. Thus the solution of privatisation of the commons as proposed by Hardin is ultimately unsound.

The systemic response, given the nature of the institution of regulation and sustainability tends to favour compliance and subversion rather than the possibility of embracing reorientation of activities.

## V.4 RÉGULATION THEORY

### V.4.1 Introduction

In spite of its in-built contradictions capitalism has survived many crises and is as vibrant today as it ever has been, albeit in different forms. This has given rise to a reformulation of Marxist theory of the State and what has become known as the 'Régulation' school, which seeks to understand how capitalism has survived given its crisis tendencies. The term has been adopted from the original French '*régulation*' which would have been better translated as regularisation or normalisation rather than regulation in the English sense (*règlementation* in French) (Jessop, 1995, p.309). 'They found an answer in specific institutional forms, societal norms, and patterns of strategic conduct which both expressed and regulated these conflicts until the inevitable tensions and divergencies among the various regulatory forms reach crisis point.' (Jessop, 1988, p.149) It is important not to confuse regulation with what can be thought of as top-down juridico-political regulation sometimes referred to as 'real' regulation. A mode of regulation is 'the outcome of social and political struggles which stabilise to form a hegemonic system – class alliances, based on consensus armoured by coercion, which shape interests both of the ruling and dominated classes into conformity with the accumulation regime' (Jessop, 1988, p.150). An accumulation regime is a particular combination of modes of production and of consumption. The crisis tendencies of capitalism provide it with the impetus to reinvent itself, constructing new forms relationships between State, capital and labour. As Thrift (2001) observed, 'capitalism (is) a highly adaptive and therefore constantly mutating formation.' 'it is engaged in constant experiment.' And therefore there are always competing strategies. The State takes on a central role in reproducing and reintegrating capitalist society in the face of succeeding crises.

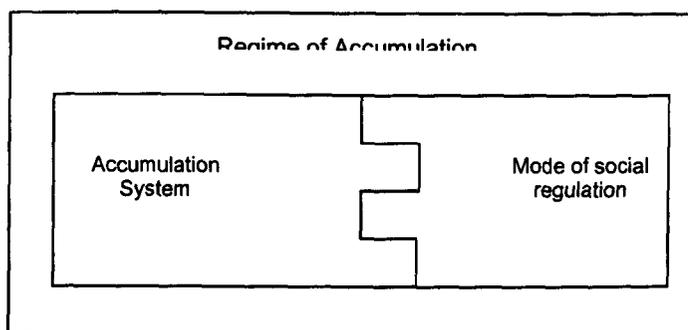
This interpretation resonates with what has been a period of transitions in capitalist modes of production and consumption as well as shifts in political ideologies since the 1970's and 1980's (Low, 1991, p.223). Along with the rise of a new middle class and fragmentation of the working class the effectiveness of the State as an organising force has been subverted by not only the greater (market) role of business and corporations but also by the appearance of international and sub-national institutions. Some writers

have offered the view that this represents a shift away from 'Fordism' and a Fordist form of State. Fordism refers to a particular form of capitalist mode of consumption premised upon the mass production of standardised commodities made possible by 'Taylorist' organisation of production. The Fordist state is 'the Keynesian, corporatist, statist, welfare state, which emerged to secure the expanded reproduction of the workforce during the crisis of Fordist accumulation.' (Low, 1991). This helped to create a mass of consumers to want the products of the mass production industries that started to develop in sectors manufacturing consumer goods.

For Aglietta, the pioneer of the *régulation* theorist (Jessop, 2002, p.466), both Marxist and neo-classical economics were concerned with the relationship between reproduction and qualitative change or transformation. In neo-classical economics this manifest through its concern with the price mechanism in general equilibrium of economy and in Marxism's case with the role of value in the circuit of capital. Both ignored the role of other, non-economic regulating and stabilising mechanisms – they were concerned with the economic mode of economic regulation (Jessop, 1995, p.316). As an alternative Aglietta suggested studying regulation in terms of 'the transformation of social relations as it creates new forms that are both economic and non-economic, that are organised in structures and themselves reproduce a determinant structure, the mode of production (Aglietta, 1979, cited in Jessop, 1995). The interest was therefore in both the social as well as the economic modes of regulation. It therefore provides a means of studying the socially embedded and regularised nature of economic activity. As such it takes in aspects such as legal regulation, changing forms of corporate organisation, modes of economic calculation, the role of the State, modes of societalisation and international regimes (Jessop, 1995) as part of the five key institutional forms involved in regulation (Jessop, 2002, p.466). For Jessop (2002, p.471), regulation theory should seek to transcend its original Parisian Regulation Approach economic roots and become a 'potentially post-disciplinary research programme'.

#### **V.4.2 Regimes of Accumulation**

Instead of crises leading to the inevitable demise of capitalism, there are transformation or accommodations that allow it to continue (Peck & Tickell, 1992). Under these circumstances regimes of accumulation arise, which have their own characteristic labour and competitive processes – the regimes become regularised (alternatively institutionalised or mediated) through their own peculiar socio-political institutions (Friedman, 2000). Thus economic development is path-dependent and furthermore



**Figure 2: Regime of Accumulation (after Peck and Tickell, 1992)**

political and social institutions matter, they change over time and should therefore not be seen as exogenous to the economic system (Jessop, 1997). Processes of social regulation, specific to each regime of accumulation, see Figure 2, serve to normalise phases of economic growth but

represent no more than a temporary institutional fix. The dynamics of the capitalist economy and society leads to perpetual and uneven technological development and this analysis provides a platform from which to understand the developments in the capitalist economy. Aglietta makes a connection between the macro-political sphere and micro-level labour and competitive processes through the basic idea that capitalism is unstable without these regulatory elements. Regulation is not a solution but rather displaces problems to new regulatory mechanisms (Friedman, 2000), focusing on changing norms of production and consumption and changing modes of economic calculation. So changes in governance, accountability and forms of accounting would be a reflection of the changes in the modes of social regulation.

The concept of a regime of accumulation is used to explain how capitalist growth can be sustained in the medium term. It consists of two elements; an accumulation system and a mode of social regulation (MSR). The accumulation system is seen as the dominant mode of economic growth and distribution and includes conditions of production (amount of capital invested and its distribution) and conditions of consumption. The mode of social regulation refers to elements such as habits and customs, social norms, enforceable laws and state forms. Peck and Tickell (1992) have suggested that the mode of social regulation has been somewhat neglected in regulationist literature and as a result inadequately formalised. They suggested five levels of abstraction: in its most general form it represents a generalised theoretical structure abstracted from everyday conditions, for example monopoly regulation. At a second level, within each MSR there are sets of regulatory functions that stabilise the accumulation system – the regulation of business relations and the formation of consumption norms. Regulatory functions are executed through regulatory mechanisms, which are historical and geographical responses to the regulatory requirements of the accumulation system – financial and environmental regulations for

example. Lastly, regulatory forms represent actual institutional structures through which the regulatory mechanisms are realised, such as legislative systems for example.

An advantage of the regulation theory approach is that it adopts a dynamic approach to economy using the concept of regulation as a process. The approach emphasises the complementary functions of other organising mechanisms in structuring, facilitating and guiding regimes of accumulation. In its acceptance of the path dependency of forms of capitalism, regulationists take economic forms and institutions seriously (Jessop, 1997, p.506) and this allows it to accommodate aspects such as spatial as well as institutional variations. Régulation theory approach has undergone change and innovation (Jessop, 1997) addressing itself to a wide variety of situations. Of particular interest has been the extension of the approach to include specific sectors and shifting scale from a national level of analysis through its consideration of case specific modes of regulation to both supranational (European Union and globalisation) as well as local/regional levels. These have attempted to formalise the analysis of structural forms, institutions and regulation and develop alternative modes of regulation based on comparative studies, modelling and scenario analysis (Jessop, 1997).

At heart Régulation theory tends to be macro-economic in orientation, focusing on institutional complementarities that regulate economic space. Aglietta in his work on a theory of capitalist regulation links a discussion of value theory with an historical account of US capitalism. There are also clear parallels with the UK in its development and adoption of the Keynesian welfare state and secondly in the solutions sought as a remedy to the crisis of Fordism. The work is most complete in its development of economic theory; regimes of accumulation and the departments of production. Its historical periodisation of American capitalism is considered to be a first approximation only. New areas of inquiry for the Regulation Approach include: questions of scale of application; a shift from a concern with the regulation of space to spaces of regulation and; sectoral analyses rather than national analyses (Jessop, 2002, p.468).

### **V.4.3 Economy and Environment**

The régulation approach in its concentration on social conditions had tended to ignore environment. It has only been with the realisation that any 'post-crisis' model would be severely constrained by ignoring the society/environment relationship that more attention has focused on this aspect. Recent work has emphasised the need to create social interaction within economies through altering the modes and conditions of

production. The aim being to improved quality of life rather than growth of material consumption as a substitute. As such this would become more favourable for the environment and for sustainability. The advantages of a regulationist approach have been said to be that development models would be premised on an economy oriented by ethics and public decisions, an economic dynamic founded on social reproduction within ecological reproduction and a very long term economy (Lipietz, 2002). Such approaches would be synonymous with sustainability.

Lipietz goes on to point out that the regulationist approach of the economy of the environment are still at an early stage. It is accepted that given the uncertainties inherent in the conceptualisation of sustainability ideas concerning legitimate forms of regulation and the objectives to be achieved can and will be contested. This is especially the case when the instruments of regulation are evolving and their efficacy debated. Under such circumstances it is far from clear that a stable regime of regulation has formed or is still forming. Even if there were consensus on the consequences of an accumulation regime there still remains the issue that different social formations would assess the costs and consequences of a mode of regulation differently. And, 'in each social formation, there may be differences between the interests of the various social groups and the interests of an elite involved in negotiations.' (Lipietz, 2002).

#### **V.4.4 Reconfiguring the State**

Under a wide range of circumstances the 'market' as an institutional form is not the best mechanism for coordinating economic activity and transactions among participants especially under conditions of uncertainty. In the case of the supply of public goods such as infrastructure and environmental improvements the efficiency of the market is quite weak. It has difficulty in dealing with extended time horizons, the socially based nature of the so-called goods and the theoretical and practical inadequacy of discounting to resolve inter-generational issues. Thus reliance on other forms of coordination other than market mechanisms is a prerequisite for the continuing dynamism of capitalism (Boyer & Hollingsworth, 1997). But at some stage the contradictions of capitalism, especially as expressed through the rationale of the market will challenge the viability of other institutional arrangements such as the values of the community, the family, systems of authority – eroded by the pursuit of individual interest.

In order to overcome such challenges and maintain a meta-balance between capitalism and society, new rules and norms emerge that place constraints on capitalist behaviour and performance. Hence there arises the need for regulation, exercised through agencies of the State, such as Ofwat, the EA as well as DEFRA. At the same time though the State has to maintain the transmission of inequalities in ownership of resources into material effects in order to maintain the capital system. Historical evidence suggests that the State intervenes in the mode of production through the promotion of such changes in order to maintain effective economic institutions. As Hollingsworth and Boyer (p. 452, 1997) note, given the coercive and persuasive power of the State, this provides an explanation for the development of new institutional forms and can lead to the emergence of a coherent mode of regulation. Institutional form involves both a definition of the rules of the game and the interaction of groups within that institutional setting. According to this interpretation the presence of coordinating mechanisms within a regime of accumulation implies a constitutional order, a political process of institutionalisation that does not rely on the routine of everyday interaction within the economic sphere. The State matters for social systems of production.

The Régulation theory approach recognises the State as being among the basic structural forms in any mode of regulation, guaranteeing certain preconditions for the capitalist mode of production and addressing/mediating its contradictions. The State becomes a key institutional focus for coordinating or coercing behaviour (Boyer & Hollingsworth, 1997) and it sanctions and regulates non-State coordinating mechanisms. In the water industry this would be manifest through the relationships between firms, driven by yardstick competition, the role of trade associations (WaterUK) and the sanctioning (or otherwise) of trade unions. The role of the State was seen as providing institutionalised compromise, underpinning emerging accumulation regimes and their modes of regulation. More recent work on the state in regulation theory has sought to identify changes in the form of the state and its functions, which would contribute to the regularisation of an emergent post-Fordist accumulation regime (Jessop, 1997, p.515). There seems to be agreement that new state forms are emerging with Jessop (1997) suggesting that the institutional restructuring and strategic reorientation of the state system is tending towards 'denationalisation of the state and a destatisation of politics'.

It is certainly true that the structure of the State has been reconfigured through a range of private sector derived processes and practices such as privatisation and new public management. Departments of State have increasingly become organisational

umbrellas under which a plethora of agencies operate, reflecting a growing preference for disaggregation rather than a unified structure. This tendency manifests itself through;

“...the dominance of the ‘business-consumerist’ model as opposed to a ‘government-citizenship’ model seen in a preoccupation with customer not political rights and with managerialism rather than constitutionalism.”

*(Painter, 1994)*

Organisational structures now include notions of targets, performance indicators and choice, and a desire to move towards systems of governance rather than government. This hollowing out, or fragmentation, separates political processes from managerial processes and couches accountability in terms of performance. The adoption of this model of the State shows a trend whereby services that were once under local government have been transferred to non-departmental public bodies (NDPBs), increasing the responsibility of central government but at arms length from a political process. Lines of responsibility become blurred, replacing local political accountability, the elected are substituted for the appointed (Flinders, 2001). Hence the rise of organisations such as Customer Service Councils (Water Voice) and the growth of local consultation processes by State agencies on local issues or national issues but at a localised level, without any democratic mandate.

#### **V.4.5 Limitations**

Régulation theory is not predictive but rather retrospective in its analysis but it can provide a basis for interpreting contemporary political-economic features. A particular problem is that it is rarely clear what is going on as productive systems and institutional structures are in a state of flux. Capitalism also displays the contradictory characteristics of getting things rights as well as getting things wrong. There are therefore dangers in trying to attribute ‘regime-wide and predictive conclusions from the flux of crisis.’ (Peck & Tickell, 1994).

Régulation theory has been criticised on several counts. The problem with regulation theory is that in focusing on forms of regularisation it over-emphasises the power of regulatory social norms and institutions while trivialising the sources of instability regarding them as technical or economic factors. This ignores the potential importance of agency and other patterns of disruptive social and political action, which can be aimed at transforming those norms and institutions. There is also a suspicion that it is

also too functionalist, assuming that modes of regulation arise to meet particular circumstances rather than emerging as a result of a dialectic process. More seriously there is the charge that regulation theory is too simplistic, reducing post-war history to a transition from Fordism to post-Fordism. Lastly, the idea of regulation might imply that such actions, consciously taken, can transcend capital's crisis tendencies – through state intervention. These points have begun to be addressed (Jessop, 1997; Friedman, 2000) and certainly the Régulation theory approach has been shown to be capable of addressing these criticisms in its more recent and developed forms – what are referred to as third-generation Régulation theorists. Others have sought to bring together Régulation theory approaches with other theoretical traditions such as discourse and governance, offering some interesting lines of exploration (Kenny, 1999). Such an approach has been adopted in this inquiry through the use of Foucauldian ideas of discourse, power and discipline.

A criticism that has been levelled is that 'the regulation approach ends up ascribing to history a stylistic, functionalist and logical coherence which it rarely possesses' and 'regulationist analysis remains caught between the desire to couch capitalist development in the form of a universal logic of accumulation, on the one hand, and its sense of the contradictory and uneven character of socio-economic change on the other' (Kenny, 1999). Furthermore, it has been suggested that the regulation approach is only meaningful in the context of a small group of industrialised nation states. More seriously Mavroudeas (1999) contends that Régulation theory's methodological and theoretical perspectives are unfit for the purpose of explaining capitalist development. The basis of the criticism is that it prioritises superficial features, presents them as stylised facts and builds theory from them. In other words it lacks a sound theoretical foundation on which to base its analyses and in its place uses middle range theory (Laughlin, 1995). It is said that Régulation theory, in spite of the importance it accords institutional forms has no coherent theory of the state nor a theory of crisis – the causes and mechanisms for creating crises within capitalism (Mavroudeas 1999). The critique suggests that the use of middle range theory in Régulation theory is flawed rather than the attempt to operationalise Marxist general theory to account for the continuing dynamics of capitalism.

However, the approach through turning the spotlight on the social and cultural conditions, which make markets and 'rational' economic behaviour possible, is able to highlight the limitations of neo-liberal political strategies which take no account of regulatory institutional frameworks in civil society (Kenny, 1999, p.58). Furthermore, it

draws on Marxist traditions and thus provides a basis for incorporating ideas of the state, modes of production and commodification within a more reflexive framework. It provides a basis therefore on which changes in the water industry, such as the debates over scale and extent of environmental programmes, the operationalising of social policy and policy consultations may be understood.

## **V.4.6 Régulation Theory and Sustainability**

### **V.4.6.1 Re-Regulation**

It is only in the past few years that the Régulation theory approach has been used to address issues of sustainability and sustainable development (Bakker, 1999; Drummond & Marsden, 1995; Gandy, 1999; Gibbs, 1996; Gibbs & Jonas, 2000; Lipietz, 2002). The move to address environmental and sustainability issues also coincides with efforts to use the approach to redress its spatial bias and move its focus of analysis from the macro-economic and national state level to consider local forms of regulation and governance. In part this has been a response to the need to understand and explain the uneven spatial development seen within nation states, using the Régulation theory approach. It is in keeping with one of the main tenets of sustainability discourse that 'local' should be the key site of intervention, seen in such phrases as "think globally, act locally" and the development of Local Agenda 21 Plans in the UK. At the same time greater attention has been paid to the international arena, reflecting attempts to understand and explain the erosion of the power of the nation state to regulate and govern as independent entities. Regulation theorists have approached this by way of considering local/regional practices (and even international practices) in terms of emerging post-Fordism forms of regimes of accumulation, reflecting localised characteristics and developments. Localised being understood as either a spatial or industry specific characteristic.

Under such an analysis there is seen to be a rescaling process, a localisation of the governance of local development and economies, of regulatory structures and institutions, and the emergence of local policies and policy implementation practices (Gibbs & Jonas, 2000). This process is recognisable in the sphere of environmental policy, which operates (unevenly) at a variety of spatial scales, from the level of the EU down to localised planning controls. As Gibbs and Jonas (2000) suggest, the understanding of this uneven development of local environmental policy making and sustainable development requires an examination of the local context of governance and social regulation. Since the 1980's there has been a growth of local or regionally

focused government sponsored agencies alongside traditional forms of local authorities in the UK (MacKinnon, 2000). The transformation of local institutional structures and relations has been represented as a shift from local government to local governance, fragmenting established bureaucracies and replacing them with complex plural systems. Development policies and planning, for example Regional and Unitary Development Plans, drawn up by local authorities seek to integrate sustainability issues, the roles of such agencies and national government policies within a local framework that has to address a wide variety of needs, not least the need for local economic growth and development. This has led to territorial economic competition and the development of local policies for sustainable development that reflect the economic pressures on local government and other local players (Gibbs & Jonas, 2000). It suggests a wide scale change in the structures of governance and regulation that, in part, responds to sustainability as an emergent discourse.

The twin processes of rescaling and transference (national to local), the setting of local sustainability policies framed within the terms of local development does suggest that it is legitimising weaker forms of sustainability rather than enabling new regulatory solutions (Gibbs & Jonas, 2000). A parallel process may be seen in the emergence of sector specific arrangements, of which those pertaining to utilities are just one example. Another emerging trend, which may be seen as a constituent to modes of social regulation, is the increasing emphasis placed on local partnerships/networks and engagement with civic society (environmental groups, community organisations, business and other 'stakeholders') as vehicles of policy delivery. Some commentators have seen these trends as part of a wider process of 'glocalisation' (Swyngedouw, 1997) and the 'hollowing out of the state' (Jessop, 1995). Glocalisation refers to a process of simultaneous embedding and disembedding in the capitalist (space) economy. With greater global dispersion there is increasing reliance on localised producer networks and labour market processes. Hollowing out takes the form of selective displacement of the powers of the nation state in three directions: 'upwards' to the international level; 'downwards' to the regional/local level; and 'horizontally' to inter-regional or trans-local organisations. This is not a process of de-regulation but rather of re-regulation; reconfiguring and re-assigning roles within a particular mode of regulation.

An example of this is Gandy's (1997) interpretation of the restructuring of New York's water supply from a regulationist's perspective, contending that the institutional changes constitute a re-regulation process. "In place of a relatively centralized,....non-

participatory regulatory system, the watershed is now overseen by a complex and dynamic jigsaw of many different pieces.” This was linked with the changing role of the State, especially with regard to its distancing from environmental (real) regulation and the simultaneous creation of investment opportunities for surplus capital. Gandy (1997, p.351) also sees the reshaping of the role of the state not only as re-regulation but simultaneously also as a hollowing out of the state. Within the regulation of the water industry an example of this would be the regionalisation of (statutory) consumer representation and the absence of any formal central platform at national level. The dilemma this poses is that the adoption of market based regulation in place of state institutions puts at risk practical means of achieving environmental (sustainable) improvements and opportunities to develop alternative paradigms in the public interest, which differ from that of capital. It moves the point of debate from the democratic arena to the market place and in doing so limits the scope of debate to a single economic dimension. The problematic is transferred from problems for society to social problems. This not only burdens sections of the population but also stifles possible reconfiguration of productive processes through limitations to market goals.

In the UK the on-going process of ‘hollowing out’ and commodification can be seen especially with reference to environmental policy and responsibilities. The responsibility for environmental policy formation has been largely displaced ‘upwards’ to the European Union by way of the development of European Directives, for example the Urban Waste Water Directive or the Bathing Waters Directive. Indeed, the great majority of UK environmental policy as it relates to the water sector is now derived via the European Union. At the same time responsibility for implementation and enforcement has been passed to parastatal agencies such as the Environment Agency and English Nature, which implement what become national regulations at regional levels through local initiatives. Not only that but these agencies are also engaged in the development of local initiatives such as Local Environmental Action Plans (LEAPs) and Catchment Management Plans (CAMs) in conjunction with various, local stakeholders in addition to other initiatives already mentioned. Such actions are taking place as a result of central government sponsorship, or as Jessop (1995) would have it, it is the national state that is orchestrating the ‘hollowing out’ process. This, it is contended adds legitimacy to certain environmental practices on the part of the local agencies and as Cocklin and Blunden (1998, p.66) comment:

“The sustainability discourse is part of the continual re-regulation of society, economy and environment, and consequently the (re)production of space.

While sustainability has become incorporated into many discourses of our contemporary society, it is being regulated and articulated primarily through the hegemonic discourses that prevail at national level, while the outcomes are then (re)negotiated at local levels.”

Such ‘narratives’ of national sustainability or environmental policy, through the process of hollowing out, enter the local policy arena and are re-narrated, so notions of partnership, stakeholder, sustainability, indicators, participation and even the idea of the ‘local’ are re-negotiated and take on specific meanings. Much of the burden for developing and implementing sustainability is, it has been argued, being placed on the local in responding to the supra-national delegation of macro-policy setting. The configuration of the water sector with its regionally based private companies, Ofwat’s Customer Service Committees, the regional/local structure of the Environment Agency and the often complementary local configuration of civic groups such as environmental NGO’s (e.g. Wildlife Trusts), offer themselves to such an interpretation. The relationship and place of the local vis-à-vis the national arenas is still a matter of debate, as exemplified in the 1999 Price Review and its non-use of regional surveys of customers. What constitutes local can transcend jurisdictional boundaries and encompass a wide and diverse range of interests, which may have competing and even contradictory agendas.

#### **V.4.6.2 Modes of Régulation**

Given that one of the principle debates of sustainability centres on the bringing of economic growth and environment into a closer, supportive relationship the regulation approach has been relatively silent on this issue (Gibbs, 1996), though this has been changing (Cocklin & Blunden, 1998; Bakker, 2002; Drummond & Marsden, 1995; Gandy, 1999). It has been argued that legislation and current investment in environmental programmes, especially where they focus on end-of-pipe solutions or remediation of environmental damage becomes a field of capital accumulation, offering further opportunities for the capitalist system (Drummond and Marsden, 1995; Gibbs, 1996). Remediation of damage is creating use value to satisfy human needs (Gibbs, 1996). The on-going attempts to address sustainability and to put in place mechanisms, institutions and (real) regulation, represents for some theorists emergent modes of social regulation. However, whilst ‘real’ regulation may be relatively easier to initiate, it must be underpinned by complementary social values and norms without which they will redirect rather than counteract the tendencies that gave rise to their need initially (Drummond & Marsden, 1995).

Regulatory modes have historically been premised on unsustainable practices in relation to the use of natural and social resources. In moving towards sustainability these relationships must change, implying as well a reconstituting of the mode of regulation. For this to happen there must be a questioning of how social values are constructed not just within institutions and the population but also the manner in which these are reflected and constructed in the value of commodities and markets “as part of different production-consumption episodes” (Drummond & Marsden, 1995). Modes of social regulation bring together not just the ability to consume but also the nature of that consumption. Examination of the interplay between the various elements of the water sector, at its various spatial and organisational levels provides a sectoral insight into how norms and values are established, maintained and changed. Consumption is in part moulded by shared ‘cultural realities’ of which social life is constituted and influenced by norms and values reflected in various discourses. The fostering of ‘cultural realities’ arises out of the milieu of interwoven discourses of the state, society and business; of ‘real’ regulatory agencies, of capital and of non-capital elements such as labour, environmental groups, and community organisations. The interwoven discourses play an important part in the emergence of social modes of regulation due to their being rooted in the interplay that constitutes a particular mode of production.

There has been a recognition that regulatory agencies are limited in that they can only employ the strategic capacities available to the state – and these are limited. The state is vulnerable to a crisis of legitimation in the complex sphere of the environment and sustainability. On the other hand the perceived power of the state ensures that it is a key player in managing and mitigating the contradictions of capital accumulation even though its agency may be faced by structural constraints. Faced with this the state has responded by developing policies and environmental governance patterns, expressed through new institutional arrangements that seek to strengthen its interaction with and dependence on civil society. It has sought to reconfigure the power of the state within new institutional arrangements. The capitalist state can be conceived of as a balancing act that mediates between the needs of capital accumulation and social cohesion in an, eventually, unstable equilibrium of compromise. The regulatory realignment places increasing emphasis on market-based instruments and the use of the private sector to replace the services provided by the state. In introducing alternative governance procedures and the proliferation of its own agencies the state weakens its own ability to act decisively and by separating the political from the technical and managerial, regulatory activities become dispersed through, and dependent on society. The application or operationalisation of sustainability as a means of mitigating risk is

increasingly de-politicised through this process. The sustainability debate serves to exacerbate the tensions in the capitalist state by questioning the sustainability of the system, the ability of the state to serve the public interests, and the fiscal ability of the state to meet rising expectations.

## V.5 RÉGULATION APPROACH AND THE WATER SECTOR

### V.5.1 Introduction

Some researchers have used the Régulation approach to analyse and understand changes that have taken place in the water sector over the last couple of decades and more particularly the change from public to private ownership (Bakker, 1999; Bakker, 2000; Gandy, 1997; Haughton, 1998). In particular it has been used to focus on the 1994/95 Yorkshire Drought as a means of revealing the tensions and indicating the contradictions of the post-Fordist arrangements created by the 1989 privatisation. Bakker (1999) and Cocklin and Blunden (1998) have pointed out that the water industry exhibits some important divergences from the regulationists' conventional historical periodisation of Fordism and post-Fordism. However, the approach provides a means of analysing the relationship between the structure of the industry (the mode of production) and the dynamic and interactive forces that are operating in parallel with and that are responsible for shaping the institutional structure and governance arrangements of the sector<sup>8</sup> (the mode of social regulation). There is benefit in situating governance as part of the analysis and relating the modes of social regulation to it, given that 'real' regulation and its mode of implementation is but one part of governance arrangements. It also stems from the observation of evolving governance structures and the introduction of new institutional arrangements within the water sector as part of the response to changes in the mode of production. This approach has not, as such, been used to understand the relationship between regulation and sustainability, in its more complete sense though some of the work has pointed in this direction. The question also arises as to the stability and evolution of these processes,

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<sup>8</sup> A distinction is made between the water industry and the water sector. Water sector is used to indicate the wider social, political and economic context within which business operates. Thus it includes the role played by civic, community and environmental organisations, politics as well as trade unions, business and regulators, which are seen as the water industry. In other words the term water industry refers to those who are directly involved in the business of the production of water for consumption, its removal and treatment after use and its return to the environment.

whether in response to external requirements (from the EU) or internal interests (price reviews, leakage).

### **V.5.2 Characteristics of Water**

Water may be regarded as unique in its characteristics, not only is it a natural 'flow' resources that serves a number of purposes but it also provides a variety of services. It is for this reason that it is difficult to establish property rights and boundaries. Furthermore, as a flow resource with assimilative capacity its ability to displace negative externalities, such as pollution, impacts on its potential usage and value but such negative 'territorial effects' are difficult to control or mitigate under private property regimes. As such it has resource implications for both production and consumption. This has provided a rationale for the involvement of the state. In turn it creates tension with private sector provision that is capital intensive and involves high costs relative to the added economic value that it generates. In developed, urbanised societies water moves beyond being a product of nature to becoming a product of society, subject to the intricacies of social, economic, environmental and political interaction. It can no longer be regarded as a neutral object but is reconstituted as an economic good that becomes a site of contest, taking on a materiality determined by its functional use. Bakker (2002) argues that with privatisation of the water industry, water became a tradeable good supplied by the market under competitive conditions: no longer a public good supplied by the state at subsidised prices. Furthermore for her, this implies maximisation of economic efficiency rather than social equity or security of supply. Whilst the argument for water being a tradable good could be accepted if founded on the profitability of its supply, the proposition that formerly as a public good its provision was socially equitable (ignoring the fact that in economic terms it was not a public good in the first place) is not at all supported. It should be accepted that this representation is a simplification. That said the importance of this body of work lies in its identification of the commodification of water services and the construction of modes of regulation to underpin the processes.

An important distinction can be between the biophysical nature of water, H<sub>2</sub>O, and water as a social construction (Illich, 1986), acknowledging a "complex dialectic between production and nature" (Roberts & Emel, 1992, p.267). Water moves beyond being something in and of nature to being socially reconstructed, as an economic good for example having attributes that relate to its social use rather than its productive capacity. As a socially constructed object water "circulates through a hydro-social cycle – a complex network of pipes, water laws, meters, quality standards, consumers,

leaking taps” (Bakker, 2002). In fact water as a social construction goes beyond this, it is not bounded by its physical nature and infrastructure, it is predicated and contingent on the institutions, institutional arrangements, structures and relationships that provide the sites and discourses for its construction and contestation. It is the laws (national and international) and regulations; the regulatory bodies; the standards, statutory and regulatory requirements; the demand patterns, customer demographics, demands and expectations; the expectations of the City (the Stock Market); and politics as much as rainfall and climate that shape and influence flow and distribution through the infrastructure.

### **V.5.3 Re-regulating Water**

Regulation, as a social practice that is inclusive of ‘real’ regulation, becomes a practice that is at once adaptive and transforming and being transformed in the process. It mediates the mutually constitutive relationship between socio-economic change and environmental change. The watershed change that was the privatisation of the water industry and its subsequent changes can be understood as a process of re-regulation of the sector. It is a process that has been primarily mediated by the state, in its various guises. This is to accept that the State is not a monolithic entity with a singularity of purpose but rather a polymorphous collection of often competing aspects of the State that come together in different combinations at sites and occasions of dialogue. From each site of dialogue there may emerge a dominant discourse, drawn from the competing discourses. And often these involve institutions outside of but with varying degrees of attachment to, the State. Re-regulation involving the State becomes a dynamic response to dilemmas that can no longer be managed within the extant political-economic paradigm. It has been characterised initially by the emergence of new institutional arrangements (changes in the structure of government e.g. Ofwat and the Environment Agency), and on-going changes in governance (the development of multiple levels of regulations, reporting, accountabilities and sanctions). Hence with the transfer of responsibility for water supply, treatment and disposal to the private sector there has been an accompanying growth of economic, environmental, resource and quality oversight. This shift in the mode of governance has been captured in the phrase “a shift from government to governance” (MacKinnon, 2000, p.293) and the increasing involvement of un-elected bodies such as private firms and their trade organisations (e.g. Water UK), quangos (e.g. Ofwat, English Nature, etc.), civil society bodies (e.g. Consumers Association and trade unions), and other lobby groups (e.g. RSPB, Surfers Against Sewage) (Kaïka & Page, 2002). At the same time

there is a marginalizing effect that works against trade unions and more especially those without the power, opportunity, legitimacy or means to either articulate their views or have them heard.

#### **V.5.4 Representation and Participation**

The increasing institutionalisation of regulation, which includes controls, penalties and coercive mechanisms, has given rise to new forms of governance, forms that reflect both the internationalisation of regulation (through the EU and its directives) and at the same time its localisation. Part of this change can be seen in the shift to accommodate mechanisms of participation and negotiation in the management and regulation of the water sector. Participation has been bracketed with sustainability, for reasons explored in the chapter on sustainability, and now forms part of the emerging governance of the sector, seen as a way of promoting sustainability. For Swyngedouw et al (2002) the shift in the public/private boundary has meant that the relationship between individuals or social groups and the mode of water governance has undergone a profound change. The relationship between civil society and its political expression in the form of institutions that undertake public managerial and regulatory tasks has shifted away from the legitimising of State power and arrangements by the electorate to be replaced by horizontal networks of relationships within inclusive participatory organisational associations sited outside of the democratic representation process. Participation is now on the basis of the 'stakes' participants hold with respect to the 'issues' and hence the emergence of 'stakeholders', a shift from 'political citizenship', articulated through state-based forms of governance, to a 'stakeholder' based polity (Schmitter, 2000). This is an expression of the widening use of consultation both at local and national levels by State agencies such as the Environment Agency and its incorporation into its everyday activities.

However, the inclusiveness is constrained and limited by who can or will be allowed to participate, with the entitlement to participate conferred on those who already hold a certain power or status;

“in preparation of the Water Framework Directive, the European Commission was the prime 'gate-keeper' in assigning entitlements. At a different scale, in preparation of the Water Bill in the UK the central government is the prime 'gate-keeper' who chooses which actor's contributions to consultations are given credibility. In addition, the terms of participation may vary significantly from mere consultation to the right to

vote on a decision. Needless to say, that status within the participatory rituals co-determines effective power positionality. More fundamentally, while political citizenship-based entitlements are inclusive (at a national level), holder entitlements are invariably predicated on a willingness to accept new entrants as participants on the one hand, but also on a willingness-to-participate by the new entrants on the other." (Swyngedouw et al, 2001).

The problems with this are obvious, the idea of representation is diffuse and its accountability contestable with limited forms of democratic control, all of which smacks of autocratic, non-transparent systems of governance. Furthermore, this 'hollowing out' implies that there will be scale order effects on governance; local representation, accountability and entitlement will differ to that of the meta-level of the Water Framework Directive for example. In the case of the water sector this will lead to the enumeration of localised goals for water bodies, goals arrived at through technocratic rather than democratically accountable processes. There is the danger that policy becomes divorced from implementation and a mismatch between organisational structure and ability to deliver. Localisation, whether it be at a regional level in the case of a water company or at a river basin level in the case of the WFD approach will clearly pose problems not only of matching but also acts as a barrier to those institutions that operate at say national level such as unions. This privileges certain institutions such as environmental groups, which have been given a greater voice and power, over others and raises the question as to whether the social and equity dimension of sustainability can be accommodated within such a regulatory approach.

### **V.5.5 Specialised Knowledges**

The evolving forms of governance are in part an outcome of the economic organisation of the water industry and cannot be separated from it. Indeed, though there is a growing concern with sustainability it is firmly contained by the primacy of economic considerations that are also reflected in the governance structures, institutions and practices of the sector e.g. Ofwat. Ofwat acts as the agent of the State facilitating and resolving economic conflicts, its power and structure reflect the fact that it is both a market-led and shaped institution embedded in the hydro-social cycle (Swyngedouw et al. 2001). The fact that the water industry is in private hands means that they have a greater degree of economic autonomy that affects the decision-making procedures. It also affects aspects such as access to information; information becomes a valuable commodity and a potential tool in a regulatory game.

A further dimension is the degree to which it is also a process of further commodification, of particular issues and also of knowledge and expertise. Specialist knowledge has a tendency to form enclosures, sites within which expertise and knowledge is concentrated, something that can be discerned in the various consultation processes that have become regularised by the State and its agencies. At the same time government relies on such knowledge as a way of exercising control over problem identification and formulation as well as the manner in which it then frames its obligations and policies to address such obligations. Such concentrations or sites of expertise (commoditants) provide the intellectual machinery for ordering procedures and explanations that construct and frame reality in a way that allows certain actions to be taken rather than others. It becomes a way of maintaining power through commonality of discourse and accountability.

Notion of 'arenas of representation' such as; the Price Review process, Parliamentary Select Committees and consultation processes, link structure to agency and are structured by economic, social and political processes. Within them actors represent themselves with a view to achieving their own aims. This can be either economically via the market or politically via regulatory arrangements though they are closely linked.

## **V.6 DISCUSSION**

The *Régulation* approach sees in the marketization of the water sector, an attempt by capital to cope with the past 'bads', especially those associated with the environment, as well as with emergent 'bads' such as vulnerable groups and metering. It does so by evolving the modes of accumulation to see value in nature, and its maintenance and improvement, internalising and seeking new sources of costs and thus revenue and profit from negative externalities and the expansion of activities to address their past and current impacts. Within this the State takes on the role mediation and allocation of 'bads' within a contested arena of policy and policy outcomes. The state in Jessop's (1990) term becomes a 'site of struggle', an object and generator of current strategies as well as the product of past political struggles (Jessop, 1990) and a focus of discourses and of mediation. In doing so it engages in an on-going process of re-regulation of governance institutions via organisational forms that embody past as well as present political struggles (Bakker, 2002). Whilst the adaptation of the modes of accumulation to incorporate or cope with the potential threat to capital posed by the environment has been 'successful', it has so far failed to do so with respect to social

'bads' such as the equity of intra-generational (water poverty and vulnerable consumers) and inter-generational burden<sup>9</sup> (future price arising from asset deterioration and climate change). In some respects it can be said that this is now a site of contestation within modes of social regulation with a number of different but related discourses emerging.

The importance of what is social and political acceptability within the water industry has been explored by Haughton (1998) with respect to the 1995 Yorkshire drought. In his work he highlighted one set of circumstances under which the system of re-regulation had failed to achieve popular acceptability and led to the introduction of new regulatory regimes, characterising this as a crisis of governance – the failure to tackle leakage. Also of direct interest to this work was the discursive manner in which the crisis was constructed – primarily by the media, in which the characterisation of the drought as an 'act of God' was challenged by a discourse centred on the inadequacies of privatisation and management – a crisis of legitimation. Although there has been some debate concerning Haughton's reading (see Bakker, 1999) it does serve to illustrate the importance of discourses in the practice of re-regulation and the insight that re-regulation is not static but an evolving and contested practice. Critical events, such as the Yorkshire drought provide a means of silhouetting the processes and endowing them with greater clarity.

A reading of the changes in regulation indicates that there has been a noticeable degree of 'regulatory creep', with increasingly formal, overt and statutory regulation. Ofwat especially, in response to the circumstances it has found itself in has developed into a top-heavy institutional-regulatory body (Swyngedouw et al, 2002). The growth in the number of regulatory bodies within the water sector that mediate its workings, at local, national and international scales, has contributed to "a 'thick' regulatory structure, with ambiguously defined responsibilities and an imprecisely defined accountability." (Swyngedouw et al, 2002). Concurrent with this has been the gradual aggregation of organisations that have discovered an interest in the water sector. The result has been a widening of stakeholders and a need to respond to this trend by evolving governance mechanisms to cope with the multiplicity of actors.

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<sup>9</sup> Current consumers paying to rectify past neglect and future consumers reaping the benefits without sharing and bearing the financial burden.

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**V.7 SUMMARY**

This chapter has sought to provide a theoretical framework through which an understanding of the relationship between regulation, the promotion of sustainability and the effectiveness of the institutional framework in the water sector might be gained. In doing so it uses a Marxist based approach to political economy and in particular Régulation Theory to provide the theoretical framework. Such an approach, drawing on the notion of the economy of community explicitly considers the relationships between the structure of production and the structure of society and situates the state and its agencies as a key constituent of the relationships. Régulation theory takes as given the dynamic nature of capitalism to provide a *post hoc* critique of modes of production and regulation and how they evolve to meet challenges such as environment and sustainability. The role of the State and its agencies is seen as central to understanding the emerging mode of regulation especially within the water sector. In responding to a multiplicity of challenges and new circumstances – such as sustainability, the State has undergone a process of ‘hollowing out’ of its centralised functions and a concurrent move from ‘government to governance’. This has given rise to a multiplicity of new actors, technologies and practices with overlapping responsibilities and constituencies. The *régulation* approach regards sustainability as integral to the critique of existing modes of production and regulation and sees the need to move beyond institutional fixes to changes in values and relationships as the basis of progress towards sustainability. The re-regulation of the water industry, the establishment of State agencies and the institution of new governance procedures within the water industry have been noted, premised on both the physical and social nature of water. To an extent these have been framed as a response to and means of addressing the sustainability paradigm through the integration of economic, environmental and social imperatives. Thus a Régulation theory informed theoretical framework provides a means of critiquing the regulation of the water industry and its relationship to promoting sustainability within the water sector.

## CHAPTER VI: DISCOURSE AND MODES OF GOVERNANCE

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*'Come, listen, my men, while I tell you again*

*The five unmistakable marks*

*By which you may know, wheresoever you go,*

*The warranted genuine Snarks.*

Lewis Carroll, *The Hunting of the Snark*

### VI.1 INTRODUCTION

Regulation Theory provides insights into what the institutional framework of the water sector is and a superstructure for understanding the modes and instruments of governance. What it does not do so well is to address the questions of how and why the modes of social regulation have emerged and are maintained. Régulation Theory is less suitable for understanding how some of the changes in modes of governance and regulation evolve and coalesce and, the role of discourse and power relationships between parties. There is therefore a need to develop a means of analysing and understanding the ways in which modes of regulation have come about and are maintained. To get behind the structural framework and examine the inner workings. By doing this I am seeking to develop the means of analysing the ways in which regulatory practices, with particular respect to sustainability, are influenced and interpreted. Such an analysis may provide insights into whether the mode of regulation seeks to provide a pragmatic accommodation of the mode of production with weak sustainability or bring about a re-orientation of the norms and values of the industry.

It is held that modes of regulation are established through discourse, the exchange of ideas and the emergence of shared and accepted understandings. This review therefore focuses on the conceptualisation and theorising of discourse as a regulatory practice. It also looks at the role of power and the State and the extent to which they have the ability to influence modes of governance and social regulation. Discourse, power and the State are employed and provide a vehicle through which to understand the way modes of governance emerge and are maintained.

In critical theory research, two of the more influential thinkers whose ideas have been drawn on in order to theorise the practices of the purpose, formation and deployment of discourses, as well as the conditions under which these take place have been Habermas and Foucault. A superficial survey of critical accounting literature would seem to indicate that interest in Foucault has been on the wane whilst Habermas

continues to be influential (Power & Laughlin, 1996; Lehman, 2001). Their ideas have been embraced, extended and applied to various strands of accounting research, Habermas seems to be particularly used in the context of social and environmental accounting. Both Foucault and Habermas have much to say that is of interest on the subject of discourse and by extension on the formation of accounts. For me the key difference between the two can be summed up as follows; Foucault theorises about discourse as it is, whilst Habermas theorises about discourse as it ought to be. This leads to two very different, though not necessarily exclusive perspectives on the practice and purpose of discourse.

The ideas and insights of both Foucault and Habermas are influential and form the basis for this theoretical framework. Their ideas provide some key insights and are seen as being complementary and adding to the understanding of the formation of modes of social regulation. However, for reasons that will be touched on, greater attention is given to Foucault with respect to discourse, the nature and functioning of power and the role of discipline to engender conformity. Habermas' ideas on discourse and communication have been used to provide contrast.

## **VI.2 POWER AND THE STATE**

### **VI.2.1 Power**

Power and the exercise of power are contestable and as such require mechanisms that are capable of underpinning and maintaining the legitimate exercise of power. As a general principle it is held that the exercise of power encompasses ideas of governance and through governance accountability. Governance involves the construction and development of discourses and the arenas for interpreting discourses and accounts that aim to improve their transmission and the retrieval of the lessons. Discourse, which by its nature embodies the construction of accounts, is not only the basis for instrumental action but also should be a central concern of life (March & Olsen, 1995). The development of dialogic discourses involves giving meaning to events, options and actions, and takes place within norms and institutional arrangements that constrain the process of story telling and its outcomes. It is an exercise in social construction that draws on prior historical accounts. Such story telling must fit a recognisable storyline and in doing so is therefore bounded by accepted conventions of explanation and other 'rules of the game' - accepted modes of action, rules of conduct and knowledge. As formal systems of accounting they become

accounts of a political reality a reality that is socially and historically constructed underlying which are efforts to secure control that reinforce those efforts.

### **VI.2.2 Truth**

'Truth' is a product of disputation (or discourse) and as such is embedded as a social process. The choices about what to accept as real and how to act are embedded in the process through which this knowledge of truth (accounts) is generated, appropriated and turned into action (Low, 1991). Discourse emerges from the whole activity, the work and the praxis, the very being of their authors, conditioned by historical, geographical and social circumstances. The formation of discourses becomes both an exchange of information and a negotiation with social groups that have different ideas and modes of thought, i.e. whose own account would be constructed differently. Storylines merge and develop through comparison and the coming together of different accounts with a sphere of contestation and therefore power. It inevitably leads to competition over interpretation. Future courses of action are premised on the political reality and acceptability of such discourses and in turn depend on institutions capable of both generating and using discourses for actionable and legitimating purposes. Regulation, in its widest sense, may be seen as the manifestation and outcome of such courses of action.

### **VI.2.3 Networks of Power**

The State, in the form of its agencies, seeks to propose that through its own structures of governance it legitimately expresses the ideas, visions and beliefs of a polity it claims to represent. The State explains actions and provides a site of mediation and contest for a dominant interpretation of social reality and at the same time seeks to influence the institutional context within which such discourses are developed, authorised and legitimised. So it plays a dual role, on the one hand mediating and on the other steering and forming, thus both partial and impartial. It can be seen that in the conduct of discourse such interventions may be regarded as stratagems to influence the outcomes of discussions, to make one set of policies more likely to be supported than another. The emergence or acceptance of a dominant discourse represents the creation of an explanation of outcomes or process that fits with cultural, social and political myths.

This requires the organisation and emergence of discourses around a collection of interlocking interpretive communities (March & Olsen, 1995) – (ibid) institutions.

Discourse includes not just vocalisations of meaning but includes other forms of communication that allow meanings to be shared, transferred and contested (Arrington & Francis, 1989), in such a way that it has the power to evoke, interpret and legitimise identities. In this way discourse forms accounts and accounts become a form of discourse, created and called on as a tool to form, support and reinforce a particular discourse. Such accounts are constructed through a process of 'accounting', drawing on a range of representational techniques, for some of which there may be established or accepted conventions. Those that are engaged in the creation of accounts - in the process of accounting, form their own interpretive communities.

Interpretive communities exist as part of the polity, part of their identity arises from the shared meanings and understandings (Habermas, 1992), the identification with and part of a particular discourse that has the ability to generate discourse as well as to evaluate and contest the discourses of others (Dahl, 1987 cited in March & Olsen, 1995). Such communities should not be construed as autonomous clusters of people but rather as networks of groupings around a point of crystallisation, in touch with each other, engaged in discourses that reflect difference – locality, interest, expertise speciality and perceptions of social, economic and political reality. As March and Olsen (1995) noted 'Directly or indirectly, each individual is tied to numerous other overlapping communities, each of which is, in effect, part of a discussion. Knowledge, values, and frames are created not only through interactions within a particular group but also through cobwebs of connections in an ecology of communities'.

In the policy formation process the central actors are formal organisations. These can be structured or thought of as advocacy coalitions (Kriesi & Jegen, 2001) or policy networks, tied together by a set of normative and causal beliefs cooperating to achieve a degree of 'policy monopoly'. A policy monopoly has two characteristics: a definable institutional structure responsible for policy making which limits access to the policy process; and a powerful supporting idea (sustainability) connected to core political values associated with the structure in question (Kriesi & Jegen, 2001, p.252). This is not to say that there are not policy compromises, especially in the administrative arena – which supports the idea of the contested and discursive nature of policy formation. Such policy processes have been conceptualised as a punctuated equilibrium – periods of stability and incremental policy making and implementation within a dominant coalition interrupted by intervals of major policy change (Baumgartner & Jones, 1993), as occurred in 1997.

The theoretical framework has highlighted the importance of the interacting roles of policy networks, power, truth and the State in influencing the formation and implementation of regulation. Thus any understanding of modes of regulation and interpretation of sustainability cannot be confined just to the State itself. It must seek to encompass the people and organisations that constitute the main policy networks. This insight has informed the choice of informants and informant organisations that were approached as part of the fieldwork for the thesis.

## **VI.3 DISCOURSE**

### **VI.3.1 Introduction**

Discourses draw on the representation of 'facts' as a mechanism whereby institutions or sectors of the community are able to exert dominance over others in the interests of their own position and status quo. Accounts, as powerful instruments employed within discourse and as a constituent of a mode and practice of governance are far from neutral both in terms of their content and purpose, a point that has been made by a number of critical accounting writers (Arrington & Francis, 1989; Lehman & Tinker, 1987; Tinker, 1991; Nelson, 1993; Neu et al, 2001). Governance and accounting practices are a way of writing a certain kind of economic text about an organisation or institution and its meaning. The meaning given by association is presented as 'fact' that then takes on a significance that goes beyond the actual text – it privileges an economic visibility and calculation mode (Arrington & Francis, 1989). In this view it is not possible to separate politics, economics and society and they cannot be investigated in isolation. Accounts therefore 'serve as a tool for constructing, sustaining and legitimising economic and political arrangements, institutions and ideological themes which contribute to (an) organisation's private interests' (Guthrie & Parker, 1990, p166). It follows from this that accounts embedded within governance form a constituent part of any mode of social regulation (MSR) they are constructed to support and reinforce the dominant mode of economic growth and distribution including the conditions of production and conditions of consumption - the accumulation system (Puxty, 1997; Pagach & Peace, 2000; Neu et al, 2001).

### **VI.3.2 Accounts**

As a subset of discourse, 'mainstream' accounts are a reflection and tool of an ascendant regime of accumulation, built around management by numbers, a practice which is a ubiquitous human practice irrespective of cultural, political or economic

settings (Arrington & Francis, 1993). As such it perpetuates certain privileged notions and parties and narrows the extent of accountability, this privileging serves to perpetuate the silencing of 'other' issues, such as the environment making them invisible to mainstream accounting (Andrew & Kaidonis, 1996). Social and environmental issues lie on the periphery and that by their nature present accounting with problems of measurement, representation and communication, however, "this complexity (cannot) continue to be used to excuse the blatant neglect and exploitation of the environment and its account(ing)" (Andrew & Kaidonis, 1996). Boyce (2000) notes that there is a broader concept of accounts and accountability in the public arena that includes political, legal, social and community accountability as well as personal and ethical, the challenge is how to embrace and 'internalise' them without being open to the charge of supporting vested interests (Boyce, 2000). The periphery becomes a zone of contest through which to challenge the central tenets of the core – boundaries become an interesting concept (Llewellyn, 1994).

### **VI.3.3 Discourse and Sustainability**

The State promotes discourse by creating the institutional space between itself and civil society and engaging in the creation of (common) frameworks of understandings of the lifeworld. The construction of meanings and the legitimation of accounts are exercises in contested imaginations (March & Olsen, 1995). Such discourses influence events and their outcome and so the actors involved struggle to invent, correct, control and interpret them. The process of the development and deployment of a discourse becomes an interactive engagement between authors and audiences as between them they wrestle to understand, explain, anticipate and react to the flow of events and pursue support for their understandings. Thus the practice of discourse and the formation of accounts is a dialectic process, it creates its own reality, which creates the possibility of new discourses and accounts.

Sustainability as a discursive object is clearly a form of social practice that has a wide-ranging effect on society generally. Locating the sustainability discourse within the context of a particular period, recognising its historical specificity provides the space within which the discursive formation of sustainability can be interrogated and understood as an emergent, shared understanding of a 'truth' that is sustainability. Truth becomes a winning set of discursive practices dependent on institutional practices, which determine which discourses are allowed. Discourses function to produce truth; it is not something that is out there waiting to be uncovered but is rather something that is created in the interest of the subjects of the discourse (Brown, 2000,

p.33). As no discourse, especially within policy fields, goes unchallenged, they provide an arena for studying power relations and as will be seen, the discourse is not monolithic but both fluid and diverse.

### **VI.3.4 Discourse in action**

An example of the importance of discourse in action may be seen in the attitude of the financial sector towards certain issues and by extension the importance both of the opinion of the financial sector to a business and to the issue. The manner in which the financial sector treats sustainability and company efforts to promote it appear to be of secondary importance (Suranyi, 1999). Many city analysts do not perceive what they believe to be moral or emotional issues to be legitimate in shaping their decisions. Non-financial issues are unimportant except when they are covered by legislation or liability, with legislation being regarded as an important market incentive force (BitE, 1994). The evidence linking corporate success with good environmental practice is ambiguous though some researchers cite US evidence and recent survey results from the UK that there is some correlation (Edwards, 1998; Toms, 2002). Clearly these issues are contested but their importance lies in the way they challenge perceptions and concepts of performance by offering an alternative interpretation of what counts. This is important in the process of discourse especially for eco-modernisation and weak sustainability within a liberal, market-based democracy. The conjunction with economics will influence the focus of governance and the measures of success of good governance. The social and environmental will only be recognised in so far as they impact on the economic and this will favour market-based methods of regulation. The implications for the societal practices of governance and regulation are that reliance will be placed on a hierarchy of real regulation rather than deliberative and democratic networks. The metrics of economic discourses are being expanded in a consistent manner in ways that offer a wider interpretation of the place of business in society, albeit a capitalist led society.

## **VI.4 FOUCAULDIAN PERSPECTIVES**

### **VI.4.1 Discourse**

Discourse, in Foucauldian terms, refers not to language or social interaction but to areas of social knowledge. It indicates specific ways of thinking about social practices and the ways in which these are bounded, what can and what cannot be included. A discourse is whatever constrains and at the same time what enables writing, speaking,

and thinking within specific historical limits (McHoul & Grace, 1993, p.30). Discourses can be understood as allowing sense to be made of things, shaping understandings as well as influencing and regulating thoughts and actions. A discourse then represents specific bodies of knowledge and therefore this redirects discourse towards questions of what can be said and what can be thought. In other words the possibilities that discourse opens up. It is for this reason that it is seen in relation to power, domains of knowledge, truth and subjectivity.

Foucault uses three concepts as the foundation for discourse analysis (Andersen, 2003, p.8):

- the basic unit being that of the statement,
- discourse, being a group or body of statements that together provide the archive for discourse analysis,
- discursive formation, a system of dispersion of statements.

“Whenever one can describe, between a number of statements, such a system of dispersion, whenever, between objects, types of statements, concepts, or thematic choices, one can define a regularity, we will say, for the sake of convenience, that we are dealing with a discursive formation.”

Foucault (1986, p.38)

A statement is only a statement if it creates objects, they ‘accomplish’ events and create effects due to their contextual setting. As such statements are regarded as part of bodies of knowledge and when grouped together both constrain and enable what can be known. They can only be understood via the rules that govern their functioning. Thus statements must be taken together with the historical flux that gave rise to them. The analysis of statements, that collectively represent a discourse, considers ‘the general system of the formation and transformation of statements’ (Foucault, 1972 cited in McHoul & Grace, 1993). Foucault wants to show how through discourse regimes of knowledge and truth are established and how they are involved with excluding and disciplinary procedures. How through discourse the power of normalisation is shaped in conjunction with the rise of sanction. The aim of discourse analysis then is to query the discourses and practices of the present by referring back to their conditions of establishment (Andersen, 2003), the mutations of discourses and the broader transformation/redistribution that might occur between two or more discourses.

Discourses as forms of representation are the subject of contention and struggle where different paradigms compete for dominance of the body of knowledge and disciplinary practices that both flow from and form part of them. This means that discourses always function in relation to power relations and are not a mere effect or end product of power. Any discourse may be seen to have a number of components: objects (the things they study or reproduce); operations (the methods and techniques or ways of treating these objects); concepts (terms and ideas which are routinely found in the discipline) and; theoretical options (different assumptions, theories and hypotheses available within the discipline). Discourse is not simply the means by which the subjects accomplish something. Rather it is the discursive conditions that make 'real' the objects, operations and concepts that allow the description and analyses of dependencies that exist within and between discourses and the broader forms of socio-political change in which they arise to be undertaken. Within a particular discursive space, one enters into the processes that regulate what occurs within that space and identity is shaped by the operation of that space.

However, such discursive spaces do not exist of themselves as isolated arenas. Within such arenas actors choose to engage and in doing so each brings their own life-world to the discourse, drawing on those experiences, world-views and beliefs as a unique contribution to the statements within the discourse. The processes within a discourse are informed by, draw on and reflect, through reference to other, overlapping discourses, wider bodies of knowledge and experience. Boundaries, if indeed they can be said to exist, are porous, actor's actions are interdependent rather than independent, even within a discursive space. Actors have degrees of choice as to whether to engage in a discourse. They are motivated to enter or to be entered through the construction of their role and position. Reasons for engagement and what they bring enables the internal 'truths' of a discourse to be contested and opens up alternative, evolving trajectories for the discourse. It is the interaction among such adaptive actors, who influence one another in response to the influence they receive (Macy and Willer, 2002) that is of importance to the dynamics of discourse. Which raises questions not only of who chooses to enter a discourse and its discursive space but also who can choose, their voice, their recognition and their place.

As McHoul and Grace (1993) observed, discourses have implications for the understanding of the operations of public institutions that draw authority from their perceived capacity to represent the truth about situations and the relationships between different people and between people and objects.

A broadly Foucauldian approach has been utilised as it provides a basis for the analysis and understanding of regulation, sustainability and the sublimation of sustainability by institutional framework of regulation. Foucauldian concepts of discourse, power and discipline offer a means of theorising the emergence of a mode of regulation within the water sector. It offers a way of capturing the importance of competing discourses and the multiplicity of actors and organisations in shaping modes of regulation. By recognising both formal and informal/social networks of regulation a Foucauldian based interpretation emphasises the dynamic and open-ended nature of regulatory formations. This is especially important with respect to operationalising and institutionalising sustainability, given its own dynamic nature.

#### **VI.4.2 Discourse and Power**

“In any society, there are manifold relations of power which permeate, characterise and constitute the social body, and these relations of power cannot themselves be established, consolidated nor implemented without the production, accumulation, circulation and functioning of a discourse. There can be no possible exercise of power without a certain economy of discourses of truth which operates through and on the basis of this association. We are subjected to the production of truth through power and we cannot exercise power except through the production of truth” Foucault (1980, p.93)

For Foucault knowledge and truth are the products born out of the struggles within any discourse of competing ideas and interpretations and at the same time they are used reflexively to authorise and establish the legitimate workings of power. Thus discourse and the competition within and between discourses is indispensable for the understanding of the role of ‘power’ in the production of knowledge, which leads to a ‘version’ of truth. According to this conceptualisation, power functions in terms of relationships between different institutions or other groups and as such these relationships are fluid as power is both mobile and contingent. Power moves around and through different groups and institutions such that no one body owns it, though some can influence and be influenced by how the forces of power, such as discourse, are played out in the course of establishing a truth about a body of knowledge. No one institution or group can make an undisputed claim to the truth and so in order to control or influence matters, especially of policy, they have to negotiate and gain support for their agendas and policies.

“Power must be analysed as something which circulates or rather as something that functions in the form of a chain. It is never localised here or there, never in anybody’s hands. Power is employed and exercised through a net-like organisation. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power. In other words, individuals are the vehicles of power, not its point of application.” Foucault (1980 p.98)

Any exercise of power and its associated discourses will engender resistance both through its own creation of norms and therefore what lies outside those norms as well as to the application of power.

Contestation requires the engagement of alternative discourses that also appeal to and seek to establish a shared truth. Discursive practices become the arena in which concerns of good governance, responsibility and accountability are revealed and actualised (Arrington & Francis, 1993). In the real world this means addressing real and lived experiences, harmonising and resonating with other interests whilst adhering to certain ‘universals’ in an appeal, such as ‘public good’ and the idea of being in the ‘best interest’. Public visibility and established cultural capital within a field ensures that ‘reasoned’ messages will be heard (Neu, Cooper & Everett, 2001) as well as having sympathetic ‘others’, surrounding to amplify and reinforce messages via multiple sites. The examination of competing discourses exposes meanings through unmasking what has been excluded or hidden. Such forms of protest, argumentation and struggle may be seen as symbolic and ritualised modes of conflict resolution (Lehman & Tinker, 1987). The power of discourse lies therefore in the capacity to orientate messages to specific constituencies and issues within a discourse for the polity.

Sustainability as an emergent discourse challenges existing discourses of the water industry by offering an alternative paradigm. Its discursive formations impact on those of the water industry and colonise them. Thus we see in the dynamics of the mode of regulation what Foucault has referred to as transformation and redistribution of discourses. It is in the examination of the archive of statements that form the discourses of regulation, sustainability, accountability, social and economic functionality that an understanding of the trajectory and transformation of regulation can be gained.

### **VI.4.3 Discipline**

“It is a type of power which is constantly exercised by means of surveillance rather than in a discontinuous manner by means of a system of levies or obligations distributed over time. It presupposes a tightly knit grid of material coercions rather than the physical existence of a sovereign. It is ultimately dependent upon the principle, which introduces a genuinely new economy of power, that one must be able to simultaneously both increase the subjected forces and to improve the force and efficiency of that which subjects them.” Foucault (1980, p.104)

Disciplinary technologies, as Foucault refers to them, are employed to control behaviour. They rely on ‘surveillance’ and the internal training this produces to incite states of docility (McHoul & Grace, 1993, p.67) and in this respect he uses the analogy of Bentham’s Panopticon. The range of disciplinary technologies employed will be specific to particular institutional arrangements, such as the water sector. Thus not only are they implicated in producing a particular kind of industry but are themselves a feature of that system. So the system produces the subject but at the same time the subject produces the system. This contains notions of discipline both as punishment – coercion - and as knowledge and skill. The way in which the water industry is regulated contains both elements. Through coercion knowledge is acquired and conversely increased knowledge is used to extend the spheres of surveillance and coercion across new fields of knowledge.

An example of this is the development of new techniques and technologies that have been developed by Water Companies to provide a means of justifying proposals in their Asset Management Plans. The submission of ever more intellectually robust technologies means that the outcomes based on these technologies are scrutinised in ever greater depth and complexity. For example, on the one hand there is Ofwat’s monitoring of company’s performance with regard to flooding of homes, now extended to consider future impacts of climate change. On the other Ofwat’s responsibilities and accountabilities are extended to include a duty towards sustainable development. The changes in what now counts as knowledge brings about a change in the subject, the way in which sense is made of ourselves. In these ways, discipline and knowledge make the participants in the water sector the kinds of organisations that they are.

Foucault talks about the “specific intellectual”, who uses specialised knowledge and expertise to engage in specific, localised sites of struggle – the challenging of

discourse through challenging the truth and objectivity of the accounts that it draws on. The role of 'experts' and 'authorised knower' is discussed in the context of how they are 'authorised' through the possession of cultural and symbolic capital that allows participation. They draw on capitals of the institutional background they come from and are seen to be part of. As Gramsci notes, one of the roles of coordinating agencies (institutional backgrounds) is to 'enforce discipline on those groups who do not consent either actively or passively' (Neu, Cooper & Everett, 2001), agencies such as professional, scientific or trade associations.

#### **VI.4.4 Truth and Discipline**

Arrington and Francis (1989, p.4) observed, 'every claim to knowledge is a discourse, a text, and is both a product of human manufacture and inseparable from language which gives it expression. The first point means that "facts," evidence" and "theory" are never approached independently of human values which are, always, logically prior to them'. In other words they arise out of values, political beliefs and opinions. Thus attempts to privilege one discourse over another implies a political act designed to "arrest" the other (Arrington & Francis, 1989) – "truth" is something that is in its ascendancy at a particular point in time. For Foucault, it is power that establishes the truth of a discourse and it is the "truth" of a discourse that sustains its power. But at the same time truth has to be asserted and maintained. The maintenance of truth in discourse is identified with disciplinary regimes and the technologies of control.

In this respect statements and the production of accounts are part of the process of truth maintenance and assertion. Something can only be upheld as true if it conforms to the accepted practices and technologies and it meets the accepted standards and norms by which truth can be recognised. To depart or propose alternative explanations, to mount a challenge is to confront and attempt to subvert a disciplinary regime and assert an alternative discourse.

It is in this light that accounting has been identified as a technology of control, real life disciplinary regimes involve different forms of power-knowledge, grounded in different purposes. These incorporate often contradictory and incompatible normalising judgements that also define the social relationships between practitioners and subjects (Armstrong, 1994). Baxter & Chua (2002) in a review of accounting research highlight studies that have drawn on Foucault's work and applied it to management accounting (also Armstrong, p.34, 1994 for further examples). The situation of accounting practices, as part of systems of governance systems, of disciplinary powers relations,

aimed at constructing a particular visibility through calculational practices has also been discussed by Lehman & Tinker (1987). The works demonstrate how such *economic forms of discourse (discursive formations)* have contributed to new disciplinary forms that have been used for the submission of workers. Management accounting control becomes a reflection of institutionalised webs of power (Baxter & Chua, 2002).

It indicates why alternative forms of discourse that do not conform to such norms, which would include social and environmental reporting, are contested. The power of a discourse and its disciplinary nature creates resistance to itself in the form of alternative discourses; Foucault himself refers to 'subjugated knowledges' and resistance within disciplinary regimes (Armstrong, 1994). This would indicate that no situation is static and that there are on going processes of contestation with rival discourses. The disciplinary power, the ability to assert and maintain a particular truth depends as much on material conditions and as these change so the conditions to change regimes of power change, opening up new possibilities of contestation.

Neu et al (2001) have examined the way accounting was called on in two disputes and the role of academics in both supporting and contesting 'regimes of truth'. The distributive and hegemonic effects of accounting and the way in which they were deployed to justify and rationalise actions is a good example of how accounts of a particular kind support and reinforce a particular discourse and help to establish its 'truth' but do not of themselves establish 'truth'. The significance of accounting is related to what it denies exposure of or prevents from emerging (Lehman & Tinker, 1987), it constructs its own reality (Hines, 1988) within which it deploys certain discursive practices. Accounting numbers "echo, enlist, harmonise and draw sustenance" from a broader discursive environment to give a particular interpretation that forecloses competing interpretations. Discourses are drawn on by actors to create both the context for interpretation as well as a means of giving symbolic reason beyond their immediate, literal use (Boland, 1993).

#### **VI.4.5 Self Regulating Bodies**

Ogden (1995, 1997, Ogden & Anderson, 1999) in a series of papers considered the impact that privatization had on water companies, especially with respect to the accounting systems. The system of external, regulatory control brought about a profound change in the internal nature of the water companies. Yardstick competition, the focus on performance measures and the reconstituting of the consumer as a

customer brought about deep seated changes in organisational management culture, vocabulary and an expansion of accounting practices into new areas, such as the measureability of customer service for example (Ogden, 1997, p.540). This brought about a new view of organisational reality that went together with the organisational reorganisation into business units and profit centres, a breaking down of the organisations with an emphasis on the setting and meeting of internal performance targets. Accounting was centrally implicated in the new visions of management practice and the creation of new expectations of managerial responsibility and accountability (Ogden and Anderson, 1999, p.121). This has supplanted an older culture of professional judgement and public services with one more amenable to measurement and 'discipline', of self-assessment and self-monitoring "understood in the context of the much greater scrutiny managers were subjected to, and their experience of the coercive and authoritarian ways in which accounting controls might be used by senior managers to appraise their performance." (ibid, p.120). But there are other layers of scrutiny, data on company performance is subject to independent audit provided by external certifiers.

The regulators have sought to couch their scrutiny of the companies as something that they are doing for the good of the companies and in the interests of the companies. Ofwat has argued that the provision of information of levels of service, physical and financial information will improve the standing of the companies in the eyes of their customers, shareholders and financial markets, the City and financial analysts – hinting at the economic 'sustainability' of the company and their professional competence. As Ogden and Anderson (1999, p.95) said, "Achieving the required changes is better described in terms of a continuing process." Foucault's ideas regarding discipline and the effects of the disciplinary gaze are most apposite in understanding the internal behaviour of companies in the face of regulation – the most effective and economical form of discipline is self-discipline, which minimises direct intervention (i.e. 'real' regulation). It has produced self-regulating subjects that have re-organised themselves in space and time: partitioning the organisation, ranking the parts, setting targets, regulating and training behaviour, hierarchical observation and normalising judgement (Marsden, 1998).

#### **VI.4.6 Governmentality**

In the modern state government has taken on itself a role in the management of water services. This requires the production of 'bodies of knowledge' that would allow the state to objectively assess the requirements of its citizenry and based on this the

introduction of policies that both regulate behaviour and provide for the needs of its citizens in a very broad sense. The production of such bodies of knowledge are bound up with discourses, hierarchies of discourses and the flow of power. Within this sustainability is but one of the varied discourses, although it cannot be entirely divorced from others. Though the state seeks to intervene in the lives of its citizens through regulation, constant and close intervention is not only beyond the means of the state to achieve but is also not the best way of stimulating wealth and prosperity or even greater sustainability.

Partly as a consequence of this there has been a transfer of regulatory functions towards a multiplicity of institutions linked in a variety of ways to government. At the same time, the technologies of governing, through administrative, economic, legal or other means, systems of governance in these institutions, have fed back into centralised state operations in such a way as to provide a governmental logic that is both generalised and localised (Danaher, Schirato & Webb, 2000 p.91). Generalised in the sense that such systems of governance embed regulation throughout the social body and localised in that the practice of governance requires the application of techniques and practices that impact directly on the conduct of the institutions within that social body.

In a 1978 lecture (Burchell et al, 1991), Foucault traces the evolution from ruling the state to the state governing, through the institutions and practices of the state interacting with society, using the word governmentality to describe this process:

“The ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principle form of knowledge political economy, and as its essential technical means apparatuses of security.

The tendency, which over a long period and throughout the West, has steadily led towards the pre-eminence over all other forms (sovereignty, discipline, etc.) of this type of power which may be termed government, resulting, on the one hand, in the formation of a whole series of specific government apparatuses, and, on the other, in the development of a whole complex of ‘savoirs’.”

The concept of governmentality demonstrates Foucault’s ideas on the reciprocal constitution of power techniques and forms of knowledge (Lemke, 2001). There are

two sides to governmentality; on the one hand government defines the discursive field in which the exercise of power is rationalised, on the other it refers to government as self control – the governing of the self. In the former government enables problems to be addressed and structures specific forms of intervention. Government constitutes the intellectual processing of the reality which political technologies (agencies, procedures, legal forms, etc.) can then tackle (Lemke, 2001, p.191). Thus governmentality endeavours to link both the state and the individuals such that they become mutually determined. Thus the distinction between the state and that of society becomes the object of study.

The reordering of the divide between state and society is seen in the forms of government that shift the capacity to act away from the state onto society – the shift from government to governance. However, the state does retain a strategic capacity to act, through policy domains, but at the same time takes on new tasks and functions through specialised state agencies. At the same time the state develops indirect techniques of government without being responsible for them. The strategy of rendering subjects responsible entails shifting the responsibility for social and environmental risk, such as poverty, vulnerable groups, water quality and the status of water bodies, into the individual domain and by doing so transforming it into a problem of self-care. Thus the notion of the hollowing out of the state and shift from government to governance can be deciphered as a technique of government shifting the regulatory competence of the state onto 'responsible' and 'rational' others (Lemke, 2001, p.202).

Central to the techniques of modern governmentality is the harnessing and institutionalisation of expertise to handle and resolve the problems of governing. As Light (2001, p.1155) notes, governmentality must deal with four persistent challenges: how to overcome vested interests, how to co-ordinate them, how to enhance their capacity to be partners of the state and, how to avoid inertia – market based strategies seem to offer a solution.

Governance and governmentality may therefore be seen as having a close relationship to each other, both have at their core ideas regarding the structure and the practice of interaction. What Foucault introduces is the idea of change, accommodation and evolution through resistance and discourse. The form of governmentality (or governance) is therefore specific and unique to a particular set of circumstances. I want to suggest that it is useful to think of the particular form of *governance/governmentality* in the water sector as representing or equivalent to a

mode of social regulation. This suggests that the discourses of sustainability, of responsibilities and duties and of economic rationality are accommodated by the political technologies and redirected. They are redirected and transformed into new understandings and statements of responsibility and function of the institutions of regulation. The key question is whether the neo-liberal concept of a governmentality that seeks to bring together responsible and moral partners and economic-rational actors (Lemke, 2001) has the potential to change norms and values or just redefine the state/society divide.

#### **VI.4.7 Resistance to Discipline**

The nature and apparatus of surveillance although inducing compliance does not necessarily lead to total docility in the observed. Those bodies subject to surveillance have challenged this gaze, not just through the subversion of substance but also through its legitimacy. As Danaher et al. (2000, p.77) put it 'this still points out one important principle that Foucault insists upon – that power never achieves what it sets out, claims, to do.' This is in part because there is no authoritative discourse or institution but instead competing discourses and institutions which produce different versions of events; the 1999 price review was 'good' for consumers, was 'bad' for shareholders, 'good'/'bad' for the environment. Such judgements have been subject to revision as new understandings have developed, each has been the subject of competing discourses and are in the process of being transformed. This is in part because such categorisations and discourses around them are not 'natural', they are not inherently absolute, they are mere constructions and are recognised, and resisted, as such. In part it is due to the creative manifestation of power, its ability to produce categories and behaviour which compete to regulate and control

Resistance to the techniques of power is usually directed against those technologies and techniques that are closest to those experiencing them, they look at the immediate effects of the play of forces. McHoul & Grace (1993, p.86) noted that 'resistance is more effective when it is directed at a 'technique' or power rather than at 'power' in general.' As it is the technique that allows the exercise of power and the production of bodies of knowledge based on the exercise of power. Resistance questions the techniques and tactics of power by an appeal to 'rights', a political response to the procedures of power. According to Brown (2000, p.49) resistance is necessary to power relations; power must allow resistance so that it is not seriously embattled.

Resistance to discipline serves to subvert the purpose of regulation by focusing on the techniques rather than the objectives of regulation. In doing so it offers an alternative rationality that diverts attention and evades responsibility so that existing behaviours are not only maintained but sanctioned.

## **VI.5 HABERMASIAN PERSPECTIVES**

### **VI.5.1 Introduction**

Habermas offers a critical, normative account of the formation and acceptance of discourse, in contrast to Foucault's realist approach. Through his critique of society and its attributes Habermas has developed his own ideas of rationality, communication and the conditions of democracy. For Habermas the distinguishing feature of humans is language, which provides a means of transforming their environment through interaction. However, human interaction is distorted and confused by social structures and institutions, arising when the facts of a situation are hidden from some or all of the participants, and when rules conspire to prohibit participation in decision-making processes (Craib, 1992). In the case of the water sector this can be seen in the absence of public participation in the formulation and implementation of technical solutions. These are deferred to and reserved for specialised spheres of expertise through arguments of lack of knowledge or the exercise of due diligence.

The solution is communicative action, a communicatively achieved agreement having a rational basis, which implies an inclusive, democratic social system, where the aim is not to dominate but to reach agreement, acceptable to all through reason without coercion. The implications of this are, inter alia, that each has access to the tools and means of reasoning as well as the opportunity to contribute and be heard. However, the presence of social organisations entails a distortion of communication and interaction and for Habermas sees modern capitalism as characterised by the dominance of the state over the economy and other areas of social life. Such a situation becomes regarded as technical problems to be solved by experts employing an instrumental rationality (Craib, 1992). Through the cultural impoverishment of the interactive sphere society becomes undemocratic, sublimated by the rise of expert cultures disconnected from the reality of everyday life.

### **VI.5.2 Ideal Speech**

Society for Habermas needs to change the way in which social values and interests are represented in the democratic process, along with the way that outcomes are

negotiated. Changes in the way democracy operates will allow for the development of a communicative ethic in which we have an obligation to debate with others. In this sense we would be able to access a greater variety of information on which to make decisions, a situation Habermas refers to as the ideal speech situation – communication in the absence of barriers. This would allow an appropriate relations between bureaucratic decisions and democratic deliberation providing a practical basis for public discussion and effective control of public policy (Outhwaite, 1994, p.10). Lehman (2001) has observed that Habermas' work has been used to justify reforms to democratic structures but it does not explicitly question the institutions of liberal-democratic societies, in a way that Foucault does. What is at issue is the transformation of the institutions that perpetuate injustices in the name of economic growth.

Communication Habermas argues presupposes four validity claims: to be comprehensible, to be true, to be right and for it to be sincere, with the implication that a consensus could be reached on the validity of a claim in unconstrained dialogue. Truth for Habermas, in contrast to Foucault, becomes a validity-claim; it is defined in terms of a projected consensus, and the absence of power. It is the outcome of discourse. One of the central elements of Habermas' *Theory of Communicative Action* is the distinction he makes between the genuine communication to achieve common goals and strategic or success orientated communication (discourse) that simulates communication in order to achieve an ulterior motive. This involves sustaining the lines of substantive public accountability between quasi-autonomous sub-systems, such as the economy, and a public sphere of dialogue and debate concerning fundamental goals and objectives (Power & Laughlin, 1996). The 'lifeworld' provides a symbolic space, a normative context within which culture, tradition and identity can be reproduced.

### **VI.5.3 Forms of Communication**

In the public sphere the quality of discourse depends on "the degree of information and the precision with which controversial issues are articulated - in short, on the discursive character of non-institutionalised opinion formation in the political public sphere." (Habermas, cited in Outhwaite, 1994, p.138). Habermas emphasises not so much the competences of actors and institutions but the forms of communication on which the interplay of informal and non-institutionalised processes of opinion and will-formation take place. For him the public sphere is not a fixed institution or organisation; it is best understood as 'a network for the communication of contents and

the expression of attitudes, i.e. of opinions, in which the flow of communication are filtered and synthesized in such a way that they condense into public opinions clustered according to themes' (Outhwaite, 1994). It is a result of a process of discourse that takes place within a structure of associations that institutionalise problem-solving discourses in a framework of organised publics.

Habermas suggests that environmental concerns are rooted in perceptions of risk as well as loss of cultural values and not just a connection between capitalist growth and environmental degradation. Such concerns are manipulated through the exercise of strategic power where one side impedes the other in pursuit of its own interests. Rational adjustment for Habermas requires the overcoming of the exercise of strategic power through the exercise of communicative action, openness and a contesting of dominant discourses in institutions and existing power relationships. Set against this are the rigidity of institutions and the manipulation of public debate by dominant economic interests by the various means at their disposal. Using distorted or imperfect information and accounts to manipulate public debate with the aim of protecting certain economic interests cannot form the basis for successful policy (Sköllerhorn, 1998). Such policies are not rationally evaluated and the justified use of power requires expert knowledge to be questioned openly and freely. The problem confronting such a debate is the materialisation of social relationships, which leads to a distortion of communication. Interpreted in political culture terms Habermas' idea of "the colonization of the lifeworld" means that the capitalist culture penetrates into parts of everyday life where only a democratic culture functions. Materialisation restricts spontaneous democratic opinion formation (Sköllerhorn, 1998) and leads to increased capital accumulation, resistance arises when the institutional, routinized way of co-ordinating actions is questioned. As happens when alternative discourses and story telling are employed to challenge dominant discourses.

The transmission of knowledge and the socialisation of different social groups demand 'sincere' debate (Habermas, 1984 cited in Sköllerhorn, 1998) as notions of reality are activated through such debate. However, the pursuit of capital accumulation results in the treatment of those engaged in debate as objects and not social beings. This social domination spills over into the institutional sphere and causes distortions based on uneven power distribution and uneven resource distribution becoming a feature of a particular mode of social regulation. However, relevant information ought to be accessible to the polity to decrease distortion and increase rationality. Misinformation on the other hand can give rise to the wilful manipulation and uniform distortion as a

defence of class and power structures, i.e. legitimation on a social-structural level (Sköllerhorn, 1998). Regulatory systems, originally intended to mediate popular will and specialised contexts of action, increasingly impose the system's imperatives on the institutions that are intended to express popular will (Power & Laughlin, 1996). So without reflecting on the institutional or the communicative structures in society it cannot be concluded that gradual change will lead to a society in which powerful groups will be less dominant (Lehman, 2001).

#### **VI.5.4 Expertocracies**

Technical discourses, such as engineering or economics, can only abstract from complexity and only measure that which can be measured easily but given the contexts of their legitimacy they constitute a means of transferring power to technical elites. The legitimacy of particular forms of expertise and how expert cultures can be mediated with everyday practices gives rise to a preoccupation with corporate governance and the problem of making expert insiders accountable to outside stakeholders (Power and Laughlin, 1996). The rise of expertocracy, who "must legitimate their monopoly of system administering privileges, through a theory of problem solving that cedes all conversational and symbolic rights to an allegedly talented technocratic minority" (Agger, 1985), tends to be self-legitimizing and remote from the wider polity of the lifeworld. Claims of technical prowess rest less on demonstrable performance than on certain styles of quantification that lay claim to social and economic legitimacy as a solution to perceived problems of control. These exert a powerful influence over the formation of dominant discourses and their subsequent influence on the development of modes of governance and regulation and the apparatus that supports them. The construction of a reality embed forms of discourse that then permeate and constitute organisational values around notions of efficiency, profitability and resource management (Power & Laughlin, 1996).

Given the nature of the water sector there is a heavy reliance on the use of technocratic expertocracies by water companies and regulators alike. In the case of water companies highly complex physical modelling of almost every aspect of operations provides the basis for the formulation of management plans as well as economic and financial decisions. They describe not only what can be achieved but at the same time provide measures against which success, failure or performance might be measured. Similarly, the regulators such as Ofwat and the Environment Agency base much of their workings on similar approaches. Ofwat's econometric modelling of water company performance is both a tool of governance and provides a rationalised

basis of regulation with a legitimacy entrenched in the concept of a market and yardstick competition. The Environment Agency's system of permits, licences and monitoring is based on the exercise of expert judgement of what constitutes 'good' environmental conditions carried out within a limited sphere of actors. Yet the potential implications of such expert judgements goes beyond just designation as it has far reaching consequences for an array of stakeholders not party to workings of the process but affected by its outcomes.

Discourse can reproduce knowledge in forms acceptable within a capitalist mode of accumulation that shape preferences and influence the boundaries of individual and collective decision making, producing new 'facts'. Practices such as accounting increasingly control the language and categories within which management of the social is constructed and realised – citizens become clients, foreclosing on other, alternative realities. That which is made visible makes other realities invisible. Habermas says that it is true knowledge that guides development of the human subject and society, not mere human interests. The discourse arena, with ideal speech provides a means to establish validity claims, means those who give accounts can use it to reflect on the information they produce, the means they use to produce it and whether or not assertions pass the truth tests outlined by Habermas in the discourse arena (Lehman, 2001).

## VI.6 SUMMARY

Understanding why and how modes of social regulation and governance is evolving in the way it is requires a lens through which to gaze that illuminates the underlying practices. What is required are the means of making sense of the institutional practices of regulation and how and why they respond to sustainability as an imperative. Conversely sense also needs to be made of what conceptualisation or aspects of sustainability are given recognition and incorporated into regulatory practices and governance. To do this requires the examination of the discursive formations and processes within their proper context. This means examining how bodies of knowledge and accepted truths are established, maintained and transformed. For this the ideas of discourse and discursive formations as an explanation for the emergence and mediation of modes of social regulation have been drawn on, especially those of Foucault and Habermas. The analysis of discourses, what Foucault refers to as archives of statements, together with the contingent historical flux provides a means of reaching an understanding.

The works of Foucault on the one hand to understand discourse on the level of praxis and of Habermas on the other as a critique of that praxis have been drawn on. Habermas in particular indicates the issues and concerns that would need to be addressed to bring about social and political transformation that would challenge the dominant capitalist interests over those of the social and natural world.

Discourses represent the flow and development of ideas of reality and social practices that create bodies of knowledge. Discourses are not just a form or representation but are also material conditions that both enable and constrain what can be known and as such focus on questions of what can be said and what can be thought within a discourse. Discourses then function in relation to power and are part of the establishment and exercise of power, representing the flow and development of dominant ideas of reality. Dominant discourses thus create norms, accepted social practices and establish 'truth'. As there are versions of a truth, discourse not only plays a role in its creation discourse is central to the maintenance and assertion of a truth in the face of competing discourses. Discourse and discursive practices provide a key insight into how and why dominant discourses may choose to privilege and resonate with other discourses such as versions of sustainability. Important to discursive practices are the networks of interpretive communities that are an adjunct that help create meaning and the material conditions of discourse. Together they effect sustainability within regulatory practices.

Disciplinary practices provide a means of establishing, supporting and maintaining systems of governance and regulatory regimes. At the same time they operate as part of discourses and discursive practices creating knowledge and at the same time being themselves re-created and transformed. Disciplinary practices create self-regulating bodies and conformity through ritualised practices. At the same time they create both norms and deviants through the categorisation of what is acceptable, recognised and approved. By functioning in conjunction with discourses, discipline evolves to accept changes in material conditions. So that as versions of sustainability enter into governance and regulatory space so disciplinary practices develop in response, and reinforce those dominant versions of sustainability by adding to the creation of bodies of knowledge.

Governmentality refers to the structuring of relationships between the state and society that overlie discourse, truth, power and discipline. It provides a link between the micro- and the macro-political levels, highlighting the reciprocal nature of power. It helps to set out what strategies can be adopted and structures specific forms of intervention

which political technologies of governance and regulation can tackle. Foucault's ideas of governmentality are closely aligned with concepts of governance and modes of regulation.

For Habermas human interaction is confused and obstructed by social structures. He suggests that the way this can be overcome is through communicative action that seeks to foster debate and achieve consensus through democratic and open discourse. A precondition is that power and the exercise of power that involves asymmetric relationships must be removed thus providing what is called the ideal speech situation. Under these circumstances the embedding of sustainability within regulatory practices would be accepted when founded on values.

## CHAPTER VII: THE RESEARCH PROCESS

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*'Taking Three as the subject to reason about -*

*A convenient number to state -*

*We add Seven, and Ten, and then multiply out*

*By One Thousand diminished by Eight.*

*'The result we proceed to divide, as you see,*

*By Nine Hundred and Ninety Two:*

*Then subtract Seventeen, and the answer must be*

*Exactly and perfectly true.*

Lewis Carroll, *The Hunting of the Snark*

### VII.1 INTRODUCTION

The purpose of this chapter is twofold; it is firstly to outline the elements of the interpretive framework, or paradigm, guiding the research and, secondly to lay before the reader what research has been carried out. It is axiomatic that the tools and techniques employed in carrying out the research reported upon and that the analysis and interpretation of the empirical results depends almost entirely on the "basic set of beliefs that guide action" (Guba, 1990, p.17 cited in Denzin & Lincoln, 1998, p.26). Therefore, this chapter provides the pivotal point around which research methods, theoretical perspectives and the interpretation of the empirical results of the research process revolve. It provides a link between the theoretical perspectives and theory and, the analysis and discussion of the material gathered.

Research is a learning process for which preparation will always be insufficient; the potential theoretical universe is infinite and little or nothing is known of the social field so problem definition will always be tentative (Andersen et al, 1995, p.18). Learning is also a socially situated activity it is influenced by research communities (near and far) and acts within an institutional framework and what is more the field being explored affects the researcher with them sometimes becoming part of that field and its social dynamics. The interaction between researcher, research environment, and the researched field means that the research takes on the features of an organic system, growing and evolving over time. There is thus an on-going and cyclical interaction between methodology, theory and interpretation such that it is difficult to apply a strictly linear timeline to the various phases of conception and execution of the research.

The nature of the research question; *whether the form of regulation of the water sector in England and Wales encourages progress towards sustainability*, predisposes the enquiry towards a qualitative rather than a quantitative approach to the search for knowledge. A point explored in more detail in the first section of this chapter where the ontological, epistemological and methodological groundings of the research are discussed. The broad grounding draws on insights from both social construction, or production as some would prefer (Lynch, 2001, p.251), and critical theory in order to situate and gain an understanding of the empirical work. The second part details the research methods adopted and processes followed both in the collection and the analysis of the research data.

## VII.2 THE SEARCH FOR KNOWLEDGE

### VII.2.1 Introduction

All human knowledge is a social artefact – it is a product of the constituting labour of people as they seek to produce and reproduce their existence and welfare, they are self interpretive beings who create the structures around them (Habermas, 1978). Knowledge is produced by people, for people and is about people and their social and physical environment (Chua, 1986, p.603). All knowledge is thus a construction produced by human interaction, and the structure that it systematically has is produced in accordance with that fundamental social reality. Our perceptions of reality are formed by the activity of social interaction, but not in some abstract sense in which reality is external to the individual: interaction is the mechanism by which reality itself is constructed by social actors. For the philosopher Mannheim (Hamilton, 1974), the truth-content of ideas is located wholly in their societal context, rather than in some transcendental or universalist construction of truth. Also, it ought to involve the study of the extent to which the processes of knowledge production, validation, distribution and change are interpenetrated by social phenomena.

Human beings need knowledge (true beliefs) about their environment, beliefs that can serve to guide their actions to successful outcomes. That knowledge does not automatically arise from observation of our surroundings, normally we must raise questions about it to direct our enquiry (Audi, 1998). In principle, there cannot be any complete knowledge of the social world. The concept of knowledge as we operate it in everyday practice, is tied to informants rather than to sources of information (Craig, 1990). We have to remember that the inquirer's knowledge of the world is bounded and incomplete. The processes of cognition are inseparable from the creation and

development of society; knowledge functions to maintain and extend human existence (Hamilton, 1974). Furthermore, our knowledge of ourselves may suffer from a distortion systematically produced by our institutions and normative systems, which extends to socially available knowledge of the actual workings of the social system in which we exist.

Qualitative research lays a greater emphasis on the socially constructed nature of reality than does quantitative research, it seeks to study things in their natural setting and attempts to make sense of what is observed in terms of the meanings that people bring to them. It starts with the assumption that the social world cannot be understood in terms of causal relationships that do not take account of the fact that human actors are infused by values, intentions, attitudes and beliefs. The assumptions behind the use of qualitative methods has been summarised by Cassell and Symon (1994) as:

**Table 3: Assumptions of Qualitative Methods**

There is no one agreed truth
Concern with attempting to decode meaning and different interpretations of phenomena
Concern with emergent themes and ideographic descriptions as part of the research process
Take a holistic view
Recognise the active role of the researcher in the research process
Take place in naturalistic settings

Qualitative research does not seek the reduction of social and cultural phenomena to the level of material relationships and provides a polemic against a (positivist) view that natural scientific theory is the paradigm of knowledge creation (Hamilton, 1974, p.60). Interests, Habermas argues, are what determine what shall count as knowledge, not intrinsic autonomous elements of cognition. Given the subjective nature of the approach, almost inevitably the researcher will bring to any inquiry their own values. This raises problematic issues of validity, reliability and objectivity – the double crisis of representation and legitimation as Denzin and Lincoln (1998, p.21) have put it, is it social science or social criticism.

The postmodernist response is to hold that there is no objective observation, only those that are socially situated and arising out of a variety of conscious and unconscious

filters such as language, social class, and degrees of knowledge. Subjects are seldom able to give a full account of actions and thus what emerges is an account of the what and the why. By extension qualitative interpretation is also constructed suggesting that there is no single interpretive truth, there are multiple interpretive communities, each having its own criteria for evaluating an interpretation (Denzin & Lincoln, 1998, p.30). Perception, or insight, does not just depend upon human senses but also on the ability to organise the perceptions. Knowledge is based on understanding as an intellectual state that is more than just a consequence of experience. As Denzin and Lincoln (1998, p.117) put it: the creation of knowledge must take full cognisance of the investigator and it must concede the significance of interpretation and understanding.

The notion that observer is and should be disinterested is rejected. In its place are links between knowledge, methodology and human interests (Habermas, 1978), a "paradigm of mutual understanding" (Habermas, 1987, p.296 cited in Denzin & Lincoln, 1998). Social research should aim to be an interactive process with one of its aims being that of social justice.

## **VII.2.2 Situating the Research**

All research qualitative or quantitative is underlain by assumptions and beliefs, which guide the nature of the research and provide the philosophical underpinnings required to understand what has been done and why. The elements of the philosophical underpinnings combine beliefs about ontology, epistemology, human nature and methodology that together shape the way the world is seen. Together they provide the paradigm within which the researcher has chosen to situate themselves. Ontology asks questions about what is the nature of reality, how we make sense of and understand the nature of the world. For Chua (1986, p.604) the issue of ontology lies prior to and governs subsequent epistemological and methodological assumptions. Epistemology is concerned with how do we know the world, what counts as knowledge and what is the relationship between the inquirer and the known – the theory of knowledge and justification. Methodology is about how we go about gaining knowledge of the world, the basic principles guiding the exploration of empirical fields. Assumptions about epistemology and methodology are closely related, as what would be an appropriate research method will be guided by beliefs about what counts as knowledge and truth.

With respect to choice of methodology, this thesis has adopted an inductive approach, broadly consistent with its epistemological and ontological underpinnings. One of the reasons for this choice is my own personal association with the water sector over a

long period of time as a participant and interested observer of its functioning and interaction with society. This has led me to trying to make sense of what has been observed and experienced and seeking explanations as to why a particular outcome. An inductive methodology relies on observations of the empirical world that through reflective analysis and interpretation provides the basis for the generation of theory or ways of making sense of what has been observed. Such an approach relies on the analysis of subjective accounts generated through 'getting inside' situations and involving the researcher in naturalistic settings. The key issues in inductive methodologies are: knowledge of realities is multiple and constructed and therefore bound by time, place and context; there exists a dynamic relationship between knower and known that is often inseparable; in this man-made world it is impossible to distinguish between cause and effect as all entities are in a state of simultaneous shaping and; all inquiry is value bound. While the approach adopted is predominantly inductive it is also true to say that this does not rule out the inclusion of deductive processes. Indeed, it would be true to say that both have been used, as will be apparent in the chapters on the analysis of the field data and that deductions on the basis of theory have also been called on. Overall the methodology is reflexive of both inductive and deductive approaches but with the balance very firmly on the side of inductions, especially given my own personal siting within the sector.

At a general level Denzin and Lincoln (1998, p.26) have identified and discussed four major interpretive paradigms, apart from the positivist/postpositivist model all work within relativist ontologies, interpretive epistemologies and interpretive, naturalistic methodological settings. The interpretive paradigms are shown in the table below and includes the general criteria for evaluating research and the typical form that an interpretive or theoretical statement assumes.

**Table 4: Interpretive Paradigms (after Denzin and Lincoln, 1998)**

PARADIGM/THEORY	CRITERIA	FORM OF THEORY	TYPE OF NARRATION
Positivist/postpositivist	Internal, external validity	Logical-deductive	Scientific report
Constructivist	Trustworthiness, credibility, transferability, confirmability	Substantive-formal	Interpretive case studies, ethnographic fiction

Feminist	Afrocentric, lived experience, dialogue, caring, accountability, race, class, gender, reflexivity, praxis, emotion, concrete grounding	Critical, standpoint	Essays, stories, experimental writing
Ethnic	Afrocentric, lived experience, dialogue, caring, accountability, race, class, gender	Standpoint, critical, historical	Essays, fables, dramas
Marxist	Emancipatory theory, falsifiable, dialogical, race, class, gender	Critical, historical, economic	Historical, economic, sociocultural analysis
Cultural Studies	Cultural practices, praxis, social texts, subjectivities	Social criticism	Cultural theory as criticism

This schema can be compared with that presented by Chua (1986) in which she refers to Mainstream (Positivist), Interpretive Alternative and Critical Alternative paradigms, which mirrors Denzin and Lincoln's (1998, p.186) later grouping of Positivist; Constructivist and Critical Theory and; Interpretive. Paradigms represent sets of basic beliefs and worldviews that are accepted on faith as there is no way to establish the ultimate truthfulness of one over any other in any conventional sense. As Guba and Lincoln (1998, p.202) stated:

“any given paradigm represents simply the most informed and sophisticated view that its proponents have been able to devise, given the way they have chosen to respond to the three defining questions<sup>10</sup>. And, we argue, the sets of answers given are in all cases **human constructions**; that is, they are all inventions of the human mind and hence subject to human error. No construction is or can be incontrovertibly right; advocates of any particular construction must rely on **persuasiveness** and **utility** rather than proof in arguing their position.” (emphasis added).

<sup>10</sup> The ontological, epistemological and methodological questions.

They then go on to outline what they believe would be the basic beliefs underlying their alternative inquiry paradigms. The broad grouping differ in as much as they reflect what are called, common breakaway assumptions. In the case of critical theory this is the value-determined nature of enquiry (an epistemological difference) whilst the constructivist assumption is that of relativism rather than realism (an ontological difference).

**Table 5: Basic Beliefs of Alternative Inquiry Paradigms (after Guba and Lincoln, 1998)**

ITEM	POSITIVISM	POSTPOSITIVISM	CRITICAL THEORY ET AL.	CONSTRUCTIVISM
Ontology	Naïve realism-'real' reality but apprehendable	Critical realism-'real' reality but only imperfectly and probabilistically apprehendable	Historical realism-virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallizes over time	Relativism-local and specific constructed realities
Epistemology	Dualist/objectivist; findings are true	Modified dualist/objectivist; critical tradition/community ; findings probably true	Transactional/subjectivist; value-mediated findings	Transactional/subjectivist; created findings
Methodology	Experimental/manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental/manipulative; critical multiplism; falsification of hypohese; may include qualitative methods	Dialogic/dialectical	Hermeneutical/dialectical

### VII.2.3 Ontology, Epistemology and Methodology

This thesis situates itself within an essentially critical theory paradigm but one which draws on elements of a constructivist paradigm in its approach to reality. It adopts a, historical relativist ontology, a transactional epistemology and a methodology that is dialogic, hermeneutic and dialectical. It aims to reconstruct present understandings of the interplay between regulation and sustainability, drawing on historical perspectives, in order to understand the transformations in social orders and produce knowledge that is historical and structural. The broad contours of the paradigm drawn upon are outlined in the following paragraphs, drawing on the examples provided by Guba and Lincoln (1998).

*Ontology: Historical relativist.* Reality is apprehendable in the form of multiple social and experiential constructions, local and specific in nature and dependent for their form and content on the groups and individuals holding the constructions. As social beings we continuously order and classify actions and experience according to interpretive schemes that are social and intersubjective. The groups' constructions though have been mutually shaped and interpreted over time by social, political, cultural and economic factors and discourses such that they display a degree of historical determinism that renders them a historically based reality. But, it is a reality that continues to be reinterpreted and alterable for what has been experienced is endowed with meaning in a backward, reflective gaze, grounded in social contexts. Rationality is something that is often accorded after an event to become part of the material conditions of social life. History achieves a reality as a process in which a historical subject realizes itself. Knowledge of reality becomes a judgment, an evaluation. In human affairs the process of knowledge production is thus historically and socially interwoven, each systematic standpoint i.e. of social groups, will give a different interpretation of that reality. Through on-going social interaction meanings and norms become inter-subjectively 'real' and may become, temporarily, stable constructs. The interpretive standpoint seeks to make sense of human actions by fitting them into a purposeful set of individual aims and a social structure of meanings (Chua, 1986). But it goes beyond this, it is necessary to use the insights in order to uncover societal conflicts of interests that have become institutionalised through cultural and organisational forms.

*Epistemology: Transactional and subjectivist.* The investigator and the investigated object are interactively linked, with the values of the investigator influencing the inquiry. Findings are value mediated and created as investigation proceeds, in other words they are bound by context and circumstance. Guba and Lincoln (1998, p.206) have pointed out that this challenges the traditional distinction between epistemology and ontology as it suggests what can be known is determined by the interaction between a particular investigator and a particular object or group. Interaction between the investigator and the investigated creates new knowledge and insights. Within this approach what counts as truth is more difficult to establish in the sense of against what standards should it be measured or judged. For Foucault, truth itself is a construct, it "is a thing of this world: it is produced only by virtue of multiple forms of constraint" (Chua, 1986, p.620). Truth or true knowledge has to be separated from the forms of domination, the discourses and structures of power, within which it operates at a particular juncture of time and circumstance.

*Methodology: Dialogic and hermeneutical.* The transactional nature of the fieldwork and data gathering requires an interactive dialogue between the investigator and the subjects of the enquiry in order to elicit individual constructions. Dialogue should be dialectical in order to transform misapprehensions and shared understandings into more informed consciousness. Constructions are interpreted using hermeneutical techniques in order to build something that is more informed than previous constructions. Given the liberational aspirations of investigation, research is most naturally located within organisations and their societal environments, drawing on histories (Foucault's "genealogical approach") and studies of organisational structures and processes, highlighting their societal linkages in order to understand the interplay between the two. Understanding of an event or situation can be accessed through an analysis of what it has been, what it is becoming and what it is not (Chua, 1986).

A constructivist approach seeks to understand the complex world of lived experience from the point of view of those who live in it. This lived reality is situation and context specific and interpreted by those who live in it through individual and shared constructions involving history, language and action, of what that reality is. To understand what is going on requires interpretation of the processes of meaning construction and how these are embodied in the language and action of social actors but to prepare an interpretation is also an act of construction. A constructivist approach holds that what we take to be objective knowledge and truth is the result of perspective – created and not discovered. Reality therefore can be multiple, there are many realities, which are inter-subjectively shared and socially construct meaning and knowledge (Berger & Luckmann, 1966). It relies on the idea that "the terms by which the world is understood are social artefacts, products of historically situated interchanges among people" (Gergan, 1985, p.267 cited in Schwandt, 1998, p.240). The emphasis is on the collective generation of meaning and reality is the result of the social processes that are accepted as normal in a specific context. But it should also be noted that these cannot be divorced from their historicity and the accumulation of shared knowledge that constitutes the shared present. This leads to the insight that there can be multiple constructions any or all of which have the potential to be meaningful. Knowledge claims are therefore intelligible and debateable only within a particular context.

Critical theory stresses a notion of man as the creator of historical realities capable of comparing what is with what could be. Knowledge is mediated by power relations that

are socially and historically constituted and that facts cannot be separated from value judgement. As Schwandt (1998, p.263) puts it:

“the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption; that certain groups in any society are privileged over others and,....the oppression that characterizes contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary or inevitable”.

Ideologies are not imaginary mental constructions but materially affect social and institutional practices, they are thus central to the understanding of concepts of knowledge and truth as well as being fit subjects for inquiry as they cannot be separated from the conditions of society. It is in this respect that critical theory is imbued with a partisanship that struggles for a better world. Foucault's approach to the exploration of the ways in which discourses are implicated in relations of power and how power and knowledge “serve as dialectically reinitiating practices that regulate what is considered reasonable and true” (Schwandt, 1998, p.264) is especially apposite. However, this is not to say that because claims to truth are discursively situated and implicated in relations of power that truth can simply be equated with the effects of power. Claims to truth do involve regulative criteria so that some are more meaningful than others, otherwise it becomes a meaningless concept.

The aim is through critique to enrich people's understanding of the meaning and consequences of their actions in order to increase the possibility of bringing about change through recognition of restrictive conditions. Bound up with this is the imperative to reveal how the taken for granted structures and institutions can become particular forms of a restrictive domination and ideology and that through their uncovering social change may be initiated. A critical qualitative approach, due in part to its emotional attachments has to rely for its power and insight on notions of the credibility of its representations of constructed realities. Perceptions of the world cannot be randomly constructed but should do so in a way that questions what appears to be natural and obvious in order to interrogate the truth and liberational aspects of those assumptions. The appropriate criteria for judging the enquiry would be, from a critical theory perspective, the historical situatedness of the research and the extent to which it uncovers the structures and practices that embed dominatory practices within social and organisation situations as well as to what extent it contributes to transformatory action. From a constructivist stance the issue of criteria is, according to

Guba and Lincoln (1986, p.214) “not well resolved”. They suggest authenticity criteria of fairness, ontological authenticity (enlarges personal constructions), educative authenticity (leads to improved understanding of construction of others), catalytic authenticity (stimulates to action), and tactical authenticity (empowers action). It can be inferred that the two share a high degree of commonality in their criteria for judging the goodness or quality of an inquiry.

Regulation of the water sector is a complex subject, there more so when the tentative dimension of sustainability is added. Social, environmental, economic and political aspects as well as competing norms and interpretations interweave themselves in the fabric of regulation. These facets have a resonance not just for the industry but with a wider polity as well, they cannot be treated in the isolation of the industry as a ‘sealed’ system. External influences matter as much as internal workings. Thus any attempt at understanding and theorising should acknowledge the open nature of the sector. It is in recognition of this that a wide variety of perspectives and informants need to be drawn on in order to capture the competing and complementary influences that shape and inform the workings of the sector and its regulation. The question that arises out of this is whether or not the net has been cast sufficiently wide enough to allow important influences to emerge. To this there can be no conclusive answer, I believe that it has and that the effort has been made to ensure this. But it remains a valid question.

Regulation applies to almost every aspect of the water industry’s activities, from the way it interacts with the natural environment through to the human/societal environments. It thus impact directly on sustainability even though this is not the prime focus of regulatory activities. Formal regulatory activities are exercised by a number of agencies and actors, as outline in chapter III, around which there are significant elements of overlap and interdependency. Broadly speaking the economic and social aspects of sustainability are impacted on primarily by Ofwat and to a lesser extent by the Customer Service Councils (CSC). Their aim is to regulate investment and service levels associated with the provision of water services and to ensure that customers are not unfairly disadvantaged by charging structures. Whilst Ofwat has regard to affordability it also must ensure the ‘sustainability’ of water companies by ensuring that they can adequately fund their activities. On the other hand the CSCs are supposed to champion and act on behalf of customers. Social sustainability issues are limited to being addressed through the provision for vulnerable groups and encouraging flexible payment mechanisms. The DWI addresses quality and health issues as a subset of social sustainability. Environmental sustainability is the remit of the EA and to a lesser

extent EN. Their activities focus on water resources and balancing the competing needs of industry with nature, pollution and the environmental quality of water bodies and demand management of both companies and customers. The DETR plays an overarching role that supposedly addresses all three legs of sustainability; social, environmental and economic. Thus formal regulation with respect to sustainability is exercised and directed primarily towards the water companies. It largely leaves to the water companies the translation of these aspirations into measures directed towards customers.

## VII.3 RESEARCH METHODS

### VII.3.1 Introduction

The previous sections outlined the set of beliefs that underlie the research and inquiry that lies at the centre of this thesis. The adoption of a critical theoretical approach modulated by constructivist perspectives predisposes the methodology to be adopted towards an inductive, qualitative approach. The objects of inquiry are the organisations and institutions situated within their social context and environment. But as these organisations and institutions are themselves human constructs and artefacts they can be accessed both via their own material representations and via individuals as a means of sharing and participating in their own understandings and socially created realities. The strategies of inquiry needs to be focused on what information is required to answer the research question and which strategies will be the most appropriate in obtaining it. As such they must also present a connection between the underlying theoretical paradigm, the empirical and interpretive framework as the what and the how of the inquiry will influence and put into motion paradigms of interpretation.

Strategies of inquiry connect the research to the specific means of collecting and analysing empirical material. A case study for example will rely on interviewing, observing and documentary analysis. Although observation does form a part of the research methods employed it is a minor part and emphasis has been placed on dialogic engagement with the various actors across the sector as well as observation of reported dialogue and use of certain texts. In view of this the research method might be characterised as a meta case study of the water sector that draws on texts, observation and dialogue as the basis of the inquiry into whether or not the regulation of the water sector encourages sustainability.

### **VII.3.2 Texts**

Texts include published sources of material that have been prepared and distributed by various organisations such as annual and environmental reports, press releases, articles and commentary in the published media such as magazines and newspapers, information leaflets as well as web based information. Of interest have been the press statements and articles put out in response to events and developments. The water industry trade association, Water UK makes particular use of this strategy as a matter of course in order to comment on and make the position of the water companies clear to the various government agencies. Water UK's press statements and briefings are a regular source of articles and comment in the national and local newspapers. An important source of information has been the official publications by the government. These have included departmental circulars and information releases as well as consultation documents and reports on responses to consultation and submissions received. In the same vein I have drawn extensively on the published material from Parliamentary committees; memoranda submitted to committees, transcripts of oral evidence, written responses and committee reports on proceedings and their findings. This has proved to be a particularly fruitful source of information, the more so as it was used as an extension and corroboration of my own interview data. Oral evidence from hearings is often obtained by means of an overtly inquisitorial process of cross questioning and is therefore a means of establishing the consistency of the evidence as well as consistency with other sources of information such as interviews and documentary sources. It also provided the only means by way of which the views, opinions and thinking of politicians could be obtained in a coherent manner.

Such material provided both a backdrop against which to examine the processes of regulation, accountability and the flow of debates over sustainability and the functioning of the sector and a source of primary data.

An attempt was made to use the press cutting service used by one of the major water companies. Although access to the material was readily granted this line of data gathering was not pursued as the volume of data produced was enormous and furthermore was found to be not particularly pertinent to the enquiry. The vast majority of material gathered through press cuttings represented highly localised issues, from which it would be extremely difficult to draw sector wide inferences.

### **VII.3.3 Observation**

A limited amount of observation was carried out. This took two forms; in the one instance it consisted of attending and participating in workshops and conferences organised by the water industry on various topics of particular relevance to the subject of the thesis. Three such events were attended; Conference on the Future of Regulation (WaterUK, 2001b), Conference on Sustainability in the Water Industry (WaterUK, 2002) and, Preparing for PR04 (WaterUK, 2002b). Water companies dominated attendance at these events with minor representation from regulatory agencies and civil society organisations such as national NGO's. Observation took the form of note taking and participation in the discussion groups during the events as well as receiving the reports and feedback from the discussions that took place as part of the events. Observation at these events provided an insight into the thinking and attitude of various senior and influential members of the water industry and regulatory agencies.

In addition to these formal events I also took part in regular formal and informal meetings with members of a water industry steering group as part of a research project developing a performance modelling and accounting methodology. This sought to include social and environmental factors whilst taking cognisance of regulatory requirements. As such it provided a direct insight into the actual workings and reactions to regulation and attempts to include forms of sustainable development into decision making and evaluation processes.

### **VII.3.4 Interviews as Data**

Interviewing of informants comprised the major field research effort. With any qualitative research that relies for a large part of its data on interviews, questions will inevitably arise as to what the status of interviews should be and can these be treated as being data from which inferences may be drawn. In other words how should we view interviews? I take the position that an interview is a form of dialogue. The ambition of a good dialogue, which only in a formal, technical sense is an interview, is to become mutually involved in understanding' one another's actions, projects, and ways of interacting with others in the field (Andersen et al., 1995). Current thinking on interviews as a technique for gathering data has moved well beyond regarding them as an activity carried out by an objective interviewer in control of the process and passive respondents being a repository of answers (Gubrium & Holstein, 2002). Contemporary thinking recognises the ubiquitous nature of interviews in modern society and the

importance of the individual as significant commentators on their own experience, as democratising force that allows the interpersonal expression of public opinions. Foucault has indicated how subjectivity has been discursively organised and how the 'technologies of self' have transformed the way we view the sources and structure of our subjectivity (Gubrium & Holstein, 2002, p.6) being the socially and historically situated practices through which new sense of who and what we are as human beings are constructed.

Interviews as a means of gathering information are far from straight forward, characterising them as a form of dialogue indicates the extent to which they are influenced by a myriad of social, institutional and representative factors; context, language, knowledge, gender, power relations and many others. The respondent and the interviewer are far from passive subjects trapped within the interview process, as might at one stage have been thought. The interview is more realistically regarded as a site of production of meaning where participants construct versions of reality interactionally (Gubrium & Holstein, 2002, p.14). The active informant in the process of offering their experiences constructively shapes the shared information, drawing in the interviewer as an active participant in the co-production of knowledge. Neutrality and objectivity are not necessary or even achievable. The value of interview data lies in their constructed meanings and the insights these provide. The interview can now be seen as a symmetrical relationship between interviewer and informant. However, this interpretation of the interview raises questions of both whose voice is being reflected and whose reality is being constructed in the process. Is their one or more voices reflected and are their multiple realities all reflected within the same process? Such a postmodern view of interviews raises and holds as many hostages as it liberates. As Gubrium and Holstein (2002, p.26) point out, 'today's variegated landscape of discursive environments provides complex options for who we could be, the conditions of possibility'. A postmodernist view theorises society as a series of fragments in a continuous state of flux.

Interviews aid the construction of narrative and aid the understanding of social processes and together they are a natural complement to each other as both construct versions of reality, vehicles of interpretation. However, narratives make use of more than just interview material and often draw on other complementary sources, what Czarniawska (2002, p.739) characterises as 'second-hand interviews', such as some of the documentary material drawn on in this thesis.

Of the different types of interview that could have been employed the semi-structured, in-depth interview is preferred. Given the subject matter and research question a questionnaire approach would have been inappropriate, as it would not have allowed the exploration of issue or the expression of insights. It is suitable where quantitative information is required and large numbers of people are the focus. For similar reasons a structured series of interviews using a set of questions would not have allowed the process of interview and dialogue that leads to the sharing of life experience to have emerged. The advantage of using a focused semi-structured approach is that it is less restrictive and prescriptive, it has the potential to elicit a breadth and depth of information that is generally difficult to obtain through other approaches (Fontana & Frey, 2000). The objective was to enter into an open dialogue with respondents that allows the development of points of interest and elucidation to emerge. It allows respondents to communicate and (re)construct histories, events and interpretations that provide both insight and evidence pertinent to the research inquiry. To be effective and useful the in-depth, semi-structured interview seeks to develop and build on a degree of intimacy (Johnson, 2002, p.104). It is particularly useful where different individuals may have complicated and sometimes conflicting multiple perspectives on some issues. The interview becomes the negotiated text (Fontana & Frey, 2000) alluded to above, grounded in the contexts in which they were gathered. To be successful the interviewer has to enter into dialogue with the informant at a similar level and build on shared attributes, in doing so it can bring about a depth and richness of understanding that would otherwise be denied. As Johnson (2002, p.109) observes, it involves a greater degree of involvement of the interviewer's self and requires them to bring some form of complementary reciprocity to the informant. The potential danger is that this may lead to the unconscious switching from exploration to using interviews as a means of verification, thus effectively limiting and closing the process.

### **VII.3.5 Interview Process**

In order to address the research question it was necessary to access as broad a range of stakeholders – interested and affected parties as possible. The decision was made that those approached should be involved in the water sector and have some knowledge of it such that they could be regarded as Stakeholders/Key Informants. A key informant was regarded as a person who by virtue of their position, level of responsibility or knowledge was able to articulate and convey information, views, opinions, and insights into the workings of organisations and the sector at one or more different levels such as policy debates and developments, operational activities,

emerging issues and concerns. Alternatively, a key informant was one who was generally acknowledged to be well informed about a particular issue or who may have contacts with other informants and may therefore be able to offer insights into thinking and issues. In the majority of the cases those interviewed were senior individuals, holding positions of responsibility in the organisations such as at heads of division, director or managing director level. This was complemented in five instances by interviewing middle ranking officials thus providing a spread of expertise across the types of organisations, responsibility and influence.

The organisations approached and interviewed are summarised below.

**Table 6: Key Informants and Stakeholders**

REGULATORS	WATER SERVICE PROVIDERS	OTHER ORGANISATIONS & INFORMANTS
Ofwat Ofwat National Customer Council (now Water Voice) Environment Agency Drinking Water Inspectorate English Nature Department of Environment Transport and Regions (DETR)	Water and Sewage Companies Anglian Water Northumbrian Water Thames Water United Utilities Wessex Water Yorkshire Water Water Only Companies Bournemouth & West Hants Bristol Water Cambridge Water South East Water South Staffs Water	Centre for the Study of Economics Research in the Global Environment (CSERGE) – UEA Consumers Association CSERGE – UCL Dr D Helm New Economics Foundation RSPB Scottish Water Industry Commission Sir I Byatt UNISON Water UK Wildlife Trusts

It should be noted that in some instances more than one division in an organisation was interviewed, so that in the case of DETR for instance representatives from three separate divisions were interviewed. Also, in a few cases two people were interviewed. In total 37 interviews were conducted with 43 individuals. Only three organisations originally approached did not take part in interviews; Friends of the Earth, Surfers Against Sewage and SustainAbility. In the case of FoE this was due to their having a very full programme and thus being unable to accommodate my request. Surfers Against Sewage agreed to be interviewed but it proved impossible to arrange an interview with them and lastly, SustainAbility declined the request.

Initially stakeholders were approached by letter (see Appendix II), after enquiries had indicated who potentially they might be. This was followed up by telephone in order to confirm any details and to organise meetings. The interviews were conducted between May and August 2001; a detailed schedule of the interview programme is given in Appendix III. All interviews were carried out at the place of work of those being interviewed. The interviews lasted between an hour to an hour and a half.

The original letter had set out the purpose of the research and indicted the broad areas of inquiry – Sustainability, Regulation and Accountability. Prior to all meetings a list of broad topics and questions within each of the areas was prepared to provide an outline framework for the interview but still allowing for a free ranging dialogue and the possibility of following other pertinent or topical points. These were prepared in such a way that they were tailored to the person being interviewed and the organisation within which they were located. In Table 7 the generic question list used for interviews with the water companies is reproduced, as an example of the type of questions to be posed. Given the nature of the interviews the questions were not necessarily asked in the same terms or indeed at all if I judged that they had been covered in the discussions. The same basic questions were used for all interviews but adapted to the particular circumstances of the person or organisation being interviewed. Copies of the question topics for some of the other organisations interviewed are given in Appendix IV.

The approach sought to explore both the internal lifeworld of the organisation as well as its relationships and observations of the external world of the water sector, its functioning, its regulation and its place in society so that it was both a reflective and a reflexive dialogue. The extent to which this was realised in the dialogue varied between individuals and organisations. It was noticeable that informants spoke with multiple 'voices', reflecting individual and corporate body viewpoints. To an extent the content and candour of the dialogue of the informants was also influenced by other constraints. Dialogue was influenced by the relative anonymity that the interviewee believed would be accorded to what they had to say. This was coupled with the potential sensitivity of their remarks or what they believed they could say given their position both within their organisational setting and the external perception of the position and importance of the organisation. Thus those informants who believed that their remarks might be attributable and were in prominent positions had a tendency to engage in a corporatist manner, modulating their responses against their perception of other, external constraints on what could or was allowable for them to say. Thus for

example in response to a leading question one informant, in a sensitive official position remarked 'for the purposes of your tape you may record a nod' or in another case the informant remarked that he had to be careful in answering a question to distance his personal views from the official. In this latter case it is of interest to note that at the beginning of the interview he had said that he had been quoted out of context on several occasions and was thus wary of what he said. In addition there are other bounds, such as the existence of legal and statutory regimes within which they operate. Other external constraints such as social/cultural norms that are taken for granted and, financial/economic regimes. Together these create both the particular space and provide the vocabulary with which informants are able to formalise and articulate their dialogue and that provide the terms for founding and structuring their own understandings. Such external constraint did give rise to a diversity of qualitative responses.

With the agreement of the informants, all interviews were recorded on tape. In all cases, I offered to provide a transcript of the dialogue and in three instances, the informants requested this – copies were subsequently sent and there was no follow up. In one instance, the informant also taped the interview and at the end of the interview requested a copy of the questions, which I provided at that point. At the end of each interview I immediately prepared notes and observations of the interview, noting its setting, the character of the interview, level of rapport and other details, see Appendix V for an example of such case notes.

Table 7: Generic List of Interview Questions to Water Companies

GENERAL THEME		
Regulation	Sustainability	Accountability
<p>Is regulation a good or a bad thing?</p> <p>What has it contributed to the water sector to date?</p> <p>What have been the trends in regulation.</p> <p>Who or what have been the driving forces?</p> <p>Is regulation desirable?</p> <p>Is there enough regulation?</p> <p>Should regulation be statutory or voluntary; as applied to what areas and why?</p> <p>What do you think of the current form of regulation?</p> <p>Are there other, better or more desirable ways of regulating the</p>	<p>What do you understand the terms sustainability and sustainable development to mean</p> <p>How it is interpreted?</p> <p>Is it a useful concept?</p> <p>How it can be operationalised?</p> <p>Has thinking on sustainability changed?</p> <p>What were the key factors that brought about that change?</p> <p>What has been the role of the various stakeholders (government, regulators, companies, other stakeholders) and regulation on sustainable development?</p> <p>How have they influenced both the way this has changed and is</p>	<p>Who are the stakeholders?</p> <p>What formal and informal responsibilities are there towards stakeholders ?</p> <p>Is there consultation and feedback to stakeholders?</p> <p>How much notice is taken of them and in what way?</p> <p>Has this changed over time?</p> <p>If so, why?</p> <p>How are clashes of interest dealt with and are they useful?</p> <p>What about bodies that see themselves as stakeholders but might not be recognised?</p> <p>How is stakeholder identification influenced (power or publicity and</p>

<p>industry?</p> <p>Does the current regulatory regime help or hinder sustainability.</p> <p>Do the lines of who is responsible for what regulation cause conflict in meeting differing regulatory requirements?</p> <p>Does regulation need to change as governance and the structure of the industry changes?</p> <p>Is the institutional form of the water sector conducive to the achievement of sustainability?</p> <p>What impact could potential developments (mutualisation, common carriage, splitting off of assets from operation) have on sustainability?</p> <p>What other forms of corporate governance and institutional form might be applicable in England &amp; Wales?</p> <p>Would there be advantages or disadvantages for sustainability, shareholder value and stakeholder value?</p> <p>What are the trends in institutional form and governance?</p> <p>Has the operationalisation of sustainability created pressures for change or been the result of other changes?</p>	<p>operationalised? (In other words, what, who and how has influenced thinking.)</p> <p>Is there a consensus or conflict among them?</p> <p>Should government be setting a sustainable development agenda and how?</p> <p>Has this affected business growth and profits (positively or negatively)?</p> <p>What will be the impact in the future?</p>	<p>public profile)?</p> <p>Does this have an impact on operationalising sustainability?</p> <p>What is the difference between stakeholder and shareholder value and</p> <p>How does this relate in theory and practice to their relationship with the organisation?</p> <p>Is adding shareholder value compatible with sustainability?</p> <p>Have attitudes towards stakeholders and accountability changed?</p> <p>What have been the key influences?</p> <p>What is meant by accountability?</p> <p>Accountable to whom and why?</p> <p>How has this changed and why?</p> <p>Where has the change come from?</p> <p>How is accountability demonstrated?</p>
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### VII.3.6 Data Management and Analysis - Interviews

A template style approach to the analysis of the textual material was adopted. A template was developed, starting with the main themes, refer to Table 7, to identify the themes in the textual data through the coding of the texts. The initial coding was 'applied' to the texts as a template as a means by which to identify sections of the text as textual data. Such an approach works well when the aim is to compare the perspectives of different groups within a specific context (King, 2003). The initial template was constructed by work through approximately 30% of the transcripts manually. This initial template was then used and applied to all the texts in order to index text segments to coding, via computer based software (which also allows for parallel coding of the same text segments). In the course of applying the template to the full set of transcripts the initial coding template was revised and extended as further themes became apparent. The template was successively refined through several readings of the transcripts and examination of the coding of the text segments. This reduced the complexity of the initial coding template and its levels of hierarchy and allowed a clearer identification of themes. The computer software was used as a means of managing the large amount of textual data and to carry out search and

retrieve operations on the textual data that was faster than would have been possible manually. The search and retrieve facilities of the software were used to facilitate several iterations of examining and summarising combinations of segments of textual data according to themes and informants. This process was used as a means of interpreting and producing an account in order to understand the phenomena being examined. Thus the role of the software was to provide a fast and efficient means of extracting segments of text for 'manual' analysis.

As indicated above, interviews were recorded using a handheld recorder. In one instance the tape failed to record the interview and no material was obtained and on another occasion the tape failed to work and thus hand written notes of the dialogue were taken. In all other cases the interview dialogue was recorded successfully. The tapes were transcribed, verbatim, using *Dragon Naturally Speaking* speech recognition software to create a Word document for each transcription. The process consisted of listening to the tape of the recording using a tape transcribing machine and repeating the dialogue to the speech recognition software. This produced a transcribed electronic text copy of the dialogue in a Word document. In order to ensure the correctness of the transcription from voice to text the tapes were played back and checked against the written text. The benefit of this approach was that it speeded up the transcription process. I included in the transcriptions instances where there was a change in the pitch or tone of the voice, in the event I did not draw on this data, nor did I consistently include such notes throughout the transcription process.

The next step in the data handling was to read the electronic files into the QSR NVivo software package for qualitative research. The programme is capable of performing *code-and-retrieve*, *theory building* and *conceptual network building* functions. However, before making use of the software I produced paper copies of all the transcripts. A selection of ten paper copies were then read several times making notes and observations on the copies. The notes and observations were then brought together and used to form the basis of a series of open codes, under each of the three areas of interest. These were then examined and ordered to produce a coding hierarchy for each of the areas, see Table 8 that could be used subsequently. I also categorized the informant interviews into common sets and ascribed attributes to each of those interviewed. The sets are shown in Table 9 and the attributes in Table 10. The main purpose of this was as an aid to subsequent examination and analysis of the interviews. The relationship between the interview topic areas, informant sets and

attributes is shown in Figure 4. At this point, I took a break of five months in order to examine the theoretical literature before returning to the transcripts and the analysis.

Table 8: Node Coding Schema

REGULATION			SUSTAINABILITY			ACCOUNTABILITY	
Purpose	Formation	Influence	Influences	Civil Society	Involvement	To Whom	Customers
	Politics				Ethos		Pressure groups
	Requirements				Impact		Regulators
	Interpretation				Equity		Investors
Dialogue	Consultation	Form of		Economic Regime	Instruments		Government
		Response to			Valuation		Stakeholders
		Networking			Funding	Practice	Attitudes & perception
		Legislators part			Incentives		Practice
	Policy	Issues		Political System	Influence - Stakeholders		Relationships
		Legislation			Politics & Policy		Consultation
	Process	Lobbying			Legislation		Reporting
		Feedback			Scrutiny	Reason	Legitimation
Application	Players	Personalities	Application	Praxis	Meaning		Image
	Impact	Experiences			Lobbying & Consensus		Transparency
		Comparatives			Attitude		Mind set/Duty
	Burden	Proliferation		Accounting	Measurement		Sustainability
		Information req'ts			Measures		
		Coordination		Players	Personalities		
	Efficiency	Industry		Implementation	Take up		
	Consistency	Cordination			Scrutiny		
	Constraints	Legislation			Barriers		
	Localisation			Legitimation	Networking		
	AMP/PR	Implications					

		Pricing					
		Shortcomings					
		Stance					
		Privatisation					
	Instruments	Economic					
		Education					
Attitude	Public	Affordability					
	Companies	Middle men					
	EA	Role					
		Approach					
		Legislation					
		Capabilities					
		Character					
	Ofwat						
	DWI						
	Government	Politicians					
	Sustainability						

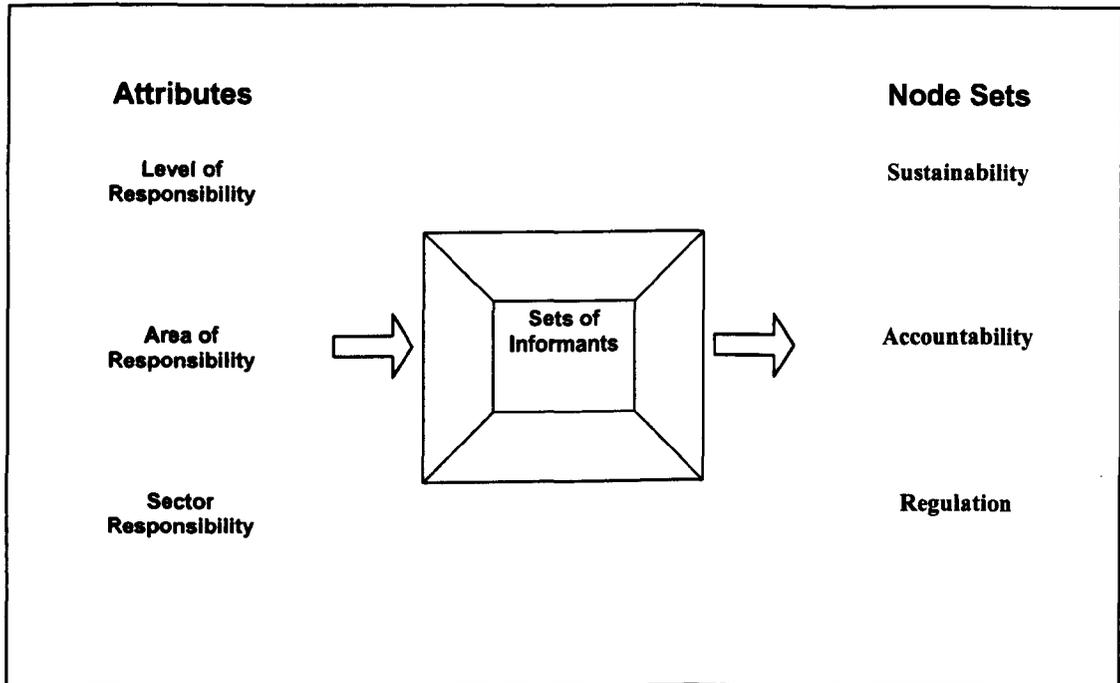
**Table 9: Informant Sets**

SET	POPULATION
DETR	Three Divisions
Economic	Sir I Byatt Dr D Helm NEF
Environment Agency	Five Divisions
Environmental	CSERGE-UEA CSERGE-UCL RSPB Wildlife Trust
Industry	WASC's WOC's UK Water

Other Regulators	DWI EN Ofwat Scottish Water Commission
Social	Consumers Association Ofwat National Customer Council UNISON

**Table 10: Informant Attributes**

ATTRIBUTE	CATEGORIES
Level of Responsibility	Top Senior Middle
Area of Responsibility	Economic Environmental Overall Social Sustainability
Sector Responsibility	Consumer Affairs Regulator Consumer Group Environmental Regulator Local General Environmental National General Environmental Policy Regulator Quality Regulator Regulatory Informant Specific Environmental Interests Think Tank Trade Association Trade Union WASC WOC



**Figure 3: Relationship between Attributes, Node Sets and Informant Sets**

On returning to the transcripts, I then used the NVivo software to code sections of text, otherwise known as nodes using the coding schema shown in Table 8 but supplemented by additional coding where the text seemed to indicate that this was necessary. Using the retrieval function I extracted for each Informant Set all nodes coded sustainability, regulation or accountability. At this stage it became apparent that the node coding indicated in Table 8 was too detailed and could be simplified by using only the first and second levels in the hierarchy. Informed by the theoretical work, the extracts were examined in detail along with other texts - mainly the evidence from the select committees. Further compilations and ordering of the themes and salient points along with examination and re-reading of the original transcripts were prepared, in an iterative manner. From this detailed examination and analysis of the material, patterns and structuring began to emerge that allowed a story; an outline description of the material findings that addressed the research question began to emerge. With the emergence of a 'story' line I then began to develop and fill this out by drawing on the transcript quotations and contextual material and cross reference it to an underlying theoretical interpretation.

In carrying out the analysis the NVivo software was used purely in a *code-and-retrieve, search-and-retrieve* mode rather than for any theory and conceptual network building. In this respect the potential power of the software as a tool has been under utilised. However, it has had the effect of overcoming the potential problem sometimes

associated with grounded theory in that it tends towards the positivistic. Its use can lead to implicit assumptions of an objective reality external to the observer who discovers data and reduces the inquiry to a manageable research problem (Charmaz, 2000).

### **VII.3.7 Critique**

Inevitably with any inquiry, it is possible with hindsight to improve what has been carried out. This section is a very brief exercise in self-criticism in order to not only highlight some of the short-comings but also in doing so to set out the boundaries of truthfulness and authenticity. The major question to be considered is whether or not the approach, the research process adopted was the correct one or would a more focused case study type of approach have been more appropriate. What is certain is that a different approach would have yielded, as is evident from the discussion of regarding the situating of the research, very different results and theorising. As such the question is self-answering and in no way negates the value of what has been carried out, or for that matter what might have been attempted. The process of data collection – interviewing, could have been more systematic, in-depth and perhaps more incisive. Having said that taking a more inquisitorial stance may well have been counter-productive. As it was the general atmosphere and rapport achieved in the interviews, the establishment of trust and genuine interest in the outcome of the research would tend to suggest that the right conditions for dialogue, sharing of experiences and joint construction of a reality were present. More pertinent would be the observation that it is the voices of an elite that are being heard and not that of the ordinary citizen and their own experience of the everyday conditions of life. This is a real and valid criticism and one for which there is no satisfactory answer. To what extent is something that cannot be known.

If it is accepted that in a postmodern world a constructed and shared story presents a version of reality that, so long as it meets certain rigorous requirements and sheds light on the interpretation of the human condition, is as valid as any other. Then the interpretation and analysis presented stands or falls by its fairness and authenticity. Or as it has been alternatively suggested, by the extent of its historical situatedness, its uncovering of dominatory practices and its contribution to social transformation. It would however be fair to say that the analysis and interpretation could have delved deeper into internal relationships within organisations, explored contradictions inherent in the material to a greater extent than has been done and considered alternative explanations and stories. This is true but boundaries are drawn and it is a judgement

call by the researcher as to where to draw such artificial boundaries such that the story is both complete and compelling and without being overly complex. A great deal more in-depth interpretation and analysis could have been carried out, it would have added to the force of the case presented, of that there is no doubt. But it has not been done, at the time it was judged that sufficient work had been undertaken to enable the story that had emerged before the researcher to be told – that it was ‘fit for purpose’, I believe that this is still the case.

#### VII.4 CONCLUSIONS

This chapter has outlined the epistemological, ontological and methodological beliefs and practices that have formed the basis of the research inquiry. The work is founded in a paradigm that draws on both critical theory and constructivist thought; that we create versions of reality through shared interactions that draw on historically situated and informed interpretations. The purpose of the research inquiry should aim to be not just illuminating but should seek through informing and interpreting to be liberating and transformatory, to improve the lot of society and the world of which we are stewards. The method of research has been shaped by this paradigm; it has drawn mainly but not exclusively on dialogic interviews with a broad range of informants across the water sector. In carrying out the interviews the aspects of regulation, sustainability and accountability have been explored in a semi-structured manner. The interview material has been supported by both observation through working with the water industry and by texts. Although some use has been made of qualitative software for handling the data, it has primarily been used in a *code-search-retrieve* mode rather than as a tool of analysis, this has relied on a ‘manual’ approach to the reading and building of an interpretation of the material. Lastly, some of the potential shortcomings of the research design and process have been touched upon.

Table 11: Initial Node Codings

Regulation		Sustainability			Accountability
Value for money (efficiency)		Understanding of/meaning	Examples		To whom for what
Burden & barriers	specialisations & interactions	Economic instruments			Image
Indicators		Measurement	economics/benefits		Expectations of customers
Purpose		Partners & partnerships			Legitimation
Interpretation		Incentives			concern for sustainability
Form & dialogue		Motivatgion			stakeholders
process of dialogue		pressure groups			transparency
Pricing		Barriers	Institutional set up		Pressure groups
Requirements & expectations			Conflicts of interests		Lines of accountability

Relationships (form & nature of)			EA weak set up	structure & hierachy	Structures of accountability
Impact of regulation		Poor fomulation			Public service attitude
Political agenda		Method of analysis			City & investors
Environment Agency	Role & Approach	Economic influence of the City			Types of accountability
	Value for money-pricing	Level of scrutiny			Consultee
	Legislation	Personality			Customer representation
	Capability	Ethos			Social dimension & customers
	Character				
	Shambles-last AMP	Impact on organisation			Customer attitudes
EA & Ofwat		Public preferences			Term of office of executives
	Companies in the middle	Legitimation & cooperation			Impact of statements on perception

	coordination of activities	Consensus building			Networking
	Conflict				Consultation
Influence on formation of regulation		Stakeholders	Affordability		Relationships
Actual application & experience of it			Links	Nature of links	Attitude change
Consultations			Scope of involvement in process		
			Nature of involvement in process		
			working together	consensus mutuality	
Appropriate regulation		Policy			
Instruments		sustainability Issues (drivers)			
	Economic	Funding	Funding activities		
	Education	Economic Incentives	Issues		

	Combine EA & Ofwat	Social Impact			
Industry consolidation		Influencing policy			
	comparators	Reporting & Indicators			
Process of dialogue		Legitimacy Reputation			
Role		Politics	impact of politics		
Personal reaction		Attitude of water co's			
Feedback		Legislation			
Networking		Indicators			
Concordance & coordination		BAP's & Agenda 21			
Localisation		Company attitude			
Consistency of approach		Public attitude			

Conflict of interest		Power & information			
Proliferation		Business case for sustainability			
Conflicting views		Impact of regulators	Ofwat	attitude	
	Examples	Championing			
Customer affordability		Adoption of strategy on sustainability	motivation/selling it		
Politicians			incentives		
Attitude	Attitude to sustainability		Language used		
	Towards the regulator		Drivers for sustainability		
	To regulation		Coordination of bodies		
Rationalisation		Motivation			
Policy		Areas of disagreement	scale & value of benefits		

Issue priority			past disputes		
Process of legislation		Lobbying			
Lobbying		Gains			
Influencing the process	Ways & means & ability to	Social equity			
Importance of personal contacts		Technological & communication barriers			
Application of regulation		Relationships			
Constraints imposed by it		Economic instruments			
Relationship to sustainability		Combine regulators			
Personalities impact of	application	Establishing credentials			
Privatisation		Community involvement			
AMP 3 Process	Implications for the future	Long term sustainability			

Experiences		Implementation			
Informational requirements (burden)		Attitude to water by public			
Government approach & management		Value of benefits	application		
Shortcomings	risk	Policy			
	five year period/short term				
Scotland	contrast of approach				
legislative constraints					
Delivery					
Networking					
Response to consultations					
Form & structure of consultation					

DWI					
Regulators attitudes					
Public attitude to (Water Industry)					
Company attitude to regulators					
Proactive not reactive					

## SECTION C

Using the theoretical lenses outlined in Section B an interpretative schema of the fieldwork data and documentary sources is presented in Section C. The work presented divides into three parts. The first centres broadly on how the conceptualisation of sustainability has affected and been used to inform regulation. It provides an interpretation of the processes at work and in doing so draws on the influence of historical frameworks; how these allow certain stakeholders and constructs to come to the fore. It also provides an explanation as to how different constructions of sustainability have been employed and maintained by different sets of stakeholders. The second part places that detail within a broader context that looks at how the governance and regulatory framework has evolved over a period of time. In other words it looks at how the institutional framework that now regulates for sustainability evolved and the manner in which it does so. It shows how regulation has colonised and institutionalised sustainability. The final part discusses the implications of the interpretation presented and draws conclusions from them.

## CHAPTER VIII: DISCOURSE AND SUSTAINABILITY

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*'For the Snark's a peculiar creature, that won't*

*Be caught in a commonplace way.*

*Do all that you know, and try all that you don't:*

*Not a chance must be wasted today!'*

Lewis Carroll, *The Hunting of the Snark*

### VIII.1 INTRODUCTION

This chapter seeks to investigate the discursive constructions of sustainability as they have emerged from texts and interviews. The process of analysis and interpretation has been iterative and reflexive, travelling between material and theory. From this the interpretations presented reflect the efforts to reach an understanding of not just the material but also of some of the underlying processes in order to develop explanations for what has been observed. The examination of texts and interviews draws on the Foucauldian ideas reviewed in a previous chapter. The analysis explores the ways in which sustainability has been conceptualised by the various stakeholders/informants drawn upon in the course of the inquiry. Given the broad range of stakeholders drawn upon the differences or commonalities in the conceptualisation and discussion of sustainability and the degree to which there might be a domination of one discourse over others is of interest. This is important because how sustainability is conceptualised and by whom, has an influence on the technologies or regulation; the forms, instruments and goals that regulation seeks to achieve. The way in which sustainability is conceptualised and the dominant discourse around this is indicative of the kinds of relationship between civil society, the State and the industry; in other words the formal and informal framework of governance. It will shape the possibilities of democratic involvement as well as the formation of bodies of knowledge, truth and power and, the hierarchy of discourses.

Sustainability as an object of analysis is explored via the texts and interviews, drawing on interpretation of the material. This reflects the contested nature of sustainability but also indicates that there is indeed a dominant discourse, that of interpreting sustainability in broadly econocentric terms. The congruence of the various statements by differing stakeholders has been explored in order to gain a sense of commonality or difference. The degree of what has been interpreted as shared aspects is noted lending weight to the possibility of a dominant discourse. The importance of this lies among other reasons in the influence such a discourse can exert over the formal and

informal modes of regulation. It is not possible to conceptualise sustainability, in this context, without thinking about the wider environment within which it exists and this has to include that of regulation.

## VIII.2 DISCOURSE OF SUSTAINABILITY

It can be agreed that the regulatory framework of the water sector has been subject to change since privatisation, the legal framework has been altered plus there have been changes with respect to stakeholders and their roles. Concurrent and consequentially the structure and practices of governance within the institutional framework have altered. As part of this process some facets that make up the framework have been revealed in greater detail and relative importance, one of these has been sustainability/sustainable development. Sustainability has emerged as a significant discourse and has engaged with economics to provide a locus of resistance to economic dominance within regulation. Regulating for sustainability offers a critique of existing modes of economic governance through challenging its purpose and rationality. It has set up a shift, or perhaps evolution, in the focus of regulation both in terms of 'real' regulation and the regularisation of practices.

### VIII.2.1 Corporate Discourses

Sustainability as a discourse or body of knowledge was explored through semi-structured interviews with 37 informants as a more detailed adjunct to formal, published statements. Starting at the level of definition there was general congruence between formal definitions of sustainability such as that given by DETR and others, see Figures 4, 5 and 6, or that of the Brundtland Commission and those enunciated in interviews by all parties. Figure 4 shows the DETR's definition of sustainability, whilst figure 5 indicates via one example how most of the water industry has adopted this 'official' definition of sustainable development but have then reinterpreted and (re)presented it in terms that offer support and legitimacy for their activities. This is achieved especially through highlighting the economic aspects of sustainability. That sustainability does not have to be constructed in this way is illustrated through figure 6, which offers an alternative vision. The elements of a social, environmental and economic aspect to sustainability were readily identified though the nuance of justice and equity were very often missing or not mentioned. However, such definitions are often used as a precursor to setting up individual interpretations or extensions of the basic concept that get reformulated in such a way as to reflect the *raison d'être* of the organisation. The broadness of the original touchstone definition allowing this as a legitimate and

legitimizing strategy that seeks to make it real for the organisation while at the same time seeking societal endorsement.

Such formalisations were reflected in the interviews with in many cases a particular 'spin' being given to working definitions. From an environmental perspective there were examples such as those reflected below:

“ sustainability, we see it as being, starting with water resources, making sure that there is enough water there for the environment, for human needs - industry and all the rest of it, making sure that there is enough now and continues to be enough.” Other Regulators B

“ the sustainability that we recognise has got the three pillars, economic sustainability, social sustainability and environmental sustainability. We really come from the environmental sustainability viewpoint where we need to recognise that whatever we promote is economically sound and socially sound as well.” Environmental C

From a water company point of view the following two quotes give an idea of the spread of interpretations current:

“I pull out the three elements, I talk to them about sustainable development, I say its about long-term decision-making and its about weighing those decisions not purely on an economic basis, you don't actually have to convert otters or social deprivation into cash equivalents, you just have to be aware that your actions have implications on environmental and social and therefore on reputational interests. The third element would be that it is about stakeholder participation both internally and externally. So you bring in things like corporate social responsibility and the ideas around that, a licence to operate. Those are the three bits that internally I try to explain sustainable development.” Industry B

“ there are three or four strands. If you have economic sustainability of the business, you have got sustainable development in terms of how we work with the rest of the business community in developing this area that we operate in as a sustainable development area. Then of course we have the general conservation, recreation sustainability issues.” Industry M

Whilst the attitude of the economic regulator is well summed up by the following:

“ environmental, economic and social dimensions and the old shorthand, which I shall get wrong about doing now what will continue to support generations in the future. I can never quite get the phrasing right but you know the phrase I mean.” Other Regulators C

## VIII.2.2 Observations on Econocentric Discourses

In reflecting the organisation through these definitions it can be seen that they are determined by what is permissible to be stated and what allows such definitions. In other words water companies choose to emphasis the business/economics related aspect of sustainability reflecting their conceptualisation of what they are about. They could have for example have choosen to stress the social aspects and relate that to what they do or quality, all would be equally as valid. The same can be said of the other players. However, since these do not exist in isolation but within, for the purpose of analysis, an institutional set up, there inevitably arise tensions at the heart of which is the power of consensus as to what should be done in order to operationalise sustainability. In other words the power to dominate the discourse through the establishment and maintenance of an ascendancy of concepts.

The actors have to an extent discursively constructed themselves and have entered into the discourse space of sustainability. In doing so they take on the rules and procedures, roles and positions, the space regulates behaviour, what can be said and what produces hierarchies. Being within the space/field they enter into the processes which shape what occurs within that space and their identity is shaped by the operation of that space. At the same time this is not a static situation but part of a series of events that both shape and is shaped by what goes on within the space as it evolves. Sustainability becomes a site of contest in which concepts and rhetoric are used to assimilate and transform the meaning within discourse such that a shared consensus is formed that embodies and reflects the power relationships.

“It is fair to say therefore that the regulatory bodies as a whole are increasingly increasing the sustainability language into their regulations, into their culture and mind set. Having said that I don't think that they fully realise what this means and therefore I think that the actual practice of regulation is miles away from these concepts and principles that are built into the guidelines and the rulebooks.” Environmental A

Turning to the documentary material it is clear that sustainability is being debated in business/economic centred (econocentric) terms and ideas. Both the promotion of

ideas to enable sustainability and the counter arguments against proposed provisions are couched in an econcentric rhetoric. Ideas and outcomes are debated and judged against a yardstick of economic efficiency and benefit rather than against other possible metrics.

### **VIII.2.3 Economic Sustainability**

The water companies certainly link sustainability to economics or market based mechanisms and in some cases are sceptical that its pursuit can make economic sense.

“Sustainability also comes back into issues which are, are we going to be allowed to manage our operational assets in the longer term. Sustainability, whatever the model that the business is operating at it has got to be allowed to charge its customers enough money to operate. I don't see the model being the sustainability issue, its just making sure that the customers pay enough for their long term service and they shouldn't really be subsidised.” Industry K

“One of the great problems with sustainable development is that we are set up in a regulatory financial way to finance the easy, end of pipe solution to any problem. We are not set up to finance the really complicated, holistic, top of catchment, partnership, less money far more complicated solutions that will actually solve your pollution at source or water colour problem at source and delivers social benefits to indigenous populations if I can call it that, or takeout pesticides along the way.” Industry B

This is corroborated by other informants from outside the water companies.

“I deal lot with industry, most industry will actually say that they don't see this so-called triple bottom line, they don't actually see what is in it for them to pursue social and environmental responsibility along with, I don't want the say profits necessarily because it is quite clear that firms do not maximise profits but they certainly are concerned with profits. They don't see what's in it for them because they see the social and environmental responsibility as a cost.” Environment A

On the other hand one of the motivating factors behind the uptake of sustainability by industry has been the perceived benefits of what has been called 'first mover' advantage. Balance this against the influence of the 'City', in other words shareholders

and investors. There is a clear perception, whether real or otherwise that any moves that might adversely affect profitability in the short term would lead to a loss in confidence and hence ability to function within the 'market'.

"They [Chief Executive & Accountant] do focus quite strongly on City perceptions, a fair amount of making sure that the analysts know what we are doing and letting them know, as far as one can in advance as to what to expect from the way we are going. ....We tend to have limited numbers of institutional investors and so it is not too difficult to keep a good flow of information and communication with them. Obviously one of the most interesting parts of our KPI that we keep looking at would be share price."  
Industry K

"The companies of course have to meet their standards statutory and environmental but then are slaves to the City so they all want a share price up and so on its a bit of a vicious circle." Industry F

This influence of the 'City' has the effect of reinforcing the couching of the debate over sustainability in a particular set of terms or rhetoric as indicated above. In doing so it serves to define what may be included and what is excluded as well as setting the norms of the debate against which any new moves or initiatives are to be judged. The effect of this is that it establishes and imposes a particular structure and set of discourse rules on any debate, an econocentric language. Thus we find that it is not only the water companies and the economic regulator using this particular language, in order not to be seen as an 'outsider' - a deviant, all those who wish to be included in the discourse adopt the same metric of rhetoric. Thus we see criticism mounted in terms of something not being economically rational, or failing to measure up to a particular standard or rigour.

" you have this organisation who can make statements, who can talk motherhood and apple pie about the nice warm fuzzy feeling about the environment but do not have to attach a monetary value to that. I fundamentally think that that is wrong. My one message to Barbara Young has been, start getting some economics behind all of this, you can't just expect everybody to want the world to be green. I know from my customers that their environment is the front and back garden and they want to be able to use as much water as they want in their front and back garden and if it depletes the river then its not really an issue for them. So I think of the Environment Agency needs to wake up and needs to start

acting as a much more commercially orientated organisation and accepting that there is a cost to all this and that the customers may not necessarily want to pay it.” Industry M

### VIII.3 THE ENVIRONMENTAL CHALLENGE

Referring back to the start of the price review in 1997 the Environment Agency, supported by a number of other stakeholders were able to force a form of sustainability agenda upon certain grounds, that of statutory liability. Although this became a driving mechanism resistance was mounted to it, principally by Ofwat through a challenge based around costs, affordability and valuation of benefits. This served to shift the discourse along a particular track and the subsequent development of the sustainability discourse within the water sector as a whole can be seen to have been shaped by this shift to an econcentric focused discourse. There has been little challenge to this dominance, which has also served to establish a hierarchy within the overall discourse that places this over others that have been based on other sets of values such as the precautionary principle for example.

“ our general remit is to help to deliver sustainable development in the UK and to do that by encouraging sustainable activity by everybody but particularly by government, DETR, and the bodies that are responsible to DETR.....we are responsible for the sustainable development strategy and for annual reporting of that. We are responsible for Green Ministers and Greening Government, what should government be doing towards that and we are responsible for DETR’s sustainable development activities. We also have the lead role in sustainable development at local and regional level in England, we are the lead sponsor in practice of the Sustainable Development Commission.” DETR B

“So effectively DETR set high level UK policy and what UK plc can afford, so it looks at the impact through Treasury and across government departments on environmental matters and then once a directive has been negotiated and signed off by a minister then they handed down to the Environment Agency for implementation.....we have a very close working relationship with DETR.” Environment Agency C

The challenge to sustainability as an encompassing concept other than a narrowly focused one and embodying this with the power to shape discourse and action has been mounted through the very nature of sustainability and its perceived lack of tight

definition. The broad encompassing nature of sustainability and what this means as a mandate by which to shape the business of the water sector gives rise to particular problems when there are attempts to systematise it. As noted in other chapters, sustainability is at its most powerful as a concept in highly localised situations, its broad ranging, encompassing nature is problematic at the level of policy and policy instruments. Hence there appears to be an ambivalence on the part of policy makers within government (DETR) to engage. From the interviews they have couched their role as one of encouraging other parties to take account of sustainability/sustainable development but perceive that the implementation is for other parties.

“Our general remit is to help to deliver sustainable development in the UK and to do that by encouraging sustainable activity by everybody but particularly by government, DETR, and the bodies that are responsible to DETR. ....Where possible we franchise to other people, our water colleagues, they ought to be able to take most of that on without us having to deal directly with that sector.” DETR B

The problem with adopting such an approach is that it allows those engaged in the discourse to seek to centre it within their rationalisations and ‘interests’ or to dictate its place in the wider paradigm from within their own hierarchy of values and beliefs. Thus we have Sir Ian Byatt contending that sustainability is not a precise concept that can be used to guide policy or action as nobody knows what it means, an extreme view in the light of what other stakeholders have said. This was coupled with a particular belief in individual rather than collective responsibility for sustainability on the part of the economic regulator.

“ what looking after the environment means [is that] people look after the environment using their own money” Economic A

When this is taken within the context that certain regulators have the ability to exercise ‘real’ regulation as instruments of power, such as setting prices, within a framework of negotiated meta outcomes then it is not surprising that there appears to be an acceptance of the pre-eminence of an econcentric sustainability discourse. An effect of this can be seen in the references by a number of those interviewed to trade-offs as a necessary and integral part of moving towards sustainability a concept rooted in economic’s notion of supply and demand being in balance after one being traded-off against the other in order to satisfy individual utility maximisation. This allows the problematics of sustainability to be constructed in a particular way, for example;

“There has been no serious attempt by the government to signal to the customer, the seriousness with which such matters [sustainability] are regarded, the potential impact on society **and the costs that it will have to bear.**” Economic B (emphasis added)

Whilst it can be argued that it is only to be expected that bodies such as the economic regulator would adopt such language there are other non-commercial organisations that have adopted the use of the same standard of language and communication. It goes further than the level of representation to become embedded in the workings of organisations. Thus for example the Environment Agency in responding to the criticisms that their work and arguments for particular measures to support sustainability are not economically sound it has recruited economists and increasingly couches its case in those terms. This from an organisation that in the past was culturally and intellectually rooted in natural sciences. Other organisations with what might be termed social or environmental remits have increasingly tended to embark on a similar course. Both in order to have their voices heard and taken seriously. In other words those who have entered the space of the sustainability discourse have accepted the perceived procedures of that space but are at the same time shaping the discourse of that space by their presence and agreement to enter that discourse.

#### VIII.4 COMMONALITY AND CONTRAST

Given the wide range of stakeholders with whom interviews were conducted a reasonable expectation might be that there would be a similar divergence on sustainability, reflecting the background and interests of those interviewed and the organisations that they were associated with. The coded transcripts of the interviews were examined to investigate this. Abstracts of textual segments of the interviews coded under: sustainability with sub-nodes definition, interpretation, behaviour, application and, influences for each of the seven sets: industry, economic, environmental, social, other regulators, DETR and, Environment Agency, were analysed. The textual segments were explored to compare the perspectives of the different groups within the specific context theme of sustainability. It was through the examination of these segments that it emerged that they could be grouped and understood by reference to three common themes that occurred in the texts. These were: how stakeholders thought people viewed or reacted to the concept of sustainability; the way in which sustainability was talked about as something associated with good management; and from this the prominence given to economic aspects of sustainability.

Apart from some variation in the definition of what is sustainability the focus was on how different aspects of sustainability are constructed and vocalised by the informants. What has emerged is that there are a number of common aspects touched on by almost all and about which there appears to be a commonality of views. These resolve around economic aspects associated with sustainability, managerial aspects and the view that sustainability is difficult understand and to operationalise.

#### **VIII.4.1 Conceptualising Sustainability**

This later point was made, in various forms, by a number of stakeholders from across the spectrum of those interviewed. Though the following quotes are all from informants in senior positions, they are representative of a more general body of opinion encountered at all levels of responsibility.

“there is a real issue here, the thing about sustainability is that people cannot see it, people cannot touch it, it is like global warming people probably feel that there is something wrong up there and there are only a few practical things that people can do” Social C

“if you're looking at issues of sustainability and really as much as people don't understand the issues we simplify it and say were all going to die in 60 years if we don't do something about the environment. That's essentially what sustainability really is” Economic C

“Sustainability is a nice sounding phrase but is a meaningless construct unless you are willing to list the trade-offs between the social, the economic and environmental objectives that you have (as a society). If you cannot properly define what you mean or understand by Sustainable Development then you cannot begin to debate whether or not regulation makes a difference.” Economic B

“people are fearful of the concept of sustainable development because it is relatively young as an idea, it is still fairly” DETR B

“I don't think that government actually seriously knows what sustainable development is.” Environmental A

“its the sort of thing that it is virtually impossible to have, a coherent sustainable development policy in the real world” Industry K

## VIII.4.2 A Managerial Construction

In the face of this or perhaps partly as a result of this sustainability is widely characterised as a technical or managerial issue. This also is a common view across all levels of the stakeholders. The character of management of activities and the rationale for current activities is redefined and linked directly to sustainability. It is interesting how the statements about what forms the the basis of good management are characterised as being about sustainability. It would seem to indicate a common and accepted construction within the sustainability discourse. The importance of this lies not so much in the commonality of statements but in the potential this has for the form of regulation and what regulation should focus on.

“I think what one is talking about is saying that one is looking at the whole range of activities from the collection, supply and delivery of raw water, the collection and treatment of wastewater and the discharge of wastewater and you are saying that you are doing that in the manner which doesn't prejudice future generations” Social B

“So on the Water Bill for example there is no doubt that the reform of the abstraction system and in the attempt to get a balance between the economic interests of abstractors on the one hand and the impact on the environment that balance is formulated in terms of sustainable developmen”t DETR A

“sustainability is looking at approaches that work with natural processes rather than against them....sustainability is linking those two together, it is linking water resources with flood defence - linking the whole water cycle together....that they are not separate issues” Environmental C

“sustainability - we see it as being, starting with water resources, making sure that there is enough water there for the environment, for human needs - industry and all the rest of it, making sure that there is enough now and continues to be enough” Other Regulator B

I guess from the Environment Agency point of view there were two distinct strands. One is to do with water resources management and the other water quality management. Environment Agency A

“The water supply area is obvious, sustainability is underlying it, it is the bedrock of what we think resource management is all about” Industry A

This commonality does not deny the simultaneous existence of other statements that extend or broaden the concept of sustainability. Rather the managerial or technical construction appear to be a central core. There are other issues that are important for the informants.

“I think sustainability has to come from a local level, a grass-roots level. Without acknowledging the issues locally I think it is very difficult to impose it from above” Social C

“This notion of complete recycling of water is beginning to start to take shape. Now there you are getting close to this issue of sustainability, total responsibility, but even then you have got the problem of dealing with the social dimensions” Environmental A

### **VIII.4.3 Costs and Economics**

As has been pointed out implications of this are that the sustainability discourse begins to privilege a particular, econocentric construction. This, potentially, has implications for the form and focus of regulation and it is around this that there is much debate and spread of opinions. But there is much prominence given to costs and the impact and distribution of costs that are associated with this particular construction of sustainability and thus this carries over into the sphere of regulation. All the stakeholders are concerned about this aspect though there appears to be little consensus. There are the impacts on customers and society:

“we are not against environmental improvements but they have to be at a pace which is affordable and who is affording it, the customer is affording it” Social B

“Sustainability to them meant having price limits that were enough to spend on what their engineers felt they wanted to spend on, maintaining their plant at somebody else's expense, namely the customer”. Economic A

“The sorts of questions that should be being asked are; does regulation protect social objectives, does it promote economic growth and, does it encourage investments that result in environmental improvements. As it stands at the moment there are no positive or dynamic incentives for water companies to be proactive in any of these three areas” Economic B

Then there are the issues around water companies. There appears to be a desire to incorporate a form of sustainability into the institutional structure of the water sector but

there are differences over what this means especially when viewed from a regulators perspective.

“the costs that are put on the water companies by the regulator to make the water cleaner actually have an inverse and negative effect on sustainability”

Economic C

“a lot of businesses are interested in sustainable development and want to see it succeed and so that they are looking for ways in which to capture value through sustainability. None of these companies will do anything unless there is a competitive advantage at the end of it, they are not doing it for the sake of hammering their profits” Environmental A

“industry will actually say that they don't see this so-called triple bottom line, they don't actually see what is in it for them to pursue social and environmental responsibility along with, I don't want to say profits necessarily because it is quite clear that firms do not maximise profits but they certainly are concerned with profits Environmental B

“There is a match in some areas between sustainability principles and business cost benefit and that makes it quite easy in those areas to drive into the business processes use of a sustainable approach” Industry D

“what it is not about is enabling companies to remain as they are for ever, it is about their overall impact on society, on the economy, on the environment” Other Regulator C

And then there are the ways in which policy is implemented.

“Our general remit is to help to deliver sustainable development in the UK and to do that by encouraging sustainable activity by everybody but particularly by government, DETR.....Where possible we franchise to other people, our water colleagues are physically and conceptually quite close to us and so they ought to be able to take most of that on without us having to deal directly with that sector...a strategy for raising awareness of sustainable development in general and we encourage them to use and sustainable development indicators, to be aware of appraisal methodologies, things like the precautionary principle and so on, to have some ideas of what the ways are of making this a reality” DETR B

From an industry perspective there does appear to be a realisation that it is more than just economics to be taken account of.

“its about long-term decision-making and its about weighing those decisions not purely on an economic basis, you don't actually have to convert others or social deprivation into cash equivalents, you just have to be aware that your actions have implications on environmental and social and therefore on reputational interests. The third element would be that it is about stakeholder participation both internally and externally. So you bring in things like corporate social responsibility and the ideas around that, a licence to operate” Industry B

#### **VIII.4.4 Implications**

The diversity of views, when it comes to the implications, given the contingent nature of sustainability is not surprising, especially as one stakeholder observed:

“as the industry has changed post-privatisation, precisely what is sustainability is, has changed as well” Social C

It is not just what sustainability is that has changed but its place and role in the regulation of the sector and the modes of regulation employed. From a non industry point of view it would appear that a consensual approach is stressed, especially by those involved with formal regulation.

“over the last couple of years or so have been very keen that individual business sectors should produce their own sustainable development strategy....there is some economic appreciation of how you go about these things rather than just going as we have done in the past, I think environmental policy-making in the EU tended to be somewhat gung ho, extremist” DETR B

“I think that it would be very difficult for them as monopoly companies with shareholders to push for the sorts of benefits that we are actually seeing in environmental terms if there were not the external stimulus of regulation to encourage them in that direction” Other Regulator C

“We are professional about it we have very good technical backup and therefore we are rightly negotiating from this corner but all the things are negotiated” Environment Agency C

The elements of success for sustainability to become an overarching driver in regulation and what regulation seeks to achieve focused on the need for regulation. The failure of voluntary measures and the importance of leadership were mentioned by

a few of the stakeholders. Generally, the stakeholders were supportive of the need for regulation, in the face of the failure of other mechanisms but this did lead to a reliance on formal measures and formulaic compliance rather than a more deep seated change.

“you need national leadership and academics to actually demonstrate why there is a real link between individual’s actions and global consequences”  
Social C

“the main problem with sustainability generally. It is entirely done on a voluntary basis” Economic C

“There is not enough happening of it at the moment whether through obligation or voluntary action. It is important to have ownership and commitment so in some ways if you get that voluntarily then it is more likely to be effective than if you have to beat somebody over the head in order to make them do but there is likely to have to be in practice some framework of law or regulations before people will do most of what is necessary”  
DETR B

“They have both got advisory panels and they have both got active directors interested in sustainability...and that is what counts”  
Environmental A

The need for a deep seated change is best summed up by one of the stakeholders.

“I don’t think that environment exists unless there are people to value it, to appreciate it and cost it” Environment Agency E

## VIII.5 SUMMARY

Drawing on material gathered from interviews with 37 stakeholders drawn from across the water sector and other documentary sources, this chapter has presented an analysis of sustainability discourses. The discourses draw on a wider sustainability discourse that has and is taking place within the State and society at different levels. The process of discourse formation and development thus needs to recognise this dynamic aspect. It also has to recognise the changing range and nature of stakeholder involvement in the water sector. The stakeholders and the salience of some as compared to others in the water industry have broadened since privatisation, a process that in many ways is on-going, reflecting the growth and diffusion of issues and concerns. How sustainability is discursively constructed and reflected through

discourses and dominant discourses is of importance. It is of importance to how the water sector and society is to go about its implementation and realisation. This inevitably involves agreements and forms of agreement between the State and society and within society as a whole – regulation and the modes of regulation. Considering the discourses of sustainability is a step towards understanding regulating for sustainability.

The corporate discourses draw on the conventionally accepted definitions of sustainability, adapting them to the particular interests and peculiarities of the water sector. There is a reflection of the contested and contingent nature of sustainability but there also emerges a more dominant, econcentric discourse. It is a discourse that, to a varying degree, all of the stakeholders tended to adopt and use in the construction of their statements. This common currency allows both entry into the discourses of the water sector, a form of legitimation and at the same time allows their constructions to be challenged. The economic rationale for sustainability is an important construct. Its importance can be seen in the environmental challenge. The environmental challenge is constructed not purely in environmental or altruistic terms but reconstructs itself also in economic terms. Thus both social and environmental aspects of sustainability tend to be seen as a part of or an extension to the economic functioning of the sector. This influences the way real regulation is formulated, what it addresses and the way progress is measured and what it seeks to achieve.

The question as to the commonality or otherwise within the discourses was considered. It was noted that there appeared to be a core of consensual aspects common to all the stakeholders, implying that these were not industry or regulator specific statements but reflect a wider consensus. It adds weight to the approach of consulting with a wide selection of stakeholder interests for the inquiry. The core issues identified were the conceptualisation of costs and economics, a managerialist/technical construction of sustainability and the uncertain nature of sustainability as applied to the water sector. Within the discourses was contained the acceptance that overt regulation was a requirement for progress towards sustainability. However, the question as to 'how' this is to be achieved is a contested one, as will be explored in subsequent chapters.

**What is sustainable development?**

The Government describes it [sustainable development] as ‘a better quality of life for everyone, now and for generations to come’.

Achieving it requires four objectives to be met at the same time, in the UK and the world as a whole:

- Social progress which recognises the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high stable levels of economic growth and employment.

From

‘A better quality of life-A strategy for sustainable development for the UK’ DETR, 1999.

**Figure 4: DETR Definition of Sustainable Development**

**Wherever we operate, AWG will work to create sustainable societies and enhance quality of life.**

At AWG, we have looked long and hard at all of our operations and business activities and have developed a blueprint for our sustainable development policy. This blueprint is based on our passionate belief in the four central elements of sustainable development, as identified by the UK Government from a range of international sources:

- **social** - social progress which recognises the needs of everyone
- **environment and resource use** - effective protection of the environment  
prudent use of natural resources
- **economic** - maintenance of high and stable levels of economic growth and employment.

Sustainable development to AWG is, therefore, an important element in improving future performance, delivering bottom line benefits and positioning the company to capitalise on future opportunities. It provides AWG with a robust platform for long-term business growth and enhances the environment and

**Figure 5: Anglian Water's Discussion of Sustainable Development**

Sustainability has become a notorious 'buzzword', but it is an idea of huge significance. It means simply, the ability to continue by balancing economic progress, environmental protection and the well-being of society. Sustainable development is about moving in the right direction towards sustainability. It means encouraging activities that: *Enable all people to reach their potential and improve their quality of life at the same time as protecting and enhancing the Earth's life support systems such as clean water, productive soil, a rich variety of wildlife and balanced climates.*

For Wessex Water to be sustainable, our activities must be compatible with the resources that both keep us going as a company and are central to society's well being. These include:

- products from the environment such as water
- services provided by the environment, such as the absorption of cleaned effluent and the balancing of the climate
- social resources such as the goodwill of customers and cooperation with outside interests
- the knowledge and welfare of our staff
- the condition of our infrastructure.

Over time, economic success depends on how we use and invest in these environmental, social and manufactured resources. Making sure that society protects these resources makes business sense. To be sustainable we need to live off the 'income' provided by these resources and not eat into the reserves

**Figure 6: Wessex Water's Discussion of Sustainability**

## CHAPTER IX: THE DISCIPLINE OF REGULATION

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*'The Jury had each formed a different view  
(Long before the indictment was read),  
And they all spoke at once, so that none of them knew  
One word that the other had said.'*

Lewis Carroll, *The Hunting of the Snark*

### IX.1 INTRODUCTION

Using a mainly Foucauldian approach this chapter seeks to investigate the discursive reformulation of regulation. It explores the ways in which the discipline of regulation is exercised principally by formal regulators on water companies, based on discourse and power and the development of specialised bodies of knowledge. This draws on power as a manifestation of truth established through bodies of knowledge as well as power as a discipline that regulates the actions not just of those who are the formal subjects of regulation but also those who are the 'regulators'. The material gathered from the series of interviews carried out as the fieldwork for this inquiry has been analysed and interpreted through the insights that such an approach brings to the material. The process of analysis and interpretation has been iterative and reflexive, mainly inductive in emphasis but also deductive as well. It has been drawn from an analysis of the material carried out through a particular theoretical lens to give meaning to the material. Behind this also lies experience of working within the water sector and some of the background knowledge that it brings, over and above that provided by texts and interviews. The interpretation presented reflects the efforts to reach an understanding of not just the material but of some of the underlying processes that have been observed.

The research question asks whether the form of regulation is supportive of sustainability. This implies that there should be an understanding of the form of regulation in order to understand its relationship to sustainability. This chapter therefore seeks to uncover how the discipline that is inherently part of the mode of regulation, and with it the relationship to power, is constructed and maintained through discursive formations. It seeks to explore how this relates to and is influenced by discourses of sustainability. It is therefore both an analysis and a discussion.

In this chapter the general approach to textual interpretation has been to examine textual segments under the coding theme hierarch 'sustainability'. A process of examining and interpreting each of the lower order codes went through several iterations in order to produce a 'story' that the material seemed to tell. In examining the material I referred back to the theoretical framework, particularly to chapter VI and the Foucauldina concepts. These seemed to offer both a means of making sense and of presenting the material in a manner consistent with and relevant to the research question. The texts presented are the most salient and pertinent to the interpretation presented.

## IX.2 DISCOURSE, POWER AND THE DISCIPLINE OF REGULATION

### IX.2.1 Discourse Power and Networks

In the previous chapter, it has been shown how the sustainability discourse has centred around economic ideas and how this has been central to the development of the observed institutional arrangements of the water sector. It is equally important to examine the power relationships that operated together with this in the creation of versions of 'truth' that shape particular outcomes. Key to this is the formation of supportive discursive networks that reinforce a particular discursive formation such that it was able to exert and exercise power over the process of moving towards some version of sustainability. Broadly, we might see the emergence of an Environment Agency centred view of sustainability within a supportive network. This discourse has been able to establish a degree of power and control over what the concept of sustainability is in the water sector. In the process it has diminished the 'Ofwat centred perspective' of sustainability and its place in the development of the water sector. An important development for the form and instruments of regulation.

The particular strengths on which a more environmentally based, discursive version of sustainability rested were the establishment and acceptance of non-negotiable statutory, primarily environmental but including social commitments, as drivers within the regulatory process. The manner of implementation might have been subject to challenge. However, there was the appeal to a more powerful discourse. This was the discourse of the law and legal obligations, to establish a truth and legitimacy. This effectively delimited the scope and grounds on which any challenge could be mounted. Supporting this was the emergence of a network of groups and institutions (stakeholders) that sought to enter and be part of this discourse. At the same time, this sustainability discourse also sought to establish its legitimacy through the endorsement

of these others, creating a hegemony with the ability to exercise power and influence over policy.

Within the interviews there are various references to the extent to which certain organisations actively sought to work together and provide mutual support. Included in this grouping were the government bodies and agencies, social and environmentally centred NGO's.

“NGOs played a very important role and the Consumers Association as well, people looking after consumer interests. They were not just interested in price but they were interested in the environment as well, which was really quite a responsible and mature attitude.” Environment Agency A

“A lot of what they were doing was trying to give the Environment Agency legitimacy to bloody well shift. In the sense that here they were all these bodies, Simon Lister for instance and Graham Wynn and people like that from Wildlife Trusts and RSPB and the others trying to persuade the Environment Agency that they had to go down this line. They were the ones setting up interesting debates and moving the agendas forward. Which is fair enough they are after all charitable organisations not government departments.” Environment Agency B

In turn the water industry also has its recognised stakeholders that it seeks to work with.

“We consult them and they help us formulate policy. So it is a wide cross-section of stakeholders, its the local wildlife Trust, its all the local council's that we try to consult and make aware of everything that we are doing all planned to do.” Industry P

### **IX.2.2 Ofwat**

What is noticeable is the absence of the economic regulator in any of the networks alluded to almost to the extent of them being sidelined. However, Ofwat in spite of this is able to exert considerable influence on the discourse as evidenced by the predominate use by the majority of actors of economics and economic rationality as the discursive language. The sustainability discourse may be seen to include instruments and techniques whereby different forms of power can be exercised in society; legal, administrative and economic. It is in the acceptance of its legitimate use of these instruments that Ofwat has been able to maintain its system of power relations. This,

even though the purpose for which they are used is being challenged and resisted. The resistance is both through the emergence of sustainability as a discourse and by the couching of the discursive debate in the same rhetorical language.

“Ian Byatt first started to trim back investment programmes and he introduced this concept of affordability which meant that no notice was taken of any of our market research programmes which he had asked us to do to show how much customers were willing to pay.” Industry E

“Byatt promoted the idea of affordability in order to challenge the programmes that the Environment Agency was promoting. It was his way of overcoming the duty placed on him to have regard for the environment and the possible implication that this might increase water bills.” Economic B

“ we are not against environmental improvements but they have to be at a pace which is affordable. And who is affording it, the customer is affording it. Part of that affordability judgment is the question of value for money, is the amount of money being spent on any one particular improvement justified?” Social B

The characterisation of sustainability in econocentric terms opens up a range of additional devices and statements that draw on the idea of the market and consumers. It therefore allows sustainability to be debated in terms with which the water companies are comfortable and understand. It also has the effect of prescribing the sorts of actions and procedures that can be adopted. In other words it will favour short-term, end-of-pipe solutions as being economically rational choices. The manner in which the discourse of sustainability has been engaged in almost inevitably means that certain forms of action are allowable whilst others will not. This reflects Foucault's observation that each body of knowledge discursively constructs its own rules and procedures, but shaped through the agency of those actors engaged in the formation of that body of knowledge. It characterises what is normal and therefore acceptable. Conversely it subjugates those aspects that lie outside of the construction of the market, such as: inter-generational equity; intragenerational equity and; the maintenance and improvement of environmental and social integrity. First order change (Laughlin, 1991) can be brought about as this results from the workings of markets and is a natural extension of regulation, as implied by disciplinary regimes. But second order change that seeks to address personal values would be something that would be regarded as abnormal or even deviant.

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## IX.3 THE DISCIPLINE OF REGULATION

### IX.3.1 Introduction

This section analyses and discusses, based on the interviews and theoretical insights how the system of regulation is conceived and operates and how sustainability is or might be embedded within it.

In the modern state government has taken on itself a role in the management of water services in order to ensure the proper provision of those services to the benefit of its citizens, this being in the interests both of itself and of the citizens. There are many ways in which such services can be provided. It is only through considering the genealogy of the service as well as the socio-economic and political landscape that there can be an understanding of how and why service provision and its influences. The water industry represents a particularised form of functionality and governance of the organisations and the institutional framework within which they operate. This is especially so with respect to the incorporation of sustainability.

“Where possible we franchise to other people, our water colleagues are physically and conceptually quite close to us, so they ought to be able to take most of that on without us having to deal directly with them.” DETR B

Thus the focus of governance is on how power and the functioning of governing can be exercised most efficiently and effectively.

“Regulation is the process of your engagement as the regulator with those who you regulate, and would include aspects such as education, influencing, peer pressure, public statements, whatever. It includes a whole gambit of what you have to do.” Environment Agency E

It is with these theoretical insights that an *understanding*<sup>11</sup> of the water sector can be sought. Privatisation brought about the devolution of the water industry to the market coupled with *arms length* regulation by various State based institutions as a way of delivering water services more efficiently.

“The current system, since privatisation, the regulatory system as set out has delivered a lot in terms of improvements in productivity, cuts in

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<sup>11</sup> There can be other understandings based on different theoretical or ideological view points.

customers bills last year after substantial rises, huge investment £50 billion  
I think, the indicators show improvements across the board” DETR A

But as with all such efforts there is, inevitably, a questioning of the intent that lies behind a particular mode of governance.

“Whilst they are committed to arms length regulation with independent regulators, in practice they (the State) have increasingly tried to become involved in controlling detailed outcomes. We get more and more social obligations imposed and we start wondering whether they see the role of the regulator as to manage the industry or to regulate it.” Industry C

There have to be mechanisms for both controlling as well as directing the inherent tensions between the state, capital and society.

### **IX.3.2 Control**

An integral part of this is the use made of the increasing knowledge to expand regulation into areas previously untouched by it. The impulse to control and regulate is based on the premise that this is necessary to improve the lot of society. It is therefore, in the interests of society and the greater good. This results in the expansion of the techniques of observation, regulation and control into all areas of life; social, economic and environmental. Techniques of observation seek to exert control not just over the setting of prices but extends to a myriad of other activities. Activities such as ‘good’ river quality, the answering of phones, support for vulnerable groups, compensation payments. All aspects of the interface between the hydrophysical and hydrosocial worlds.

“They are collecting information that is not actually useful for management purposes. But a lot of the information that we produce is so detailed, does not seem to have much relevance to the running of the company, it is also not obvious how it has much relevance for the regulator doing their job either. You do see a bureaucracy taking over. We have now got a government that really wants to control outcomes. So whilst they are committed to arms length regulation with independent regulators, in practice they have increasingly tried to become involved in controlling detailed outcomes. We get more and more social obligations imposed and we start wondering whether they see the role of the regulator as to manage the industry or to regulate it.” Industry C

“The regulator is trying to get into areas where the decision about risk is ours to take and yet he is seeking more clarity more certainty or more evidence or whatever to understand or manage that risk. We are saying hang on a minute that’s not your job. To come back to the information requests, June returns, periodic reviews, and so on, there’s a bit of a sense of an insatiable demand for information.” Industry G

The changes that have taken place within the Environment Agency as to its perception and abilities to enter and influence the environmental programme moulded its own attitudes and behaviour and the way in which it monitored itself. Not only did it change itself as a subject but it also brought about change of the other subjects, such as Ofwat, English Nature and others.

“Just as we have a related and important task of managing the environment in an integrated and holistic way, again there is no textbook on how you do that, so you progressively do better and better and more adequately. So we have always seen ourselves as being on a journey seeking always to develop thinking that stretches those boundaries.” Environment Agency B

“I actually rather changed my mind on this one. I am taking it in the narrow sense of the specific sustainable development duty on the regulator. I started by thinking, does this muddle things? Could it be that if Ofwat has got a sustainable development duty it will leave everybody, the companies, the city and the other stakeholders uncertain and they are already sometimes uncertain, necessarily so, about just how my various objectives are going to be bound. I concluded after a bit of thought, no, it was actually quite proper and helpful that I should have a sustainable development duty and that nobody should be able to accuse Ofwat as they did in that original EAC report of being anti environmental. I do think that we can perfectly well work with a duty because I think that we are endeavouring to go in that direction anyway.” Other Regulator C

Thus the discursive agreement of what ‘counts’ creates the possibilities of control and the extension of the boundaries of what is to be controlled. At the same time the institutional framework will largely determine how that control is to be exercised.

### **IX.3.3 Self Regulation**

One of the concerns of control is to engender compliance and conformity with the constructed norms of what counts. A technique is to produce ‘docile bodies’ that can

be regulated by structuring their activities in particular ways in terms of time and space. In the case of the water sector geographical space is used as a means of regulation. Companies are regionally differentiated, many of the regulatory agencies are similarly regionalised. The pseudo market conception for the industry is premised on yardstick competition that relies on the maintenance of regionally based companies. Spatial distribution is also achieved within companies through the enclosure of its own internal activities. Thus there is 'water supply and distribution' and 'wastewater services'. These are practices that are not just embedded in the companies but that are also institutionalised by the regulator through the Regulatory Accounting Guidelines N<sup>o</sup>4.

The regularising of time is used as an instrument of discipline through the use of timetabling of actions. Thus there are annual June Returns, quinquennial price reviews and asset management plans, there are annual water resources assessments, annual social and environmental reports, daily and monthly water quality monitoring. Discipline seeks to intensify the use of available resources by exerting ever greater control. The appetite for what it seeks to control grows, a point that many water companies have made concerning regulators, referred to as regulatory creep. Rankings enable and enhance the regulation of water companies and bodies and their progress. Importantly, they enable and enhance self-regulation such that discipline is not just imposed from above but from within as well.

One of the ways of regulating activities, of disciplining and managing time and space is through surveillance. The making of the subject's activities a target for the gaze of authority. This is recognised as part of the system, see Figure 7, something that operates as a general principle throughout the water industry and is accepted as such.

“...it is inevitable that there will be a high degree of government regulation of what we do. What we do both in the sense of physically what we do and how we do it, things like water quality and all the rest of it and also how we charge for what we do. It is almost inconceivable that we could have private operation without regulation. So rather than viewing it as a burden and quite honestly we often do view it as a burden, in principle, in essence rather than viewing it as something that we could do without I think that we try to view it as something that is inevitable and essential.” Industry C

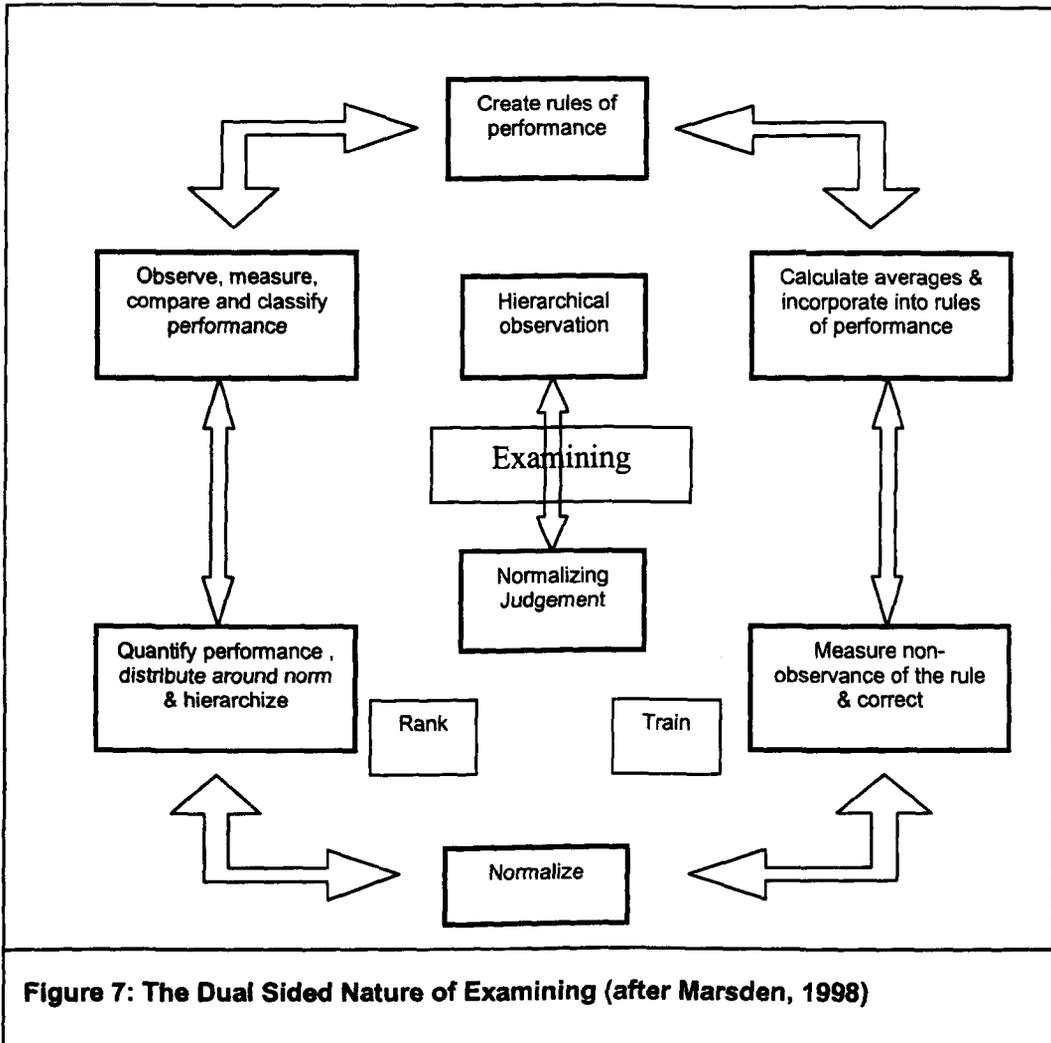


Figure 7: The Dual Sided Nature of Examining (after Marsden, 1998)

Thus in social and environmental reports for example, water companies report their own progress towards meeting internally set CO<sub>2</sub> emission targets, report on efficiency gains, on drinking water quality and bathing beaches. Anglian Water have developed and systematised their approach to sustainability by basing it on building a business case, based on economics, for any proposed development or projects. Wessex Water in partnership with Forum for the Future are looking at the way they operate their business and its impact on sustainability through the Natural Steps and natural capital approach. Other companies have developed their own approaches.

".....the original move into environment certainly came like a lot of things from one or two enlightened individuals who at the time were looking at BS 7750, we were I think one of the first water companies, I think one of the first in the whole country to get BS 7750 partly because we backed the right certifier. So we were actually in there helping to set the standards for BS 7750 and that was seen I think as being very much a marketing position and a leadership, innovative type project. Having done that it was a very quick and easy move into environmental reporting.....my

predecessor...was looking at that and he was very much thinking around not Forum For The Future but the Natural Step process but he never transferred that across, there was a fair horror of that coming across. So that was probably the origins and the rest of it would have been that this is very close to 'management as we should do' and having ISO - BS as it was, it gradually becomes a badge of need rather than one of distinction." Industry B

"What we did from with there was we developed a business of orientated approach to sustainable development which I don't think many do actually. We said its all very well having with this statement of sustainable development and what it is all about but the next step is to actually converting that into what it means and we have developed a ten target approach to sustainable development which aims at around 2007 - 2010 based on government and EU targets on sustainable development and what we are trying to do is to alignment of business to deliver on those targets. The obvious ones are about energy use, renewable energy and CO<sub>2</sub> and those sorts of things and some related to the AMP program, some about our interaction with the community. It has produced this and each of those targets is based on a business case, so unless it delivered benefits it was not signed up to. We are well in to professionalism, we have been tracking those targets now for a year and a half and some of them are reported in there (indicates report) and this next report is to be one where we report on how far we have got." Industry E

Whilst there are statutory requirements in respect of reporting, there are few overt drivers for sustainability in the manner outlined above. However, sustainability does appear to have become entrenched as part of the water industry's own self regulation, for whatever reasons.

### **IX.3.4 Non Formal Regulation**

The regulators embody this institutional gaze as they carry out their work of evaluating and monitoring of behaviours and attitudes. The system of surveillance extends beyond the immediate regulators to encompass others such as the customer bodies, unions, environmental groups and NGO's. These stakeholders can also be seen to be part of a system of surveillance and scrutiny that is part of the disciplining of the industry. And also the disciplining of the institutional regulators themselves. They represent the organs of civil society that provide a counterweight that challenges the

legitimacy of the State's actions and behaviour. A counterweight in as much as they intervene and regulate the lives of citizens either directly or through interference with free enterprise. Civil society offers a counterpoint to the State's and its institutions' surveillance with its own. This focuses on public concerns and, moral and ethical behaviour. Issues largely removed from government control but at the same time vital to it.

“One of our mandates is that we are representing one million people who support the environment and want to see the environment protected and want to see action taken across the board and who are also customers....If the aim of regulation is to get sustainable systems for the management of water then it has not worked. Which is what our aim is for regulation....Water companies are quite supportive....because they quite rightly saw that if they didn't get the national environment programme into AMP 3 they wouldn't be able to deliver it but they would still have us on their backs saying you have got to deliver this.” Environmental C

An outcome of the development of bodies of knowledge, of surveillance and discipline is the concept of norms and what is normal. Such constructions confer a certain identity. The construction of normal implies that that which lies outside of it is abnormal and by extension, delinquent or deviant. The construction of norms is indicative of what are taken to reflect the 'normative' values in society. This involves an unequal interplay between the parties involved in the exercise of discipline and surveillance. The flow of action tends to be one way, towards the subject upon whom the particular technique of observation or surveillance is exercised. The subject does not have the reciprocal power to 'observe' the observer, one party has the power or knowledge to exercise judgement over another, on the basis of 'superior' knowledge. Thus the water companies are the subjects of surveillance by regulators and civic/societal actors in an unequal relationship where they cannot exercise the same degree of reciprocal action.

#### IX.4 REFORMULATING REGULATION

It is suggested that a reason for the shift towards an acceptance of sustainability as an overarching paradigm by the State is that it fits with its notions of the achievement of a 'greater good' for society and that this 'greater good' has been reformulated in terms of notions of sustainability. In doing so the State seeks to derive its legitimacy or power as coming from the people, standing in for the people as their representatives. However, the term 'the people' is ambivalent, more often than not referring to a

particular category or subset of the people, and created to support and legitimised. This is linked to the idea of categories and norms that evolve out of our attempts at classification to control activities. It can be seen that the invention of groups, the creation and labelling of categories such as 'expert', 'customer' or 'environment' has important and far reaching implications for governance; the technologies of discipline and the system of accountability. Categories become a means of dispensing power and legitimacy (as well as their reverse). They imply sets of relationships, of what counts and what doesn't.

Privatisation and arms length regulation necessitated the creation of the category of customer and implies a certain identity and relationship premised on the functioning of a market, utility maximisation, a whole institutional ediface. Such an ediface also incorporates stakeholders and the role of the stakeholder in the way the sector is governed. Their inclusion and consultation during the formation of regulation, the way they are consulted not only by government and water companies but also their place as consultees for government agencies and institutions such as the EA and Ofwat.

“ there is obviously the high-level interactions with RSPB and Surfers against Sewage, people like Surfers against Sewage were very, very influential because they link with the Tourist Boards, the Welsh Office....don't forget, public attitude has shifted a lot, we have done things that we never thought possible 10 years ago. Partially because of that, partially because of the drive of tourism competing with other countries”  
Environment Agency C

“ obviously with our customers, with local authorities, with local businesses and customers' surrogate organisations like the Customer Services Committees, the Citizens Advice Bureau we are one of the few companies that has set up a genuine customer consultation group, real customers rather than these pretend customers that Ofwat have on their Customer Services Committees. We consult them and they help us formulate policy.” Industry P

The reliance on moving towards sustainability based on first order change is an inevitable consequence of such a set up with its privileged bodies of knowledge and the rise of an expertocracy. The challenge of sustainability is to go beyond the narrow categories of regulation, of customers or stakeholders. To reformulate the proliferation of categories that compete and label in terms of norms and deviants and embody the notion of the citizen within regulation.

## IX.5 RESISTANCE TO DISCIPLINE

### IX.5.1 Perceptions of Accountability

The perceived inequality in regulation between water companies and regulators is testified to by the importance accorded to transparency and accountability in many of the interviews. This has been echoed in public fora such as the Parliamentary committees. There emerges clearly a feeling that judgements made on the basis of surveillance, whether this is the scrutiny of cost submissions, leakage levels, or other measures, at a variety of levels, are opaque to those who are the 'subject'.

"An independent regulator as we have said before makes decisions applies his decisions on businesses and largely that is the end of the matter. He does not have to explain himself, he does not have to bear the consequences of something that is wrong about that decision or package of decisions that he has made." Industry K

"you get caught in a kind of bureaucratic loop, even when you do manage to find somebody that you can have a dialogue with and have a sensible discussion about what they are going to do with the data, and how it might be better presented. You can do that that the next week the same thing comes back again from another part of Ofwat." Industry C

It was often suggested in the interviews that regulators are unaccountable in contrast to the water companies, which are accountable. The problem that this poses is that it mixes accountability with transparency, and clearly the two are not the same, and it fails to distinguish different hierarchies and bodies of accountability. Transparency is about understanding what has happened in all its detail and being able to reproduce the result, a situation that any system where this has an interdependence with policy that it is unlikely to be a desired goal. Accountability or the ability to render an account on the other hand is a different matter and they are often confused.

" government should be transparent about these and absolutely clear about what they want, and what is a mistake I believe and causes bad regulation, bad everything is 'Oh Mister Regulator perhaps you would like to do this' and without it being clear to everybody what is going on. There has got to be proper accountability and proper transparency" Economic A

What is of interest is that the reference to transparency and accountability accepts the need for regulation and for observation. But there is on the one hand the desire for an

assurance of fairness – joined up regulation, and on the other challenges the construction of the norms. Hence, the shift to sustainability as the frame of reference, the norm around which judgements of behaviour should be made. There are implications of incomplete knowledge, the need for new sets of data, an extension of what and how surveillance is carried out and by whom. This is taking place as much as at the level of the institutional regulators and government as between regulators and water companies. It is suggested that regulating for sustainability has become the key point within the sustainability discourse. This is evidenced by the debates and eventual acceptance by the economic regulator of having a duty to sustainable development. It is also evidenced by the proposal that the government should be able to issue guidance on this issue to the economic regulator. The potential implications of this in disciplinary and surveillance terms could be very significant as it represents a further extension of this régime.

“ it was actually quite proper and helpful that I should have a sustainable development duty that nobody should be able to accuse Ofwat as they did in that original EAC report of being anti environmental. Now, how does that actually translate into taking care of sustainable development? I think it must mean a long-term horizon. This is not new to me this is very much Ian Byatt as well. So we don't just go from five-year review to five-year review, we are talking about programs that will extend for 25 to 30 year periods and that will need to be financed over that length of time. So we both encouraged the industry and ourselves to develop a long-term approach. We too are concerned that health and safety, that long-term sustainability, that the best in economic as well as environmental options should be adopted through careful study and we are working with the other two regulators and with the companies through UKWIR to try and develop our understanding and our serviceability indicators.” Other Regulator C

“The government are a player as well and they are often overlooked in regulation. There is no way that difficult or contentious measures would be allowed through under Ofwat or Environment Agency regulation without some form of ministerial overview.” Environment Agency E

### **IX.5.2 Transparency**

Transparency and accountability were prominent themes discussed in respect of the workings of what can be called the technologies of power; either exercised by State

institutions or other groups, such as the water companies. As such the discourse of transparency and of accountability is interpreted as a site of resistance, situated within a broader set of discourses. Water companies make claims concerning the lack of transparency of the decisions and actions taken by various State institutions. They seek to resist intrusion into the way they conduct their affairs through appeals to various 'rights'. Rights to fair treatment, freedom of information, free market or, that institutions should be democratically accountable. In doing so they are reacting to their experience of the localised effect of the techniques of power being exercised upon them. The companies mount a challenge to the instrument, its legitimacy and effect rather than the overall institutional framework of relationships within which they find themselves. In other words they do not question the premise that there should be a flow of information, used as a basis for making decisions. But rather they question what information is required and the manner in which it is used. Thus there were references in the interviews to the work of the Better Regulation Taskforce and its recommendations to *improve* regulation, not to do away with it. In another instance Ofwat responded to criticism regarding the transparency of its use of its financial model by undertaking to share it with the companies. Yielding to resistance in order to further entrench the exercise of its power over the companies and perhaps allowing it greater scrutiny.

### **IX.5.3 Accountability**

Accountability as a practice can be utilised as a point of resistance as it encompasses ideas of: accountable for what and to whom? It is therefore bound up with not just the technologies of power but with the effects of power as well. It relies on the creation of categories and norms in order to function, whether of people and behaviour or outcomes. Even though some may see it as an artefact of civil society acting as a check on State institutions. In this respect the idea of the customer has important implications for accountability with regard to sustainability. This can be either because accountability is constricted in its application or because it excludes sustainability. In other words the category 'customer' has a tendency to foreclose the extent of accountability. Hence, there is a debate as to whether or not the 'customer' is interested in sustainability. If this can be legitimised then its exclusion from accounts becomes less tenable. On the one hand groups such as the Environment Agency and NGO's contend that this is something the public (citizens) – not just customers, consider important. On the other water companies and the economic regulator are

ambivalent about its importance to customers, seeking rather to couch the interests in economic terms.

“But in reality of course as water customers we don't take any interest in water as long as the taps are working and as long as the loos are flushing we don't care and we haven't got the time to care anyway. Therefore you need some sort of specialist body, which is actually monitoring what is going on from the customer's viewpoint.” Industry R

“ public attitudes have changed and don't underestimate how much that has changed, people want a clean environment and if you ask them locally 'do you want a clean stream next door' they will say yes it isn't that they say that they don't want it, it is just whether it is high up their priorities. So all of this is about a better environment for their kids and people always think about kids and the next-generation. Don't forget that our kids are much greener than we are generally speaking that generation wants it and I think that society is changing.” Environment Agency C

It is argued, based on the evidence of changes by Ofwat and the role of the government that there is a shift in attitude towards the incorporation of sustainable accountability within the institutionalised framework. However, the shift towards a more inclusive set of accountabilities is increasingly being accomplished through the inclusion of third parties (stakeholders and experts) as surrogates for the customer or the citizen.

The statement that a body is unaccountable, that there are no mechanisms for checking its activities has clear implications for the rightness, fairness and legitimacy of actions and behaviour. From the interviews it was often used in a binary relation to other groups. Thus a water company saw itself as being accountable to a regulator. Whereas, that regulator had no reciprocal relationship with the water company nor an 'acceptable' level of accountability to other parties such as the government or Parliament. The implication is that it is the water industry that has to bear the consequences of the lack of accountability, on behalf of its customers and shareholders. Within these statements there was recourse to examples of water companies' own behaviour in rendering accounts. So that precisely their concordance with disciplinary mechanisms were drawn upon – the making of information available, reporting, interaction with other stakeholders.

At the same time the regulatory bodies are themselves subject to accountabilities. In the case of Ofwat this is to Parliament or in the case of the Environment Agency to the Minister, the government and Parliament. The ability to exercise such oversight lends a degree of credibility and at the same time reinforces the power of these bodies to regulate on behalf of the State. Which is perhaps why their accountability is challenged. The separation of accountabilities serves to create distance between the groups and to diffuse the instruments by which power is exercised. The entry of other, civic based groups, such as NGO's, though self-selecting in terms of their own remits and limited in their accountabilities, is supported by agencies of the State. The support is contingent on their ability to enable the extension of disciplinary regimes through their intervention and inclusion in the framework of regulation of the water sector in its broadest sense. Whilst such groups may indeed challenge the activities of the State this can serve the function of providing a safety valve of resistance in a limited sphere. Their entry and inclusion may be seen as conditional on the extent to which there is concurrence with the dominant discourse, in this case of sustainability.

"It is important to have ownership and commitment so if you get that voluntarily then it is more likely to be effective....but there is likely to have to be in practice some framework or law or regulations before [water companies] will do most of what is necessary." DETR B

"The water industry itself has looked at sustainability, developing sustainability indices. I'm not quite sure whether it was a meaningful output." Social B

"as unelected public appointees, Ofwat takes very seriously its accountability to Parliament. We are creatures of statute and work within that framework, subject to judicial review of our actions." Ofwat, 2003.

"Disclosure is a powerful mechanism" Environmental B

#### **IX.5.4 Resistance**

The discipline of the regulation regime extends throughout the regulatory regime and acts not just on the subject of regulation. It also acts on the regulators the more so as there are overlapping waves in which the regulator becomes the regulated. In the absence of an ultimate authority (or as Foucault would have it, the sovereign who embodies the state) power becomes fluid and no one institution or discourse can claim undisputed access to the truth. Such discourses are not natural and in spite of the techniques of power this is recognised. Resistance becomes a strategy of both

challenge and change in a positive sense that it shapes discourses and enables them to evolve as other bodies of knowledge are assimilated into the discourse. A key to resistance and change is the use of rhetoric and language. At the same time resistance uses the concept of civil society as a challenge to the imperatives of the state. The regulatory state and civil society are not separate. The *raison d'être* of the state, which promotes the prosperity of the state and its institutions produces the need for a civil society that challenges the effectiveness of the state and the necessity of regulation. Thus civil society appeals to the existence of rights and the law as well as the logic of the market to limit the activities of the state. Hence the appeal to accountability and the right to equal treatment both as a point of resistance and challenge to the legitimacy of the institutional framework and its regulatory interventions. Resistance is itself eventually subverted through the adaption of what is being resisted.

### **IX.5.5 Absenting Discipline**

In simple terms the need for regulation and the accompanying practice of discipline is premised on the presence of flaws and inadequacies in current arrangements and the need for society to exercise social control over these. This has led to the institutionalising and formalising of practices. Practices that themselves become grounds for the exercise of power and the hierarchical decision-making through the consensus of the few. Such decision making appears to be premised on limiting and guiding rather than an alternative of confronting and overcoming.

In Habermasian terms what this requires are democratically negotiated outcomes in which the problems of subjectivity are confronted in order to arrive at a state of cooperative coordination of different plans of action. This would allow for the development of an appropriate relationship between the bureaucracy and democratic processes. This requires the overcoming of the distorting practices of institutionalised structures that maintain and distort interaction and prohibit participation. It requires the adoption of democratically negotiated outcomes in the absence of the exercise of power, what Habermas calls *communicative action* and *communicative ethics*. Habermas believes that this achievable through collective social behaviour exercising influence on the political and economic system indirectly, through mass public opinion (White, 1988, p.141). In other words an opening up of the social/civic dimensions so that it enters the political and economic system on an equal basis. This would diminish the requirement for formal/institutional regulation as it would be supplanted by negotiated outcomes.

The moves for the greater provision of information, its accessibility and the widening of the circles of consultation points to some progress towards such a goal. It is reinforced by the self-adoption of sustainability as a plank in decision making within water companies and in leadership. However, the wholesale adoption of Habermassina ideals is a long way removed and would still have to contend with the overcoming of institutional rigidity to accept this as an alternative mode of regulation.

## **IX.6 SUMMARY**

This chapter through using interview material as well as drawing on a personal knowledge base has sought to analyse and discuss the formulation and application of regulation with respect to sustainability. In doing so it has drawn on concepts of power and discipline exercised through discourses by the formal subjects of regulation as well as the formal and informal regulators (stakeholders) of the sector. It has examined how networks of different stakeholders have become part of an discourse of sustainability that relies on an economic centred rationality to promote its active use as a further facet of regulation. The aim has been to accord the support for sustainability the same weight as the economic regulation of the industry. However, this has not gone without challenge from Ofwat. The formulation of arguments for supporting sustainability, in economic terms has found support from the water companies through the resonance that such economic arguments have with their own corporate culture.

A mainly Foucauldian approach was used to analyse the workings of the regulatory system. Regulatory control over the workings of the sector has been characterised as being exercised through a disciplinary system that draws on 'surveillance' and compliance with control measures to ensure conformity. Thus there are instruments that impose a discipline of measures and reporting that both ensure conformity as well as constructing the norms of what counts. At the same time this encourages self-discipline and the development of internal regulation and reporting, even in the absence of external compulsion. It is notable the degree of engagement of non-formal bodies in both formal and self-regulation in respect of operationalising sustainability. A consequence of regulatory discipline has been the construction and proliferation of categories. This has arisen partly through the creation of measures against which behaviour and performance is to be observed and judged. The econocentric nature of regulation reinforces the tendency to see sustainability as an additional economic construct.

The exercise of discipline is not without forms of resistance and challenge. The challenge to the workings and legitimacy has been mounted through appeals to accountability and transparency. The industry, with a degree of support from a wider polity, argues for a degree of reciprocity in the exercise of regulation, that this also require a degree of scrutiny of those doing the regulating. Hence the transparency of process and outcomes is used to challenge the legitimacy and fairness of the modes of regulation. But this is confined to what lies within the boundaries of regulation. Few attempts are made to challenge the regulation for sustainability by reference to what it does not do or what lies outside of its current (econocentric) construct. It is these structural failures in discourse and communication that Habermas had in mind when he talked of the need to overcome the distortions of discourse by social structures and institutions. Democratically negotiated outcomes, in the absence of power, would change the nature and basis of regulation from countering institutional failure to promoting the conditions for communicative action. Under such conditions the need for discipline as an authoritarian expression would be absented and replaced by discipline as a path towards knowledge and enlightenment.

## CHAPTER X: MODE OF SOCIAL REGULATION – A DISCUSSION

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*'So engrossed was the Butcher, he heeded them not,  
As he wrote with a pen in each hand,  
And explained all the while in a popular style  
Which the Beaver could well understand'*

Lewis Carroll, *The Hunting of the Snark*

### X.1 INTRODUCTION

The previous two chapters have looked at sustainability as a discourse and how that has been constructed and developed and, then how it has been made part of regulation in the water sector. Building on those two chapters consideration is given in this chapter as to the extent to which the processes of regulation represents the emergence of a stable Mode of Social Regulation. One that incorporates sustainability as an integral part of the paradigm. Such a mode of regulation would seek to resolve the conflicts inherent between the 'natural', social and economic nature of water and its sustainable utilisation. The regulatory modes and instruments are largely contingent upon the dominant discourses of sustainability as well as on the wider social, political and economic discourses within which they are nested. The exercise of regulatory practices also serves to embed these practices, as well as the discourses. The question that chapter analyses and discusses is whether the modes of regulation that focus on and include sustainability form a distinctive, coherent and stable set of practices.

In this chapter the textual segments coded under the theme hierarch accountability were abstracted and handled in a similar manner to that noted in previous chapters. The interpretation of the texts was informed by the theoretical framework, in particular modes of regulation and governance. The 'story' of accountability, the various forms and workings in relation to sustainability and regulation is presented within the framework of modes of regulation and governance through the use of the textual segments.

The research question asks whether the form of regulation is supportive of sustainability. To be supportive or aid the realisation of sustainable utilisation regulation should be stable and comprehensive. Comprehensive that is with respect to what it covers, its inclusivity and its accountability to a wider polity. It implies that what now needs to be analysed is whether the form of regulation can and does function as a

mode of governance. This chapter also attempts to synthesise the work of the two previous chapters to chart the internal workings of the particular form or mode of regulation. In doing so it tries to map out and interpret what the form of regulation looks like, and provide a link with the following chapter that considers the historical processes behind its formation.

The starting point is to consider regulation as a constituent of governance. The first section therefore provides a discussion of governance with particular reference to the water sector and analyses how this is conceptualised through the interviews. The second part of the chapter tries to draw the pieces together and lay out the contours of the mode of regulation. What does it look like according to this construction? The institutional framework, that now accommodates sustainability, is considered to be a constituent feature of the governance of the water sector. It provides a means by which relationships between the political, economic and social spheres are governed. A feature of this is the use of horizontal and vertical networks to steer and regulate as well as the role of accountability and oversight. Together they constitute a mode of regulating for sustainability that's evolved particularly since 1997.

## **X.2 GOVERNANCE**

### **X.2.1 Introducing Governance**

Governance refers to the process whereby elements in society wield power and authority, and influence and enact policies and decisions concerning public life, and economic and social development. It involves the interaction between the formal institutions of government and those of civil society. Although there are no normative implications, judgements concerning governance usually include the degree of legitimacy, representativeness, popular accountability and efficiency with which public affairs are conducted (IIAS, 1996).

A particular style of governance provides a particular framework within which the process of governing can occur. As such it shares much with regulation in the broad sense that has been used so far. In a broad sense governance can be looked on as mediating procedures used in the conduct of public policy, a mode of coordinating societies and regulating complex policy problems (Papadopolous, 2000). It is particularly important from this point of view that groupings representing interests outside of the economic field should be included in policy deliberation. And also in decision making arising from a functional necessity rather than any planned

democratization of governance. Such a partnership style of public management seeks to establish relationships and shared discourses. Eder (1996) notes that forms of 'discursive governance' have been used in relationship to the management of risks from pollution, environmental mediation and infrastructure building. This enables policy, policy outcomes and implementation to be presented as contributions to the public interest. Thus the inclusion of sustainability as a policy objective of the water sector has been formulated as contributing to the good of society, thus requiring measures to ensure its proper inclusion.

This section focuses on two aspects, that of the relationship between what may be termed as certain organs of civil society and the state and secondly, the relationship between the state and the agents of the state. The inter relationship between the various agents of the State as well as the relationship between them and the water industry are addressed, recognising that within the water sector governance is a multi-level phenomenon.

The need for regulation of the water sector was universally accepted by all the stakeholders interviewed, usually citing the monopolistic nature of the industry as it is currently configured. There is also the notion that regulation should encompass ideas of balancing commercial and other interests and that this should take place within a policy led framework.

"One of the features of the current regulatory regime is that of the government setting it up and outlining in broad terms its objectives and what it wishes to be achieved. It then chooses individuals to head up and lead the regulatory bodies charged with the implementation of those objectives and provides them with the powers and the mandate to pursue their strategies and agenda's" Economic B

"It is very clear that [water] is a private good that has to be subject to quite substantial regulation.... From an ethical and equity point of view people do not find [exploiting monopoly position] desirable... the other reason is as you say the environmental aspect" Environmental B

"the purpose of regulation....from society's perspective is to protect the customer" Industry L

## X.2.2 Governance Networks

There are mechanisms that allow certain, but not all, elements of civil society access to the process of regulation. This clearly indicates that such a configuration represents a particular system and style of governance for the water sector. It is one that has evolved to enable interest groups, those who are not directly involved in the business of water services provision, to articulate their concerns and to influence both policy and the conditions of provision. The system of governance has led to the establishment of networks of relationships that span particular secular interests and form part of the engagement with the regulatory processes and the discourses that envelop it.

“NGOs played a very important role and the Consumers Association as well, people looking after consumer interests. They were not just interested in price but they were interested in the environment as well, which was really quite a responsible and mature attitude.... you have the local environmental action plan, the LEAP’s strategy bringing in local pressure groups, local action groups, communities are in, down to parish sort of level..... Then there is obviously the high-level interactions with RSPB and Surfers against Sewage, people like Surfers against Sewage were very, very influential because they link with the Tourist Boards, the Welsh Office.”  
Environment Agency A

“we had very good close working relationships and personal relationships this time with the key players in DETR. We had a very close working relationship....so there was a lot of networking by phone throughout the whole of the three years....we have good working relationships with wildlife groups, we did in AMP 3.” Environment Agency B

“external players are involved in the whole game at several different levels. So in terms of with the primary, high level national context with these things that’s then to myself and the Directors, the Head Office are in there. So Barbara Young and people like that obviously have inputs, quite close formal working relationships with us, formal relationships with people like English Nature and others. There are informal relationships with the pressure groups.” Environment Agency C

These networks are able to both respond to and drive changes in the make up of discourses, especially that of sustainability and its place within governance. Such networks act as a counterweight to what is perceived as the conflictual nature of the

formal regulatory process. They allow a process of dialogue to continue, at different levels of engagement. However, there are issues of information asymmetry and transparency as well as of the shaping and nature of the shared accounts.

“Transparency is a two-edged sword and we forget that at our peril we as an industry are very happy to say ‘Not fair, not transparent’, the other side of the coin is I guess there would be more transparency expected of us and that may lead ourselves driven further down the road as well, this is more interference, ‘why do you want to know why decisions were taken? why do you want to know how this was achieved? that’s our business’. Well its all part of transparency.” Industry G

There are what may be referred to as networks of interests, such as that which encompasses environmental groups and State environmental institutions: the Environment Agency, English Nature. This increases the legitimacy and power to question the formal workings of the regulatory process. The mutually supportive inclusion of certain, societal groups enables the self-selecting nature of their claims to constituency and advocacy to be legitimised. For example, the Consumers Association claims to represent a certain constituency and to act as an advocate of their interests – this based on the subscription to a magazine. Conversely, it is only recently that Unison, the trade union that represents a large number of workers in the water industry has been included in the policy networks. The presence of networks both necessitate and require a response on the part of the formal regulatory structures especially as their status as consultees/stakeholders is increasingly recognised.

“We work closely with water companies on the whole, some more so than others and there are local partnerships with most at local level and water companies and agencies likewise, the Environment Agency is a key partner....both at a national and a local level, we work closely with English Nature and Countryside Council for Wales. No we don’t work closely with Ofwat but we work at a policy, at a national level and at a local level we work with the water companies, at a national level on policy”  
Environmental D

### **X.2.3 Governance and Consultation**

A particular feature that has been the increasing emphasis on consultation and along with it a stress on communication. In the case of the latter there has been a tendency to equate increased communication with transparency and accountability without

recognising that there are differences between them. Recent studies (Page, 2001) have shown that participation in policy consultation in the water sector tends to be dominated by a small number of 'holders' (Schmitter, 2000), in general social, environmental and consumer NGO's as well as market institutions. Page (2001, p.40) argues that:

“what happens in the UK is an elaborate performance of participation staged and scripted by the State, the private water sector and the consumer and environmental lobbies. Furthermore, it is argued that by divesting apparently technical decisions onto 'the public' government is seeking to disperse responsibility for the political consequences of those decisions.”

This is supported by views expressed by stakeholders of the growing place of consultation in policy formulation and the need for regulation to be aware (though not necessarily responsive to) the views of a diverse polity. There is a trend by the State to institutionalise participation through consultation within the regulatory process. Exemplified for example by “Having your say” (Ofwat, 2000), the Environment Agency's Catchment Abstraction Management Strategies (CAMS) (Environment Agency, 2001) and Article 14 of the Water Framework Directive (EC, 2000).

“one of the things that every regulator needs to be careful about is that you don't get captured by your clients - industry. Ofwat is as firm and keen on that as anyone else but of course we talk to the industry through Water UK, through the individual companies all the time as we talk to all the other stakeholders....we held a stakeholder conference, which was actually very helpful and which included the companies. We have been listening to several of the comments they made” Other Regulator C

“we have had meetings with quite a lot of environmental groups, Wildlife Trust, RSPB etc. A lot of people in fact that we have talked to have responded and some have come into talk to us before they actually submitted written responses as well. So I think that that was one area where we had quite a wide range of interest from people who perhaps wouldn't in the normal run of events have quite so much contact. That is an indication of the growing importance of consultation and developing legislation early. I think in general we probably do tend to be more open now than we were....in my seven years now in this Department I have noticed a change. I think there has also been a tendency to be more

proactive....now it is becoming more acceptable for us to say that we would like to come and talk....just get....informal views” DETR A

The institutionalising of consultation has arisen for a number of reasons. In part it is a response to the sustainability discourse that posits that greater participation leads to more sustainable outcomes (ideology). And in part it is due to challenges to the State's accountability and legitimacy in acting on behalf of its citizens (shifts in discourse and power through resistance). Although this is supposedly open, in practice it privileges certain groups over others. Those that have access to resources and that have been recognised as 'holders' with a legitimated mandate and interest to participate. These are resources that NGO's, associations or market institutions have and can call upon. It is these same groups that are able to establish pre-and post- legislative relationships with the State in the fields of policy formulation and implementation partnerships.

“We have a parliamentary department that deals with liaison with Parliament..... between ourselves and the water companies, we do quite a bit of work with Water UK as well on the policy side, so that if we can present a common face on an issue, the more people you can get to support your argument the more likely you are to get to change from government. So if we can get support from the water companies and they can get support from us and this is a solution that will be good for both water customers and the environment then let's work together on this. I think we base our work on reasoned debate and discussion and we are not seen as loonies or what not and I think that that is partly why they want to work with us as well because we do come up with the reasoned arguments.” Environmental C

#### **X.2.4 Democratic Oversight**

Parliament has taken on a more active oversight role through the increasing use of select committees. The activities of the committees and their reports to Parliament may be seen as legitimating or establishing the accountability of the regulatory institutions. They act as a bridge between the State and civil society through the provision of a forum that has a certain reliance on semi-legal procedure and presumes to act in the best interests of citizens. Acting on behalf of society as both a check on government on the one hand and the markets on the other. As such the committees have also proved influential in affecting the development of policy and the practice of regulation, for example the report on the hearings into the draft Water Bill (2000).

“could I offered just one more comment on credibility while it occurs to me which is the importance of the parliamentary select committee system. I gave evidence to three select committees in the narrow window between Christmas and what was expected to be the date of the election, the Environmental Audit Committee, Environment Subcommittee, the Parliamentary Subcommittee or rather the Trade and Industry Select Committee could call me as well and no doubt the Treasury could etc. but I do think that is a format which is very important and which Parliament has been developing and which helps give credibility. It is not a matter of accountability through a Minister to Parliament even though the Secretary of State for now the Environment Food and Rural Affairs appoints me but rather that I am prepared to not just to make public appearances but also to be grilled by elected representatives.” Other Regulator C

There have been moves to embed participation into the system of governance. But there has also been a strengthening of the position of government in the form of the Minister and the DETR/Defra with respect to policy. The calls for the government to take control of policy direction have to a large extent resulted in the assumption of comprehensive powers. Powers to direct the agents of the State with respect to the implementation of policy through the limiting of their discretionary powers. It is of interest that there have been calls for a ‘lighter touch’ to regulation on the part of the industry. However, their dissatisfaction with the regulators would appear to have raised the possibility of greater powers of intervention on the part of the State and its institutional agents to ensure compliance with policy. This, potentially, contrasts with the (re)presentation of the neutrality of the centre.

“What we in the industry are actually pushing for is for all of these strands of regulation to be picked up and steered by DEFRA. There almost needs to be a steering group that actually set the agenda and ensures that there is continuity in terms of the information that has to be submitted, when it has to be submitted. There isn’t actually a strategy for water, a national strategy for water and that I think is what is lacking.” Industry P

“The way it should be is that the sponsoring department is setting the policy, it is the Ministry in concert with Government and Parliament that sets policy and then it is up to the regulators to implement the policy and the instrument of that policy.” Industry B

Some have characterised the system of governance as being multi-leveled and participatory (Page, 2001). Whilst this does capture some of the features of the governance of the water sector it perhaps overstates the participatory elements. At the same time it understates “the focus on governing mechanisms which do not rest on recourse to the authority and sanctions of government” (Stoker, 1998, p.17). Perhaps also reference should be made to the multi-faceted nature of governance in order to draw attention to the role played by features such as the Periodic Review of prices, which includes the development of Asset Management Plans. Such features represent mechanisms used to achieve policy objectives. Mechanisms that reflect an interpretation of the concerns of government (policy), expressed through the regulatory framework. The on-going and participative nature the review process clearly offers mechanisms for interaction at many levels between a wide variety of ‘holders’ and for this process to be carried out in both the private and public sphere in a way that has elements of transparency and accountability. There is also recourse to forms of democratic scrutiny through Parliamentary processes as well as recourse to legal challenge and review. Thus it can be suggested that periodicity is also a feature of the governance of the sector, as much as is the notion of the separation of the political from the practical – arms length regulation of the companies.

Most notions of sustainability include a social dimension. Society, through democratic processes being able to exercise choices with respect to the formulation and implementation of economic, environmental and social policies. Thus the development of forms of democratic oversight are *per se* a contribution to sustainability. They may be procedural rather than participatory, exercised by the polity through the filters of third party representation or parliamentary processes. But they do seem to have become an integral part of the mechanisms and as such are a feature of governance, of the mode of regulation.

### **X.3 AN EMERGENT MODE OF SOCIAL REGULATION**

#### **X.3.1 Governmentality and Governance**

Privatisation of the water industry in 1989 resulted in the emergence of new institutional forms, organisations and conventions. It marked a move away from the exercise of the core functions of government by government to new processes of governing. Ogden (1997) for example commented on the discursive character of governmentality in the privatised water industry, highlighting features such as technologies of representation (performance indicators, levels of service, etc.) “that link the conduct of individuals, and

organisations to political objectives through ‘action at a distance’ (ibid, p.532). New governance models had to be evolved suited to the particular milieu of the water sector. Governance models that took account of the complex, multi-level interrelationships between the various agents, between State and civil society that this re-regulation created. The mode of production had changed and consequently the mode of social regulation had to adapt to the flux and tensions between the mode of production, the State, civil society and the mode of social regulation itself. It has been argued that sustainability has been a central feature of in the emergence of the regime of accumulation of the water sector, influencing both production and social regulation – the governmentality of the water sector. That this represents a Mode of Social Regulation particular to the water sector can be accepted. Whether this represents a stable mode that manages to establish a metabalance between the contradictions of an ‘exploitive’ economic system, the rights of civil society and the sustainability of the environment is a more complex question.

It is suggested that the mode of social regulation that has emerged is sectorally based, exhibiting features that are not reproduced elsewhere and has achieved a degree of maturity. Some of the general features, drawing on the Differentiated Polity approach to governance (Bache, 2002) may be summarised in Table 12. The particular features of the mode of social regulation of the water sector are outlined in the following sections.

**Table 12: Features of Differentiated Polity Approach to Governance (after Bache, 2002)**

<p><b>General Principles</b>  Heterachy  Steering  Multiple lines of accountability</p>	<p>Formal connected structure but without an explicit hierarchy  Setting of goals and objectives  Accountability is diffuse</p>
<p><b>Internal Dimensions</b>  Regionalist  Inter-institutional bargaining  Multi-level bargaining  Quasi-judicial constitution</p>	<p>Many organisations are regionally based  e.g. Ofwat, EA.</p> <hr/> <p>Licenses and recourse to judicial review</p>

### X.3.2 Heterachy and Steering

As has been shown there are a constellation of organisation and agents involved in the functioning of the water sector and at the level of the 'front line' organisations (Ofwat, EA, water companies, DWI, EN) there are clear interrelationships but without a specific hierarchy – each has its own area of expertise and bodies of knowledge that often overlap each other. The coordinating mechanisms are focused on a mix of market based instruments exercised and defined within parameters set out by an interventionist state and its institutions that regulate the flow of resources through compliance. Sustainable development is a core feature within this, seeking to mitigate unsustainable practices without requiring fundamental change in the nature of the market or service provision. Within this there are limits placed on the distribution of the economic burden between companies and customers premised on social equity and affordability. And it is in the nature of the institutional structure that bargaining based on discourses, knowledge and power should be embedded within the functioning of the framework. It is through the multi-level nature of the interactions that society is able to exert an influence on the core market based mechanisms. But in order to do so the sustainability discourse has taken on an econocentric focus, which paradoxically has led businesses to reconfigure their own actions around a rhetoric of sustainability.

“We like to see ourselves as a company that is concerned with the environment and we have a Department that deals with environmental issues they report to a separate board director.” Industry G

“Sustainability also comes back into issues, which are, are we going to be allowed to manage our operational assets in the longer term. So there's environmental issues and there's operational issues.” Industry K

“In the last year there has been a fair, rapid movement towards that [sustainable development], starting, to be fair longer than a year ago starting maybe two or three years ago but coming up fast. So we are trying to get mainly issues about environment and valuing environment into mainstream thinking and into mainstream decision-making but it does tend to be, can you add the environment in and any other social as in recreational, community involvement work. Community involvement would be I suppose what we might see as the social end of sustainability.” Industry B

“So if you want to use sustainability and you are prepared to go to the effort to build it in to your scoring system then you can use it in business decisions and evaluate and put some financial benefit on it and then use it. So you can do it if you want to but you have got to want to do it, somebody in the business has got to want to be, to value being seen as being a responsible company in terms of sustainability.” Industry D

“well the environment has always been recognised as a stakeholder in Wessex’s business and as things have developed sustainability has become as well, well more of a theme and we are getting towards an integrated picture there.” Industry H

Since 1997 there has been a strengthening of policy direction by the State extending into what may be broadly characterised as sustainability issues. This has provided greater powers to direct and steer in new policy areas but with the interventions being delegated and implemented at arms length to the State by its agent institutions. It does not seek to control but rather steer through various policy instruments and direction. However, in seeking to achieve its own sustainable development policy objectives, the State engages in a process of commodification. Thus it seeks to address discrete problems, such as over abstraction or vulnerable groups. In pursuance of which particular instruments are designed specifically for that problem, often including some element of performance measure. Hence the growth in the extent and depth of regulation by return, commented upon by many of the informants. The extension of the role and scope of regulation, of the disciplinary gaze, although it is able to achieve the outward compliance, it has been incapable of inducing a more fundamental change in behaviour through a reorientation of values.

“it is very easy to persuade people that sustainable development is a good thing but it is far more difficult then to get them to do anything about it and to understand what it means to them.” DETR B

“I don't think that they have led without being prodded if you see what I mean. I think they are making moves towards that but I don't think that they would necessarily have done it without the whole issues surrounding the drought and the water summit. I don't think that they would have done it without some of these issues having come to the fore, so it has been a mixture of incentive and regulation really.” Environmental D

“most industry will actually say that they don't see this so-called triple bottom line, they don't actually see what is in it for them to pursue social

and environmental responsibility along with, I don't want to say profits necessarily because it is quite clear that firms do not maximise profits but they certainly are concerned with profits. They don't see what's in it for them because they see the social and environmental responsibility as a cost. Others that you talk to are quite happy to take a risk on these social and environmental issues primarily because although they won't say so they are in it for what you might call first mover advantage." Environmental  
B

Coupled with the growth of central policy making and coordination there has been a collateral increase in political oversight through parliamentary processes – the committee system. This now provides an opportunity to subject the workings of the State to an alternative disciplinary gaze, based on democratic accountability and open debate.

### **X.3.3 Accountabilities**

Accountability is not easily defined, largely because it is a matter of perception drawing on many elements at differing levels of society and the economy: political, public, managerial, professional and personal. As Letza and Smallman (2001, p.70) observe, 'accountability is both abyss and oasis'.

#### **X.3.3.1 Managerial Accountability**

Within the notions of accountability participation and consultation are essential elements. It has been noted that consultation has grown in importance at all levels of policy formation and implementation, a point that has been noted by several of the stakeholders. Together with consultation has been the an increased circle of participants in the processes, though this is still limited to what has been referred to as legitimate 'holders' (Schmitter, 2000). The nature and scope of participation and consultation, although becoming embedded, is restricted and limited. Though it has permeated throughout the institutional framework such that it now takes place at central as well as localised levels. Building on this there is an increase in networking and sharing of resources in order to either effect policy or to implement it. The implication to be drawn from this is that it is essentially a "managerial" form of accountability that is being applied (Broadbent & Laughlin, 2003, p.24) rather than "political or public" forms of accountability. In the case of the latter the key accountability questions revolve around "*the role governments hold within society to exercise control and 'steer' societal institutions and organisations*" (Broadbent &

Laughlin, 2003, p.24), it is about authority and the legitimation of the exercise of that authority.

“the government issued us guidance on how to go about our sustainable development duties. That is something they are obliged to do by the Act, they have to give that guidance, lay it before Parliament and then issue it to the Environment Agency.” Environment Agency A

“Government has to make decisions and those decisions are concerned with making trade-offs, so there are people in government to have different positions so they have to be reconciled. So that for example I think you will find that ministers of economics and Treasury will be more concerned with consumer benefits and with efficiency and that departments of the environment will be more concerned with environmental benefits.” Economic A

“the real dilemma is that people and politicians feel that there is something different about the water industry that its different from other utility industries. There is a feeling that this is more than just energy or communications, it is a natural resource which requires some sort of democratic accountability and involvement in its governance.” Social C

It is argued that there is a limited form of public accountability, which is at present located primarily within the sector. This takes the form of informal mechanisms that involve the questioning of the functioning of the regulatory procedures by the ‘electorate’. In this sense the ‘electorate’ being those parties that consider themselves to be stakeholders in the water sector and its affairs. The pressure that this exerts increases the extent of detail that is provided to meet the accountability demands. Often though the response to such pressure devolves to legitimation through recourse to managerial accountabilities – demonstrating ‘value-for-money’, achievement of targets, compliance with performance measures. It devolves to a process and performance accountability in that it justifies policy through achievement (or lack of it). The ‘electorate’ though is still engaged in the policy discourse, which relates to the processes of ‘democratic’ and ‘political/public’ accountability, recognising that the aspiration for control is problematic.

“So what is regulation got to do. Yes its got to look to see that the customers are getting fair value for money. In other words getting services for which it is paying and it is paying a fair and reasonable price for it. It does that by comparative efficiency and comparative regulation.” Social B

“regulation as I see it is about enabling the water industry to achieve, again it looks jargoned, a world-class services in terms of quality and value to customers in England and Wales.....Behind it though lies the need to deliver quality, value to customers” Othe Regulator C

New institutional arrangements are evolving in response to changes in modes of production and regulation, especially at the level of State institutions. Thus customer service structures are formalising both at the level of regulator and industry, opening up new areas of discipline and reporting – accountabilities. At the same time and partly in response to the sustainability debate, the water sector is seeking to place itself within a wider polity, with responsibilities to that wider society. Thus the incentives to change business practices and behaviour have at the same time widened to include ideas of social responsibility, place in the community, guardianship and stewardship. Along with these responsibilities is the notion that responsibility goes hand-in-hand with accountability. Thus for water companies there is a wider and more differentiated conception of accountability; the responsibility to both render and be held to account. Lacking are the democratic mechanisms that would transform the accountabilities into reflexive practice. In other words the stage and conditions for a Habermasian discourse are not yet in place.

### **X.3.3.2 Forms of Accountability**

Given the multi-level nature of the institutional framework it is clear that there will be multiple lines, natures and scope of accountabilities. It is perhaps useful to distinguish at least three sorts of accountability. There is the reciprocal accountability relationship between those that regulate and those who are regulated, which involves fairness, consistency and transparency. This for many was the most visible and immediate accountability of concern to them. It is, given its prominence, perhaps the most contested given its potential economic impact. By the same token it is the least democratically based of the accountabilities. A second accountability is that related to the field of policy formation and implementation. The accountabilities of the State and its agencies to the wider polity discussed above. It is in seeking to address this that forms of consultation and participation become important. As important is the role played by Parliament so that there is a mix of both horizontal forms of policy networks and expertocracy as well as democratic oversight.

There has been a maturing of this process such that for many this now represents a stable form of exercising accountability within the water sector. The third accountability relates to more immediate forms of actions in seeking to address the relationship

between the customer/community and the water industry in terms of the actions that they take on behalf of and to provide a service to the customer/community. In this there is little attempt to foster a consultative or partnering approach, other than that of the community or NGO's being recipients, e.g. recipients of material or educational support. Whilst communities/customers are resource poor, NGO's are engaged with industry at this level though this does not go down to the level of formal accountabilities within the relationships.

"We have been working quite well with water companies on the number of areas. Water companies are very keen to promote their environmental credentials and where that is the case we are very happy to support them."

Environmental C

"a lot of water companies are developing their own biodiversity action plans and that is something that we are working with them on." Environmental D

"that is seen in the role that we play in the region as a major company we actually produced the lot more that goes with it; education, community work, environmental work, opportunities for employment and everything else like that. So you are actually saying, well hold on, we have a much bigger presence than just the water coming out of your tap. What you get is the lot more and we are accountable for all of that." Industry B

In its memorandum to the House of Lords Select Committee on the Constitution, Ofwat (2003) also identified three separate accountabilities that it holds. Firstly, to Parliament framed in terms of compliance with statutory functions, value-for-money and following the principles laid down for public servants. A procedural/managerial rather than democratic framing of accountability. Secondly, to the regulated companies, also a managerial accountability which has the aim of "*enhancing their accountability for the provision of a public service*" (ibid.). Lastly, to the public, or rather 'customers', to engage with them as represented by and through official customer representatives and provide information. This is a clear reference to the managerial (process and performance) accountability referred to above. The implication is that it has no role in political/public accountability as that takes place at a 'higher' level. By extension it is implied that the industry holds a managerial accountability without recognising the discursive role it plays in policy formation.

Shaoul (1998) also notes that Ofwat has opted for a narrow, economic interpretation of its duties confined to the setting of standards and targets and reporting on progress against those targets. However, times have changed and it is no longer true to say that

“to date [there have] been few investigations into the industry by any of the select committees” (ibid, p.41) and whilst it is still true that “the work of such committees is at best ex post facto and there is no requirement for governments or indeed regulators to respond or follow their recommendations” (ibid, p.41) the reality is that they do. There has developed a degree of parliamentary oversight that provides for accountability to the public.

With respect to the companies themselves, clearly privatisation promoted a new set of dominating stakeholders. This is not the “great share-holding democracy” of small investors as originally claimed but rather the banks, insurance companies, pension funds and other City institutions. In spite of what has been said it would be fair to say that for most companies this principle-agent managerial accountability (Broadbent, Dietrich & Laughlin, 1996) is as important as any other and has the ability to influence behaviour outside of this immediate relationship. In the case of privatised utilities, some maintain that there is little accountability to a wider polity other than that due to shareholders (Letza & Smallman, 2001). There is a reciprocal accountable relationship that exercises a modulating influence on this, and indeed in many ways cannot be separated from it. It is the accountability of firms to the regulators – also discussed in a previous section. Ogden and Watson (1999 p.536) noted that the system of economic regulation provides a relatively high degree of discretion to the regulator but given the way it is exercised it results in mutual benefits for different stakeholder groups and without a high level of trust between the parties the system would be beset with legal challenges.

#### **X.4 SUSTAINABILITY**

Sustainable development has become a key and entrenched part of policy that has and will continue to have an overarching influence on policy development and regulation of the water sector. In evidence before the Select Committee on Environmental Audit (EAC, 2000) in February 2000, Rt Hon John Prescott MP and Rt Hon Michael Meacher MP illustrated the central importance and embeddedness of sustainable development with government and its influence on all aspects of policy.

“ [sustainable development] you will see that in the Treasury guidance notes on this it is at the heart of the government on public expenditure.”  
Prescott (EAC, 2000)

“I think it is very difficult to convince you purely on the basis of general statements. I think the evidence, for all of us, and certainly for you,

depends on the cumulative growth of specific evidence in the case of other departments.” Meacher (EAC, 2000)

“The new Commission on Sustainable Development will have extra powers reporting directly to the Prime Minister with annual reports to monitor and report and show where we are failing.” Prescott (EAC, 2000)

There is an acknowledgement that this takes time and involves changing people's behaviour, affecting their hearts and minds. Interestingly, this explicitly refers to a change of personal values as being at the heart of sustainability, laying much of the emphasis on the individual. What it does not do is seek to change the values and behaviour that underlie the economic system that in many ways gives rise to unsustainable behaviour in the first place. In this respect the emphasis is compliance with changes in regulation and regulatory instruments that have at their heart technology based fixes, addressing symptoms not causes and assuming that these will bring about the requisite changes in personal values and public appetites.

## **X.5 SUMMARY**

This chapter has considered the extent to which sustainability is incorporated and forms part of a stable mode of regulation of the water sector. The analysis and discussion is based on the work of the previous two chapters as well as on further reflection and analysis of the interviews with stakeholders. As such it has focused on how sustainability has been incorporated into modes of regulation.

The general approach was to see sustainability and its incorporation with regulation as part of the emergence of a system of governance. Governance, in this sense, covers the range of institutions and relationships involved in the process of governing. In this instance it is the governing of the water sector and not just the companies that constitute the industry. It covers the instruments and tools that are deployed (by the State) in order to achieve policy goals. There can be different styles of governance both across government and across sectors. As such they are (historically rooted) attempts to define the relationship between the State and civil society. What has been mapped in some of the interviews touches and draws on the discursively constructed relationships.

The State has a generalised goal of promoting sustainable development – itself a particular interpretation of sustainability. It aims to secure the long term supply of environmental and social 'goods and services' whilst minimising the production of

'bads' (pollution, social exclusion, biodiversity loss, etc.). Sustainability therefore has become an essential site of regulation within civil society where the natural, political and social intersect. What this chapter has charted is some of the interactions between the State and civil society; the ways and means (instruments, institutions and relationships) employed to achieve policy objectives. As has been suggested, sustainability is not a single concept. It is interpreted and builds on new insights and experience. Thus the ways and means employed in its promotion also change and evolve to reflect a whole range of changing circumstances. This chapter traces and interprets a particular configuration that seeks to operationalise sustainability as a constituent of the governance of the water sector. It does so through the interviews and by reflecting on the interpretation of the interviews in the light of a particular theoretical perspective.

This has suggested that we can understand how the institutions, instruments and relationships have evolved by considering them as being discursively constructed within a fluid environment. There is no a priori reason why they have evolved in the way they have. The institutions, instruments and relationships are contingent on the ebb and flow of a discourse of ideas. Contingent on the evolution of knowledge, the application of the instruments, the role of civil society and the development of relationships.

Through the interviews the importance of networks and the multi-level nature of governance has been noted, including the relative isolation of Ofwat from these networks. The role of (policy) networks has been especially important during the period 1997 – 2001 for ensuring that environmental dimension of sustainability was recognised. The interviews have confirmed the importance of the inclusion of stakeholders in governance and the growth of consultative processes. This serves both to illuminate certain issues and obscure other, usually social, issues. The distant democratic oversight offers a form of accountability that would otherwise have been marginalised by managerial/procedural accountability, which is prevalent in the various discourses. Reflecting on the material, it is argued that a particular style of governance (mode of regulation) has evolved in the water sector. It has evolved through the interpretation and inclusion of sustainability into the workings and hence the regularising of the sector's affairs with sustainability. The style of governance includes the operationalising of policy guidance, through a constellation of organisations and agents, that seeks to resolve the tensions between the economic and the

environmental/social. It is very much compliance rooted rather than emancipatory approach to sustainability and is reflected in the approach to regulation.

## CHAPTER XI: DEVELOPMENTS IN WATER REGULATION POLICY: 1997 TO 2001

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*'Come, listen, my men, while I tell you again*

*The five unmistakable marks*

*By which you may know, wheresoever you go,*

*The warranted genuine Snarks.'*

Lewis Carroll, *The Hunting of the Snark*

### XI.1 INTRODUCTION

The purpose of this chapter is to look at the superstructure of regulation. It considers, reflects on and interprets the questions of how and why the mode of regulation evolved in the manner it has. Its approach is informed by the Regulation Theory approach and as such is different from the previous three chapters. The previous three chapters have examined the underpinnings of the mode of governance that has incorporated sustainability into the mode of regulation; how it functions, its styles and institutional framework. This chapter broadens out from that foundation and complements it. It should not be viewed as a progression but rather as examining another and interrelated facet of regulation. This chapter is historically based as its purpose is to chart the emergence of a mode of regulation that incorporates sustainability as an integral aspect of its regulatory focus. As such, it is relevant to the research question because it charts how the form of regulation has come about and the forces that have gone into shaping it. If we are to consider if the form of regulation promotes sustainability, we must also question the efficacy and efficiency of the processes that provide us with the form of regulation we have. How democratic, informed and comprehensive are the process. To what extent do they reflect particular secular interests and what are the contours of power. These are aspects that reflect what sustainability means in and to the water sector and the degree of compliance that the mode of regulation might be able to achieve.

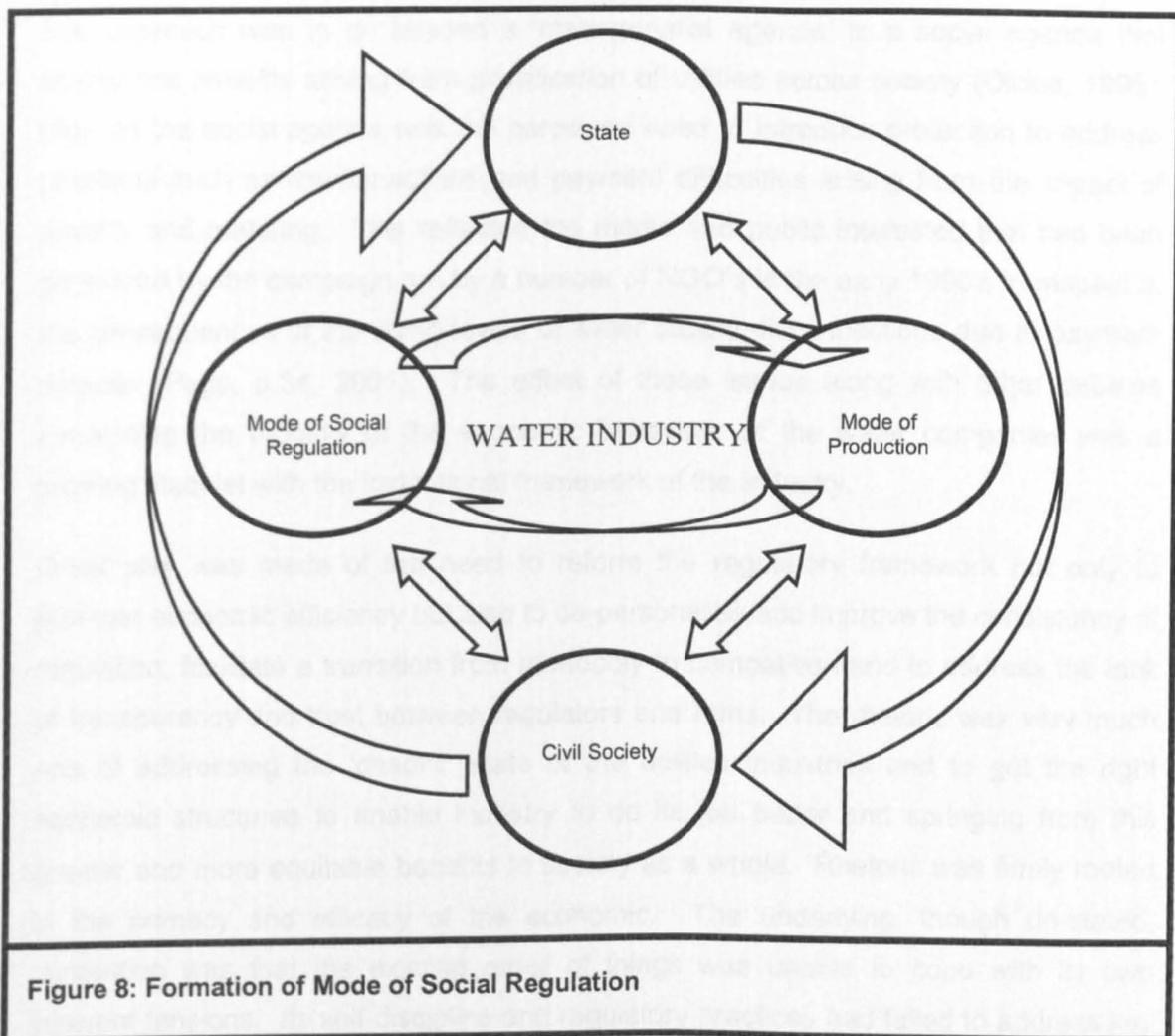
### XI.2 APPROACH

This chapter presents an analysis of some of the more significant developments in water policy and its regulation, within the context of the approach developed in the previous chapter. It considers a series of specific developments as emblematic of a maturing and sophisticated mode of social regulation that emerge through discourse between networks of advocacy coalitions (Sabatier, 1998). The specific focus is on the

Labour Government's first term in office, a period that runs from April 1997 to March 2001. This period includes a set of events that have had a significant bearing on the shaping of water policy and its regulation: the Water Summit of 1997, the 1999 Water Industry Act, the 1999 Price Review and the 2000/01 draft Water Bill. These are not considered as single independent events but are approached as different, overlapping layers each of which influences the other over time. Taken together with the existing structures they provide an evolving and maturing mode of social regulation framework for the sector, see Figure 8. The events themselves are used to centre 'sites of contest' and explore the rhetoric and discourses employed in their formation, translation into practice as well as a means of drawing on pre-existing discourses and practices. The choice of the first term of the Labour Government is apposite. As a party Labour sought to bring sustainability into the heart of government and to do so within a business friendly environment. It was therefore committed to the use and adaptation of existing market mechanisms within which to situate its sustainable, communitarian approach to business and the economy. Recognising that a failure to adequately accommodate social and environmental issues had the potential to disrupt the economic functioning, or mode of production, of the sector.

It is within this context and the development of policy that the issues of sustainability and its incorporation into regulation are particularly relevant as a platform to address environmental and societal concerns. They emerge as themes with which all the major participants in the water industry engage and debate. Sustainability and regulation, I would hold were a key focus during the events referred to above. The events provided a nexus for questioning and developing the relationship between the regulation of the water industry and its role in achieving a more sustainable society. The availability of material allows the various discourses employed and an examination as to how these may or may not have contributed to the particular mode of regulation developed through this period to be analysed in some detail. The choice of a period approach has the benefit of placing boundaries around the material and the analysis in order to make it manageable but without narrowing it unduly.

The material on which this chapter draws comprises three main sources. Firstly, there are the interviews with key informants conducted as part of the fieldwork. The second, major source of information, is the proceedings of Parliamentary Committees, which include memoranda submitted to the committees, oral evidence taken during hearings before the committees and the reports of the committees themselves. The final source is the individual documents and reports produced by various parties as well as



**Figure 8: Formation of Mode of Social Regulation**

newspaper and magazine articles and reports. As with the previous chapters a combination of analysis, discussion and interpretation is used to chart events. Three 'sites of contest' are considered; the first may be broadly categorised as the Water Summit, the second the Price Review and the last, the Draft Water Bill.

### XI.3 PERTURBATION AND RESPONSE – CHANGING THE MODE OF REGULATION

#### XI.3.1 Background

In 1997, a Labour Government came into power for the first time since 1979 bringing a different perspective to the regulation of utilities not least water utilities. It accepted the 1989 change in ownership but sought to introduce regulatory changes in line with its proposed policies. As such, it opened up new areas of discourse – social issues, and brought greater prominence to others, such as environmental issues.

“When the Labour government came in May 1997, I thought it came in with a fairly sure touch. It saw the need to have done its homework and it arrived running.” Social A

The approach was to go beyond a 'managerialist agenda' to a social agenda that shared the benefits arising from privatisation of utilities across society (Dickie, 1996). High on the social agenda was the perceived need to introduce protection to address problems such as disconnections and payment difficulties arising from the impact of poverty and metering. This reflected the media and public interest that had been generated by the campaign run by a number of NGO's in the early 1990's in respect of the consequences of the rising levels of water supply disconnections due to payment defaults (Page, p.34, 2001). The effect of these issues along with other debates concerning the morality of the economic behaviour of the water companies was a growing disquiet with the institutional framework of the industry.

Great play was made of the need to reform the regulatory framework not only to promote economic efficiency but also to de-personalise and improve the consistency of regulation, facilitate a transition from monopoly to competition and to address the lack of transparency and trust between regulators and firms. The rhetoric was very much one of addressing the 'chaotic' state of the utilities industries and to get the right economic structures to enable industry to do its job better and springing from this greater and more equitable benefits to society as a whole. Rhetoric was firmly rooted in the primacy and efficacy of the economic. The underlying, though un-stated, contention was that the existing order of things was unable to cope with its own inherent tensions. Its self-discipline and regulatory practices had failed to address key emergent areas of conflict. On top of this a combined crisis of capitalism in the 'communal general conditions' and 'external conditions' (O'Connor, 1991) brought about by the climatic conditions between 1995 and 1998 indicated that a new order was required. The response to this is traced through the period 1997 to 2001.

Some commentators maintain that since 1997 the regulatory environment is more socially orientated resulting from a greater degree of intervention in the regulatory framework (Bakker, 2001; Page, 2001). This foreshadowed a more overtly active role for the State in the operationalisation of regulation, as highlighted by one of the interview informants.

"I think there was difference between two governments in the way that they work so that the Conservative government having created independent regulators wanted to maintain that distance and see each with their own sphere of influence but of course talking to each other. I think that the Labour government particularly in the early days, having been out of office for 18 years wanted to feel that it could get its hands back on the levers of

power. There is always a difference between a Conservative government who believe more in structures and markets and general incentives and Labour government who are more concerned with being involved in the details of doing it. Nothing like as much as they used to be involved in the old days when central planning was all the rage." Environment Agency B

#### XI.4 WATER SUMMIT – INCIPIENT CHANGE OF MODE OF REGULATION

One of the Government's first significant acts in response to the situation of regulatory failure was to call for a 'Water Summit' within three weeks of coming to power. This was motivated both by policy considerations and by the water situation in the country. As the Deputy Prime Minister, Mr Prescott said, "By May 1997 there was severe anxiety about water supplies. Water companies had obtained over 100 drought orders, allowing them to take more from a water environment, which, in many cases, was already under great stress. Yet at the same time, about a third of all the water put into supply was leaking away." The drought between 1995 and 1998 had exposed in the eyes of the public both management and regulatory failure and complacency in dealing with leakage as well as water resources. This was compounded by steeply rising water bills and 'fat cat' salaries for top executives while the public suffered the consequences of the drought providing popular. It provided democratic and electoral support for change. Clearly, the mode of regulation that did not consider the sustainability aspects had failed in its ability to reconcile competing traits of a capitalist mode of production with the requirements and expectations of the State and civil society. Thus from the outset of the new government social and environmental issues assumed a high profile and a backdrop to an evolving regulatory framework. Almost inevitably, these issues were placed within a discourse of sustainability.

"....like the water summit that Prescott put together shortly after Labour came in, well you can take it two ways; on the one side you could say it was a nice example of environmental and sustainable development thinking and on the other hand you could say it was an easy target. You had all the fat cat water companies, they were an easy target and politicians had nothing to lose by putting the boot in fairly forcibly on that one. The outcome was good from an environmental and sustainable management perspective there were some serious shifts in attitude." Environment Agency B

Part of the change in the mode of regulation may be seen as introducing a move away from an over-reliance on the pseudo-market mechanisms of the regulator, a reliance on the exercise of power at a distance. It has moved towards a more overtly policy-led regulated approach as evidenced by the introduction of social provisions, backing for environmental improvements, mandatory targets and performance indicators backed up by the threat of penalties.

“...there were things like demand management, water resources plans, drought contingency plans, mandatory leakage targets, which in our view that linked with the agenda towards a more sustainable balance.”

Environment Agency D

There was also growing perception that the regulatory regime had been lax. Lax in the sense of allowing substantial increases in economic profitability that could not be attributed to productivity gains, profitability having more to do with falls in capital costs (Saal & Parker, 2001). This at the expense of social and environmental sustainability.

The introduction of more rigorous regulation did much to curb this though was not as effective in generating efficiency gains. With this was a tacit acknowledgment that reliance on market based mechanisms does not always lead to (socially) acceptable outcomes. A point highlighted by the National Audit Office in its report on Leakage and Water Efficiency (NAO, 2000). Indeed it was precisely the failure of the market-based mechanisms that had allowed leakage rates to rise and required overt political (state) intervention to bring about a change in attitude and approach of both water companies and the economic regulator. Because of these changes, the attitudes of regulators and water companies have evolved to meet changing expectations and requirements and has influenced their discourses.

“the regulator has been good at carrying on that process but it didn't start from the regulator and the regulator wasn't doing sufficient work with it.”

Social C

“...practically every one of the companies had taken their eye off water resources and there was a need to refocus, so one of the reasons [for] doing annual reviews of the companies water resources plans is to keep it on their agenda.” Environment Agency B

“I don't think that they [water companies] would necessarily have done it [change of perspective] without the whole issues surrounding the drought and the water summit. I don't think that they would have done it without

some of these issues having come to the fore, so it has been a mixture of incentive and regulation really.” Environmental C

This is not to say that there was acceptance on the part of the companies of the need for change, especially with regard to leakage. This can be taken as symptomatic of a resistance to changes that affect the economics of their operations.

“...with leakage we saw a situation where the government stepped in with the water summit in '97 and as one Managing Director put it at the subcommittee meeting, companies had to be dragged kicking and screaming” Social C

The Water Summit became an opportunity to signal the introduction of a raft of measures to change regulation. A change not so much in the 'how' it was applied but in the 'what' it ought to achieve. A recognition that there are valid concerns other than economic objectives. The Water Summit provided an opportunity to reshape the regulation of the water sector, an opportunity that the environmentalists were quick to seize in a way that the previous emphasis on economic issues had not allowed. It allowed and legitimised the emergence of a regulatory discourse centred around environmental sustainability as well as coalitions of advocates of the discourse.

“John Prescott decided straight away to have a water summit. Civil servants weren't used to this idea of somebody coming and saying, right we are having that, we are having it in two weeks time, get a venue, get it organised it is going to be on the Wednesday at such and such a time, there is a space in my diary. This is a bit of a shock and as a consequence they didn't have a neat of list things they were going to announce. So we had half a day brainstorming session with the Minister, Meacher where I and the couple of my team and my then chairman took him through the issues we were discussing and on the hoof we identified 8 and then two others and afterwards I apologised to our chairman it just seemed like a good idea it was going so well we would go for it. He said, no, no, no quite sensible that's alright, excellent. Nine out of the ten items announced by Prescott, were ours.” Environment Agency B

The onus to operationalise many of the measures was placed on the economic regulator, after consulting with the Environment Agency. It was the possibility of economic sanctions that was to be the stick that provided incentives to the water companies to comply. Moving towards sustainability was rationalised in economic terms, as the DG of Ofwat said in the closing sentence of his speech to the Water

Summit "Save the environment and save your pocket!" (Byatt, 1997). The more 'hands on' approach to policy and regulation of the water sector as well as an emphasis on social issues was seen as an opportunity to give greater weight to environmental issues and by extension to sustainability. In doing so it raised the profile of sustainability and its pace within the regulatory regime among all parts of the water sector. This is seen as an attempt through changes to the institutions and framework of regulation to respond to the emerging crisis of capitalism. However, discourses and statements were not formulated in such overtly ideological terms, as indicated by the following interview extracts;

"We need to be opportunist; the chances of getting things through to influence UK legislation are very thin. It often needs things like the Water Summit to make things happen and produce something like a Water Bill but again the drought has finished now people have gone off the boil on that one." Environment Agency C

"....so far as the government views and the government statements are concerned there is a clear change after the 1997 election, post 1997 the government is giving higher priority to the social aspects of sustainable development, clearly there are some quite tricky things for water and what that means pricing and disconnections and so on. In a sense I think that it is going back to what sustainable development was supposed to be as enunciated at Rio." DETR B

#### **XI.5 SOCIALISING REGULATION – WATER INDUSTRY ACT**

In 1999 the Water Industry Act entered the statute books, giving effect to some of the government's social policies and other measures that were aired at the Water Summit and subsequently consulted on. The Act introduced protection for certain, narrowly defined 'vulnerable' groups, removed the ability to disconnection household customers, gave the Director General the task of approving companies' charge schemes and made provision for more flexible adoption of metering for domestic consumers (DETR, 2000a). Regulatory responsibility and oversight of the measures was placed on Ofwat. In effect making social policy part and parcel of economic regulation, which represented a development of a particular mode of governance. At the same time the regulator was allowed a degree of discretion over the interpretation and implementation of the policy as well as the governance procedures;

“...the legislative framework was put in place in the 1999 Water Industry Act, there you have got the removal of disconnection and Ofwat's approval of charges powers and that gives Ofwat a very clear remit to look at tariff issues taking into account social impact. That's what this guidance does, it says this is the social context in which you, director-general have to exercise your functions from our perspective as the lead policy department, that is what creates the policy framework in which Ofwat operates.” DETR

A

For some the consumer orientation resulted in more antagonistic relations between the DG of Ofwat and water companies (Page, p.14, 2001). However, it would be too simplistic to attribute any change to that one factor alone. Indeed, Ofwat has championed consumer interests as a counterweight to the burden of environmental improvements, especially during the price review. There has been some disquiet about the degree to which social policy is perceived to have been devolved to regulators though;

“....social policy is the responsibility of government whether it is about poverty or excluded sections of the community, that is the responsibility of government and we want to see absolutely clear policy leads in statutes ... rather than leaving social policy by default in hands of economic regulator's.” Social A

Although the provisions for vulnerable groups were most commented on, the new structures for the setting of water charges were also framed in terms of ‘the sustainable use of water supplies and protection of the aquatic environment.’ In the guidance given to Ofwat by the Secretary of State water charging to customers was to be given a key role in promoting what might broadly be called sustainability measures; providing incentives for water efficiency and conservation, reducing water abstraction and enhancing the environment and, deferring the need for investment in new resources (DETR, 2000a). Thus, the sustainability discourse employed by the State in shaping the mode of regulation appears to be rooted in an econocentric rhetoric. However, these measures should be placed in the context of the proposed fall in prices after the 1999 Price Review and the reluctance to encourage the widespread introduction of metering for domestic consumers. The outcome especially with respect to meeting the objectives of the Water Summit has been disappointing and for some in the environmental camp the regulatory balance needs to be re-thought (Howarth, 1999).

From the start of the new administration in 1997 there were moves to reformulate and extend the scope of regulatory instruments through recourse to sustainability as an important motivating factor.

## **XI.6 THE PRICE REVIEW 1999**

### **XI.6.1 Introduction**

Any process whose aim is the setting of prices and investment of a whole industry for a period of five years must by its nature be a long, involved and complex task. In the case of the water industry the Periodic Review of Prices is one that effectively took place between the beginning of 1997 up to the announcement of the determination at the end of 1999. It is impossible to effectively capture all that occurred as part of that process. What follows should be regarded as a summary and discussion that seeks to focus on a particular subset of issues and processes that are considered relevant to this inquiry. The focus has been on those policy issues and processes that seem to have a major bearing on sustainability and sustainable development within the changing mode of regulation. This recognises that given the overarching nature of sustainability all issues have a bearing on sustainability in some way or another but that some are of more relevance or immediacy than others.

### **XI.6.2 Background**

In 1997 the Director General of the Office of Water Services Ofwat, set out the timetable for the 1999 Periodic Review indicating that there would be an expectation of a lowering of prices. A point that was re-emphasised in the 'Proposed Framework and Approach to the 1999 Price Review: A Consultation Paper' (Ofwat, 1997) and after Ministers had indicated that they intended to address the issue of 'fat cat' salaries and 'excessive' profits by privatised utilities.

"Prices for water and sewerage services have risen very substantially since 1989. The Director believes that customers now wish to see the greater efficiency achieved by water companies reflected in a reduction in bills. He also believes that they expect companies to meet their investment and service obligations without prices needing to rise in real terms, financed through expected efficiency gains. Customers should be consulted about their views on the trade-offs and priorities within this framework of falling prices." *Ofwat 1997*

The consultation paper also indicated the economic regulator's attitude towards environmental improvements, very much in line with its treatment in previous price reviews. Effectively indicating, at the start at least, that there would be no major changes in approach or application thus locating the process within an 'unchanged' mode of regulation and its attendant set of discourses. Within all of this, there was no mention of contribution to sustainability or sustainable development – this had not entered into the rhetoric or terminology of the economic regulator at this stage.

“Allowance should only be made in price limits for quality and environmental enhancements, whether statutory or supplementary, which have measurable outputs and defined times for delivery. The Director intends to ask the Secretaries of State to provide guidance on the implementation of legislation to improve the quality of drinking water and the environment.” *Ofwat, 1997*

The implication was that only where benefits of quality and environmental enhancements, whether statutory or not, could be quantified and demonstrated would funding through prices be allowed. Ofwat was setting a condition of affordability and serviceability as a guiding principle in the way it sought to regulate capital expenditure programmes, whether linked to environmental or quality drivers or to asset capital works. As Helm (2000) commented;

“Ofwat has encroached into the Environment Agency's territory by enunciating the principle of customer affordability, claiming that, only if the costs can be properly demonstrated to be less than the measured benefits, should environmentally driven projects be financed (contrary to the precautionary principle).”

The manner in which charges are passed on to the customer effectively means that it is only affordability, an economic 'measure' that can be considered. The charging structure by its nature excludes issues of social equity, which are important in sustainable approaches.

### **XI.6.3 Ofwat's Affordability Discourse**

Ofwat seemed to suggest that customers wanted lower prices. Also, that prices could be a lot lower if there were not a substantial environmental protection and improvement programme. Indeed, Ofwat reiterated that apart from its duty to finance water companies, it was there to protect customer interests. Almost by implication saying

that, prices rising from environmental investments were against customer's interests. Ofwat's limited duty towards conservation together with the apparent implications of the Water Industry Act (1999) regarding the mitigation of the social impacts of tariffs created a more conducive climate for the propagation of such an interpretation (discourse) by the economic regulator. Such an approach suggests a placing of matters such as environmental sustainability outside its regulatory process. Whilst this may have been acceptable under the previous periodic reviews it was to become clear that attitudes in government had evolved and that this would have knock-on effects. In its 7<sup>th</sup> Report, the Environmental Audit Committee (EAC, 2000) specifically censured Ofwat for 'demonising environmental and quality investment by portraying it as the key upward pressure on prices'. Evidence of the greater importance that was being attached to the environment and sustainable development can be seen in the establishment of a Parliamentary Environmental Audit Committee and Green Ministers as well as the statement of the Aim of the Department of the Environment, Transport and the Regions (DETR) "to improve quality of life by promoting sustainable development".

The greater prominence given to sustainable development by the State created opportunities to mount a challenge to Ofwat's interpretation of its duties to fund environmental expenditures by the water industry. The Environment Agency saw an opportunity to secure greater environmental benefits and actively went about trying to influence the outcomes;

"....in AMP 2 as opposed to AMP 3 Ian managed to manipulate it so that the Tory government of the day accepted that he had a role to play in deciding how much environmental investment there should be. This time he set out down a totally different course, which was to take it back to where Parliament had put it in the first place, which was that the role of environmental improvement was the Environment Agency's, guided by Ministers. The Director-General's job was to make sure that the companies were adequately financed to fulfil their obligations. It wasn't his job to determine what those obligations were to the environment. A very clear separation. He got politely told to F\*\*\* off about costs and benefits."

Environment Agency B

The case against affordability was argued in the first instance by the Environment Agency and then with the active support of the State. Far from being discretionary much of the proposed environmental programme had been set in response to statutory

requirements arising from European or British legislation (EAC 7<sup>th</sup> Report, 2000 oral evidence para 131). This process went beyond the State and Regulators. Other influential parties, with interests in securing environmental improvements, became involved in the Price Review process. These parties not only considered themselves as stakeholders in the process. Parties such as the State and Regulators also saw them as legitimate stakeholders. It marked the emergence of a particular advocacy coalition with an alignment of mutual interests and discourses. For example, a national environmental NGO that saw one of its duties to become directly involved;

“.....one of our first targets was to try to get Ofwat to recognise that they have got an environmental duty. That was a duty they did recognise they had but it was a duty that actually came secondary to their other primary duty. So one of the things we did was to seek legal counsel on their environment duty to try to illustrate to Ofwat the work that they aren't doing and in identifying the financing that the water companies need they have to make sure that water companies can finance their responsibilities to biodiversity. It wasn't just us doing that you had the Environment Agency and English Nature supporting that approach” Environmental C

The RSPB together with English Nature organised a number of functions including a conference “Investing in Wildlife” as part of efforts to influence the size and extent of the environmental programme. The establishment of how environmental programmes were to be viewed and handled within the review process was an important one in that it was not only to influence the scope for price reductions and capital investment. It was also an important shift in overall policy discourse indicating that customer concerns were not the only criterion on which prices were to be determined. Through the emergence of an advocacy coalition, the parties were able to exercise a degree of power over the economic regulator. It drew its strength from the alignment and emergence of a dominant discourse, which the economic regulator was not in a position to counter. Furthermore, this offered a pathway for the wider involvement of civic society. As such, it may be considered to be a feature of emerging governance procedures and thus mode of social regulation of production.

Within this emerging site of contestation, policy guidance was to play a key role. A role not just in setting out what the government expectations were. But also, as a means of exercising power over regulators while still maintaining the semblance of arms-length

regulation. Policy guidance acted as a counter-weight to the influence and independence of the economic regulator<sup>12</sup>. The effectiveness of having a clear articulation of policy objectives was commended by the EAC whilst pointing out the limits that should be respected by the Minister (EAC 7<sup>th</sup> Report, 2000, para 68 & 94).

#### **XI.6.4 Environmental Advocacy Discourse**

In September 1998 DETR published *'Raising the Quality'* (DETR, 1998) that set out the Ministerial guidance on the over-arching social, economic and environmental policies that formed the context in which the Periodic Review was to be conducted – some 15 months after the *'Proposed Framework and Approach to 1999 Periodic Review'* had been published by Ofwat. The indications are that this document was largely a collaboration between the Environment Agency and the DETR and its scope included matters such as water charging policy, asset maintenance and service to customers.

“The key document was *'Raising the Quality'* the ministerial statement, which we put a lot of effort into helping him [the Minister] write. We worked very hard with him and that was again an important statement by the new government, which had a different view. The previous government only wanted statutory drivers and minimalist implementation. The new government would prefer to get closer to meeting European law but not spending rashly.” Environment Agency C

In the intervening period obviously much work went on in preparing for the final price determination. A feature of this process was not only the flow of open letters from the various regulators and government but also the various meetings and discussions between the parties. Notably this included the *'Quadrupartite'* meetings that involved Ofwat, the EA, EN and DWI over the quality and environmental programmes. These provided a formal level of engagement and means of exercising discipline and conformity. In addition to such formal meetings there were discussions not only with the water companies but also with a whole range of stakeholders such as consumer interest groups, industry associations and environmental groups. Taken as a whole this may be viewed as a discursive formation in which statements join together to

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<sup>12</sup> It is perhaps because of this that it has been included so prominently in the draft Water Bill, even though other mechanisms already exist, stemming from the Water Industry Act 1999.

become a shared discourse, as outlined in the chapter Discourse and Modes of Governance.

“.....we had agreed that unlike the previous round there would be a need to have a roundtable session every so often with Ofwat, ourselves, the water companies, Drinking Water Inspectorate and English Nature but those would not get into decision-making, all they would do was to make sure that everybody understood where the game was and where the issues were and who was going to resolve the issues but it was not necessary to resolve the issues [there], which was quite important because that stopped DETR becoming a focus for decision-making and being put on the spot.”  
Environment Agency B

The Quadrapartite process of consultation provided a platform to share and discuss matters related to the price review. In its own way it also acted as a pointer as to the greater prominence given to environment/sustainability related matters. Initially, English Nature had not been included by Ofwat and indeed had been actively ignored by the Director General Ian Byatt. It was only under pressure from environmental interests that they were included having been recognised as having a distinctive role to play, quite separate from that of the Environment Agency (English Nature, 2000a). Also not included were other stakeholders such as Water UK, environmental and other NGO's who throughout the price review took a keen interest in developments and negotiations. They therefore sought to create space in which they could play a role through a variety of mechanisms and networks, such as that referred to above in the case of the RSPB. By raising their profile and seeking ways to engage with the process some such as Wildlife Trusts and RSPB managed to establish themselves as legitimated stakeholders. As a result their input was sought (EAC 7<sup>th</sup> Report, 2000 oral evidence, para. 105, 278, 398) on an individual basis by the Quadrapartite members. This resulted in the mutual development and support of a particular and dominant environmental discourse. The relative success of the environmental NGO's in accessing and lobbying the Quadrapartite members is reflected in their opinions of this part of the process for example Surfers Against Sewage (2000) commented;

“We feel that the DETR had a far more open and inclusive approach to NGO's than in the previous Periodic Review. They also had an approach that was far more in keeping with the spirit of the EU legislation. There was a clear move away from a policy of minimum only compliance by the last possible date.”

In contrast, others, within alternative advocacy coalitions (Sabatier, 1998), such as the Chartered Institute of Water and Environmental Managers and Water UK held differing views and sought to promote an alternative discourse:

“The Institution is concerned that the quadrupartite process has not been sufficiently open and transparent. CIWEM suggests that the Audit Commission should obtain minutes and records of the meetings and establish how decisions were made particularly with reference to.....sustainable development.” CIWEM Memorandum (2000)

and,

“The industry, as a whole and individual companies input to the process by responding to consultation papers, representations at one or two general meetings, bilateral meetings with Ofwat, and through a total of fourteen highly detailed and complex information returns. Despite this the quadrupartite process did not work well because of a lack of realism....and a lack of early consultation by Government on its proposals” WaterUK, 2000.

Such views might be interpreted as reflecting the relative success of the various parties in having their points of view taken note of and incorporated into the decision-making framework. It is notable that Water UK, representing the views of the industry as its ‘trade association’ was particularly unhappy about the outcome of the price review. Subsequently they have promoted an alternative discourse centred around the need for ‘joined up’ regulation. In other words the need for better leadership from the State and greater transparency by all. Indeed, Water UK commenting on the overall process made the point that in their view;

“We do not believe the process has balanced well the interests of customers and the environmental objectives, as well as our other stakeholders. We believe we can achieve more for our customers and for the environment given a better regulatory process.” (emphasis added) (WaterUK, 2000)

Others disagreed with this assessment;

“Personally, I think it is better to coordinate their positions, which is the job of Ministers in a way, transparently, rather than the old business where everyone was talking to the Minister behind somebody else’s back. What

some people often mean by joined up regulation is that they want their own way." Economic A

The EAC (2000) in its report noted in its recommendations that; 'Ofwat must make further efforts to involve the full range of stakeholders beyond the quadrapartite forum during the periodic review process in a more effective way'. Even Ofwat was aware that its seminars for environmental groups, companies and customers were not as successful as those held for City investors and analysts. What is fair to say is that the process of the price review is not an open one. It cannot be said to be an open and democratic one. There is a high degree of selectivity as to whom the 'recognised' stakeholders are, the manner in which they are allowed to engage with the process and the mechanisms of control that govern their engagement. This is evident in the way in which the discourses of the various stakeholders either resonate or create discord with the emergent dominating 'official' discourses. However, what is also evident is that with regard to the price review process within the wider framework of regulation, consultation and inclusion of a wider polity, as part of a deliberative process has become a feature of the mode of regulation. Moreover, it is able to exercise a degree of influence and control over decision-making.

### **XI.6.5 Transparency**

The perceived transparency of the process, or lack of it, was something that was commented on by many of the players in the process of regulation. It was used as a means of conferring or withholding the legitimacy and 'rightness' of the outcome:

"I think that the high-profile that AMP 3 generated, largely through the work that we did because it was a very public process, I think that it did attract the attention of government" Environment Agency A

Great store was set by transparency, hence the importance attached to the 'openness' of the process. Transparency by itself does not make a system accommodating or responsive. There is perhaps an element of confusion in the connotations some stakeholders attached to transparency, which might account for their remarks. Transparency is a necessary but not sufficient condition of being held to account – accountability that includes the condition that if found wanting there will be a responsiveness to the challenge and an openness to change.

The benchmark of transparency was applied to a number of different aspects of the process that participants felt were unsatisfactory using this to point out what they

believed were shortcomings, or alternatively to highlight positive aspects. For example UNISON (2000) stated "We believe that there should be more transparency in the process of arriving at the new price determinations". Further, Water UK's oral evidence regarding information availability in which they agree that in certain respects there has been more transparency but that at a detailed level of decision making this is not the case. In another instance, transparency was used to describe the use of a particular tool by the Environment Agency, the spreadsheet containing information on the proposed National Environmental Programme. This was said to be an open and transparent way of presenting information and evidence of the way the Agency was carrying out its work.

Ofwat in its memorandum to the EAC made a point of stressing that it had consulted at an early stage with stakeholders and that there was a clear and public timetable as to how the review would be conducted. The implication being that even though the words were not used that this was therefore a transparent process. In a sense both Ofwat and DETR, in drawing attention to the timetable and the flow of information, were perhaps suggesting this as a proxy for transparency. Transparency as a claim and counterclaim had clearly entered the rhetoric of the review and had emerged as an important site of contest. Hence the repeated references to it within differing contexts suggesting its use both as a means of discipline and of challenging discipline. It became a powerful argument for the legitimacy and accountability of a particular part or result of the process of the review, an instrument that was used within discourses and as a constituent discourse of itself. A means of both inward and external critique;

"The processes of the current regulatory system and input into that, is that fair? It is not as transparent as it could be. Because it is such a complex issue and because there is the whole issue of commercial confidentiality. We entirely accept that that has to be there. There are elements of where both Ofwat and the water companies hide behind that far too much, which makes it difficult to see really what the issues are in some cases."

Environmental C

"Transparency is a two-edged sword and we forget that at our peril. We as an industry are very happy to say; Not fair, not transparent. The other side of the coin is I guess there would be more transparency expected of us and that may lead ourselves driven further down the road as well. This is more interference; why do you want to know why decisions were taken? Why do

you want to know how this was achieved, that's our business. Well its all part of transparency." Industry G

Although not coupled with sustainability in the discourses, transparent exchange and behaviour would constitute a feature of Habermas' ideal speech. As such it has a direct relevance to sustainability in as much as it refers to the democratisation of processes and empowerment. Thus its recognition, or otherwise, as part of a regulatory process has implications for sustainability and how this is perceived.

### **XI.6.6 Discourses and Power**

At particular key points the various parties to the periodic review would issue formal position statements or reports, as a prelude to the next stage of discussions. Thus there was *Prospects for Prices* in October 1998 Ofwat's response to and their summary of the implications of the *Raising the Quality* document. These were followed by *Maintaining Public Water Supplies* (DETR, 1999b), *Informing the final decisions on "Raising the quality 2000-2005"* (Ofwat, 1999) and the draft and final determinations of future water and sewage charges 2000–05 and finally the Environment Agency publication *Achieving the Quality* (EA, 2000). Whilst on the surface this would appear to indicate a harmonious process aimed at reaching the best outcome for all parties this was not the case. The deployment of these accounts had a particular purpose in mind. A means and a tool of establishing and maintaining a dominant discourse and locus of power over the outcome of the price review process. The outcomes of the price review were determined as much by a combination of competing ideologies, construction and representation of truths, knowledge, power and legitimacy, the enlisting of support through institutional networks and coalition of interests and the emergence of dominant discourses as to any perceived harmonious negotiated accord.

"So my role therefore was lead game player for the review and we approached it as a chess game, a number of opponents, a number of things to achieve. We set up a subgroup of our board specifically to provide if you like a political sounding board and guidance so that I could be confident, as could my Chief Executive that we were going in directions and taking positions the board was comfortable with and could live with. It was our bit of business and it wasn't even friendly jockeying for position, it is a pretty ruthless game at the end of the day, which you're playing for billions of pounds of environmental investment. I'd like to think that we won because Ministers took the view that it was their right to decide on the scale

and pace of environmental improvements and not the Director-General's."

#### Environment Agency B

Competing ideologies in the sense of whether or not sustainability had a primary or subordinate role to play in the mode of regulation. This was influenced by the manner in which sustainability was conceptualised, whether by the various regulators, water companies or other stakeholders. In this respect the support of the various members or coalitions of this stakeholder circle for a particular discourse and their ability to legitimise and imbue power was of importance to the outcomes. The perceived primacy of the economic regulator to make decisions was able to be effectively challenged and decisions steered in a particular direction as a result of the emergence of a dominant discourse with respect to the importance of environmental goals and obligations. The relative shift in power has had the effect of opening up the mode of regulation in a way not previously possible and thus marks a further development and maturing of the process.

The periodic review process was viewed as a game, albeit a very serious one, being played for high stakes, the stakes being the policy aims of the State and the mind of government. In simplistic terms it can be characterised as either policy discourse that puts the economics of the market and consumer at its heart or an approach that whilst recognising the importance of such matters seeks to provide a balance through a more equal emphasis on (environmental) sustainability. Fundamentally, the regulatory instruments used in the water industry had not changed but rather it was the use and purpose to which they were put or allowed to be put that underwent change. The formations of consent and power were undergoing a change as dominant, econocentric, discourses were challenged and resisted. This on-going dialogue was not confined to the institutional circles of the State but encompassed a wider polity that was drawn on for support and that also in turn sought to influence policy outcomes. The wider polity included those such as consumer, environmental and social groups with a direct interest as stakeholders as well as those in the background who contributed to the generality of dialogue such as commentators, the media, policy think tanks and academics amongst others. Arguably, what had changed was the social dimension, presaged by the Water Industry Act (1999) but the full impact of its measures would only become apparent from 2000.

In this water companies often characterised themselves as being caught in the middle between competing policy discourses whose support was alternatively enlisted by one

side or the other or cast as villains. In their own eyes, they were the honest citizens caught in the middle being pulled both ways.

“The Environment Agency are looking for a strong environmental gain which we would support by and large. Similarly we want to keep billing to the right level, we want to keep customers happy. So we kind of tend to be in the middle of all this, we try and influence where we think it makes sense to influence and there is an opportunity to do so” Industry E

“We cannot have a shambles that we had the last time which had the agency saying here is the NEP (National Environmental Programme) programme, Ofwat saying we are not accepting most of that and the companies stuck in the middle and Ofwat saying don't do it and the EA saying we are expecting you to do it.” Industry N

This is of course not an entirely fair reflection as the water companies are not exactly neutral or blameless in this debate. It is in their own interests to have large capital works programmes, which have proved to be a good vehicle for maintaining flows of profits, a fact that has not gone unnoticed by the regulators. They also have recourse to other ways of influencing the policy debate. Some of these measures are through their individual responses and sometimes through collective response of the industry associations as well as through the building of networks with other stakeholders in the water sector. Such networks appear to be relatively stable over time and as such transcend single issues enabling a whole range of issues from the practical to the policy to be addressed. Network membership and engagement in a common discourse is recognised as being a useful and legitimising tool that brings with it a greater ability to be listened to and to influence. Interestingly the lack of comment on involvement with or in networks of stakeholders from interviews suggests that Ofwat stands somewhat on the outside as does DWI and DETR (now DEFRA). This is to be expected, as it is these bodies that are perceived as being at the heart of policy and power. On the one hand they seek to extend and maintain that power through instruments of influence and control whilst other stakeholders are seeking ways to exert influence over the same instruments, making use of networks and alliances.

A strategy of 'subversion' that has drawn on the above strands has been to emphasise the differences both between the regulators as well as within them with the specific charge that the exercise of regulation is not 'joined up', lacking in clear policy objectives and institutionalises relationships that can be conflictual. To this was added the personalisation of economic regulation as exercised by Sir Ian Byatt during his time as

Director General of Ofwat. The clear implication being that the outcomes of such a process cannot be fair, reasonable, equitable or well considered. Challenging the accountability and legitimacy through subversion has resulted in the State responding and accommodating these concerns as part of its development of formal instruments within the mode of regulation.

### **XI.6.7 Post Hoc Enquiry**

Following the final price determinations in November 1999 both the Parliamentary Environmental Audit Committee (EAC) and the National Audit Office carried out reviews of the Periodic Review – an audit not only of what had happened, the outcomes but also of the process itself. This contrasts with the absence of any official review by the Government of the previous price review. Although *post hoc* it did at least present a form of public accountability of a process that is by the nature of the way it is set up closed to public scrutiny and influence. Again this was a development from previous practice and represents an additional set of governance procedures.

Ofwat perhaps recognising that it needed to respond to the widespread criticism and portrayal of some of its handling of the price review also carried out its own review during 2000 by way of a questionnaire survey (200 stakeholder responses out of 500 sent out) and structured interviews analysed by MORI. How much this was genuinely prompted by a desire to improve and adapt to changing circumstances, how much by a changing leadership and how much by a desire to seek endorsement and legitimation of its conduct and workings can only be speculated. There are probably elements of all three. Perhaps its own perception of itself as a purely economic regulator acting in a market driven environment and governed by economics limited its ability to respond to the emergence of other discourses. Certainly a reading of the proceedings of the EAC tends to support the view that the State (DETR) and the Environment Agency emerged with their reputations and positions within the regulatory process 'enhanced' whilst that of Ofwat in terms of transparency and attitude towards sustainable development had not (e.g. EAC 7<sup>th</sup> Report, 2000; paras 3, 69, 96, 102, 121, 139;).

“In the end when the Minister was making the final decisions about the scale of the investment programme I was in the room, the relationship was that good. Ofwat were not.” Environment Agency B

The aim of the EAC inquiry was to focus “on the extent to which the process and outcome of PR99 contributed to environmental protection and sustainable development” (EAC 7<sup>th</sup> Report, 2000, para 4). Inevitably, much of that focus was on

environmental protection and the customer. Conversely, there was little attempt to interrogate how the process and outcomes contributed towards sustainable development other than by situating it with broad reference to the Government's commitment towards sustainable development, Green Ministries and the meeting of existing obligations and a belief that what has been or will be achieved does make a contribution. There appears to be an implicit assumption that environmental and quality improvement equals greater sustainability and progress towards sustainable development. There are however, inconsistencies between what can be achieved through the regulatory process as it stands and what would be more sustainable solutions. The regulatory process is, through its design and concentration on deliverables and economics constrained to the adoption of end-of-pipe solutions. Solutions that of themselves are not particularly sustainable even though they deliver environmental and quality improvements. It is designed to tackle consequences rather than the under-lying problem of society's inefficient use of water.

The water companies contended that the regulatory process did not encourage innovative and sustainable solutions and was reluctant to 'go it alone'. In this they believed that "these are areas for society at large", that they are agents of regulatory process and that such matters are outside of their control. The EAC report noted that "the Environment Agency accepted that the current legislation tended to drive them towards "end-of-pipe" solutions.....rather than looking at the whole process" and went on to say that outcomes should be more consistent with longer-term objectives, targets and strategies as they impinge on the water environment. In spite of its promotion of the need to meet environmental requirements the Environment Agency has not been successful in influencing water companies corporate thinking to adopt more sustainable solutions or bringing about a fundamental change that would privilege them above short-term solutions. Nothing in this though on social sustainability nor a call for a refocusing of the system to ensure more holistic and sustainable outcomes. Rather there was a call for the greater use of economic instruments as a means to further sustainable development and the need for a first order change of behaviour;

"You do need a change of behaviour and so much of environmental action by the authorities, government downwards, is to try and promote a change of behaviour." Meacher (EAC, 2000, oral evidence para 330)

Such a response is understandable given that the changes to the mode of regulation have sought to address the causes of the crisis of capitalism and re-establish a stable

regime of accumulation. The alternative would be to challenge the economic order, something that the mode of regulation specifically seeks to emasculate.

The short-comings of the price review were used as further justification for the need for the draft Water Bill (EAC 7<sup>th</sup> Report, 2000, para 218, oral evidence para 402). Overall the EAC were satisfied with the outcome of the price review and the regulatory process, within the ambit of their sphere of responsibility. Whilst it was indicated that more would be done by the Environment Agency to monitor the implementation of the environmental and quality programme by the water industry there is no direct mechanism of evaluation of the wider impacts on sustainability of the regulatory process. Nor is there any discussion of how shortcomings might be addressed other than through the mechanism of policy guidelines issued by Ministers.

The EAC, after issuing its report and obtaining written responses to it from both the Government and Ofwat then held a further round of enquiry, calling the Director General as a witness. In its response Ofwat indicated that it would adopt a more collegiate attitude towards ascertaining customers' views together with other parties and that it had taken steps to improve its approach to stakeholder dialogue. More use to be made of partnering with respect to researching particular issues and developing policies. This is also true for the government as well adopting a more consultative approach. Together this is indicative of a significant shift in working practices and taken as an emerging and evolving facet of social regulation through partnerships and networks. Transparency was acknowledged as an emerging area of discourse.

"Transparency should not be expected of Ofwat alone; it should equally apply to the practices of companies. They should make information readily available, not only to Ofwat and to other regulators, but also to their customers and the public, who have a legitimate interest in scrutinising the public position of companies and regulators. All round transparency can only strengthen the robustness of the Period Review." DETR, 2000b

"I am committed to ensuring that our work, and the decisions we make, are communicated and explained. Our objective is to ensure that interested parties cannot say they do not understand our decisions. Informed stakeholders are better able to contribute to debate and so encourage better decisions." Fletcher (2001b)

It would appear that as far as price reviews are concerned there has been a maturing of the regulatory process and procedures. The conclusion, by those institutions on the

inside, that overall it was transparent appears to have led to greater confidence that this is the way in which, with some minor changes, price reviews are to be conducted. An outcome is a clearer appreciation of the roles and responsibilities of the main parties involved in this part of the regulatory process. With this clarity, there also comes greater confidence in the system's ability to function in a manner that reconciles the goals and desires of the various actors and institutions, without creating destructive tensions within a capitalist oriented system.

## **XI.7 DRAFT WATER BILL 2001**

### **XI.7.1 Introduction**

The regulatory measures implemented following the Water Summit and the Water Industry Act had done much to change the balance between social/environmental objectives and economic objectives within the water industry. Many of the discourses around which these objectives were framed drew on and emphasised notions of equity, efficiency, and sustainability which became embedded in the policy measures. However, there were other policy matters that had not been addressed by these measures.

The draft Water Bill had its origins in New Labour's pledge to reform the regulation of the utilities sector (Dickie, 1996). Water utilities were originally included in the Department of Trade and Industry's Utilities Bill (2000), but they were subsequently dropped in favour of having a separate Bill that dealt exclusively with the water industry, sponsored by DETR. This was seen as an opportunity to not only address the issue of competition in the water industry but also to attend to other issues such as abstraction licensing that had not been included in earlier legislation or regulation. Interestingly, there was no mention of the EU Water Framework Directive and its transposition into UK law through its inclusion. By this time also it was floods not droughts that were very much in the public mind and so to an extent the impetus to reform had undergone a change in tenor.

“...in the case of water, and it is a very good example, bills take a long time to work up and get government time. But the main thrust of the Water Bill goes back to 1995 when there was the big drought” Environment Agency A

The draft Bill was “shoe horned” into the final Parliamentary Session before the 2001 General Election and a notable feature of the draft was the fact that significant portions, relating to competition for example, had not been drafted.

“DETR have been clear, the draft Bill was not complete. So even the things affecting us were not complete and that was purely because they did not have enough time to finish drafting it. There was a desire to get it published before a general election.” Environment Agency B

### **XI.7.2 Sustainability and Modes of Governance**

The draft Water Bill provides an insight into the sustainability issues that needed to be addressed and legislated for as well as the preferred manner in which these could be dealt with. They were to be dealt with principally through the use of market based forces such as the introduction of greater competition. It was an opportunity for the environmental regulators to capitalise on their relationship with the minister and the State to modify the regulatory rules in favour of more environmentally supportive regulation. There was a feeling that the balance needed to be adjusted to place the exercise of policy and regulation on a more acceptable basis, as one commentator put it;

“The current imperative for change appears to have arisen largely from the almost unfettered personal powers over regulation and customer interests given to the first DG of Water Services, for eleven years from privatisation in 1989, and his skill in appearing to use them to fulfil a particular agenda” (Thackery, 2001)

The draft Bill covered issues pertinent to the further development of modes of social regulation such as independent customer representation, protection of the customer, promotion of competition and, reform of abstraction licensing and promotion of water conservation. These would also entail extensions to modes of governance as well as accompanying disciplinary measures premised on their contribution to sustainability. Hence the need to include measures to promote sustainability in a regulatory system.

### **XI.7.3 The Committee Stage**

The competition element of the Bill was marked as ‘work in progress’ and therefore little comment of any substance could be made. In the absence of this element, discussion focused on the abstraction and regulatory arrangement provisions, many related to sustainability issues. The Select Committee on Environment, Transport and Regional Affairs undertook an enquiry on the Bill and in doing so received over 30 written memoranda from individuals and organisations, for “Legislative reform on water is an infrequent occurrence, we should not have to wait another 10 years to get a

sustainable regulatory regime in place—we must get it right this time” (RSPB, 2001, emphasis added). In its Ninth Report to Parliament the Committee, noting the partial nature of the Bill chose only to report briefly on abstraction licensing and sustainable development. However, the submissions raised a number of important issues, which the Committee believed would have to be taken account of when the complete draft would be presented.

Opinions over the focus of the Bill were divided, Ofwat, Water UK, ONCC and water companies saw the legislation as placing the customer at the heart of regulation and that therefore the provisions of the Bill not only flowed from that but should be judged against that yardstick. The tenor of their submissions followed the general line that the interests of the consumer/customer should be accorded at least equal if not greater weight than that of water companies. Furthermore, any social or environmental provisions should not compromise or adversely affect the interests of the customers. In contrast, others believed that ‘Sustainable water management must be at the heart of regulation. It is important that regulators, and society as a whole, treats water as a heritage....not as a commodity” (RSPB, 2001). Among the environmental stakeholders there was a feeling that the Bill did not go far enough in its environment/sustainability orientated measures. There were fears that too narrow an understanding of environment might be detrimental to the spirit of the Bill (Friends of the Lake District, 2001) and that consumers and the environment should at least be accorded equal status. A point made during one of the interviews with informants;

“What do you think has been missing in terms of regulation and regulation policy?”

*Respondent:* “Oh, I think that is very clear and that is that regulators are not very clear including the water regulator, is not very clear whether he or she is supposed to be regulating for consumer interests alone or consumer interests and environmental interests and you see this in the speeches that regulators make. They say that they don’t know whether they are supposed to be raising the price of water to signal its scarcity as an environmental resource or whether I am supposed to lowering the price of water because it is good for consumers.” Environmental B

The committee’s report was silent on this issue except in as much as it was to be placed within the context of the guidance to be given by the Secretary of State to Ofwat on government policy with respect to social and environmental issues. In seeking to place consumer interests at the heart of the Bill the customer is constructed as a victim

in need of protection, a protection that several respondents implied they would and should afford. Hence staking out a role and position of power for themselves. The construction of victim drew on the potential (upward) impacts of the various provisions on water prices. There is the implication of the powerlessness of the customer/consumer to speak or act for themselves and to exert influence on the process. In the absence of formal mechanisms that would allow their voice to be heard, other advocacy coalitions move forward to claim their power through representing the powerless, to speak and to challenge on their behalf. So not only do they posit claims to representation, in doing so they craft concerns and issues, such as notions of service and quality. The irony is that it is precisely the institutionalisation of the sector that both allows such representational bodies – stakeholders, to emerge and denies direct representation of those that are being represented. An institutionalised market requires institutionalised customers/consumers who thereby are accorded market power. The following exchange between representatives of Water UK and the Parliamentary Committee and is illustrative of this how customers have been socially (re)constructed (ETRA, 2001, oral evidence para 188-191);

(Ms Taylor) We are looking at increased costs being passed on to customers as a result of the licensing amendments.”

(Chair) So it is really just upset about your members possibly having to pay a bit more?

(Ms Golay) It would be our customers, and that is the problem. That is why we come back to our first point that if the costs of obtaining raw water increase, as the Bill is proposing, it would be our customers eventually paying for that.

(Chair) Rather than the company profits coming down slightly?

(Ms Golay) If it is a cost that is legitimately incurred under a legal obligation, it is part of the Director General's duties to finance it. That is the law.

(Christine Bulter) What are you afraid of? Charges to customers, or lack of profits?

(Ms Taylor) **Charges to customers.**” (emphasis added)

#### **XI.7.4 Sustainable Abstraction**

The different discourses centred either on an environmental sustainability or on an economic/commercial rationale, as was apparent in the debates on the proposed

changes to abstraction licensing. The changes included in the Bill would ensure that water abstraction does not take place at the expense of the environment. The inclusion of the provisions had come about as a result of much work, brought together in *Taking Water Responsibly*. This was the government's document behind the Water Bill (ETRAC, 2001, oral evidence para 275). It identified the need to reform abstraction licensing, carried out by the Environment Agency and supported by most of the environmental NGOs. Again the impact of the drought, Labour's sustainability initiatives in government and the general perception of the public of the performance of water companies since privatisation created a supportive atmosphere for change. In the memoranda and oral evidence, many of these NGOs argued that the provisions though long over due and hence welcomed, represented a missed opportunity to undertake the fundamental reforms that moving the industry to a sustainable future required.

Opposed to the reforms was a grouping of broadly economic interests including water companies, the economic regulator and customer services councils though not bodies such as Consumer Association nor the National Consumer Council. The objections raised were not regarding the need for reform but rather the potential implications if reform were allowed to proceed as proposed. The opposition was framed in such a way as to question and subvert the environmental discourse through an alternative interpretation that stressed their 'unsustainable' nature. It did so by offering the adverse social and economic impacts as outweighing any environmental benefit to society (Ofwat, 2001; Water UK, 2001; United Utilities, 2001). For example, stressing that the costs had been underestimated or that the new arrangements should be cost effective and calling for this to be demonstrated. The Committee strongly supported the proposed reforms noting that the balance between the need to abstract water and the need to protect the environment needed to be re-addressed (ETRA, 2001).

In this case the arguments in favour of a change in the status quo implied an additional economic burden. This appears to have been weighed against the need to conserve water as an available resource on which economic utilisation could continue to rely. With the presumption that such measures, if passed on could be characterised as being necessary to move towards more sustainable practices.

#### **XI.7.5 Ofwat's Sustainable Development Duty – Sir Ian Byatt's Views**

The proposed new regulatory arrangements came in for a great deal of debate again centring around the introduction of greater economic uncertainty. A notable omission

from the proposals was a duty on the economic regulator to facilitate sustainable development especially given the fact that the Environmental Audit Committee had made recommendations to this effect in 2000. Sir Ian Byatt the first DG of Ofwat had vigorously opposed such a duty on the grounds that he already had to have regard for certain, defined, environmental conditions. He was clearly of the opinion that this was good enough. He believed that current legislation already provided for making “a positive contribution to the Government’s sustainability agenda” (Ofwat, 2001a), therefore was “opposed to a sustainable development duty” (9<sup>th</sup> Select Committee Report, ETRA, 2001) and “Ministers not regulators are responsible for social and environmental issues. I therefore expect John Prescott to give me clear guidance on the strategic direction of environmental policies” (Byatt, 1998). In this he was supported by Water UK, the industry’s trade association. Water UK was of the opinion that firstly, it would blur accountabilities and secondly, it would assign to unelected regulators a role that should be a political one to be exercised by government.

It was clear that the weight of opinion was in favour of a sustainable development duty and importantly this was supported by the Minister responsible for the Bill. During the examination of witnesses the Minister, Michael Meacher said;

“....with regard to sustainable development, should the Director General of Ofwat have to have regard to sustainable development? This is arguable and I personally take the view that that would be desirable....This is an issue which is being discussed within government at the present time....In my view, as Minister responsible for water, having to take account of Ofwat and other relevant departments, DTI and Treasury in particular, he should take account of sustainable development....I believe that the government’s overall commitment to sustainable development from the Prime Minister downwards would make it extremely difficult to suggest that the Regulator should not have to take account of sustainable development. We are requiring all government departments in all their planning to take account of sustainable development. There seems no reason to make an exception here, but we do need to make it explicit, I agree.” Michael Meacher (ETRA, 2001).

#### **XI.7.6 Ofwat’s Sustainable Development Duty – Mr Phillip Fletcher’s Views**

Given support not just outside but also inside the political processes, the views of Ofwat did undergo something of a shift “I know that the Director General, Phillip

Fletcher, has given his views on this which are probably fairly similar [to my own].” (Michael Meacher, 9<sup>th</sup> Select Committee Report, ETRA, 2001). It should also be noted that Phillip Fletcher had only recently taken over from Ian Byatt as the new Director General when called upon to give evidence to the Committee and although he was intent on playing down any change “I do not see this as marking a sea change in Ofwat’s approach to regulation.” (Fletcher, 2001a), there can be little doubt that it did at the very least represent a change of emphasis;

“The environment subcommittee said, ‘we think that the financial regulator (Ofwat), the DWI, the Environment Agency, the financial regulator should have an environmental sustainability duty’. Ian Byatt would probably have said no, Philip Fletcher would probably say, in fact he does say, yes but with conditions. Then he would say as a footnote, PS I don’t really know what this means. I don’t know what it means for the water industry”. Social B

“I concluded after a bit of thought, no, it was actually quite proper and helpful that I should have a sustainable development duty that nobody should be able to accuse Ofwat as they did in that original EAC report of being anti environmental.” Phillip Fletcher.

The DG of Ofwat went on record as saying “Ofwat should be given a specific duty ‘to have regard to sustainable development.’ within the Water Bill (Fletcher, 2001b) reiterating this during his oral evidence to the Committee, which went some way to responding to mounting criticism of Ofwat<sup>13</sup>.

The Select Committee concluded;

“We recommend that Ofwat should be given a duty ‘to facilitate sustainable development’. So framed, the duty will help provide an appropriately broad and balanced context in which co-operative working between the economic regulator, the Environment Agency and other actors in the regulatory process can flourish.”

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<sup>13</sup> The Environmental Audit Committee report on the Periodic Review, Water Prices and Environment HC597-1 had criticised Ofwat for demonising the environment and a 1998 committee report that said that Ofwat saw its role in terms of only of protecting the consumer from rising bills.

Shortly after Mr Fletcher had this to say;

“I do not see this as marking a sea change in Ofwat’s approach to regulation. Rather, I believe that it would help to continue to focus our thinking on key aspects of the regulator’s task. Sustainable development duties or not, Ofwat and the Environment Agency have complementary roles to play in the regulation of the water industry, joined with [DWI]. We shall continue to have a lively debate on various issues and specific investment proposals as the next capital programme, AMP4, is developed. But I believe that we shall start from a common platform of understanding, to the benefit of the industry, its investors and its customers.”

### **XI.7.7 Sustainable Development and Ministerial Guidance**

Placing a duty towards sustainable development on the economic regulator needs to be considered together with the proposal that the Secretary of State should have the power to give social and environmental guidance, i.e. sustainability guidance. Ofwat would be required to have regard for and take into account such advice. It left to the discretion of the regulator how such advice would be taken into account when exercising regulatory functions. Not all stakeholders were happy with this wording of the duty, feeling that it was too weak and left too much at the discretion of the regulator. For some environmental NGO’s there was unhappiness with this wording.

“would you welcome there being a duty on Ofwat to have regard for sustainable development?”

Respondent

Definitely, if not stronger - to promote sustainable development, have regard to it is a bit of a weasel word.” Environmental D

Most other stakeholders did not comment on the wording but rather on the potential impacts of such guidance and its interpretation by Ofwat, by implication assuming that the Director General would not ignore such guidance. This was however a concern of the Committee reflected during its questioning of the Minister especially as the Clause as framed was not equivalent to an explicit statutory duty on the Director General. The Minister was of the opinion that in such an event this could be handled within the existing system and was reluctant to go so far as dictating on such matters though he did concede “If there continued to be a major lacuna in terms of social and environmental concerns, we might have to change the legislation”. But as the Minister

said "To dictate to him exactly how he should make that judgment would be to diminish the proper role he has to take account of all these factors. I am doubtful about how far the government should excessively prescribe how others who we set up with confidence and in whom we have faith should make their judgements." (Michael Meacher, 9<sup>th</sup> Select Committee Report, ETRA, 2001). Such an approach seeks to maintain 'arms length' regulation and the separation of policy from implementation a particular feature of this mode of social regulation.

There was broad support from all parties for the measure though naturally there were particular points made by the various respondents. The water companies had particular concerns that they might not be allowed to recoup additional costs that might arise from such guidance to Ofwat. This even though there was a commitment that such costs would be allowable, indicating a degree of caution with the workings of the economic regulator. Other (more partisan) respondents sought to place a particular interpretation the clause that reflected their remits, so for example the National Consumer Council placed it within the context of disadvantaged and vulnerable groups. Ofwat's view was that this was an extension of the principle of guidance from the Minister that they already had experience of and were comfortable implementing. From Ofwat's point of view, it accorded their actions a degree of legitimacy that they would otherwise have been lacking and thus open to challenge. The Government's response (DETR, 2000b) to the Select Committee's recommendation was;

"We propose to amend the existing clauses of the draft Bill to give the Director General a specific sustainable development duty as the Committee recommends. We propose that this duty should be worded along similar lines to 'shall act in a way best calculated...to contribute to the achievement of sustainable development."

### **XI.7.8 Social and Environmental Guidance**

It is apparent from some of the above that a sustainable development duty and guidance on social and environmental issues are both intertwined, often seen as overlapping. Guidance on such matters was supported as it was seen as providing a mechanism whereby consistency and compatibility between government policy and regulatory activities could be achieved, noting that in the past this had been at best difficult. The mismatch between the relationship between DETR and the Environment Agency on the one hand and DETR and Ofwat on the other was seen as an obstacle that this was designed to overcome.

“Recent guidance on social matters from DETR has not been well drafted, and Ofwat have had their own social agenda differing from that of DETR. Companies have been caught between the two. In the case of environmental objectives Ofwat issued guidance on the handling of changes to companies’ obligations in its final determinations document that was not agreed with DETR or the Environment Agency.” Water UK

Indeed Water UK seemed to advocate an almost interventionist role for government by suggesting collaboration between regulators on a continuous basis overseen by DETR with respect to sustainability issues (Bannister, 2001). Water UK was keen to emphasise that the industry would like intervention where there were conflicting objectives between regulators arguing that this would aid sustainability. The Committee pointed out that in effect the intention seemed to be to curtail the independence of the regulators, making them subordinate to political processes. A curious point of view by Water UK given that their position had been that Ofwat was too interventionary in its relationships with the water companies. In part, it was prompted by Water UK’s concern for more ‘joined up’ government, this being a (debateable) way to reduce regulatory uncertainty also but reflective of a more general concern.

“We welcome Part II of the new Bill and in particular: The Director General’s obligation to take into account Statutory Guidance on Social and Environmental matters (clause 28). Although Ofwat already has specific duties associated with environmental and social policy, this Clause will enable Government to ensure that regulatory activities are compatible with environmental and social policy.” New Policy Institute (NPI,2001).

Guidance by the Secretary of State to regulators has been a feature of the regulatory system since its early days and is one that has been gradually extended by various acts of parliament e.g. the 1999 Water Industry Act. The fact that the power to issue guidance was included in the draft Water Bill would suggest some dissatisfaction over existing powers and its effectiveness. Its effectiveness that is as an instrument to direct regulators in seeking to strike the balance between the independence of regulators and implementation of a political ideology. All regulators have drawn on guidance as a means of establishing a legitimate basis for their actions within their particular spheres of influence and responsibility. In part it has been the interpretation of where the balance of discretionary power lies that gave rise to dissatisfaction on the part of many stakeholders.

“The Director General already has quite specific (discretionary) powers and I think that the ministerial guidance that is proposed in the Bill could further direct that and bring some of the strands together. It would be useful if the ministerial guidance brought those together in a specific way.” (English Nature, 2001).

The general unease resulted in a coming together of stakeholders and government to mount a challenge to the economic regulator’s discretionary ability through an increased ability to issue guidance. It is of interest to note that the consensual nature of any proposed guidance was stressed both by DETR as well as by others such as the EA and Water UK, in contrast to the implied non-consensual approach by Ofwat.

The suggestion of a more overt role by government was resisted by ONCC who were of the opinion that instead of a continuation of the trend of using the regulators to deliver social policy objectives other agencies and mechanisms should be used. A note of caution was sounded the Chair of the Parliamentary Environmental Audit Committee, which had been vocal in its criticism of the regulators and more especially the economic regulator. That Committee felt that the Periodic Review Process had delivered a satisfactory environmental outcome in terms of the planned investment programme. However, this had not been set out within a framework of long-term policies and goals. The requirement to give statutory guidance was an obvious means to ensure that the Government’s long-term objectives would be clear to Ofwat. Hinted at is a concern that guidance should be broad based and benefit from a mix of policy and pragmatics by drawing on available expertise, a point also made by some of the environmental groups.

“This statutory guidance would be an obvious means to ensure that the Government’s long term objectives are clear to the Director, in line with our recommendations. However, it is worth bearing in mind that the DETR already provides guidance to the DG during the course of periodic reviews on the nature of the environment and quality programme it wants to see delivered. It is not clear how this guidance would fit with that envisaged under Clause 28. This existing guidance is prepared with input from the EA and DWI and I feel that it is important that any new arrangements do not reduce this contribution in any way.” (Horam, 2001)

One respondent pointed out, the powers of guidance introduced in the 1999 Water Industry Act had not been exercised by the Secretary of State, calling into question both the need and the motive behind the inclusion of such powers. This does seem to

suggest that the retention of more prescriptive powers of guidance to the Secretary of State has more to do with the trappings of authority rather than a desire to set in motion a particular notion of sustainability.

## **XI.8 SUMMARY AND CONCLUSION**

### **XI.8.1 Summary**

The focus of this chapter has been the changing nature of the sustainability discourses and the accompanying evolution of the mode of social regulation to accommodate the necessary changes to the institutional framework of the water sector. In particular the chapter has taken the period 1997 to 2001 as its temporal framework within which to conduct its investigation, as it is the contention that this period represents the start and development of the changes referred to. Within this period a number of key events or processes have been identified as either being instrumental in bringing about change or providing a nexus around which evolutionary changes has occurred. These processes are: the Water Summit of 1997; the 1999 Water Industry Act; the 1999 Period Price Review and; the draft Water Bill 2000. Taken together they represent a continuum of development that has left governance and mode of social regulation of the water sector significantly changed when compared to the start of the period.

Three types of change have taken place. Firstly, both the mode and dominant discourse of regulation at the start could be characterised as being economic rationalist centred in that this constituted the main aim and focus of regulation. This has been challenged to the extent that economic considerations are no longer the sole or predominant focus. Secondly and related to the first is that sustainability is no longer a peripheral matter to the mode of regulation but has become a driver and focus of regulation such that it is balanced alongside economics. Thus the customer is no longer characterised as a utility maximising individual intent on receiving price cuts at the expense of the environment but rather as willing to pay for environmental and social improvements, adding an extra dimension to any economic analysis of water prices. Thirdly, there has been a marked move away from minimal State intervention and the propagation of 'markets' to a situation where the State has reserved for itself greater powers of guidance and direction. For example, the State has intervened in the market functions to remove the ability to disconnect for non-payment and the use of charging by water companies as a proxy for social policy measures. These changes are reflected in the evolution of the dominant discourses associated with them as well as the challenging discourses.

The impetus for change may be ascribed to two main factors that disturbed the prior state of equilibrium, which demonstrate a high degree of fit with Sabatier's Hypotheses 4 and 5 (1998, p.106). In the first instance the change in ruling party brought about a change in the forces that instituted the particular mode of regulation and governance. Secondly, what Sabatier (1998, p.106) refers to as significant external perturbations, namely the 1995-98 drought and leakage, the issue of fat cat remuneration, water company profits and rising prices and concern over rising levels of disconnections. The second factor can be characterised as both being a crisis in and of capitalism to which the state would be required to respond. The crisis in capitalism has been addressed through discourses of sustainability while the crisis of capitalism has been partially addressed but not resolved through extension of modes of governance and regulation. By focusing on the sets of events it has been possible to trace the reactions within the institutional framework and map the adaptation of the mode of social regulation to accommodate sustainability and the changing circumstances and social forces. The changes have been mapped through reference to the discourses employed and that have shaped the particular outcomes. There was nothing predetermined about these responses and outcomes, they have been shaped by discourses.

The events considered have been approached from the perspective of; what do they tell us about the modes of governance and regulation and; what do they tell us about sustainability? The former may be accessed through considering the events as arenas within which discourses occur and the latter through the discourses themselves. In the case of the former the change in content and focus of the dominant discourses have been mapped such that they reflect that there has been a gradual broadening both horizontally and vertically of governance reflecting a broadening of the role of regulation to include social and environmental (sustainability) objectives. As part of this there have evolved a variety of mechanisms for policy learning; through the expansion of mechanisms of (distanced) democratic accountability (e.g. parliamentary committees), an increasing role for civil society institutions through consultation processes and the acceptance and spread of advocacy coalitions and, through evolving governance mechanisms. Importantly and as a consequence of changes in the mode of social regulation there has been a move away from its isolationist approach by Ofwat, evident through this period.

With respect to sustainability, this has evolved from being a mainly economic construct (e.g. sustainable business, sustainable prices) to one that seeks to balance business,

customer, environment and society. However, this is firmly rooted within the weak sustainability paradigm with its notions of first order change (Laughlin, 1991), the meeting of statutory requirements and a focus on effects rather than causes. A significant influence on the discourses has been the notion of transparency; the - who decides that has to do with the relations of power. Social sustainability issues have for the most part been dealt with in a 'top down' manner focusing more on equity and policy issues rather than operationalising the societal aspects of sustainability. More critically it may be said that in spite of these changes sustainability as conceptualised within the mode of regulation is about meeting obligations rather than promoting sustainability, as described in Chapter IV.

Given the ability of the water sector's institutional framework to respond to changes in external and internal forces and to stabilise the accumulation system it is suggested that there is an emergence of a distinctive sectorally based Mode of Social Regulation. It is able to respond to sustainability without compromising the market-based system that provides it with its core values.

### **XI.8.2 Conclusions**

In this chapter the changes to the regulation of the institutional framework of the water sector have been traced through the consideration of four emblematic series of events. The need for the system to evolve has been associated with the conjunction of circumstance that were a change in ruling party coupled with external factors that manifested themselves as a crisis in and of capitalism. In tracing the events that arose in response to this, there has been a focus on discourses and on the development of the modes of governance and regulation within the sector. A conclusion is that there is evidence to support the idea that there has been a significant and deep seated change in the institutional regulatory framework and its practices.

## CHAPTER XII: SUMMARY DISCUSSION & CONCLUSIONS

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*'It's a Snark!' was the sound that first came to their ears,*

*And seemed almost too good to be true.*

*Then followed a torrent of laughter and cheers:*

*Then the ominous words, 'It's a Boo –'*

*'Then, silence. Some fancied they heard in the air*

*A weary and wandering sigh*

*That sounded like '– jum!' but the others declare*

*It was only a breeze that went by.'*

Lewis Carroll, *The Hunting of the Snark*

### XII.1 SUMMARY

In 1876 Lewis Carroll published *The Hunting of the Snark* and has since that time been used as an allegory for among other things nuclear energy and the atom bomb, the capitalist system and search for material wealth and, a satire on the philosopher's search for the Absolute. It describes 'the impossible voyage of an improbable crew to find an inconceivable creature' (Gardner, 1967, p.21). That in many ways is an apposite summary of this inquiry.

In starting to consider the question of regulation and sustainability in the water industry of England and Wales the historical background provides a point of departure. Understanding the present and thinking about the possible futures must to a great extent be premised on what has taken place as that journey has both foreclosed some options and opened up others. It would be difficult to understand the current framework and institutions of the water sector without some knowledge of how and why it came to be constituted and function in the way it does. The Historical Context of the Water Industry sets out to provide an overview of the more significant influences on the development of the current institutional set up of the water sector. It notes the failure of free-market based privately owned water companies in the nineteenth century to provide adequate water services to meet the social and economic needs of society at that time. And it resulted in the almost wholesale take over of the responsibility for service provision by local authorities. It also, as a consequence contributed to the notion of access to water services as being a right to which people were entitled.

In the 1980's the influence of the European Commission's various environmental directives having to do with water highlighted the need for major changes to the way in

which the water industry impacted the aqueous environment. At the same time economic strictures and political ideology within the UK were to guide proposed reforms along the path of privatisation. However, given the peculiar nature of water that privatisation of the water industry could not mean the wholesale conversion to a free market with minimal state intervention. The monopoly nature of the industry and the particular manner in which the government of the day choose to constitute the industry inevitably meant that there would be close State regulation across social, environmental and economic spheres. Indeed, in many ways the re-regulation of the water industry was even 'thicker' than when it had been in public hands. This was partly due to the need to respond to a broader social and environmental agenda but also as a result of the efforts of principally the economic regulator, to exercise effective control over the workings of the water companies. Certainly a feature of the first years of privatised operation was the dominance of economic regulation.

The rationale for and the purpose of the regulation of the water industry is more than just curtailing the power of natural monopoly suppliers and a response to incomplete property rights and markets. Regulation is about both rules and norms of acceptable behaviour and therefore encompasses both formal regulation in terms of compliance with juridical requirements but also informal in the way in which such norms are derived and their extra-judicial enforcement. The State plays a central role in not only setting in place regulatory structures and practices but also in balancing competing claims. As such regulation has elements of a bargaining process in which the State, industry and civil society seek to achieve an appropriate balance between their often competing interests. The chapter on the Regulatory Framework explores some of the current ideas regarding regulation and then places them within the formal structure of the institutions and organisations of the water sector. A cursory examination of the formal regulation of the water sector reveals a complex and overlapping framework of organisations that together have some form of jurisdiction over every aspect of the provision of water services. This framework is made up of an intersecting vertical and horizontal network of relationships that gives rise to multi-level and multi-purpose governance with responsibilities that range from the local to the trans-national (in the case of the EU). A particular feature is the relative lack of democratic involvement and indirect (diffuse) social regulation in the provision of what many still regard as a public good.

Chapter IV Sustainable in Theory explores the meanings of sustainability, how it has been conceptualised and its influence on policy development. To theorise

sustainability is to theorise about normative beliefs and behaviours, ideas of well-being and social enablement. Any perceived need for change, to move towards a more sustainable society, or environment or business is predicated on normative values and judgement not only about the current situation but also about what the alternative might and should look like. As such sustainability is imbued with ideological and political content as any change requires an engagement in a political process, with politics here being understood in its widest sense. But any change or need for change also depends on the State and completeness of knowledge and as knowledge is never static but continuously developed it means that the processes of change are open, on going and subject to re-evaluation and reinterpretation. It also implies that human agency must be a key consideration in any discussion of sustainability. Human agency has engineered the present, the result of the sum of individual and societal choices and it is precisely the ability to chose that will dictate the future direction of progress/change.

Societal choice and competing normative claims and values almost inevitably mean that the State has a significant role to play, certainly in western market-based liberal democracies. In this respect the actors and agencies that comprise the State apparatus are both empowered and constrained in how they can act and the powers that they have to bring about change. They are not a monolithic entity, impervious to and uninfluenced by capital and civic society to make and impose its own choices rather it is open (to some), a site of struggle. Statist actors and agencies seeks to balance, reconcile and impose their own (in)formed normative sets of beliefs as policy, through the means at their disposal. They are then facilitators of change, intermediaries, which by their nature privilege the *status quo* and relies on utilitarian concepts. It is not surprising therefore that the dominant view of sustainability may be identified with what is termed as weak sustainability. It is accommodating of the present economic system, it regards nature as a resource that is to be used and relies on technology and ideas of the substitutability of natural and human capital to overcome what others see as limits to growth. Economic development and growth is therefore key to achieving sustainability and the negative effects of growth can be mitigated by coercive authoritative structures. Incremental change is the way forward and issues such as inter-generational equity can be deferred. In contrast strong sustainability questions these assumptions and sees the need to change individual and social values as the key to becoming sustainable rather relying on organisational compliance. It brings into question the relationship between sustainability and democratic processes.

The theoretical underpinnings of the inquiry, outlined in chapters V and VI, are to be found within political economy and a critical theory paradigm. At its heart, unsustainable practices are rooted in the commodification and alienation of labour from nature that is inherent in a capitalist society and its one-dimensional view of value. Forms of capitalist society set up social and institutional relationships that are predicated on the particular form of the mode of production. The state is a functional necessity both as a site and agent of intervention in capitalist relations and as regulator of access to resources and the conditions of production. The crisis tendencies inherent in capitalism manifest themselves not as absolute shortages in resources, for example, but rather problems of technology or knowledge that require resolution. Régulation Theory (RT) provides a means of analysing the ways in which the modes of production and social regulation adapt, accommodate and consolidate so as to accommodate and stabilise particular capitalist crises. Régulation Theory along with Fordism/Post Fordism has been used to consider the resulting role of the state, non-economic stabilising mechanisms and the accompanying structures that arise and perpetuate. Recent work on the rescaling of the state and its institutional mechanisms and re-regulation has been extended to consider local levels of economic co-ordination while this work extends the approach to an industry specific situation. In this respect it is shown that the RT approach can be applied to the water sector as a means of providing an explanation of the institutional and regulatory developments that have taken place since privatisation. In response to the unique characteristics of water both as a physical and a socially constructed object, the State has created a variety of new institutional arrangements that embed both vertical and horizontal networks of regulation in an attempt to mediate between the often conflicting goals of capital, labour, civil society and the environment. Alongside these formalised structures there have also developed networks of coalitions around particular policy issues and approaches. Together these form part of the mode of social regulation that has developed in the water sector with the State and its various agents as the points of convergence and mediation. Whilst RT provides a framework for interpreting the development of a mode of regulation the role of discourse sheds light on how the particular mode has evolved. Foucault has theorised as to how power and truth are established and maintained through discourse and the deployment of disciplinary procedures and practices. The rise of technical discourses especially through the State and its agencies has had the effect of transferring perceived power to elites and given rise to a culture of expertocracy within sustainability. However, such dominant discourses and their conceptualisations of what counts as knowledge are resisted and

part of the mode of regulation is its ability to sublimate and assimilate such resistance within itself.

The research is by the nature of the subject matter qualitative and is predisposed to a critical theory approach but one that draws on elements of a constructivist paradigm in its approach to reality. The research lays a greater emphasis on the socially constructed nature of reality and seeks to study things in their natural setting and attempts to make sense of what is observed in terms of the meanings that people bring to them. It starts with the assumption that the social world cannot be understood in terms of causal relationships that do not take account of the fact that human actors are infused by values, intentions, attitudes and beliefs. Knowledge of the social world is mediated by power relations that are both socially and historically constituted and that are passed as facts that cannot be separated from value judgments. Thus it is held that there is no single interpretative truth and that the observer or commentator is not and cannot be disinterested or dissociated from what is being observed. In such a schema knowledge is a social artefact produced by people. Ideologies materially affect social and institutional practices and therefore understandings of truth cannot be divorced from the conditions of society.

In chapters VIII to XI the theoretical perspectives developed in chapters V and VI are used as a lens with which to interpret the qualitative material gathered through the fieldwork and interviews. Discourse functions within power relations in such a way as to make things real. Thus though the participants in the water sector have taken on board sustainability as an issue they have each reformulated it in their own image, to reflect the goals and purposes of their organisation and the great majority have formulated sustainability in varying shades of an economic rationale. Interpreting sustainability in predominantly economic terms provides the opportunity to challenge the consistency of its propositions with regard to their impact on the economic system and particularly the water companies as businesses. Such reactions concord with a weak sustainability approach in which debate centres on the degree to which the current economic system requires incremental change. The re-regulation, the extension of regulation and the growth of multi-dimensional networks have been interpreted as disciplinary structures that enforce and reinforce regulatory relationships, create and share particularised bodies of knowledge and extend self-discipline. At the same time resistance to discipline within the mode of regulation is mounted through discourses of transparency, economic efficiency, accountability and the need for democratic control. The mode of regulation has been responsive enough to

accommodate these discourses through the institutionalising of network coalitions and consultation procedures as a feature of evolving modes of governance. The features of a stable mode of social regulation of the water sector have been identified as regionalism, inclusion of oversight as a form of democratic accountability, consultative forums with policy network coalitions, sustainable development focus and a move from government to governance.

The chapter on Developments in Water Regulation Policy uses the same theoretical approach to interpret policy developments during the period 1997 to 2001 by focussing on the 1997 Water Summit, the 1999 Water Act, the Periodic Price Review and, the 2000 draft Water Bill. It posits a link between a crisis in capitalism and a policy response to the crisis, manifest through the above events, that has given rise to the development of the particular mode of regulation of the water sector. The analysis therefore complements and extends that presented in the preceding chapter. It presents the development of the mode of regulation within a continuum of adaptation and change that has seen a move away from a minimalist approach to State involvement in the strategic functioning of the water sector and the embedding of sustainability as an overarching goal of the industry such that it offers a counterweight to a purely economic rationale for the water industry.

## XII.2 DISCUSSION

This inquiry started out by raising the question as to whether the form of regulation of the water sector in England and Wales encourages progress towards sustainability? In this section the various threads are drawn together in order to answer that seemingly simple question. It is suggested that there is no single definitive answer. The reason for this is that the answer will depend on individual understandings of the nature of sustainability. It is also clear that regulation, in whatever sense it is seen, is not of itself a causal effect that brings about more sustainable practices or progress towards sustainability. Regulation is but a tool that is fashioned and used for the achievement of a particular purpose. If that purpose is sustainability then it needs to be considered in the light of what is meant by sustainability. Meanings or understandings of sustainability have an ideological and political as well as ecological and economic content. As such sustainability inevitably becomes associated with normative principles, beliefs and value systems such as preoccupation with human well-being, provision of basic needs, welfare of future generations, preservation of environmental resources and global life-support systems, integrating economics and environment in decision making and popular participation in development processes. Thus

conceptualising any move in the direction of greater sustainability is a political act. The processes of politics and sustainability cannot be separated from each other and can therefore be seen as part of the ongoing debate about the nature of social progress that has concerned political decision-makers and the social sciences throughout the twentieth century. And it is about shared understandings of the natural world and humankind's relationship with that natural world.

If there were a broad subscription to the weak version of sustainability or acceptance of an eco-modernist approach to sustainability then the answer to the research question would be; yes, regulation has contributed to progress towards sustainability.

Weak sustainability does not question the present mode of economic development and market-based capitalism, believing in an evolution of current institutional structures capable of accommodating the changes required to meet sustainability requirements. It does not question the basis on which our society and economic system is founded but rather accepts it and believes that within itself it has the capacity for its own salvation. It is based on the assumption that it is possible to substitute one form of capital (usually natural capital) with another in order to offset the diminishing capacity of the natural environment but with protection of critical natural capital and measures to allow room for ignorance over thresholds of tolerance. This preserves aggregate capital.

Some of the key ideas of weak sustainability include a concern to prevent an environmental catastrophes that would threaten human society but the natural environment is a resource that humans need to better master in order to solve present problems. The human species is what we are seeking to maintain. The present situation is near to a sustainable one and is achievable with incremental adjustment of the current system. Authoritative and coercive structures (for example market forces) along with greater technological development can be utilized to solve problems. Intragenerational equity is a separate issue and the sustainability focus is primarily on environmental issues, with equity issues following from them. Primary focus is on sustaining Western populations. There is a belief that economic development is actually essential for the pursuit of sustainability.

The accompanying framework of regulation, given the basis on which it is premised is designed to bring about first order change (Laughlin, 1996), - compliance with a set of norms within an institutional framework in order not to be out of line with others within that framework. The mode of social regulation and of governance that has evolved is

well suited to support this. It provides a set of regulatory mechanisms that underpin the continued economic functioning of the mode of production of the water industry in such a way as to provide the means to reconcile tensions between the economic imperatives and the social and environmental concerns and the constraints these impose. It provides a degree of stakeholder participation in policy matters and formation as well as democratic oversight of the functioning of the sector. The State and its institutions are perceived to have the legitimacy and technical ability to manage and make judgements regarding the balancing of sustainability with the economic functioning of the industry with debate of policy and measures being limited to the outer, functional layer of regulation rather than of an inner core of normative beliefs. The focus is on technical approaches to resolve problems of sustainability, premised on better knowledge and the growth in bodies of knowledge to empower regulation. Disciplinary or coercive processes are in place that ensures compliance and a translation of policy into practice and that also reinforce the development and sharing of bodies of knowledge both as a means of control and as a demonstration of success of the system. Mankind is placed at the centre in a dominant position with nature.

On the other hand if a critical theory and/or strong sustainability perspective is adopted then the answer to the research question would be, no. This approach holds that the root cause of unsustainable practices lies in the alienation of mankind from nature brought about through the economic commodification of nature and the type of social relationships that permeate the conditions inherent in the capitalist mode of production within the water industry. The involvement of the State and its corporatist institutions are required in order to mediate the relationships between capital, civil society and nature to ensure the continued functioning of the economic system and its access to resources. As part of the mediation by the State it seeks to counter the grosser exploitative tendencies of individual capitals that would otherwise give rise to continuing crises in capitalism and a resultant crisis of capitalism that would undermine its foundations and functioning. Within this paradigm there is no transformative relationship with nature but rather one that forecloses on other, sustainable options.

The mode of regulation that has evolved, especially since 1997 has been mapped as having the characteristics of sustainability, accountability, regionalism, governance and heterarchy. Sustainability is said to be at the heart of the State's development of social and environmental policy. Accountability is broadly identified with participation in consultative processes particularly with respect to policy issues and development and is deployed more as a means of legitimation. In general accountability tends to be

unidirectional and limited in scope. Considering the institutional framework of the water sector and more especially the regulatory side there is no clear hierarchy and instead there are both formal and informal networks of connections and interactions between the various institutions. Guiding this policy, goals and objectives are set at a high level by the State and then operationalised by the institutional framework. The mode of governance includes the array of new institutional forms with overlapping and inter-related fields of play, relying on what have been referred to as technologies of representation to exercise control, such as indicators and asset management plans. Governance structures also includes the interplay of networks of coalitions and a limited degree of democratic oversight.

The emergence of the modes of social regulation and governance peculiar to the water sector offer a perception of improving social and environmental conditions brought about through the exercise of regulation. This is demonstrated through the use of indicators that reflect efficiency gains to the industry rather than underlying equity and equality issues. The focus tends to be on short-term goals, on addressing effects rather than causes and draws attention away from the underlying systemic problems. These would be a culture of rising wants rather than provision based on needs, the diffusion of accountability by moving away from vertical integration and the contracting out of services, shifting of burdens on to sections of society rather than the companies and exporting pollution from one medium to another. It entrenches a system in which civil society is commodified into stakeholders, customers or consumers and in doing so defines their relationship with capital and institutions of the State. It forecloses on democratic involvement not just in policy formation but also in operation and implementation by relegating relationships to those of the market place. Such relegation serves to entrench unequal power relationships leaving certain sections of society unable to participate in the formation of policy discourses.

Viewed from a strong sustainability perspective many of the same points outlined above present themselves though the emphasis differs. The relationship between humans and their environment and with each other is of fundamental importance. Humans and nature are not separate from each other but rather harmony between the two is sought. Other species, not just the human species are to be maintained and intragenerational equity is an integral and essential part of sustainability. The present situation is a long way from a sustainable one, it is so far away it is almost impossible to imagine what sustainability looks like but fundamental, structural change is likely to be required. The nature of economic growth may need to be redefined or abandoned

as a dominant goal and replaced by alternatives such as a steady-state economy; local social, economic and political self-reliance; redistribution of property rights through burden sharing and a paying off of legacies of ecological damage. The precautionary principle would apply to safeguarding critical natural capital, recognising that technical fixes may generate more side effects than they solve. This raises questions about how we currently measure and view development and any change will have to involve participatory, transparent and democratic processes. This implies a change in both individual and societal values, something that the emergent mode of regulation is not equipped to facilitate.

In conclusion it can be said that there are many aspects of sustainability that the current form of regulation fails to address or even offer a means of addressing. More importantly it fails to recognise the constraints that the system itself places on the sectors ability to respond to change and in doing so does not offer an adequate system for maintaining the necessary range of future, transformative options. In the light of this the present regulatory framework of the water sector in England and Wales while offering some encouragement of progress towards sustainability (depending on how sustainability is conceptualised) it does not do so in a comprehensively enough to ensure the necessary progress across all aspects of sustainability.

### **XII.3 IMPLICATIONS FOR THE FUTURE**

Although for some sustainability is synonymous with a benign environment, for there to be realistic and realisable progress towards sustainability, it has to be about people and society. As has been observed; "sustainable development is not simply an environmental concept, but a general one, describing a new goal of economic and social (and, by implication, political) life" (Jacobs, 1999, p.37 cited in Barry, 2001, p. 382). If progress is to be made that satisfies this criterion then adaptation should clearly be the strategy of choice, providing the circumstances to nurture adaptive capacity in a whole range of systems, including governance and regulation. This should come as no surprise, after all adaptation is something that this inquiry has revealed in the development of regulation. However, too often this has resulted in the construction of diktats that seek to formalise and linearise actions and responses. Regulation, as it is currently conceived, has led to the ossification of modes of water management. There is a need to move away from regulation by restriction towards a form of regulatory guidance that moves away from solving yesterday's problems. But adaptation should not apply to modes of governance and regulation alone. It equally applies to the industry as well.

It might be argued that water companies have demonstrated a high degree of adaptation, responding to a spectrum of changes and still remaining in business. This is certainly true, but what has been at work in the vast majority of cases is selective adaptation through the use of and in response to economic instruments. Selection by way of economic instruments alone creates social difficulties that are difficult to accept in our society (impacts on vulnerable groups, social exclusion, access to services). It creates conflict in the private sphere that the public sphere seeks to resolve. These are problems of social justice that present some of the biggest (and impossible) challenges to resolve.

Giddens (1994), also, has argued that the development of our industrial and economic system has given rise to the creation of human manufactured uncertainty and risk. These have altered the framework of our relationship to the natural world and human social development. Addressing the consequences of manufactured risk and uncertainty through “providentialism”, as an inherent part of our economic system, has led to contradictory outcomes and does not move towards sustainability.

Any system that seeks to create conditions to support sustainability should recognise the complex nature of interactions and outcomes that involve humans, science and nature. The water sector is a complex adaptive system of interacting orderly, disorderly and complex elements. It is unrealistic to treat such a highly complex system as a fundamentally deterministic mechanism, capable of being controlled by centrally directed, hierarchical, command and control procedures. As has been shown it is incorrect to assume that it is only the political and administrative elites that are in control. Part of the solutions lies in promoting society’s ability to address sustainability issues and to respond to its own manufactured risks. The State, as an expression of society’s intent, needs to create the space within which society can interact with industry. Creating the conditions that this can occur in the absence of inequalities of power and influence. How sustainability issues are resolved depends fundamentally upon the institutional structures that are in place as well as the accountability and legitimacy of the decision-making to society. The test of accountability can only be properly made in an open and democratic arena. For Benton (1999, cited in Barry, 2001, p. 392) this means “re-embedding economic activity and technical innovation within revitalised democratic civil societies and legal-political orders”. In other words civil society must be brought into economic activity as an (equal) partner, “sustainable development is as much about democracy as it is about limits to growth and our ethical relationship to the non-human world” (Connolly & Smith, 1999, p. 61).

The creation of the conditions to achieve this calls for the recognition of the importance of Habermas' 'ideal speech' situations and their operationalisation through modes of governance and regulation. Regulation would thus move from being a restrictive practice to one that had inclusivity, consensus, accountability and legitimacy at its core. To do this requires change at both a policy level and a practical level. At a policy level this requires two things. Firstly, a reorientation of the basic question of regulation from 'what are we regulating for' to 'who are we regulating for'. Secondly, a continuation of the opening up of the policy arena to civil society and, the creation of spaces for 'communicative action'. This must have as one of its goals the re-ordering of the existing mode of water management, which would include governance and accountability, ownership and operating structures, measures/indicators that are society/service rather than commodity related. At a practical level, which includes the company and the local level, there need to be developed mechanisms of local, civic, involvement, accountability and control. There must be moves away from the ethos that it is the 'City' and shareholders that are the better judges of performance than the citizen that the company serves, or the regulators. Thus there is a need to challenge the existing power relationships that exist and to move beyond the expertocracies of the technical and specific interest groups to create space for the local and the civic segments of society within the overall functioning of the water industry. In this respect the EU's Århus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998) is potentially a powerful instrument. What is envisaged is the emergence of a water industry in which there has been a 'socialising' of the firm (Bakker, 2001; Letza & Smallman, 2001).

There can be no single recipe for transforming sustainability from a concept into an operational and overarching reality. In the same way it would be naïve to expect that this could be achieved by regulation (or formal processes) alone. Social reality includes elements of trust, norms, perception and knowledge, situated within an organisational framework. Individual organisations and bodies are not only themselves complex systems but they exist within larger complex environments. Patterns emerge, adaptations occur but exact predictions of outcomes cannot be made. Thus best strategies cannot be known in advance. What is required is the creation and embedding of opportunities for engagement and exchange, accepting uncertainty and the limitations of knowledge. For any progress to be made towards the implementation of sustainability there has to be a change in our cognitive knowledge, in our values and norms, in our organisational and regulative structures and, a willingness to overcome the inertia inherent in our social practices.

## XII.4 CONTRIBUTION OF THE STUDY

The study has sought to make a contribution to the understanding of the interrelationship between sustainability and regulation and the role of accountability and governance in that relationship. Previous studies of the water industry have focused on the impact of privatisation (Bakker, 1999, 2000, 2001, 2002; Haughton, 1998; Ogden, 1994, 1995, 1997, 1999a, 1999b; Schofield & Shaoul, 1997; and Shaoul, 1997, 1998a, 1998b) albeit from differing theoretical perspectives. Other studies have considered the 'real' regulation and the changes in the water industry over time (Beesley 1997, 1999; Kinnersley, 1994). At a theoretical level there has been some work that has sought to apply Regulation theory to either sustainability (Drummond & Marsden, 1995) or to water management (Bakker, 1999, 2000, 2002; Cocklin & Blunden, 1998; Gandy, 1997).

There has been a scarcity of work that has sought to bring together sustainability, regulation and accountability either at a practical level or within a particular theoretical framework of understanding. Furthermore the added dimension of their relationship to the water sector in England and Wales has been absent. The tendency has been to treat sustainability, regulation or accountability as distinct and separate spheres. Given that the water sector may be understood as a complex set of systems it is instructive to consider the complexity of the interrelationships between sustainability, regulation and accountability. By their nature complex systems are dynamic and evolutionary that respond to and produce change. The inquiry has sought to recognise that complexity and thus integrate and interpret these three elements by drawing on a variety of sources that relate to a particular period of time. And the interpretation has drawn on a particular theoretical lens. Also, the inquiry has sought to adopt a holistic approach, to the water sector as distinct from the water industry.

Based on this work, it would be impossible to provide exact predictions as to what sort of and how changes in the water sector might affect the sector and society. Nevertheless there is a desire to go beyond a critical perspectives approach and to at least make some attempt to identify the generality of change that could underpin progress towards sustainability.

## XII.5 SUGGESTIONS FOR FUTURE RESEARCH

This inquiry provides an interpretation of a particular sector, within a particular geographic and temporal context, by employing a particular set of theoretical devices.

The suggestions for future research address each one of these caveats. For the purposes of brevity only four particular possible avenues will be suggested. The first two pick up on points made above. This approach could be extended to other economic sectors, such as energy (and in particular renewable energy generation), and to other countries. This would enable cross- sectoral and country comparisons to be made in order to explore the difference/similarity contours. At a theoretical level it would be instructive to combine this with the exploration of alternative theoretical approaches in order to highlight additional aspects of the processes of regulation and accountability. In this way it may be possible to gain deeper insights into observed developments and develop more closely argued policy proposals. In addition to the use of broad scale approaches it would be instructive to tighten the focus of possible further investigations whilst remaining in the water sector. This would entail a more detailed examination of the internal/external organisational responses to sustainability regulations and its associated range of accountabilities. Thus the focus could be on the firm, the regulators or on other organisations that are routinely involved with the operations and activities of the water sector. This would be a way of taking the private into the public domain in order to highlight how internal processes are rationalised and distilled into policy responses. Lastly, there is a lack of research into actions outside of the policy sphere, into what happens at a practical level when policy becomes practice by way of project implementation. How do responses to specific regulatory and sustainability criteria evolve and how are they mediated? What accountability discourses are employed? Such an approach could inform future policy initiatives and highlight the opportunities for real democratic social involvement and act as a catalyst, informing future policy initiatives for promoting and supporting sustainability in the water sector.

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## APPENDICES

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**APPENDIX I: DETAILS OF WATER AND SEWAGE ONLY COMPANIES AND WATER ONLY COMPANIES**

**WATER COMPANIES' CONTACT DETAILS**

**The water and sewerage companies**

ANGLIAN WATER SERVICES LTD

Henderson House  
Lancaster Way  
Huntingdon  
Cambridgeshire PE29 6XQ  
<http://www.anglianwater.co.uk>

DWR CYMRU CYFYNGEDIG (WELSH WATER)

Pentwyn Road  
Nelson  
Treharris  
Mid Glamorgan  
CF46 6LY  
<http://www.dwrcymru.co.uk>

NORTHUMBRIAN WATER LTD

Abbey Road  
Pity Me  
Durham DH1 5FJ  
<http://www.nwl.co.uk>

SEVERN TRENT WATER LTD

2297 Coventry Road  
Sheldon  
Birmingham B26 3PU  
<http://www.stwater.co.uk>

SOUTH WEST WATER LTD

Peninsula House  
Rydon Lane  
Exeter EX2 7HR  
<http://www.southwestwater.co.uk>

SOUTHERN WATER SERVICES LTD

Southern House  
Yeoman Road  
Worthing  
Sussex BN13 3NX  
<http://www.southernwater.co.uk>

THAMES WATER UTILITIES LTD

Clearwater Court  
Vastern Road  
Reading RG1 8DB  
<http://www.thameswater.co.uk>

UNITED UTILITIES WATER PLC

Dawson House  
Great Sankey  
Warrington WA5 3LW  
<http://www.unitedutilities.com>

WESSEX WATER SERVICES LTD

Claverton Down Road  
Claverton Down  
Bath BA2 7WW  
<http://www.wessexwater.co.uk>

YORKSHIRE WATER SERVICES LTD

Western House  
Western Way  
Bradford BD6 2LZ  
<http://www.yorkshirewater.com>

## The water only companies

ALBION WATER LTD

c/o  
Pennon Group plc  
Peninsular House  
Rydon Lane  
Exeter EX2 7HR

BOURNEMOUTH & WEST HAMPSHIRE WATER PLC

George Jessel House  
Francis Avenue  
Bournemouth BH11 8NB  
<http://www.bwhwater.co.uk>

BRISTOL WATER PLC

PO Box 218  
Bridgwater Road  
Bristol BS99 7AU  
<http://www.bristolwater.co.uk>

CAMBRIDGE WATER COMPANY PLC

41 Rustat Road  
Cambridge CB1 3QS  
<http://www.cambridge-water.co.uk>

CHOLDERTON & DISTRICT WATER COMPANY LTD

Estate Office  
Cholderton  
Salisbury  
Wiltshire SP4 0DR

DEE VALLEY WATER PLC

Packsaddle  
Wrexham Road  
Rhostyllen  
Wrexham  
Clwyd  
North Wales LL14 4EH  
<http://www.deevalleywater.co.uk>

ESSEX & SUFFOLK WATER

Now part of Northumbrian Water Ltd

Hall Street  
Chelmsford  
Essex CM2 0HH  
<http://www.eswater.co.uk>

FOLKESTONE & DOVER WATER SERVICES LTD

Cherry Garden Lane  
Folkestone  
Kent CT19 4QB  
<http://www.fdws.co.uk>

MID KENT WATER PLC

PO Box 45  
High Street  
Snodland  
Kent ME6 5AH  
<http://www.midkentwater.co.uk>

PORTSMOUTH WATER PLC

PO Box 8  
West Street  
Havant  
Hants PO9 1LG  
<http://www.portsmouthwater.co.uk>

SOUTH EAST WATER PLC

3 Church Road  
Haywards Heath  
West Sussex RH16 3NY  
<http://www.southeastwater.co.uk>

SOUTH STAFFORDSHIRE WATER PLC

Green Lane  
Walsall  
West Midlands WS2 7PD  
<http://www.south-staffs-water.co.uk>

SUTTON and EAST SURREY WATER PLC

London Road  
Redhill  
Surrey RH1 1LJ  
<http://www.waterplc.com>

TENDRING HUNDRED WATER SERVICES LTD

Mill Hill  
Manningtree  
Essex CO11 2AZ  
<http://www.thws.co.uk>

THREE VALLEYS WATER PLC

PO Box 48  
Bishops Rise  
Hatfield  
Hertfordshire AL10 9HL  
<http://www.3valleys.co.uk>

<http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/watercompanyaddresstelephone>

## APPENDIX II: EXAMPLES OF LETTER OF INTRODUCTION

South Staffordshire Water plc  
Green Lane  
Walsall WS2 7PD

Attention: Managing Director

Dear Mr David Penna,

### REQUEST FOR INTERVIEW

I am writing to ask if it would be possible to arrange an appointment to interview you. The purpose of the interview would be to allow me to collect information for my PhD research. The subject of my PhD is the regulation of the water industry of England and Wales and its implications for sustainable development and accountability. It is supported in part through a grant from the Engineering and Physical Sciences Research Council's Water Infrastructure and Treatment Engineering programme into whole life costing approach to distribution network management. For my research, I am conducting a series of interviews with key informants drawn from government and regulators, from water companies and, from other stakeholders. To date I have interviewed top officials in what was the DETR now DEFRA, Directorate heads in the Environment Agency, the former and current DG of Ofwat, the chair of ONCC as well as the trade union movement, consumers associations, economic and environmental "think tanks" and environmental groups, amongst others.

Given the importance of regulation to water companies, it is critical to have from them an informed insight from a high level into the effects of regulation on the water business, the challenges that regulation presents and how companies such as yours are responding. A further area of interest and importance is the relationship between business and sustainable development. I believe that by discussing such matters that I will be able to get an objective and strategic assessment of your company's views and position on these subjects.

I would envisage taking about 60 minutes for an interview. All material gathered is treated as confidential and anonymous. If there are other restrictions I am more than happy to discuss them with you. For your information, I work with Prof. Adrian Saul and my supervisor is Ms L Lewis. Prof. Owen is on my doctoral board. I am flexible as to when we could meet, however, I like to be able to complete all the interviews as soon as possible and hope that a mutually convenient date can be arranged. If there is any further information that you would like or points to be clarified I will be happy to accommodate them.

Yours truly,

Wildlife Trust

The Kiln  
Mather Road  
Newark NG24 1WT

Attention: Director General

Dear Mr Simon Lister,

### **REQUEST FOR INTERVIEW**

I would like to request the opportunity to carry out an interview with you on the subject of the regulation and sustainability in the water industry. The purpose of the interview would be to allow me to collect qualitative information for my PhD research. The subject of my PhD is regulation, accountability and sustainability in the water industry of England and Wales. It is supported by a grant from the Engineering and Physical Sciences Research Council's Water Infrastructure and Treatment Engineering programme into whole life costing approach to distribution network management. In pursuit of this I am conducting a series of interviews with key informants drawn from government and regulators, from water companies and, from other stakeholders.

Through the interviews and documentary sources, I hope to gather information on the application and effectiveness of regulation since privatisation and the interrelationship with sustainability. The focus areas are regulation, accountability, corporate governance and sustainability. I am aware that the water companies regard the Wildlife Trusts as important stakeholders and that there is a reasonable degree of cooperation between trusts and water companies on a range of issues. You are thus in a position of having first hand insight and experience of the workings of water companies especially with regard to environmental and sustainability issues. It would be valuable for me to listen to your views and experience on a range of topics that are central to my research area. These range from why it is that you are perceived as an important stakeholder, what do you think motivates water companies with respect to the implementation of sustainable practices, how do you regard their consultative processes and the level of accountability and transparency, the role of regulation, how it has changed and what has influenced it and, what do you believe are the strengths and weaknesses of the present system. You may be aware of possible changes to corporate governance, I would like to have the benefit of your opinions as to what this might mean to the work that you undertake. Without the input and benefit of your experience in its relations with the water industry an important part of my PhD research would be missing with adverse consequences for its credibility.

I would envisage taking about 60 minutes for an interview. All material gathered is treated as confidential and references to it are anonymous so that the sources are protected. If there other restrictions I am more than happy to discuss them with you. For your reference, my supervisor is Ms L Lewis and Prof. Owen is on my doctoral board.

I am hope that the results of my work will be of interest and value and make a contribution to the understanding and functioning of regulation both within the water industry and within the larger socio-environmental context. In particular by developing a theoretical framework for understanding the operationalisation of sustainability it might be possible to identify opportunities to optimise its application in achieving social objectives. I hope that you will be able to spare me some time in order to share your knowledge and expertise. My contact details are given below. As you might expect I am flexible as to when we could meet, however, I like to be able to carry out all the interviews within the next two months. If there is any further information that you would like to have or points you feel need to be clarified prior to making arrangements please do not hesitate to contact me.

Yours truly,

**APPENDIX III: INTERVIEW PROGRAMME**

Date			Morning	Afternoon
	23	Feb	New Economics Foundation	
Tue	3	April	Sheffield Wildlife Trust	
Mon	30		Consumers Association	Water UK – Regulation Policy Advisor
Tue	1	May	DETR - EPE	DETR – DWI (Deputy Chief Inspector)
Wed	2		DETR – WS&R	
Thu	3		Unison – Water Industry National Organiser	DETR –SDU (Head)
Mon	14		CSERGE/UCL (Director)	
Wed	30		Wildlife Trusts	English Nature
Thu	31		RSPB (Head Water Policy Unit)	CSERGE/UEA (Director)
Wed	6		June	Scottish Water Commissioner
Fri	8	Sir Ian Byatt		
Tue	12	EA–Environmental Management Unit		EA Water Management
Wed	13	EA-Environmental Strategy		CRI - University of Bath Wessex Water
Mon	18	Ofwat NCC - Chair		
Wed	20	EA-Water Quality		EA-Parliamentary Affairs Unit
Mon	25			Ofwat - Birmingham
Tue	10	July	Anglian Water	Cambridge Water – Regulation Manager
Fri	13			Environment & Quality Manager Thames Water
Thu	19			Yorkshire Water
Wed	25		Regulation & Competition Director, Northumbrian Water	Environment Director, Northumbrian Water
Thu	26		UK Regulation Thames Water	
Tue	31			South Staffs MD
Tue	7	August	South East Water MD	
Mon	20			Bournemouth & West Hampshire MD
Tue	28			Dr Dieter Helm, New College Oxford
Wed	29		United Utilities	
Thu	30		Bristol Water MD	

## Interview Questions to Ofwat

### REGULATION

What is Regulation and What is its purpose?

- Economic Regulation
- Social/Environmental Regulation

What are your opinions about the current system of Regulation (too much too little)?

Do you think that with so many involved/different mandates that this complicates Regulation?

Who regulates the Regulators?

What influence/say do Water Companies have on the Formulation and Implementation of Regulation?

Other Stakeholders?

Regulatory process how does it contribute towards Sustainable Development?

- AMP process is end-of-pipe orientated
- Is there scope for rewarding Green Initiatives

Views on the need for the Draft Water Bill

Ofwat speaks of promoting transparent and predictable Regulation BUT Water Companies talk of Regulatory Risk and a need for Joined-Up Regulation – there seems to be two very divergent views here?

What lessons are there to be learnt?

What future Regulatory challenges do you see?

- Changes in company structures
- Why not allow takeovers
- Do you think that Competition will bring less Regulation.

What role does Politics play in Regulation?

### SUSTAINABILITY/SUSTAINABLE DEVELOPMENT

What does Sustainable Development mean to Ofwat?

How do you see it in the context of the Water Sector?

Environmental Audit Committee talked about a need to make a positive contribution towards Sustainability. Now agreed to consider a Sustainable Development Duty. What will this mean in practice?

Could the Water Companies have been left to do it themselves?

What influence does the EU have on Ofwat's policy in this area – if any?

Has Ofwat's thinking been changing and Why – the Influences?

Does Government have a coherent Sustainable Development policy?

Is there a need to demonstrate the Benefits of Sustainable Development/Environmental programmes?

Coping with Uncertainties

- Climate & environmental changes
- Water quality & public health issues
- Legislation
- EU Directives (Water Framework Directive)

Will add to costs, may be outside your control, is this fair

We only seem to get step changes when there is a crisis, then there is a public Will – we haven't had one for a while.

National Audit Office had concerns about Water Companies – Water Efficiency Plans – what could be done to address this?

### **ACCOUNTABILITY/TRANSPARENCY**

What obligations do you have towards your Stakeholders (Who are they)?

How do you establish your Legitimacy ?

Ofwat has a high degree of independence, Some Water Companies etc are uneasy about this and have suggested changes. Is this Fair?

Are you Accountable enough for your actions?

There seems to be a change in Ofwat, more reports coming out

- Annual Report
- Forward Programme

Is this a response to EAC's comment on a need to improve Accountability & Transparency?

How do you ensure open & transparent Regulation?

How accountable are Water Co's?

### **Interview Questions to Drinking Water Inspectorate**

#### **GENERAL**

What does the DWI do?

What contact does DWI have with other stakeholders?

Is the DWI influenced by stakeholders?

#### **SUSTAINABILITY**

What has been DWI's contribution to sustainability?

How are your actions influenced by sustainability?

Has this changed and if so what has driven the changes?

How do you assess the effectiveness of sustainability?

What has been the role of other organisations in the sustainable development agenda?

Can the implementation of sustainability be left to the industry?

What do you see as the future role of DWI in the governments sustainable development agenda?

How could DWI promote sustainable development?

## **REGULATION**

What is the role of regulation?

Objectives

Are these being achieved?

What do you think of the framework of regulation in England and Wales?

What role does regulation play in sustainability?

Is there enough regulation?

What is meant by 'joined up' regulation?

Do the present arrangements support the achievement/implementation of sustainability?

Are the lines of responsibility for regulation clear?

## **ACCOUNTABILITY**

Who are your stakeholders?

How do you account to them?

Has the nature of your accountability changed over time?

How and why?

Does specialisation impact on sustainability?

## **Interview Questions to Consumers Association**

### **GENERAL**

What are the areas of interest and concern to CA with respect to the Water Industry?

Why do you think the CA is qualified to get involved in the water sector?

Who does CA represent and how?

Are you recognised as a stakeholder in the water sector?

How do you give feedback to your constituency?

### **SUSTAINABILITY**

What is sustainability for the water sector?

How should this be achieved?

Are there different understandings of sustainability?

What is the role of government?

What is the role of the water industry?

Have these roles been changing?

### **REGULATION**

What role does regulation play?

Is regulation adequate in this respect?

Are there other ways of regulating for sustainability?

Should there be incentives?

What do you think of the system of regulation?

How well does it work

How could it be improved?

What are the drivers?

Is the current system of regulation good or bad?

### **ACCOUNTABILITY**

In what way could the water sector be more accountable?

## APPENDIX V: EXAMPLE OF CASE NOTES

Name: Mr XX  
Position: Managing Director  
Organisation: YY plc  
Date of Interview: ZZ/ZZ/2001  
Time & Duration of Interview: 10:30 to 12:00

### Notes

The meeting took place in the Managing Director's office in XXXXX. There were no interruptions during the interview. There were no objections to taping the interview, even before I had explained how the material would be dealt with. I used a normal cassette to tape the interview; this needed changing over part way through the interview. Other than that there were no problems with the conducting of the interview.

Mr XX's background is very much rooted in the engineering aspects of the industry. By his own admission Mr XX is a civil engineer with over thirty years experience of the water industry. He has risen to his current position through the ranks and thus knows more about the operational aspects of the business than the financial and accounting side of the business.

I found him to be a very open, likable and relaxed person. His responses were on the whole a little shorter than I have experienced with others and so there was more of a need to keep referring to my question list in order to keep the interview going. He did not; I felt, open up in his answers and try to expand on the question and his answers. I also felt that he tried too much to be fair to everyone and avoid too much controversy in his answers. Furthermore his answers tended to be couched in general terms such that it was not clear whether these were his and his companies experience or were an observation. My feeling was that this was more to do with the way he expressed himself rather than evasion of giving a direct answer to the question. He was a very open person and I have no reason to suppose that he was trying to avoid issues.

Very many of the answers I got added nothing new to the evidence that I have gathered so far but by its nature it has added to the general store of knowledge and by echoing and confirming what others have said it can be taken as confirming and has been a useful exercise in triangularisation of the information.

I did not ask too much on the Accountability aspects as I felt that we were running out of time and secondly I did not think that asking these would elicit helpful or informative responses. What I did do was to summarise to him what I thought might be his own point of view and then ask him to confirm or disagree with it. This was a tactic that I used on a number of occasions through this interview. Otherwise I felt that this was a good and useful interview to have. Another benefit of it was that it allowed and prompted me to address the questions as to what some of the points of similarity and differences are between WASC's and WOC's, the influence of the background of the MD on what the company does and how they have answered my questions.