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Bringing the river to life?

Myths, motivations and practicalities of community involvement in urban river restoration

By

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DECLARATION OF OWN WORK

Abstract

This thesis considers the 'myths motivations and practicalities' of community involvement in urban river restoration, by reference to three projects recently undertaken in urban parks in the London boroughs of Greenwich, Lewisham and Brent. In order to understand how those members of the community who get involved with such projects perceive the benefits and challenges of participation, a number of semi-structured interviews, as well as a discussion group, were held with a selection of local residents who had been involved in these three projects, in a variety of ways. Their comments and assessments are analysed within the context of debates about the value and purpose of community involvement in environmental projects, and also within the context of debates within the environmental movement about the value of urban biodiversity and habitat/landscape restoration.

It was found that assessments of the experience of getting involved were mixed, and were influenced by, among other things, the form that an individual's involvement had taken, their perception of the motivations of the project leaders, and previous experience of participatory processes. This research does highlight some very positive examples of the input that community groups can have to such a project, and in two of the case studies it was a community group that was influential in initiating the restoration work in the first place. However, there were also negative assessments, some people spoke of the 'frustration' of trying to get their point of view taken seriously and about the suspicion that can develop between different sectors of a community if influence is seen to be shared unequally.

Personal motivations for involvement were seen to cover a range of eco-centric/ anthropocentric / environmental apathy value orientations, with individuals exhibiting ambivalent and complex attitudes towards urban nature, restoration and wilderness. In particular it was found that the idea of restoration as 'liberating nature' had a strong resonance for some people, while for others this was balanced with a cautious attitude to the idea of a more 'wild' urban nature, because of a fear it would bring risks to property or human health.

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Chapter 1 - Introduction

Greater public participation in environmental decision making and practical projects is widely regarded as a good thing (see, for example: Macnaughten and Jacobs, 1997; van Ast and Boot, 2003; Ravetz, 1999, Robertson and Hall, 2003). This principle is enshrined in international declarations such as the Rio Declaration, in international law such as the 1998 UNECE Convention on Access to Information, Public Participation and Access to Justice on Environmental Matters, and various pieces of EU legislation such as the recent Water Framework Directive. Statutory conservation agencies are increasingly positioning themselves so as to be *with* the people, not just *for* the people (Goodwin, 1998). At a local level, access to government or EU grant funding for environmental projects is often dependent on demonstrable evidence that the local community has been at least consulted, if not actively involved, and that there will be tangible benefits for people, as well as for nature (for example see Environment Agency, 2002).

In part, this can be seen as part of a broader trend within society that demands a more inclusive approach to decision-making (Fischer 2002, Kearns 1995). Such demands for community-led or community-based approaches are particularly evident in health policy, for example (Zakus and Lysack, 1998). This can be seen as an attempt to reconcile the democratic ideal with the realities of a technologically sophisticated, global society, in which most decisions of importance have been made not by consensus or by vote, but on the advice of experts. The intention is that by opening out decision making to greater input from the lay community, it will reverse growing political apathy and suspicion of authority as well as creating a valuable source of added information, and in the recognition that the experts have not always got it right (Fischer, 2002; Robertson and Hall, 2003).

For the environmental movement, there is the added hope that getting people more involved at a local level is one way to draw environmental debates away from an abstract rhetoric of a 'global environment under threat' and to emphasise the importance of individual efforts towards sustainable lifestyles and to engage with wider societal issues. A rhetoric that, encouraged by the media, tends to focus on doom and gloom or takes a moral high ground can leave people overwhelmed, or demotivated (Macnaughten, 2003). It is argued, that it is

the everyday practices, in which people actually encounter nature directly, such as gardening/home-making, that informs their understanding and *relationship* to nature, (Bhatti and Church, 2001) and it is often these embodied 'vernacular' knowledges (Degen *et al*, 2003) that are most important to people, and so shape behaviour. It is hoped that greater involvement with environmental projects may mean that people are more inclined to take direct environmental action on an individual level (Macnaughten and Jacobs, 1997).

Despite these grand hopes for public participation, experience has shown that achieving these benefits in practice is much more difficult than it would first seem, whether in the areas of health (Brownlea, 1987; Ansari *et al*, 2002) or the environment (Ravetz, 1999; Goodwin, 1998). The rhetoric does not always match the reality and the potential benefits are often limited by practical factors. There are many groups of people who do not have the interest or capacity to participate in formal participative processes, whether limited by time, resources or experience (Zakus and Lysack, 1998; Matthews *et al*, 1999).

This study aims to consider critically the direct experiences and understandings of people who have participated in a local environmental project. The chosen case study sites, are three river restoration projects in London. River restoration, the re-meandering of previously channelised rivers in urban areas, is an interesting study because it can be seen as the product of two quite strong trends within conservation philosophy, both of which look on the surface to be relatively unproblematic, but in practice turn out to be quite contentious. These are first, *restoration* as an environmental aim, above and beyond traditional conservation, and second, the valuing of urban /common nature as well as the rare/threatened or pristine.

At an official level, the rationale behind each of these is still being debated (Eden *et al*, 1999, Harrison and Davies, 2002) and it is therefore of immediate relevance to investigate how understandings and perceptions were changed by such involvement.

Three urban sites where the river had recently been restored were chosen, two in South London, on the River Quaggy, a tributary of the River Ravensbourne, and the third on the River Brent in North London. A sample of people who had been involved in the project

was selected for interview to establish their motivations for involvement, as well as their experience and evaluation of the participative process itself.

On paper, these three sites share many important characteristics. For example, the physical work was completed relatively recently in each case, they each had an urban park setting, and it seemed on first sight that relatively high levels of community involvement had taken place. But as the study reveals, the nature and quality of public involvement were quite different in each case, and even from the small sample of people I interviewed, there was a broad diversity of understandings and perceptions of urban nature, and of the river in particular.

The Chapters will take the following format. Chapter 2 considers the trends within the environmental movement towards restoring as well as preserving/conserving nature, towards a greater valuing of urban or common biodiversity as well as the rare or the threatened, and towards greater public participation in environmental decision-making. The arguments that challenge or dispute the rationale behind these trends will be given particular emphasis.

Having set up these three broad themes, the practical development of these ideas will be explored in the context of river restoration in Chapter 3. The drivers that are particular to this subject will be explored first, taking in a broad literature review and a review of the main organisations involved in such a subject, before going on to consider the case studies. The intention is to use the case study material to elaborate on certain themes brought out by the literature review and to understand more fully how these are experienced in practice, as well as to challenge some of the accepted wisdom and finally to make specific policy recommendations.

Chapter 4 discusses in more detail the specifics of the methodology used in this study, and the issues raised by this particular choice of methodology. Chapter 5 then briefly reviews the history of the river restoration work at each of the case study sites, and the individual experiences and understandings of the process of involvement, and of approaches to urban nature will be discussed in the following two chapters, together with a discussion of the

implications of these findings for policy. Chapter 8 draws the discussion together into a brief set of concluding points.

Chapter 2 - Broad themes: restoration, urban nature and public participation

2.1 Introduction

As discussed in the introductory chapter, three important trends have come to the fore in the environmental movement in recent years. First, an increasing rhetoric that values restoration above and beyond conservation; second, that is concerned not only with the nature reserve but also with the urban landscape, and finally, that seeks to involve people as active participants and to 'reconnect people and nature'.

In terms of practical effect, these three trends will be explored in later chapters by reference to one of the practices they have substantially inspired and influenced - urban river restoration. But it is worth first considering each in a little more detail in order to set the historical background, and in addition to begin to highlight the inherent contradictions and contestation that each brings.

2.2 Restoration

The idea that nature organisations ought not only to conserve biodiversity, but to go a further step and actually 'restore' degraded or human modified landscapes, is an idea that has become increasingly popular over recent years (Gobster and Hull, 2000).

The history of restoration, in the sense of helping the land to recover from human impact, can be traced all the way back to the practice of leaving land to 'fallow' which has been with us since biblical times. Naturalistic landscape architects such as Capability Brown in England and Thomas Jefferson in the US have contributed to the concept of developing natural ecosystems for aesthetic purposes. Pioneering work on restoring natural systems based on an ecological understanding was carried out by Edith Roberts at Vassar College in the US in the 1920s (Jordan, 2000).

These days there are predominantly two forms of restoration – two ends to which it is usually directed. The first is restoration in order to recreate a historical landscape or natural feature – to return a river to its nineteenth century meandering course, (Eden *et al*, 1999) for example, to restore a prairie land to part of Mid West America, (Gobster, 2000) or to

recreate the lavender fields of London (BioRegional, 2004). The second is restoration in order to 'liberate' natural processes and restore a quality of 'wilderness' so that the landscape or eco-system functions without human intervention.

In the UK, for example, the idea of including 'wilder' areas within the National Parks is being explored where farming is withdrawn and natural succession allowed to take its course (Council for National Parks, 1998). 'Managed retreat' where sea defences are intentionally allowed to be breached, creating new areas of wetland, is another example of this idea in practice.

There are a variety of drivers behind the popularity of restoration. Landscapes that look 'natural' are appealing to many people, often more so than industrial, or intensive agricultural landscapes, though the extent to which this is true does vary across cultures and across sectors of society (Kaltenborn and Bjerke, 2002). As such their popularity may in part be due to a valuing of biodiversity, but it may also reflect cultural and fashion tastes, or be indicative of a sense of nostalgia for the past. In addition, there are strong economic and political factors at play. For managed retreat, one of the big influences has been the fact that it is very expensive to maintain sea walls. Inland, changes to the Common Agricultural Policy may mean that less intensively farmed landscapes become a viable option in this country.

2.2.1 Challenges

Though restoration appears self evidently a good thing, there are some legitimate problems with the theory behind it, and in practice it is not always well received.

Projects that aim to restore historical landscapes encounter problems when people disagree about which era should be used as an ideal reference point, - what century would it be best to return the landscape to. It is difficult if not impossible to find a time in recent history when the flora and fauna of an area was not influenced to some degree by human inhabitants, and this is true to a lesser extent even in countries such as America, which were relatively unpopulated until the arrival of Europeans. In any case, not all human influence is

negative. In some cases human management may increase the biodiversity of an area, as an influence that halts the natural succession before woodland is reached.

Furthermore, in creating 'natural' landscapes, many living plants may have to be destroyed, trees cut down, exotic species removed, and animal habitats disturbed if not removed. People may not consider the end justifies the means (Gobster, 2000) or it may be argued that restoration only imitates nature, whilst being very much a human designed and influenced process (Eden and Tapsell, 2000).

Finally, and particularly importantly, there is the danger that restoration can be used as an excuse to justify environmentally damaging activities by implying that any damage can be completely cleaned up in the future, or by being used as a justification for 'compensation' (Eden et al 1999).

2.3 Urban biodiversity

It is also recognised that over the past fifteen years or so, urban policy has been increasingly 'greened' and urban biodiversity increasingly recognised and valued (Whatmore & Hinchliffe, 2003).

Nature conservation groups and organisations concerned with urban regeneration have found common ground over the idea of 'liveability'. The idea being that access to green spaces and urban nature contributes substantially to what makes a city a pleasant and vibrant place to live (Degen et al, 2003).

In practical terms this has meant that most councils (urban and rural) now have a local biodiversity action plan. For example, the GLA act of 1999 requires the Mayor of London to set up a biodiversity action plan as part of the planning strategy for London, and in 2001, the London Biodiversity Action Plan was launched, sponsored by the London Biodiversity Partnership, a cross-sector consortium of volunteer, public sector and private organisations. Planners and developers are also increasingly required to take environmental issues more seriously. (Harrison and Davies, 2002).

Rationale

The reasoning called upon to justify calls to protect urban biodiversity issues are varied. Urbanisation is certainly a significant and growing phenomenon worldwide. In England, the vast majority of the population live in towns or cities. In many ways the urban and the rural are linked, part of one greater ecosystem, particularly for environmental processes such as waterways – therefore if natural 'pristine' landscapes are to be preserved, the urban must also be addressed. In any case, the countryside is no longer particularly pristine in most parts of the West, as agriculture has become increasingly intensive, the difference in ecological richness between urban and rural areas has become less marked, in some cases it has been argued urban areas may act as refuges for wildlife from large-scale industrial agriculture with its monocrops and associated pesticides and herbicides. It is fair to say that in a global context many parts of Europe, including England, should really be considered urban systems, the extent of human influence is so pervasive (Rapson and Thomas, 2000).

In addition, urban areas do have the potential to act as habitat for some nationally rare species. The black redstart for example, has become something of a flagship species for the movement. Some urban habitats are valuable for invertebrate species (Eyre, 2000). There are even a few species that are found only in such environments, one slightly obscure example being a mould that is found only on wood chippings used in ornamental parks and gardens but has never been found in the wild (Shaw, 2000).

Ecological Functioning

There is also the argument that urban biodiversity should be valued as it has an important role to play on a functional basis (Massini, 2003). Trees and green spaces can improve air quality, and soak up rain-water, reducing run-off and flooding in times of high rain fall.

Social and Psychological benefits

Quite apart from the ecological benefits, green spaces in cities are thought to provide social and psychological benefits. In many cases they form a community resource, available for leisure and recreational pursuits. It has been argued that green space contributes to urban regeneration, though the evidence is not completely clear-cut – the two do not correlate completely and where they do it is difficult to show causation, there are so many other factors involved (English Nature, 2003). Walking through natural landscapes is thought to

benefit people suffering from depression (Rhode and Kendle, 1994), while English Nature argues it is important people should not have to make a special trip to see natural landscapes but should live within a certain distance of green space (Harrison *et al*, 1995).

2.3.2 Challenges

Pressure to develop

Despite the fact that the concept of an urban biodiversity worth protecting and preserving is becoming more popular it is far from uncontested. Public policies to protect urban nature have certainly become more established, but they are threatened by economic pressures to develop (Harrison and Davies, 2002). Brownfield and 'wasteland' sites are particular targets for planning policies that pursue a compact city (Whatmore and Hinchliffe, 2003).

Wildlife as a threat to urban civilisation and order

Human preferences and ecological benefits do not always correlate. There is a strong tendency to conceptualise 'nature' and 'the city' as incompatible that dates back to ancient times. The value that is placed on each of these extremes varies from culture to culture, the Greeks for example, valued the city highly as a place of civilisation, whereas the dominant portrayal of the city in the bible is of a place of moral decline (Rhode and Kendle, 1994).

Arguably, this idea can be seen reflected in current discussions where, for some, wild areas in cities represent threat and danger and understandably associate such areas with neglect, poverty and criminal activity. More vulnerable groups such as women, children and the elderly often associate areas public open green space with a threat to personal safety. Despite the fact that most people do value highly the benefits of an urban green space, seeing it in various ways as a 'gateway to a better world' and as a place for personal relaxation and for group interaction, because of these safety concerns people's attitudes to an urban green space can be highly ambivalent (Burgess *et al.*, 1988).

The influence of gardening fashions and the garden industry

Much of the natural flora and fauna in English cities is to be found in private gardens. Bhatti and Church (2001) discuss how, with the influence of the garden industry, TV garden make over programmes, and double working households, the garden has become an

extension of the living room, a view to be admired and a status symbol, rather than to work in. Far less fruit and vegetables are grown for example, and there is a trend towards low maintenance gravel and concrete features. However there may be more complex attitudes at play, for example, in a BBC survey, 74% of respondents agreed that they 'love to care for things in the garden and watch them grow' (cited in Bhatti and Church, 2001).

2.4 Community involvement

A running theme throughout all the above, however, is the fact that community involvement is key. This is a general development in the philosophy and practice of environmental management that has moved from top-down decision making by centralised government agencies, to bottom-up, participative approaches (see, for example, Rhoads et al, 1999).

As discussed briefly in the introductory chapter, this can be seen as part of a wider trend within society as a response to the tension of the democratic ideal meeting an increasingly technocratic and complex society in which decisions are predominantly made by those with expert or specialised skill (Fischer 2002).

Rationale

The rationale for trying to get the lay public more involved in environmental decision-making is twofold. First, it is argued, that the quality of a decision is increased. Local people have specific information about a place – about what the potential problems might be, how it might work in practice, that might not be available to an outsider coming in. Second, that public support for an issue is important, and hence the project is sustained in terms of future management inputs.

In addition, there are aspects of any project that do not require expert knowledge, that are not about *how* to do something but *why* one should do it in the first place – it is about direction and relative value. In this respect, local people are as well placed as the experts to decide what is appropriate and what is not (Fischer, 2002).

It can be argued even more strongly that certain environmental management issues, such as watershed management, are inherently social in nature requiring negotiation, conflict 18

resolution, co-operation and collaboration skills above and beyond scientific and technological abilities (Rhoads et al,1999).

Community involvement in urban environmental projects

In urban areas this approach is particularly relevant. The value of preserving urban biodiversity simply does not have the same legitimacy as the preservation of 'natural' habitats (Harrison and Davies, 2002). It may well be the potential social benefits of a project that convinces funders of the worthiness of a scheme, rather than its ecological benefits as such (Environment Agency, 2002). To justify the significant sums of money that need to be spent on creating and maintaining valuable green space, as well as the opportunity cost of not developing what may be valuable land, the human benefits have to be shown to be significant. Not only that, but to make green spaces 'work' at all, to make sure they are used and appreciated, rather than neglected and feared as 'dangerous' places, they have to be accepted by local communities.

Organisations that have traditionally dealt primarily with 'environmental' or ecological issues, are increasingly changing their way of working, such that they are positioning themselves to be not only *for* but also *with* the people (Goodwin, 1998). This is reflective of an increased support for the idea that nature should be conserved, not only for its inherent value, but for its benefit for people.

Community involvement in river management

As will be discussed further in the following chapter, the Water Framework Directive is particularly emphatic in its calls for public participation and has been the most important factor in increasing the debate about community participation in river management as it explicitly requires community participation in the drawing up of watershed framework plans. It provides for three types of involvement – access to information, consultation and 'active involvement'- a term which is not defined in the text, considered to require a 'tailor made approach that is context specific'. There are numerous forms of community involvement techniques that can be applied for this purpose – covering questionnaires, interviews, focus groups, meetings 'planning for real' exercises (MerseyBasin Campaign, 2003).

2.4.2 Challenges

It is often considered a difficult task to engage local people in such activities. Certainly the number of people who turn up to official events, or respond to questionnaires is often extremely low. Fischer (2002) argues the problem is that people are uninterested rather than incapable of getting involved – people are more intelligent than is normally acknowledged, and they are often badly informed by the media. Hinchliffe *et al* (no date) argue that the energies and enthusiasms of local residents and their expertise, is often to be found much more when you look at what people *do*, rather than at what they *say*. While most forms of participation require skills of experience of speaking at meetings, or articulation in the form of questionnaires, which may limit some sectors of the community.

Furthermore, if people have experience of participation in which they have contributed their opinion, but do not feel listened do, they may then opt out – which can be interpreted as apathy (Goodwin, 1998). Similarly, people may be unwilling to co-operate if they believe the expert groups are favouring their own values over those held by the local community, presenting these values as knowledge and therefore making the participation into a learning exercise rather than a genuinely participative process (Rhoads et al, 1999).

2.5 Discussion

Participation as a 'locale' for negotiations of nature

Genuine stakeholder involvement in environmental projects is important for quite generally applicable reasons – it is a matter of respect and common sense to listen to the people who will be affected by your actions, to consider their viewpoint and to try to accommodate any genuine concerns or complaints. It is also controversial and difficult for the same reasons that political involvement is difficult in any other political arena.

Importantly, however, there is the added dimension that genuine public involvement in environmental projects also has the potential to affect and inform people's relationship with nature, with the possibility that this will translate into more environmentally responsible behaviour at all levels of action. It is a grand hope, but there is the argument that the dominant environmental rhetoric that focuses on abstract or scientifically complex ideas such as climate change, or that preaches only about a global nature under threat, requiring

global action to protect it, appeals only to a minority of the population. To reach those who would not naturally be environmentally orientated, it is perhaps better to talk about nature in terms of people's everyday encounters with it – such as gardening, surfing, bee-keeping (Macnaughton, 2003).

The understandings and meanings that ordinary people attach to nature are important, even in a society where expert scientific understandings of nature are given such prominence. To quote one author: 'our vernacular relationships with nature should be taken every bit as seriously as the folk-lore of less developed areas (Mabey, 1996: 12, cited in Bhatti and Church, 2001).

Furthermore, it is not that scientific understandings are free from human value and interpretation. Rather, as the philosopher Mary Midgley points out, (Midgley, 2004) whenever the catalogue of facts science builds up is used to relate to the wider world – when connections and generalisations and implications are made, imaginative interpretations are involved:

'We are accustomed to think of myths as the opposite of science. But in fact they are a central part of it: the part that decides its significance in our lives. So we very much need to understand them.

Myths are not lies. Nor are they detached stories. They are imaginative patterns, networks of powerful symbols that suggest particular ways of interpreting the world. They shape its meaning.'

[Midgley, 2004:1]

These myths can have powerful consequences in the way human beings relate to the world, in the direction scientific research takes and the ends to which it is put. For example, a dominant mythological interpretation of nature, since the Scientific Revolution, has been that of nature as a machine. Whereas in other cultures, at different times, nature has been perceived as animate in and of itself – as 'mother earth', or as populated by ancestral spirits. Carolyn Merchant, in her book 'The Death of Nature' (1982) argues that it was the rise of this mechanistic interpretation of the world – the 'disenchantment' of nature, that led in part to an attitude and approach to nature that saw it as something to be plundered and

'improved', rather than, as in the past – worshipped – leading in turn to the environmental crisis we are witnessing today.

In reference to the future directions of the environmental movement, it seems likely that the meanings and understandings people attach to nature will influence whether they consider it should be conserved or restored, whether they value urban and common biodiversity as well as the threatened and whether they think they should get directly involved in such efforts.

2.6 Summary

This chapter has demonstrated that urban biodiversity and community involvement in environmental decision-making are increasingly important areas and gaining in popularity. They have a great potential to bring environmental awareness closer to people, making abstract issues more 'real', and involving people in a hands on way in the care of their local environment and practical nature conservation.

In practice, however, the validity of some aspects of these concepts is still disputed, and the exact means by which they are to be implemented is still being worked out at a policy and 'expert' level. There are many potential traps and dangers in implementing such projects. In each case the success of these intentions depends on its acceptance and uptake by the local community. As such it is important to investigate 'lay' attitudes to the issues discussed above, to see whether there is a groundswell of support for urban biodiversity projects, what the challenges and benefits are to getting involved, how and why people participate in such projects, and the assumptions they bring about 'nature and the city' and how these might be altered by getting involved.

This research will explore these issues through the example of river restoration work, the history and current policy of which will be discussed in the following chapter.

Chapter 3 – Rivers and river restoration

'Today, waterfronts and waterspaces are being rediscovered throughout London. There is a river renaissance reaching from the Thames to canals and smaller streams. This rediscovery is part of a wider soul-searching that urban dwellers, politicians and policymakers are currently engaged in, by asking what kind of city do we want to live in?'

(London Rivers Association, 2003)

3.1 Introduction

One of the areas in which the three themes discussed in the previous chapter are having substantial influence is in river management in the UK. There are moves by the Environment Agency among others to promote river 'restoration' over further channelisation of rivers (Environment Agency, 2002). Restoration in this sense usually comprises the re-naturalisation of a river channel, so that concrete walls are removed and the river is re-connected with a wider flood plain where water can be stored in the event of high rainfall. This is being promoted in rural and urban areas, not only as a solution to flood defence, but also as a means of increasing the value of rivers for people and for nature – increasing the diversity of natural habitats along the river channel, and at the same time improving the aesthetic and amenity value. It is presented as a win-win situation, but again, as the discussion in the previous chapter would indicate, in practice it is not without complaints.

3.2 The history of river management in the UK

Throughout history rivers have provided many benefits to human cultures. On the most fundamental level, fresh water, is of course, essential for all life - rivers provide a source of drinking water for humans and nourish the plants and animals on which we depend for food. Rivers have also been important for humans in a variety of other ways such as for industrial processes or as a means of transportation, and many of the world's great cities are consequently situated on a river network (Mance *et al*, 2002, Everard and Powell, 2002). Not only that, but rivers provide many non-direct-use benefits in modern cities – they often

represent a rare piece of green open land, they can be used for water sports, for fishing or as a cycle/walking route.

However, rivers have also caused great problems and continue to do so. They have often been used as a means of waste disposal, for rubbish and for sewage and throughout the nineteenth century became extremely polluted – the Thames, for example, was famously virtually sterile and the smell so bad it disturbed meetings in Parliament and initiated the first pieces of water quality legislation.

Flooding is also a major problem. The autumn of 2000 was one of the wettest on record in England and Wales for 270 years (Mance *et al*, 2002). 2004 has seen a particularly devastating flood in Boscastle, Cornwall, where the residents were lucky to escape with their lives. The Department for Environment, Food and Rural Affairs (DEFRA) estimate the value of properties and agricultural land at risk from fluvial or tidal flooding in England and Wales to exceed £200bn. The annual cost of building and maintaining flood defence is around £400m (DEFRA, 2001, cited in Mance *et al*, 2002). Flooding problems are set to increase, as development on the flood plain increases, and as a result of climate change.

The management of rivers goes back to the time of the industrial revolution. The new discipline of civil engineering sought to tame rivers and put them to use for human benefit, and was valued as an example of 'victory over nature'. More recently, in the twentieth century, the engineering of rivers to provide drainage for agricultural land gained prominence. The importance of increasing domestic food production was highlighted by the food blockades in the first world war. In 1930 the Land Drainage Act created catchment boards to carry out major river works and allocated responsibility for smaller watercourses to local authorities. Until the 1970s, it was easy to obtain funding for flood drainage works, agricultural production was such a high political priority (Scrase and Sheate, 2003).

As a result of this drive to drain the land, the vast majority of rivers in England and Wales (some 85%) have been modified to some degree. These days, most flood alleviation works are carried out in urban areas, as development on the flood plain increases, driven by the demand for new houses, 1.6m houses are expected to be built in the south east by 2016 and the attractions of a riverside location. (Mance *et al*, 2002) Urban rivers, particularly in the

most built up areas are often channelised where they pass through housing estates, and may be culverted, buried underground in the most built up areas. A few, such as the Effra and Fleet in London, are entirely lost as a result, subsumed into the sewage network.

In terms of river 'health', there have been significant improvements to water quality over the past few decades as a result of the investment of thousands of pounds in treating sewage and industrial discharges, though run-off from intensive agriculture and urban areas, and silting is still a problem. As a result, now it is not water quality, but the physical characteristics of such modified rivers - primarily lack of habitat that is the limiting factor to further ecological improvement in urban rivers (Environment Agency, 2002).

3.3 River restoration

At the same time as water quality has been improving, and despite the fact that flood risk is increasing, there has been a more recent trend towards softer engineering solutions to river management, an approach that seeks to restore natural-style meanders and sloping banks to rivers that were previously encased in concrete.

As discussed in the first chapter, the drivers towards restoration can be seen as ecological, cultural and, importantly economic and political. For rivers, these can be seen expressed in the change in attitude on the part of the engineering profession and the Environment Agency, the statutory body responsible for flood defence in the UK, in European and in National legislation, and in local community based projects.

Alternative attitudes within engineering profession

There is some evidence that attitudes within the engineering profession are starting to recognise the value of alternative approaches to river management albeit slowly, partly as a result of interaction with other disciplines, such as ecology. For example, the first significant river restoration projects in the UK were conceived by a group of delegates at a river conference in 1990, with various backgrounds including ecology, river engineering and geomorphology (Eden *et al*, 1999). They were concerned at what they saw as the dominant approach to river management which sought to subdue and control the river through 'hard engineering' solutions – containing the river in channels, or burying it underground, and were interested in pursuing 'softer' alternatives that worked with the

river itself. In October 1993 the project successfully bid for European LIFE money, along with Danish colleagues, to fund the development and demonstration of river restoration techniques in the UK and Denmark. Two English rivers were chosen as demonstration sites, the River Cole, which rises on the northern edge of the North Berkshire Downs and flows into the Thames (Eden and Tapsell, 2000) and the Skerne in Darlington, North East England.

As of 1998 the River Restoration Project was subsumed in the River Restoration Centre, which has continued to collect and disseminate best practice on restoration techniques, through newsletters, conferences and 'bible' of river restoration, the manual of river restoration techniques that is updated regularly. The centre maintains a database of all the restoration projects in the UK, which now number around 600.

The Environment Agency

It is claimed that the statutory response to demand for greater care for the nation's rivers has been slow (Everard, 2004). However, the influence of such projects as the River restoration project has had an impact and the Environment Agency (EA), in particular, is coming on board, and is starting to actively promote and employ soft engineering solutions. River restoration is seen as one way in which the EA can maintain or improve flood defence while at the same time enhancing 'wildlife, landscape and cultural features' as is its statutory duty and it is actively trying to promote this approach to councils and land developers, stressing the social and economic benefits that can result (Environment Agency, 2002).

EU legislation

The European Water Framework Directive and the Habitats Directive also provide drivers for river restoration. The Habitats Directive, for example, requires the management of 'features of the landscape which are of major importance for wild flora and fauna', with particular mention made of rivers and ponds. The Water Framework Directive aims for an integrated approach to water management, and good ecological status for surface and groundwaters. Crucially, this Directive recognises heavily modified water bodies as a separate group (the other groups being rivers, lakes, estuaries and coastal waters) and, as mentioned before, for these water bodies it is usually lack of habitat over water quality that

is the limiting factor – something restoration seeks to improve (Environment Agency, 2002).

Local political drivers such as the Blue Ribbon Network

There are also certain more local drivers for river restoration. In London, for example, the capital's waterways - the Thames, its local tributaries and a network of canals - have been designated a 'Blue Ribbon Network', a policy approach to managing rivers which officially recognises their economic, social and environmental importance.

The London Plan and its Blue Ribbon Network annex, in conjunction with the Mayor's Biodiversity Strategy are important political drivers for river restoration in London. The London Plan establishes the land use planning policies for London for the next 20 years. The Blue Ribbon Network annex to the draft London Plan, published 2001, sets out the principles by which London's waterways should be managed. Significantly, these principles aim to protect not only the economic but also the social and environmental benefits of local waterways:

'To be a more attractive and green city, London must protect and enhance the biodiversity and landscape value of the BRN. It should also be respected as the location of a rich variety of heritage that contributes to the vitality and distinctiveness of many parts of London.'

[Mayor of London, (2001): 303]

Local community-based projects

One of the longest running community-based river projects is the Mersey Basin campaign, launched in 1985 by Michael Heseltine, as a government-sponsored initiative, to involve both the public and private sectors. The project had three official aims: water quality, waterfront development and community involvement. In London there are two organisations that have as their main remit the involvement of local communities in the care and appreciation of the capital's rivers: Lea Rivers Trust and Thames 21. Lea Rivers Trust organises regular clean-up days, team building days for local business workers to get involved, and 'dopt a waterway' schemes on the river Lea in North East London. Thames 21 organises clean up days throughout the capital, on the Thames and on its tributaries and has been involved with restoration work done by the Environment Agency.

The importance of community involvement

The very local projects such as the MerseyBasin Campaign, Lea Rivers Trust and Thames21 unsurprisingly have local community involvement at their core. A study of the Mersey Basin Campaign, for example, describes how 'the development of a framework for informal invention, local initiative and the fostering of community involvement has steadily become a prime objective of the Mersey Basin Campaign', in order to ensure watercourses are treated as environmental and community assets (Wood et al, 1998).

Projects that are initiated by national agencies, by the Environment Agency or the local council, do also usually have some aspect of community involvement. In some instances this is simply because there it is a procedural 'good practice' – most councils, for example, will have an established policy on community consultation. It may also be because there are seen to be practical advantages to getting people involved – encouraging schools to get involved, suggestions from local people may improve the scheme design (Nolan and Guthrie, 1999). Eden and Tunstall (2001), go one step further, and argue that in urban areas, at least, river restoration projects are often *primarily* undertaken for the community benefits they are thought to bring, considered to be a stimulus to regeneration.

3.4 Challenges

Full restoration is not possible

As discussed in the previous chapter, there are practical and theoretical objections to the concept of restoration – whether it aims in this case to restore the 'natural' functioning of a river, or to recreate a historical river course. To call these activities restoration is rather optimistic, most would more properly be defined as 'rehabilitation' – the partial return to a more natural state. The return to a historical channel course in urban areas is rarely possible because of the restriction imposed by nearby homes and businesses (Nolan and Guthrie, 1998, Eden *et al*, 1999).

What is achieved in practice is usually a compromise or a balance between the reality of a modern day landscape and the restoration ideal.

For example, the River Restoration Project (RRP) in its 1994 document considered

'the term *restoration* to be important in the sense that it conveys a *visionary* target of pristine rivers that are wholly returned to an undisturbed state. In practice, this target will rarely be achievable and restoration will comprise a *sustainable* balance between the essential needs of people and the natural environment. In practice restoration will comprise a programme of *rehabilitation* and *enhancement*'

(emphasis in original, quoted in Eden and Tapsell, 2000)

In fact, many practitioners are wary of the term 'restoration'. One alternative is 'renewal' (pers. comm., Richard Butcher Tuset, Chief Executive Lea Rivers Trust, 3 June 2004).

In practice it is difficult to get on-site engineers to 'soft engineer' projects

The implications of the fact that the history of flood alleviation has really all been a very hard engineering kind of approach, is that the civil engineering contractors who are employed to carry out river rehabilitation have little experience of the 'soft engineering' techniques that are required. For example, in one study of two restoration sites in the North West of England, (Nolan and Guthrie, 1998) the engineers were keen to create uniform curves to the course of the river and hard edges, when what had been intended by the designers was a more soft and natural feel. The authors of this paper concluded it is often necessary to have on-site supervision to achieve this effect and to have a multi disciplinary team including ecologists, landscape architects, geomorphologists and engineers. Despite the fact that there is some indications that engineering attitudes are changing, traditional attitudes do persist (Scrase and Sheate, 2003).

The ecological success is limited

The ecological benefits of river restoration, however, are limited and may not always be entirely beneficial. Restoration projects tend to be quite small in scale. On a catchment level the amount of good that can be done is limited – the river may flow through a beautiful park area where it is free to meander naturally, but a few hundred metres on it will return underground.

People are impatient and want quick results

Responses to river restoration have been found to be quite strongly positive, on the whole, both before and after completion, though slightly more qualified after than before (Tunstall *et al*, 1999). Usually, it is found that immediately following a river restoration project perceptions are quite variable. Sites are often still quite raw and the edges of the bank have quite a messy look, particularly if the site is being left to be colonised naturally. Having said that, there is evidence that on the whole, people do tend to recognise that the full benefit of the works will be more evident in the long term (Nolan and Guthrie, 1998).

What is best for wildlife is not always best for people

Security and safety are always major issues. The availability of the site to be used not only as a wildlife corridor but as a corridor for criminals can prevent local residents being willing to allow open access to the site. This means the site is not used as extensively as it could be (Nolan and Guthrie, 1998). The authors of this paper concluded that for the residents of one scheme, the actual state of the river came a definite second to security issues. There are always fears that a more accessible river will increase the risk of drowning.

3.5 Summary

There are many challenges and contradictions inherent in river restoration, which correspond to the wider issues raised in the previous chapter about how attitudes to urban nature are often deeply ambivalent. On the whole, people do value green space very highly, but it is often an ordered and controlled nature that is most appreciated – not the landscape 'restoration' enthusiasts are aiming for, and which may not be the best for wildlife. Moreover, in our increasingly risk-averse and litigious society, people are often unwilling to accept any perceived increase in risk. This demonstrates how complex a river restoration project is in having to manage conflicting demands.

Chapter 4 – Research Methodology

'In qualitative research, one explores the realities of everyday lives as they are

experienced and explained by the people who live them.'

[Burgess *et al*, 1988: 310]

4.1 Introduction

In order to investigate further the extent to which public participation in local

environmental projects, such as urban river restoration, is being successfully implemented

and how it is influencing negotiations and constructions of 'urban' and 'restored' nature,

three case studies were chosen, and a number of local residents who in some way had

participated in the project, were interviewed.

4.2 Case studies

The case studies were chosen on the criteria that some community involvement had taken

place, that the work had been completed relatively recently (so perceptions and

understandings were still fresh in people's minds) and where the restoration had taken place

in a public park, rather than on a new housing development, for example. These similarities

enabled comparisons to more easily be made across the groups, and as will be shown in the

following chapters, though there are certain themes that were common to all case studies,

there was also a great diversity of experiences, despite the superficial similarities, and this

importance of the specific has implications for policy which will be discussed.

The following tables summarise the forms of community involvement that took place, and

are continuing at each site, the features of which will be discussed in more detail in the next

chapter.

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Sutcliffe Park

London Borough: Greenwich River: Quaggy Work undertaken: April 2003 - June 2004 Project leader: Environment Agency

Forms of Community Involvement					
Local action groups formed?	User group	Consultation undertaken?	Other events and activities		
	established?				
A local action group - 'Friends of the Quaggy'	'Friends of Sutcliffe	A consultation process with local	From June 2003 the Environment		
- was formed in protest against a flood defence	Park' is being set	residents as to the acceptability of	Agency employed a community		
scheme proposed by the NRA ² in 1989 that	up by Greenwich	flood storage at Sutcliffe Park was	outreach officer, with the aim of		
would involve further channelisation of the river	council.	undertaken Jan-Feb 1995,	building links with local		
Quaggy. The Friends of the Quaggy were		questionnaires were distributed to	community groups, schools and		
instrumental in initiating the alternative flood		around 5,000 homes and to	residents.		
defence scheme, which has involved flood		community and sports groups in the	The Greenwich Parks Outreach		
storage at Sutcliffe Park.		area. A public meeting and question	officer is now continuing this		
An alternative local group also formed in 1992 -		and answer sessions were also held.	work, such as trying to get a user		
Victims of the Quaggy - in protest at the delay		294 response forms were received	group established.		
to the flood alleviation scheme and organised a		with 78% generally in favour of the			
petition demanding the immediate return to the		proposals, 16% against and 6%	A launch day was held in June		
original channelisation plans.		non-committal. ³	2004.		

Figure 1: Sutcliffe Park River restoration – key characteristics of community involvement

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¹ Since reformed as QWAG - Quaggy Waterways Action Group

² National Rivers Authority, now the Environment Agency

³ Dinnage (1995)

Chinbrook Meadows

London Borough: Lewisham River: Quaggy Work completed: October 2002 Project leader: Lewisham council

Forms of Community Involvement						
Local action groups formed?	tion groups formed? User group established? Consultation undertaken?		Other events and activities			
QWAG, also provided substantial 'driving force' and 'inspiration' for the restoration work, primarily through their report – Operation Kingfisher, drafted in 1995 - which highlighted the opportunities for restoration along the Quaggy River.	group was established by Groundwork ⁴ before work started on the park. Since the work has been completed, the group has continued in the form of a	A feasibility study was carried out in 2000 by Groundwork and the EA. Residents and park users were consulted through postal questionnaires, park surveys and consultation events, through which respondents were asked which park design and river meander, out of a choice of 4 they would prefer. 63% of respondents replied 'yes' to the question - 'would a natural look to the river encourage you to use it'.5	October 2002. The user group organised a bulb planting day in			

Figure 2: Chinbrook Meadows – key characteristics of community involvement

⁴ Groundwork is an environmental charity

⁵ Groundwork Thames London Gateway South (2001)

Brent River Park

London Borough: Brent River: Brent Phase 1 completed: Oct 2002 – June 2003 Project leader: Brent council

Forms of Community Involvement								
Local action	User group established?	Consultation undertaken?	Other events and activities					
groups formed?								
No similar,	A steering group was	Extensive consultation took place at all	A launch day was held in June					
entirely self-	established in Dec 2001,	stages of the project, including	2003.					
directed local	before work began on the	questionnaires, public meetings and focus						
community groups	park in October 2002.	groups.	As part of the e-histories project,					
were formed in the	The steering group has		Alperton Millenium Volunteers,					
course of this	since reformed as a user	70%+ of questionnaire respondents	have been recording the changing					
project.	group - 'Friends of Brent	expressed support for 'major riverside	habitat of the park through the					
	River Park'	enhancements linked to improved	seasons, along with residents'					
		accessibility to the locality and	experiences and memories of the					
		employment area' 6	local area.					

Figure 3: Brent River Park – key characteristics of community involvement

⁶ Brent Council (no date)

4.4 Interviewees

Local residents who had been in some way involved in the project were contacted through a 'snowballing' method. A key initial contact for Sutcliffe Park and Chinbrook Meadows was Victor Richardson, a Thames21 employee who had been working as the Environment Agency's community outreach officer for Sutcliffe Park. Victor Richardson facilitated the introductions with a number of interviewees (referenced as QWAG 1, FOCM 1, FR 1, SP 1, see Figures 4, 5 and 6). The founder member of QWAG was the first person to be interviewed, and introduced me to two others, another member of QWAG who had since moved away from the area (reference QWAG 2), and a local resident who had been involved with Victims of the Quaggy (VOQ 1). The vice-chair of Friends of Chinbrook Meadows (FOCM 1) subsequently arranged a discussion group to be held with other members of this organisation.

For the River Brent, a key initial contact was Joyce Ip, the council project leader for the restoration work, who invited me to a Friends of Brent River Park meeting, where I met a number of the members of that group, and subsequently arranged interviews with three of them (reference FOBRP 1, 2 and 3). I also spoke to Sylvia Tunstall at the Flood Hazard Research Centre at Middlesex university who had held focus groups with residents before the restoration work took place, and who had attended the Planning for Real day (see Eden and Tunstall, 2001).

From conversations with these local residents, and with officials from the Environment Agency and local council, it would seem that these interviewees represent a significant proportion of those who were *substantially* involved in the restoration work, though of course there are literally thousands of stakeholders such as park users, questionnaire respondents, who could be said to have been involved to some degree. They also represent a range of levels of involvement, from someone who at one point was spending forty hours a week on related issues, to a local resident who through his involvement became a community liason officer for the NRA for a period of time, to a local resident who would like to be more involved but has not yet had much direct input beyond speaking to the community outreach officer.

Of course, with such a small sample size, and the unavoidable bias in the method of selection, the resulting survey cannot claim to be representative. One of the most significant viewpoints not represented here, is that of those people who were initially on the steering group at River Brent, but who left because they objected so strongly to the river restoration work. In ascertaining the motivations and perceptions of these people it was useful to speak to Sylvia Tunstall and Joyce Ip, (for confidentiality reasons neither could pass on an introduction), though this does mean the perceptions of this group are received second hand, with an unavoidable layer of interpretation already applied.

For a summary of relevant details for the interviewees, see Figures 4, 5 and 6.

Reference	Format ⁷	Site ⁸	Sex	Age	Occupation	Form of involvement	Duration ⁹	Ongoing?
QWAG 1	F	SP /	M	45-55	Business Analyst	Founder member of Friends of the Quaggy (formed	14/15 years	Yes
		CM				Dec 1990), currently chair of QWAG.		
						Riparian house-owner.		
QWAG 2	F	SP /	M	25-35	Conservation	Member of QWAG from 1990 – 1997	7 years	No
		CM			Officer	Briefly, community liason officer for a section of the	intermittently	
						flood scheme.		
						Ferrier Estate resident for most of this time ¹⁰		
						Since moved away from the area.		
FR 1	F	SP	F	55-65	Editor of FRAG-	Included information about the restoration work in	1 year	Yes
					KV newsletter.	the FRAG-KV (Ferrier Residents Action Group -		
					Former nursery	Kidbrook Vision) newsletter on a no. of occasions.		
					school teacher.	Ran a stall at the launch day.		
SP 1	T	SP	F	55-65	Part time	House owner bordering the park. In contact with the	Little	Yes
					administrator in	community outreach officer, would like to get more		
					health service.	involved.		
VOQ 1	FN	SP	M	55-65	Semi-retired	Riparian house owner for the last 40 years or so.	Intermittently	Yes
					chartered engineer	Member of Victims of the Quaggy.		

Figure 4: Interviewees primarily involved at Sutcliffe Park

 $^{^{7}}$ F = Face to face interview, recorded, and transcribed, FN = Face to face interview, not recorded, T= Telephone interview, G= Group discussion

⁸ SP = Sutcliffe Park, CM = Chinbrook Meadows, BRP = Brent River Park

⁹ To nearest year

¹⁰ The Ferrier Estate being an estate that borders on Sutcliffe Park

Reference	Format ¹¹	Site ¹²	Sex	Age	Occupation	Form of involvement	Duration	Ongoing?
FOCM 1	G	СМ	F	45-55	Teacher	Member of user group since 2002. Currently vice-chair of user group.	2 years	Yes
FOCM 2	G	CM	M	65+	Retired	Member of steering group when it was first set up and subsequently member of user group.	3 or 4 years	Yes
FOCM 3	G	CM	F	65+	Retired	As above Home overlooks the park.	3 or 4 years	Yes
FOCM 4	G	CM	M	65+	Retired	As above	3 or 4 years	Yes
FOCM 5	G	СМ	M	65+	Retired	As above Home overlooks the park.	3 or 4 years	Yes
FOCM 6	G	CM	M	45-55	Works part time at a local community group, part-time student/ musician	Member of user group since 2002.	2 years	Yes

Figure 5: Interviewees involved at Chinbrook Meadows

 $^{^{11}}$ F = Face to face interview, recorded, and transcribed, FN = Face to face interview, not recorded, T= Telephone interview, G= Group discussion

 $^{^{12}}$ SP = Sutcliffe Park, CM = Chinbrook Meadows, BRP = Brent River Park

Reference	Format ¹³	Site ¹⁴	Sex	Age	Occupation	Form of involvement	Duration	Ongoing?
FOBRP 1	F	BRP	M	55-65	Traffic Data Consultant	Member of User Group for the last 6-9 months. Chair of Friends of Gibbons Rec.	6-9 months	Yes
FOBRP 2	F	BRP	F	40-50	Energy Advisor/ Home Visitor	Member of steering group when it was first set up. Chair/acting chair of BRP user group for the last 15 months.	3 years	Yes
FOBRP 3	Т	BRP	F	45-55	Teacher	Member of User Group for a couple of years. Instrumental in setting up Alperton Millenium Volunteers	Over 2 years	Yes

Figure 6: Interviewees involved at Brent River Park

 $^{^{13}}$ F = Face to face interview, recorded, and transcribed, FN = Face to face interview, not recorded, T= Telephone interview, G= Group discussion

¹⁴ SP = Sutcliffe Park, CM = Chinbrook Meadows, BRP = Brent River Park

4.5 Format

A qualitative methodology, rather than a quantitative approach, was used on the basis that the research aims to investigate perceptions, impressions and associations, attributes not easily captured by numerical information: as Burgess *et al* (1988:309) put it: 'Quantitative analyses are not suitable media for discovering feelings and meanings for environment.' A mix of formats was used involving both face-face long interviews, telephone interviews and a discussion group (Figures 4, 5 and 6). Extended interviews have the advantage of permitting greater flexibility, in that interviewees have a greater possibility to express their understandings in their own words and to open up themes and issues that *they* consider most important, rather than being necessarily led by the terms in which the researcher thinks the issue should be framed – as happens when respondents are asked to fill in a very structured questionnaire. A discussion group permitted a greater depth to the analysis in that the group dynamics and the way in which these attitudes are constructed and differences negotiated, could also be explored.

Interview and group discussion questions centred around four topics:

- 1. Why participants were motivated to get involved.
- 2. The form their involvement took and why.
- 3. Their perception and understanding of the urban river restoration project. The terms and context in which it was understood.
- 4. Their assessment and experience of the participative process.

Five out of the eight interviews were recorded, as well as the discussion group. Three interviews were not recorded, two because the only way to do them was by telephone, and one because the interviewee did not seem comfortable with being recorded. Interviewees were usually met in their own home, or at a place of work, or in one case, in the park itself. Full transcriptions were made for the first three recorded interviews, after that, part transcriptions were taken – sections where discussion was deemed to be irrelevant or repetitive were left out, but with notes to summarise what was discussed, so there was the opportunity of easily finding the appropriate section on the original tape to clarify points if need be.

The fact that notes had to be relied upon for three interviews did limit the sophistication of the analyses for these three interviewees. Listening and making notes is very difficult to keep up and since it is impossible to write everything down, there is a level of interpretation that takes place at this very first stage.

Ethical issues

There are three traditionally important ethical principles of qualitative research – informed consent, right to privacy and protection from harm (physical, emotional, and any other kind). Fieldworkers are expected to exercise general common sense and moral responsibility, to the subjects first, then to the study, and finally to themselves (Denzin and Lincoln, 1998).

To this end, interviewees were informed about the research before they were asked whether they would be happy to be interviewed, they were told that the interview would be recorded, with their permission, that they would remain anonymous in the final document and that they would be sent a copy of the final report. Permission to include details of age, occupation and other identifying characteristics was obtained separately, with express permission sought to include these in the final document.

Chapter 5 - Case histories

5.1 Introduction

This chapter will expand on the introduction to the case studies given in Figures 1,2 and 3. It will highlight how despite their initial similarities, in each case the river restoration work was carried for quite different purposes. At Sutcliffe Park, the main official rationale was the improvement of flood defence; at Chinbrook Meadows the work was intended to counter the environmental and aesthetic impact of a new housing development on the flood plain, and at Brent River Park, the work was done primarily for the social and community benefits of urban regeneration, that it was hoped the restoration would bring. Furthermore, these differences in motivation affected the extent to which community involvement was carried out in each case, and to a degree, the form it took.

In the chapters that follow, these case studies will be explored in more detail in the context of the main research questions of this project. In particular, in Chapter 6 the following will be considered:

- What was the individual perception of the success (or otherwise) of community involvement?
- What were the perceived benefits and challenges of such participation?

In Chapter 7, the analysis will be taken one level deeper and the following questions considered:

- What perceptions and understandings of urban nature/ restoration lay behind the desire of these participants to get involved in the project?
- Were these understandings negotiated, constructed and changed, during the course of involvement?

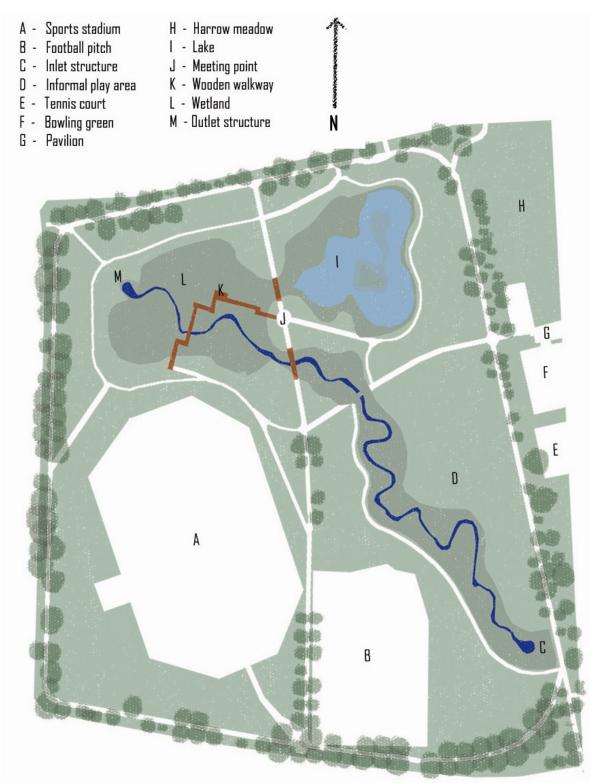


Plate 1: Map of Sutcliffe Park after restoration

Based on: Environment Agency (2002)

'Quaggy River Flood Alleviation Scheme – Sutcliffe Park.

Marginals, Reed Planting and Seeding.'

October 2002







View East





View North





View Northeast

Plate 2: Photographs of Sutcliffe Park before and after restoration

'Before' images courtesy of Jean Hunt

'After' images courtesy of Halcrow

5.2 Sutcliffe Park

River Restoration for Flood Defence

Early origins

The history of plans for a river restoration programme at Sutcliffe Park goes back to 1989, when the National Rivers Authority (NRA, now the Environment Agency) began to inform riparian house owners along sections of the Quaggy about its plans for a new flood alleviation scheme. Sections of the flood defence walls had fallen into disrepair, and the agency decided the best course of action would be a 'full channel scheme' (Environment Agency, 2001), so as to avoid having to come back to the river again in the future.

The River Quaggy, a tributary of the Ravensbourne, which flows into the Thames at Deptford Creek, has a long history of flooding, and serious floods had occurred in 1958 1962, and 1968. Flood protection work had been initiated in 1962 and was responsible for the complete channelisation and adjustment of the geomorphology of the river through the majority of the middle and lower reaches of the catchment. (Environment Agency, 2001) The scheme that was being proposed in 1989 would have continued and virtually completed this process of channelisation.

Friends of the Quaggy

In Dec 1990 a group of riparian house owners began to form, who were concerned about the environmental and aesthetic consequences of the proposed scheme. One of the founder members of this group, which became known as the Friends of the Quaggy and later reformed as Quaggy Waterways Action Group, (QWAG), explained the early history of the formation of the group and how he came to discover there could be a viable alternative to river channelisation:

'I would say my interest started out because I could see a project, a flood alleviation project coming in that was going to have an adverse effect on my garden and local environment and a number of people got together, me and some neighbours, to put in an objection. But before that, it was really necessary to work out if there was some sort of alternative... I had my brother to stay with me, who is American, he's a half brother, and he's an academic in geography, and he was saying, that at that time, which was about 89 that this was a big issue, the issue of how to treat rivers in urban environments in America, and

there was a lot of argument over whether one should naturalise them rather than put them into concrete, and I asked if he could find out a name, in this country of someone I could speak to try and learn more about that...'

[QWAG 1]

After following up a couple of leads, Mr (QWAG 1) got in touch with an academic at University College London (UCL), Dr Edward (Ted) Hollis, who was to prove essential in helping Friends of the Quaggy persuade the NRA to alter their proposed scheme:

'I had a number of conversations with Ted Hollis and learnt about things like catchment management planning and storm water storage, as opposed to rushing the water through, and, you know, all about the problems that channelising creates and causes, and so we started a rather more informed discussion with the National Rivers Authority.'

[QWAG 1]

Victims of the Quaggy

After various discussions and meetings, the NRA agreed to reconsider the options for the river Quaggy, and by 1992 had agreed in principle to the idea of flood storage at Sutcliffe Park. The idea being that the park could be redesigned to function more or less as a natural floodplain. In times of peak rainfall, a naturalised river, with shallow banks, would be permitted to flood within the area of the park, storing water and reducing the pressure on houses downstream. However, after severe flooding later in 1992, an alternative pressure group had formed, the Flood Victims of the Quaggy. This group felt strongly that there had been too much delay to the flood alleviation scheme already, and sent a petition to the NRA demanding a return to the original channelisation scheme as quickly as possible.

A local councillor got involved in mediating between the two pressure groups, the council and the NRA and over time some members of the Victims of the Quaggy at least, came round to the idea that the 'flood meadow principle' was sound, though still unhappy at the length of time it was taking to implement a flood prevention scheme (VOQ 1). It was decided in 1995 that a consultation would be carried out with residents local to Sutcliffe

Park and of the 294 responses received, more than 70% of respondents indicated a general approval of plans for flood storage at Sutcliffe park (Dinnage, 1995).

Sutcliffe Park before restoration

Sutcliffe Park itself is a relatively large park, which, prior to restoration, was a flat, open stretch of mown grassland, mainly used for sports, with 11 football pitches and an athletics track in one corner. Since the 1930s the river had run underground in a concrete pipe broadly following the path of a perimeter footpath lined with trees, around two sides of the park. The park is named after Mr Sutcliffe, the engineer responsible for culverting the river.

Sutcliffe Park – after restoration

The work to create a naturalised river and flood storage capacity at Sutcliffe was finally undertaken from April 2003 – June 2004. This involved the excavation of 35 Olympic size swimming pools of soil. The river was broken out of its underground pipe and now meanders through the park. A lake has been formed at another end of the park, with reeds and a viewing platform. The park has been designed so that it has a more formal park feel to it at one end, with wrought iron railings, and traditional benches, and at the other end it is more natural, with outdoor furniture made by members of the Riverwood project. The park is designed to permit annual flooding events which will cover the low lying parts of the park, connecting the river up with the lake. In extreme storm condition, the park will flood completely and will be locked, though this will happen only rarely.

The input of QWAG –direct involvement in the design and initiation of the scheme itself In terms of community participation, what stands out about this scheme is the extent of the input of a certain local action group, the Friends of the Quaggy/QWAG. Although the first people to get involved were riparian householders, concerned primarily about the direct impact of the scheme on their own gardens, the group soon expanded its remit:

'The Friends of the Quaggy became the Quaggy Waterways Action Group, actually, when we started taking a wider interest in the river and realised it wasn't just about some residents and their back gardens, you know, it was a much bigger thing.'

[QWAG 1]

The members of QWAG did become quite heavily involved. As discussed above, the group had many discussions with the NRA trying to persuade them that flood storage at Sutcliffe Park, rather than further channelisation would be a better option. Both members of QWAG were proud to report that they felt it was their research and local knowledge that had highlighted Sutcliffe Park itself as a possible site for flood storage:

'... it was us that highlighted Sutcliffe Park, based upon the information they'd [the NRA] given us about where most water entered the system and our own local, kind of going around investigating the river. I didn't know anything about where the river ran or anything about it, until I got on my bike and tried to follow it, and... it was us that measured the park up and got a rough feel for how many cubic metres it could store...'

[QWAG 1]

At one point, one of the members of QWAG reported that his involvement was taking up to forty hours a week of his time, on top of a full time job (QWAG 1). Another member of QWAG (QWAG 2) was actually employed by the NRA for a few months to undertake community liason work with a section of riparian house owners downstream who would be affected by one of the proposed stages of the flood alleviation scheme, though he had no previous experience of such work, his main qualifications for the job being enthusiasm and knowledge gained through his involvement with QWAG.

In 1995 the group drafted a report, *Operation Kingfisher*, (1992) which outlined the opportunities for river restoration along the entire river Quaggy:

'it just seemed like a good project, so... we wrote this thing called Operation Kingfisher... that was basically systematically looking throughout the system, starting at the top and working out what you could do to every single stretch of the river to restore it, to break it out of concrete, to create wetlands and restore floodplains and that kind of stuff.'

[QWAG 2]

In many ways, this echoed an earlier report drawn up on behalf of the National Rivers Authority titled Ravensbourne Catchment Landscape Assessment (1992), which considers 58

possible enhancement proposals within the Ravensbourne catchment that would return its rivers (including the Quaggy) to 'a more natural character' (NRA, 1992:2).

QWAG have also campaigned strongly to get river restoration included in the proposals for the Urban Renaissance Lewisham project, an urban regeneration programme for the redevelopment of the centre of Lewisham (QWAG 1).

Involvement of Local Residents

In terms of consultation with, and involvement of, residents local to Sutcliffe Park, where the area of flood storage was to take place, however, this scheme is the one of the three case studies in which this was perceived to have been carried out with the least 'success'. For example, Mr (QWAG 1) commented:

'they still have a lot to learn, the Agency, about consultation, I think. Sutcliffe Park was implemented very badly in that local people were not informed about what was going on and hoardings were put round the park that cut the whole thing off visibly and people knew nothing about what was going on...

I am disappointed that the Agency hasn't, and Greenwich council didn't make more effort to involve the very local people, who are, who's park it is really going to be, in what was going on and in making decisions.'

A number of people I spoke to remembered that some of the first pieces of graffiti on the boardings around the park were along the lines of 'get out of our park' because most people unsurprisingly thought the diggers were there to dig up and build on the park, and were unhappy about this. For some residents of Ferrier estate who are waiting to be re-housed following the demolition of this estate, this caused them excitement that they might get new homes, and then disappointment:

'we were told initially that there would be some properties built in the park, so when all this was sectioned off, that's what people thought was happening'
[FR 1]

There had been a public consultation, of course, but a lot of people I spoke to were unaware that this had taken place, and in any case, it took place in 1995, eight years before the work

started. As Ms (FR 1) explained, on the Ferrier Estate 'there's an awful lot of coming and going, in fact people tend to move off every five years', so a lot of people now living in the area would not have been around for that consultation. For those, such as Ms (FR 1) herself, who did receive the 1995 information it is still a long time: 'I never thought the project was going ahead, to be honest, well, because I got this in 1995, and I thought they'd forgotten about it, you know'.

In fairness, however, this was recognised by some people within the Environment Agency and attempts were made to rectify the situation. The Landscape Architect, in particular, mentioned how she would have like to have had the support of local groups to a greater extent (pers. comm Julie Baxter, 17/08/2004) and in designing the park, left space for community groups to have an input – a circular space that could become a meeting place, a grassy informal area that could be used for children's play area, a central space that could have a mosaic or some other art work placed there.

In addition, the Environment Agency did employ a community outreach officer, from June 2003 until, and just beyond the work being completed in summer 2004. This outreach officer faced something of a difficult job, given that work had already started, but did make links with local community groups, schools - meetings and semi-structured interviews were arranged.

There were a couple of large events that served to bring the park to the attention of the local community, information was distributed at a Ferrier Estate Feast Day in October and there was a launch day in June 2004.

The council parks outreach officer is now taking over community engagement for the park, and starting to try to set up a 'Friends of Sutcliffe Park' user group. Thames21 have also been involved in organising a litter pick up day.

It would seem likely that part of the reason efforts to involve the local community were sporadic was because the emphasis for the scheme was very much on the benefits it could bring for flood defence. The Environment Agency, rather than the local council, was the project leader, unlike in the following cases, and many people I spoke to reported the 60

impression that Greenwich Council was not initially very keen on the idea. I did not confirm this with the council directly, but there were certainly disadvantages in the scheme for them: potential objections from residents who would lose their football pitches, loss of income for the council from the football pitches, as well as a more complicated, sensitive and more risky green space to manage.

- A River channel
- B Cricket pitch
- C Tennis courts and multi-sport area
- D Football pitches
- E Play area

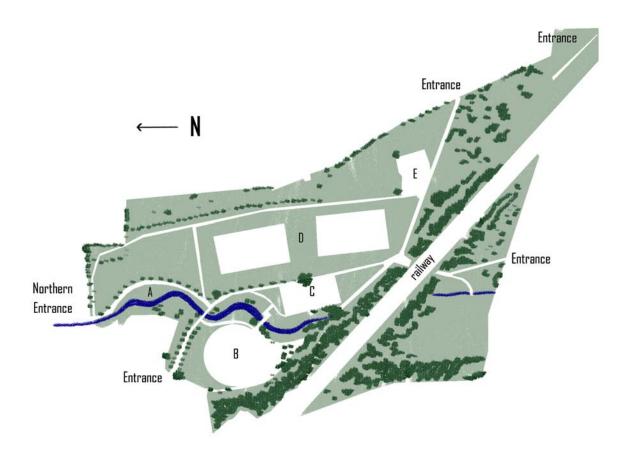


Plate 3: Map of Chinbrook Meadows after restoration

Based on Anthony Stiff & Associates (2003)

DRAFT Chinbrook Meadows Vision Plan 1.4.03

Courtesy of the Environment Agency







Plate 4: Photographs of Chinbrook Meadows after restorationCourtesy of the Environment Agency and Glendale Management

5.3 Chinbrook Meadows

River restoration as compensation for development

Unlike the project at Sutcliffe Park, the river restoration work that has been completed at Chinbrook Meadows was not specifically put forward by the Environment Agency as a flood defence solution. It is intended that the project should maintain or improve on the existing flood defence schemes in the area, but that is not its primary purpose. Rather, it was the environmental and aesthetic benefits that were primarily sought, in part, as a compensation for the environmental disbenefit created by the development of a group of houses on the river floodplain, within an area that had previously housed garden nurseries, connected with the park.

Chinbrook Meadows before restoration

Chinbrook Meadows itself has been a public park since 1937, before which it comprised part of Chinbrook Farm. It is a much smaller park than Sutcliffe Park, but a substantial one for the local area nonetheless. The name comes from an alternative name for the Quaggy river – the Chin Brook, though the river was channelised just 2 years prior to the park being opened in the 1930s. Before restoration the river formed a central division in the park, bordered by high hedges and a fence and as such it effectively cut the park in two (GTLGS, no date).

The park forms a link in the green chain walks and was used for sports, featuring four tennis courts, two full sized football pitches, a basketball court and a cricket ground, though the cricket ground had been lost before the restoration work began. In the 1970s the park had had a number of staff, and had incorporated a nursery which employed propagators and gardeners, and they had grown plants for events in the park and the local area (FOCM 5). The ornamental gardens remained, including a feature of the rose bed, but they had become somewhat neglected (GTLGS, no date).

Plans

As mentioned earlier, it was a proposal for a housing development of 15 low cost homes, by the South London Family Housing Assocation, on the old nursery site at Chinbrook Meadows that was the initial stimulus for considering river restoration. Mr (QWAG 1)

heard about this proposed development and approached the council to suggest that, as a condition of planning permission, money could be requested to be put towards restoring the river (QWAG1). The council agreed, Lewisham council being particularly keen to focus on the environmental disbenefits of development, and where appropriate, to require compensatory payments. QWAG's *Operation Kingfisher* report (1995) was useful as a 'vision', particularly because it was 'well presented' and 'sensible' and therefore 'something we [the council] could hold up and use' (pers.comm., Conrad Young, Lewisham Council, 20/7/04). The potential for river restoration at Chinbrook Meadows had also previously been discussed in the 1992 Ravensbourne catchment landscape assessment mentioned earlier (NRA, 1992).

The housing development was controversial in the local area. Many of the members of Friends of Chinbrook Meadows that I spoke to were particularly upset about it and reported that their opposition was shared more widely, with packed public meetings when the matter had been discussed. Almost all the Chinbrook Meadow residents seemed to feel somehow cheated that the development had been allowed through, believing that the area should have been protected as green belt land. One person mentioned that it was only because it had already had buildings on it, the sheds for the nursery, that development had been allowed i.e. it was put through on a technicality - 'that's how they got away with it' (FOCM 3) One person mentioned how 'that shocks me now to see all those buildings there' (FOCM 6) while Ms (FOCM 3) replied 'they're so ugly aren't they'.

Despite the objections the development did go ahead, and, some time later, a feasibility study for the river restoration was carried out by Groundwork Thames London Gateway in conjunction with the Environment Agency, in Feb 2001. Local residents, school and youth groups were consulted using questionnaires, a public event and individual and group interviews/discussions. 63% of respondents to the questionnaire replied yes to: 'would a natural look to the river encourage you to use it'? (GTLGS, Feb 2001) As part of the study, participants were shown a few alternative designs for the river, which varied according to the extent the river meandered, and the size of the ponds, and asked which they would prefer. The most popular option gained 46% of the vote, and was the design on which the finished work was based one taken through to construction.

The project manager for the site was the London Borough of Lewisham, with certain aspects of the project assigned to other organisations; as previously mentioned, Groundwork took responsibility for community consultation, the Environment Agency for technical engineering aspects and landscape design. A grounds management company, Glendale, who have a 10-year contract with Lewisham borough to manage the parks and gardens of the borough as a whole, are responsible for the ongoing management of the site.

Chinbrook Meadows – after restoration

The original concrete channel was broken up, and a meandering river channel constructed, narrower than the original channel so as to encourage a consistent small flow through the winter, rather than permitting stagnant pools to collect during these months as used to happen (GTLGS, no date). The top half the river bed was planted, the bottom half will be allowed to colonise naturally. There is a board walk, part of which is designed as a nature study area for children, with activities such as pond dipping particularly in mind. Work was completed in time for the formal opening of the park on the 22nd October 2002.

Friends of Chinbrook Meadows

A residents steering group was set up by Groundwork in July 2001 and the group met every six weeks until the work was completed. Representatives from Groundwork Glendale and the London Borough of Lewisham and the Environment Agency attended these meetings (Environment Agency, no date).

After the work has been completed the steering group has continued in the form of a 'Friends of Chinbrook Meadows' user group of whom there is a core group of seven or so members who meet regularly, and others who will come along if there are particular problems.

Summary

In some ways this scheme was undertaken, from the council's point of view, as compensation for development, to negate the environmental disbenefit of developing a piece of green land. Similarly to Sutcliffe Park, a local environmental action group, Quaggy Waterways Action Group (QWAG), provided substantial impetus for the scheme to take place in the first place. Unlike at Sutcliffe Park, however, community engagement with

local residents was maintained before, during and after the work began, through the setting up of a steering group, which later became Friends of Chinbrook Meadows. Numerous consultations and events were held, and show general positive public perception of the river work. The more consistent approach to public participation may be partly due to the fact that here, the local council were the leader in the project, whereas at Sutcliffe Park the local council were, at least in the early stages, something of an unwilling accomplice. Local councils will have more experience and focus on community and public relations than the NRA/Environment Agency. Conrad Young at Lewisham council for example explained: 'We tend to start from the approach that we are here for the community, rather than as environmental experts as such' (pers comm., Conrad Young, Lewisham Council, 20/07/04).

However, the members of Friends of Chinbrook Meadows user group that were consulted for this study, were not particularly positive in their assessments of the consultation process. This was partly because they largely represented people who had initially been opposed to the river restoration work (see Chapter 7 for further discussion on this point). When the work went ahead, these people felt their voices had not been listened to. In some ways this is unavoidable in consultation processes—it is usually impossible to please everybody, and the questionnaire results gathered by Groundwork would indicate that the majority of people were happy for the river to be naturalised. However, it was not just those that were opposed to the restoration work that commented on this. See the following extract about some of the early meetings (FOCM 1 being someone who was generally favourable to the restoration work):

FOCM 2: Everybody got so despondant with the way they got lent on... when you went to these meetings.... it was always felt it was discussed before we got there

KR: Did everyone else get the same impression?

FOCM 3: Oh definitely

FOCM 1: My husband, I remember my husband going to one, because that was before I was involved, and he went to one and he said people were really, and I, presumably council people, were quite rude in the way they just sort of dismissed peoples comments

FOCM 3: We went up us three, it was really awful

FOCM 4: They commandeered the situation, that's what really happened

It was clear that, for some people, part of the reason they felt unhappy about the consultation process was because for them it was all unavoidably associated with the unwelcome development of the new houses near the park. See, for example, the following extract:

FOCM 2: 'they kept saying oh we're gonna do this, we're gonna do that, and they kidded us along with what they were gonna do, but they had a hidden agenda, all they've done, is to keep us quiet, there is no way we would have allowed, if we'd have been told that they were gonna build houses and then remodernise the park,

FOCM1: that was separate though really wasn't it?

FOCM 2: 'well no no it wasn't, that was the hidden agenda... that is what got up a lot of people's backs'

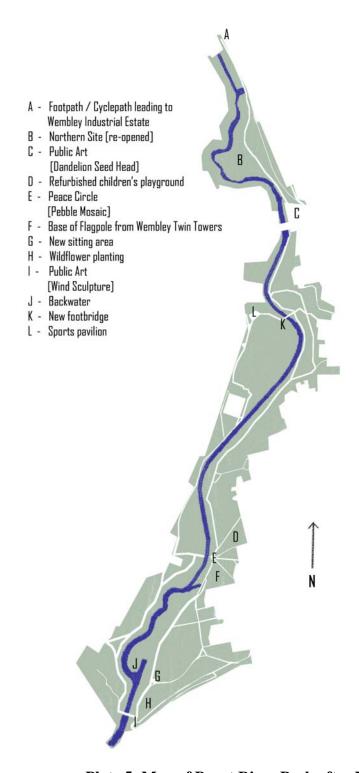


Plate 5: Map of Brent River Park after Phase 1 restoration

Based on: 'Phase 1 of Brent River Park'

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[ONLINE] Available from: www.brent.gov.uk/riverbrent.nsf

[Accessed August 2004]



New Footbridge





Naturalised River Channel



Backwater

Plate 6: Photographs of Brent River Park after restoration
© Brent Council 2004

[ONLINE] Available from: www.brent.gov.uk/riverbrent.nsf [Accessed August 2004]

5.4 Brent River Park

River restoration for urban regeneration

This project was initiated and led by the local council. Similarly to the situation at Chinbrook Meadows, the Environment Agency had already identified this section of the river as a potential site for enhancement (Eden and Tunstall, 2001) but in this case there was no external stimulus to prompt them into action such as the housing development and the suggestions of QWAG. Rather the scheme was seen by the Council as 'part of a wider urban regeneration effort in the Borough which has at its heart the construction of a new National Stadium (soccer) at nearby Wembley' (Eden and Tunstall, 2001: 7). Funding was obtained from the European Regional Development Fund (ERDF) London Waterway Partnership, London Development Agency and the Neighbourhood Renewal Fund (London Borough of Brent, 2003).

The River Brent

The River Brent itself flows through North West London, from its source in Barnet to the Thames in Brentford, encompassing a catchment of some 67 square miles, almost all of which is heavily urbanised (London Borough of Brent, no date). The lower sections of the river were canalised, and in some places straightened, in the late eighteenth century to form the first part of the Grand Junction Canal (Barton, 2000).

The river has a varied history of use and abuse by the people living near it. In ancient times, the river was worshipped as a holy site, named after the pagan goddess Brigantia (London Borough of Brent, 2003). Over the last century, the lower sections, forming part of the Grand Junction Canal, as mentioned above, have been used for transport. The Welsh Harp reservoir is a large man-made reservoir which was constructed in order to provide water for the Grand Junction Canal. There was an attempt made to use the Welsh Harp as sources of drinking water, but the water was found to be unsuitable for this purpose. Now the Welsh Harp is used for recreation, water sports and is an important site for water birds (Barton, 2000).

There have been periodic straightenings of higher sections of the river for flood protection, most significantly in the 1930s when major channelisation took place, and almost all the river banks were lined with concrete to prevent erosion The London Borough of Brent took

its name from the river when it was formed in 1965 and the river is included on the borough's coat of arms (London Borough of Brent, no date).

Monks Park

The restoration work has taken place on a 2 km stretch of the river where it runs through Monks Park. Here the park is bordered by two residential estates Tokyngton and Saint Raphael's. The two communities either side of the river are characterised by different racial mixes, Tokyngton having a high percentage of residents self defined as Asian, while St Raphael's has a high percentage of people self defined as belonging to black ethnic groups (Eden and Tunstall, 2001). Sa0int Raphael's is identified under the government Neighbourhood Renewal Fund as a priority area for funds (London Borough of Brent, no date).

Prior to the restoration the river was contained in a concrete channel, through the park, and substantially overgrown. Phase 1 of the restoration, which began in October 2002 and was completed in time for the launch day in June 2003, has seen a section of concrete channel replaced with a meandering river, a new footbridge with CCTV cameras, new trees, street furniture and a new cyclepath (London Borough of Brent, 2003).

The paper by Eden and Tunstall (2001) quoted above (see also Methodology Chapter 4) highlights the very strong emphasis on community consultation that was placed on the river project at Brent, right from the beginning. This has continued throughout the project, with numerous questionnaires and information days held since the local residents were first invited to offer their suggestions for improvements to the area, back in 1999 (Brent Council, 1999).

An early consultation found that more than 70% of respondents expressed support for what was described as 'major riverside enhancements, linked to improved accessibility to the locality and employment area' (Brent Council, 1999).

A community steering group was established in December 2001 and met every six weeks between December 2001 and April 2003. Members were elected and comprised representatives from the residents and tenants associations, schools, sports clubs and other 78

community groups as well as from the Environment Agency, Parks service, consultants, contractor, plus council representatives. A number of members of the steering group have since reformed as 'Friends of Brent River Park' which now meets monthly.

Community consultation

Despite all these efforts the community consultation has not been an entirely smooth process. As mentioned in reference to Chinbrook Meadows, this is partly because it is always impossible to please everyone and there are those that will not feel they have been substantially listened to because they are still in disagreement about what has been done.

During the initial stages of the consultation there were two groups of people who were strongly opposed to the scheme. First there were a number of residents from the Tokyngton estate who were concerned that a more accessible river, together with a new footbridge, would increase the level of crime on their side of the park, as it would remove the barrier that the channelised river had formed between the Tokyngton and the Saint Raphael's estate (FOBRP 2; Eden and Tunstall, 2001). Whether justified or not, Saint Raphael's does suffer from a bad reputation in the area (FOBRP 2). The second group of people were those who were worried that the breaking down of the channel walls would increase the flood risk to their homes, a particular concern for those bordering on the park. The planned extent of meander of the new river channel was reduced after objections were raised by these residents. Many people were also concerned about the potential risks of drowning brought by a more open river (pers.comm., Joyce Ip, Brent Council, 5/8/04).

Now that Phase 1 has been completed, a section of the river restored and the new footbridge constructed, these concerns have not gone away. Some people are still quite hostile and one or two people have accused the council of 'just waiting' for people to drown. Flooding is a real worry for people, and there is still reportedly a group of people who just do not believe that the flood risk can be less with a 'natural looking river', who are certain that a river cannot be controlled unless it is encased in concrete (pers.comm., Joyce Ip, Brent Council, 5/8/04). A number of the residents who particularly objected to the project on the grounds of security subsequently left the steering group (FOBRP 2).

Having said that, as was the case at Chinbrook Meadows, it would seem that those who were unhappy with the scheme were in the minority. Initial results of a follow- up questionnaire study by a student at the university of Abertay Dundee commissioned by the Environment Agency and supported by Brent council, carried out at the end of 2003, indicate that people are generally quite positive about the project, admittedly more so on the Saint Raphael's side than on the Tokyngton (pers.comm., Joyce Ip, Brent Council, 5/8/04). One of the people I interviewed commented that despite the complaints, the bridge is certainly used by people from the Tokyngton estate, as it is a convenient route to a local supermarket, cutting off a big square section of roads (FOBRP 2).

One potential problem that was commented on in reference to the consultation at Brent River Park, that was not a problem at either of the other two case studies, was how to deal with a perceived sense of over-saturation in 'community' consultation and ineffective support of 'community-based' activities. The problem of over-consultation was something that Joyce Ip commented on when discussing the problems they had getting people to reply to questionnaires, and how they often turned to face-to-face interviews to resolve this problem. Of course, the problem of low response rates to questionnaires is not unique to Brent, nor does it seem that this project had a particularly low response rate compared to the other two case studies considered here. However, it does highlight the fact that ever-increasing numbers of questionnaires are not necessarily the best way to involve people in their local communities.

Similarly, one of the members of Friends of Brent River Park I spoke to who is a local teacher and involved in a variety of volunteer and community initiatives herself, commented on how her experience was that a lot of money was coming into areas like Brent and the Saint Raphael's estate, but it was not being used effectively, with money allocated fairly haphazardly and so-called 'community' groups given money without any proper check on quality control (FOBRP 3). (For further discussion see Chapter 7).

Having said that, it must be stressed that this individual considered the project at Brent River Park to be an example of what a good community project should look like – well structured, ongoing and with good dynamics between the participants (FOBRP 3). Friends of Brent River Park does seem to be a particularly active group, and they have organised a 80

number of events and all the respondants I spoke to were enthusiastic about their involvement.

Though the success in linking the two sides of the park through the river project has been somewhat limited, one of the areas in which the group is hoping to make progress is linking up with another park user group, Friends of Gibbons Recreation Ground, on the other side of another physical feature that forms a barrier between communities in the area - the North Circular. (For further discussion see chapter 7).

Summary

Yet again, the official rationale for this river restoration project was quite different. Unlike the previous case studies, the emphasis here was very much on community, the project being led by the local council and the objectives primarily being about urban regeneration. The emphasis on community consultation and engagement was very strong from the council's point of view, and officially, was done so with the emphasis on trying to involve people right from the beginning, and in continuing this momentum. There was, however, no local group such as QWAG that formed spontaneously, on their own terms.

5.5 Summary

This chapter has given a case history of the restoration work and of the community consultation/involvement work that was carried out, for three river restoration projects in London. The discussion has highlighted the fact that despite physical similarities, the motivation for the restoration was quite different in each case. In Sutcliffe Park, the main reason for the restoration work was flood defence, at Chinbrook Meadows it was undertaken as compensation for development and at Brent, to regenerate a community.

In each case, the ecological benefits of river restoration were a motivating factor for the project leaders but were given different interpretation/emphasis. For example, the greater ecological benefit of flood storage at Sutcliffe Park over further channelisation of the River Quaggy was a strong reason for certain local residents to protest against the proposed channelisation scheme, and a strong deciding factor in the Environment Agency's decision to go ahead with flood storage instead. At Chinbrook Meadows, the idea that river

restoration could compensate for the environmental disbenefit of further development was a motivating factor for the local council to make a contribution to river restoration a condition of planning permission for a nearby housing development. At Brent River Park, ecological benefits were primarily interpreted in terms of improving the quality of a public open space.

These different emphases have influenced the way in which the community involvement has been carried out. At Sutcliffe Park and at Chinbrook Meadows, a local community group was able to significantly influence the direction and design of the restoration work. There was no similar, spontaneous forming of a group pushing for river restoration at Brent, perhaps because there was no real opposition to fight against, the council taking the lead. In all cases there were people who felt strongly against the river restoration and this motivated them to get involved with the process in some form or another.

The commonalities and comparisons between the experiences of individuals involved at the different sites will be explored in more detail in the following chapters. Chapter 6 will concentrate on experiences of participation, Chapter 7 on understandings and negotiations of nature.

Chapter 6 – The perceived 'success' of public participation

6.1 Introduction

This chapter will explore in more detail the commonalities and comparisons between the experiences and perceptions of community involvement across the interviewees from the three case studies. It will look first at the role that people saw themselves as having within the restoration process, and what they felt they had contributed. Secondly, it will look at the experience of relationships, between community groups, and between the council or the Environment Agency and the community groups. Thirdly it will look at what rewards participants perceived themselves to have gained through their involvement. Finally it will consider the future – how these people see their involvement continuing now that the restoration work has been completed.

6.2 Perceived roles and contributions

The roles which those involved defined for themselves within the process and the contributions they felt they had made were seen to be quite varied across the individuals and across the case studies. These roles and contributions included:

Bringing local knowledge

At Sutcliffe Park the members of QWAG I interviewed were proud of the fact that they were the ones to highlight its potential (see Chapter 2). Mr (QWAG 1) recounted the story of one meeting where the NRA had claimed that flood storage was not an option at Sutcliffe Park because it was higher than the surrounding roads, only for a photo to be produced showing one of the *Friends of the Quaggy* standing in the park, his head and shoulders just visible above the road, demonstrating that, at least in one corner of the park, it was lower than the surrounding roads.

Persuading others of alternative viewpoints

While Mr (QWAG 1) saw QWAG's role as reflecting public opinion, he also felt they had a role in influencing this opinion, a role which they were particularly well suited to, being, in a way, a mediator between the 'experts' and the uninformed public:

'....I don't see us as real experts, I see us as just raising the spectre of a restored river in the public's mind and then leaving it for them to choose what they want.' (QWAG 1)

This was a role that had also been taken on by at least one member of Friends of Brent River Park, (FOBRP 3) who mentioned how she, after initially being concerned about the dangers of an open river, and concerned about flooding, now found she was explaining to other people on the estate where she lived about how the new restored channel wasn't as dangerous as some other areas where children often play, and how parents should watch their children around water in any case, and also about how a natural floodplain could actually be just as good as a channelised river for flood defence (FOBRP 3).

As previously mentioned, for Mr (QWAG 2) this role of persuading others was formalised when he was employed by the Environment Agency to undertake community liason work with riparian house owners along certain sections of river Quaggy who would be affected by the Flood Alleviation scheme.

Tying up loose ends

Friends of Chinbrook Meadows saw their current role, to a large extent, as in pressing the council and the grounds management company to make sure things got done, things got finished off. One member described the group as a 'thorn in their [the council's] side' (FOBRP 3). On the whole, the group did think this was an important role and reported a few successes, such as getting the gates changed so motorbikes could not enter, which though small, were nonetheless important. One member did express the hope, however, that they would be able to find a more active role for the group in the future, as will be discussed below.

Bringing the community together

At Brent River Park, two of the people I spoke to emphasised the way they hoped the project could bring the community together. As already discussed, Mr (FOBRP 1), hoped that the group could help to unite the two communities either side of the North Circular, by linking with another park user group on the other side, Friends of Gibbons Recreation

Ground. Ms (FOBRP 3) had facilitated links between Friends of Brent River Park and the Alperton Millenium Volunteers.

6.3 Relationships

A long haul, a battle, and frustrating – but the importance of personal relationships

Interviewee (QWAG 1) obviously felt the process had been a 'battle', as mentioned above, he also referred to it as a 'very long haul' and spoke of the 'frustration' of the process, unsurprising given that it was 14 years since he had first got involved (see chapter 5). Despite all this, he felt he had gained some good personal relationships with some members of the NRA and was particularly pleased with how far they had come.

Similarly, one member of Friends of Chinbrook Meadows said how frustrating it could be at points:

'looking back over the minutes you sort of find, you know, we're saying the same things that really need to be done, over and over again and it doesn't seem to get done. And you sometimes get a different person coming along and saying 'oh yes I'll have to deal with that' and you know it doesn't actually get done, so there is a bit of, there is a certain amount of frustration, I mean we know there's limited funds and they have sort of promised things that have then gone astray because they haven't got the money, and we're, kind of aware of that, to a certain extent.' [FOCM 1]

Suspicion and trust

Experiences which affected the level of trust between the local participants and the project leaders were a particularly important theme.

As mentioned in chapter 5 for most of the members of Chinbrook Meadows, their experience of the river restoration work and the associated public consultation, was tarnished by their association with the unwelcome development of a group of houses on a piece of green space next to the park.

For Ms (FR 1) the project at Sutcliffe Park was seen in the light of previous negative experiences with Greenwich council, most strongly in the way the demolition of the Ferrier

Estate and the rehousing of its occupants was being dealt with. For example, after explaining about the problems that the re-housing was going to cause, and about how she had had to fight so long to get CCTV installed in her housing block, she said:

'FR 1: I know you can focus on the river, but if you're talking community involvement you need it in context

KR: Because I suppose what you're saying is that there's not the trust there

FR 1: (laughs) there's not the trust, there's not the understanding, there's not the motivation, there's more worry about other stuff like the rebuild...'

Importantly, Ms (FR 1) also saw the project in the light of a regeneration project on the Ferrier estate that had taken place a few years back. The idea had been to create mini playgrounds in the squares around which the tower blocks of the estate are arranged. There had been public consultation before the parks were created, but they had since become run down because there was not the money to maintain them and they are now locked:

'we've seen other projects, like the playgrounds in the middle of the squares, big dreams, Ferrier involvement, resident involvement, consult with the residents, have meetings, spend the money, get these squares put up, but have we allowed for the funding to maintain them? No, so what was it all about, a good exercise on paper for that particular return, is this [the river restoration at Sutcliffe Park] going to be an even bigger exercise on paper?'

The difficulty of representation

There was also a reported level of distrust between different sections of the community, which in some cases was felt to have been exacerbated by the projects.

One member of Friends of Chinbrook Meadows (FOCM 2) for example, reported how he felt that another local community group had been given an unfair influence in the process. While a couple of others mentioned that there was some annoyance when some people in the local area received letters inviting them to meetings or informing them about developments in the river restoration, while others did not. They thought the reason had been that leaflets were only distributed to owner-occupiers rather than tenants, but didn't think this was a good enough reason.

Similarly, Ms FR 1 mentioned she was concerned the Friends of Sutcliffe Park would be dominated by residents from the more middle class areas near the park:

'On a personal basis I don't want it [Friends of Sutcliffe Park] to be all people from Black Heath who think they can do things like that, and exclude, I think it needs to be a working group which includes everybody.'

Though networks are built

Despite the fact that there was this suspicion between sections of the community there were networks that were built, as will be discussed in more detail in the following section, but see also this quote from a member of FOCM:

'the issue with a project such as this, once its been done the first time then there are communication routes that exist but at the beginning of the process I can imagine thinking well, how am I going to start all this, and communication networks actually are created because of a project as big as that... I think if something was done in the park again the communication networks that have already been created would actually be used and you'd probably find the consultation would be an awful lot better, but I always think when a project is starting off any time, that's the hardest thing consultation is always very, very difficult, well, communication first, then the consultation.' (FOCM 6)

6.4 Rewards

Lifestyle

The person who had probably been affected by his involvement in the most tangible way was Mr (QWAG 2) for whom it had kick-started a career in conservation:

KR: Did your experiences make you think you'd like to get involved with similar things again? Was it a good experience?

QWAG 2: 'Oh it was amazing, yeah, really, very exciting, yeah, it was kind of, I suppose it changed my outlook on the kind of, the importance of, the importance of rivers and, sort of, you know, nature and open space and all that sort of stuff to people, and quality of life, all that sort of stuff, so now I'm working with the RSPB on very much international conservation...' [QWAG

Personal satisfaction

This interviewee also seemed to be implying a sense of satisfaction he gained from seeing that the project had been started at Sutcliffe Park, in the following quote, in which he describes the unusual circumstances in which he discovered the work had finally started, after he had moved away from the Greenwich area:

'I went over to Sumatra with the RSPB and we flew back and we were kind of stacked over London because there were planes, there were delays with the planes and so we circled over London a couple of times and it kind of banked and went straight over the Ferrier, directly above it, and I was shocked to look down, and this was July last year, and I could see... the square I lived on on the Ferrier... and I could see Sutcliffe Park and I could see the school and it was all just dug up and it was just a real shock to the system.' [QWAG 2]

Another interviewee made explicit the altruistic reasons for getting involved:

'As far as I'm concerned I'm not there for a reward, not in that sense, I only want to see something changed I just want to see green space used properly and enhanced, because our neighbourhood is so short of green space, available green space.' [FOBRP 1]

A sense of community

As mentioned above, despite the fact that the groups were quite small, networks were built through the project, and though a small step, these small links were considered important:

'I mean I've got to know all this group through the park... I have got to know people a bit more... so you there have been a few other little things, sort of like when we've done events like the walk with the pond dipping, and ... the bulb planting, there was one family that we sort of got to chat to, so you do start to make little kind of connections with people and I think that's one of the big pluses for me, you know, that you do feel more part of a local community and you feel like you're actually involved in something, and you know, its quite nice to feel you're sort of including people...' [FOCM 2]

The role of the project in strengthening community links was particularly important for interviewees FOBRP 1 and 3 as mentioned above. Indeed this was their primary motivation for getting involved in the first place. This will be discussed in more detail in Chapter 7.

6.5 The future

During the course of the river restoration works at these case studies, three new community groups were established that are still carrying on their work, even now that the restoration work has been completed: namely Quaggy Waterways Action Group (QWAG), Friends of Chinbrook Meadows (FOCM), and Friends of Brent River Park. Victims of the Quaggy has not continued to be active. Another group, Friends of Sutcliffe Park, is in the process of being established.

In terms of the future, both QWAG and FOCM are currently renegotiating what their role should be:

'You know we are at a point where we are wondering what is our role next, we have a lot of input into planning applications but you know, the message has got across to some extent and we would, we will stay involved in the urban renaissance Lewisham project and we will stay involved in the flood alleviation scheme, but whether we can start doing serious fund-raising and project management or even project initiation for the [restoration of the] rest of the river remains to be seen, but that would be the ideal.' [QWAG 1]

A similar point was brought up by one member of Friends of Chinbrook Meadows:

'I was just going to suggest that now the project is almost completed what I think, this is my own opinion, I haven't discussed it with anyone else, might be a good idea if we reformed the Friends of Chinbrook Meadows and refocused on our aims now that the park, sorry meadows, are there in that condition and actually, on what we should do next, how often we should meet, what actually we are going to be for, and then prioritise, again from the differing opinions amongst the group and the wider area...'[FOCM 6]

Another mentioned how she hoped they could find something more positive for the FOCM to do:

'we said last year it would be nice to sort of feel we had something active for us to do as our contribution, say so not always be nagging, saying ok you've got to do this, you've got to do that, which we do feel is important, but also that we can actually make, you know, some sort of contribution...the problem is I suppose, if you really get into that, you are going to start needing to raise money and that is like another, whole nother ball game...' [FOCM 1]

The difficulty of maintaining momentum once work has finished

The vice chair of FOCM commented on the problem of getting people involved:

'and I mean we feel we're too small a group and there aren't enough people who are kind of prepared to you know, put in the time. We would like more people sort of involved, its quite hard to feel as a small group that you've got enough momentum to move things on, and you want people with new ideas' [FOCM 1]

And later reinforced how difficult it is without a 'big issue'

'I mean a big issue does make the difference doesn't it, that's the thing, I mean people will come to a big meeting if they feel that there's you know, like a house is going to be built on a piece of green land or you know, things are going to really be changed in a big way' (FOCM 1)

and when on to jokingly suggest they should send out letters saying that the park was going to be built on, just to get people along to meetings. (Another interviewee (FOCM 3) said 'oh don't even say it' as if to do so would be to tempt fate.)

The problem of having very few people who were prepared to get involved directly was also commented on by FOBRP 1 and 3. But for Friends of Brent River Park this perhaps not such a problem as the future looks more solid. They still have strong support and direction from the local council and have further phases of the restoration project to look forward to, to plan for, and to help raise funds for. They are also already particularly active in organising events, again with the substantial support of the council officer.

6.6 Discussion

These findings indicate that community involvement does have a potentially important role to play in urban river restoration, whether that restoration is carried out for the purposes of flood defence, as compensation for development, or as a means of stimulating urban regeneration.

The theoretical benefits of community involvement – improved quality of decision making, greater public support for decisions, and economic and social spin-offs, were observed, though the research has raised some important qualifications to these benefits, and provided further evidence that, in practice, community consultation is difficult to do well.

For example, the objections of local residents at Monks Park were taken into account in the planning process. This meant that the meander of the proposed new river bed was reduced, so as to be further away from their houses, which presumably had the effect of increasing public support for the scheme, but for restoration enthusiasts would be seen as reducing the quality of the decision. The involvement of Friends of the Quaggy/QWAG prevented further channelisation of the river Quaggy, which the Environment Agency now recognises would have not been the most environmentally friendly solution, but it also caused delay to the flood alleviation scheme, which though not perfect, was for some people such as the Victims of the Quaggy, thought to be better than nothing. The general point being that whether a decision is considered to have been improved by the involvement of local people depends on whose standards you are judging by.

Social spin offs, such as the building of community networks, were actively sought, and achieved, in small, but significant ways. It could even be argued there were tangible economic spin-offs for the one resident who was led to a career in conservation as a result of his involvement (though of course, an alternative career path would not necessarily have been less lucrative!).

However this research has indicated that *how*, *when and why* the involvement was undertaken is equally, if not more important as *whether* it was done at all, in terms of the perceptions of those who got involved. Since if the consultation or forms of involvement were perceived to have been handled badly, the spin-off consequences might actually be

negative. For example, if certain groups were seen to be favoured in their relationships with the project leaders, the consultation/involvement would foster suspicion and disharmony within a community (see the views of certain members of FOCM). If the involvement was undertaken inconsistently, it could be ineffective (see the experience of local residents at Sutcliffe Park). Finally, if it was perceived that the restoration and consultation had been carried out as part and parcel of an unwelcome development, it could be tainted by that association and thus limited in its effect (see the views of FOCM again).

6.7 Summary

These findings emphasise the fact that consultation and community involvement are not quick and easy cure-alls for broader problems or complaints. The tensions between two communities either side of the river Brent were not solved by the restoration work, or their concerns completely resolved by information and consultation. Such issues are only resolved over time, and as such require ongoing commitment and resolution. As will be demonstrated in the following chapter, there were differences in attitudes to urban nature and disagreement as to the proper relationship that should be held with respect to it, that lay behind people's motivations for involvement. These are quite subtle, and consensus will not be reached overnight, indeed these attitudes may be inherently ambivalent (Burgess *et al*, 1988).

As such it is particularly important that the growing fashion for community consultation does not direct attention away from more traditional and direct forms of increasing public support for a project, for example setting aside money for the ongoing maintenance of the site. Similarly, it is important that the focus on formal methods of consultation does not mask the commonsense values that lead to good decisions and which these formal methods represent, such as respect for other people's viewpoints, listening to others, taking time to explain and inform people about what you are doing and where it will affect them. There is reported evidence that people can grow tired of an approach that is seen to be simply a means of 'box ticking'.

Chapter 7 – Attitudes and understandings of urban nature

7.1 Introduction

This chapter will conduct a deeper analysis of the attitudes to urban nature that lay behind the individual's motivations for involvement. It will consider the range of motivations for involvement, as well as the attitudes of the interviewees to the themes discussed in chapter three, and how these attitudes were negotiated and changed through involvement.

7.2 Anthropocentric vs. ecocentric motivations

There was a full range of motivations for getting involved with this project from ecocentric to anthropocentric, (see, for example, Kaltenborn and Bjerke, 2002, for further discussion of these classifications) with interviewees often exhibiting mixed and complex attitudes.

For example, Mr (QWAG 1) was perhaps the most strongly 'ecocentric' of the group I spoke to. He spoke of the restoration as the 'bringing the river to life'. It was this image of the river having the potential to 'live' rather than just being a 'dead drain' that was an important motivating image for him. He felt that QWAG was distinctive in that 'we have this vision of the rivers just being part of our lives'. He had not always felt this way, and commented that before he heard about the flood allevation scheme he had not thought much about the river at the bottom of his garden. While stressing that he had not become an 'expert' on rivers by any means, he did feel he had learnt a lot in the process:

'I think I, realising that they could really be restored and become rivers again was a fantastic thing, realising that, what the problems are and what the problems aren't, like that the water quality in the rivers is actually very good, that water quality wise they could support a lot of life, it's habitat that's missing, you know, learning that there are, understanding what the issues are and therefore seeing how they can be resolved was just wonderful, to feel there is real potential here, and er, understanding something of what the cost of it is was a real insight because its not that expensive, compared to roads building schemes, its peanuts...'

At the same time, he felt this appreciation of rivers and of water was something fundamental, so in a way it was a rediscovery, or an unearthing:

KR: What do you think it is about rivers that attracts people, or particularly attracts you?

QWAG 1: I don't know, I think, I do think its something fundamental, it something in, inner built, you know, the excitement of waters and rivers, and they are you know, beautiful, romantic things, and they're very interesting.'

Mr QWAG 2 was also primarily motivated by a sense of appreciation of urban nature. For him, it was something he had been interested in since a child, and it was when he heard about the proposed creation of a wetlands scheme at Sutcliffe Park that he became involved. He was interested because he thought it would attract new wildlife to the area. He valued the wildlife partly for its own sake, but also for the benefits it had brought him and that he thought it could bring to others. He mentioned how he and other children from the Ferrier Estate had played in an area of wasteground behind the Estate near to the park, and how that had been something of an escape for him when things were difficult. He mentioned how he wished he had had the river when he was growing up and how good the contact with urban rivers could be for children, 'because they've got bugger all else to do in places like London'.

For another interviewee, Ms (FOBRP 3), as mentioned earlier, the motivation was primarily the potential benefits that she felt the scheme could bring to young people in the Brent area. Not only the improved sense of ownership and appreciation of the park as an amenity area, but also the chance to meet good role models. For her it was the personal characteristics of the people who were involved – the positive group dynamics, the opportunities for networking, and the fact that it was an ongoing, well structured project that were particularly attractive to her about the scheme.

Another interviewee at FOBRP was also motivated by a feeling that the project could bring substantial benefits to the community for a variety of reasons:

'I joined it [Friends of Brent River Park] relatively recently in the last six to nine months, one because I wanted to join the Gibbons recreation group up with the other side of the North Circular and to bring two groups together to add weight to our own arguments about environmental issues, and also to bridge a gap between a road that was made in the 1930s and to link in with the natural river that is part of our own environment, and it's a river for all, so my perception was that if I brought some of my members over and we managed to get some of their members over to the other side we'd bridge some of that gap, of that road between us'

[FOBRP 1]

For him, there was the sense that it was not only the human beings that were involved in the project that had the potential to build this sense of community, but actually the park itself:

'In a borough like Brent then, one of the difficulties is that we actually have such a huge ethnicity.... to get beyond the tower of Babel that actually exists and to find things that are beyond language so something like this park is a way of bringing people beyond language, that's the way I can think of describing it, so tangible a thing like a park, a green space, can actually convey across things to people, mostly subliminally... because people won't be truly aware of their environment, or take an innate pleasure from it without even realising why they're taking that pleasure from being in a green space... where the air is a bit fresher...'
[FOBRP 1]

For a number of the members of Friends of Chinbrook Meadows it was their nostalgia for the park as it used to be in its 'hey day' in the 1970s, and a concern that the river restoration would involve the removal of some of the features of the park that they particularly appreciated, that was the prime motivation. On first sight this would seem to be quite an anthropocentric motivation or evidence of apathy towards environmental issues, one of the residents spoke about how he thought parks should be for people (FOCM 2). However, the real situation was more complicated. This same individual spoke about how he had been extremely upset about the cutting down of the trees in the park that the restoration would involve. Ms (FOCM 3) spoke about how one of the other members of FOCM, (FOCM 6)

who had worked at the park had a strong sense of care for the plants in his care, in their own inherent right, and how she felt this contrasted with the new managers of the site:

'I would say, I know (FOCM 5) loves every plant that's ever there, do you know what I mean? We do a bit of gardening round where we live, and I think that's the difference you know, when you've got outside contractors, they just literally, well I feel they're just labourers, very nice people no doubt, but they're not, they're not gardeners, different lot of people'

Similarly, the member of Victims of the Quaggy was motivated in his involvement by what he saw as the problems that the river brought at the back of his house. Not only the potential for flooding, which was a major concern for him, but also the problem of having tyres dumped in the river, kids throwing stones into it, and being a site for 'vermin'. But at the same time he identified the source of these problems with humans having the wrong attitudes to the river. For example, he was well aware that flooding problems have been exacerbated by excessive building on the floodplain, and blamed 'bad planning'. He also pointed out that he remembered when his father had heard there was to be channelisation of the river he had been suspicious of the concepts flood defence benefits since the quickest route from a to b is a straight line – a meandering river must store more water than a straight one. Despite having signed the petition to the NRA in 1992 demanding an immediate return to the channelising scheme, he was now a great convert to the flood meadow principle. He stressed that what he had been, and still was, most upset about was the delay - he had been waiting for the flood defence work to be completed at the back of his house for most of the time he had lived in that house, which was over 40 years, which he saw as incompetence on the part of the NRA/EA. He thought that there should be better education in schools to encourage children to see the river differently, not as a dumping ground and he did not think rivers should flow overground near restaurants where there could be hygiene problems and rats would be encouraged.

7.3 Discussion

Restoration as liberating nature

For the two members of QWAG that I spoke to, the idea that the restoration would 'liberate' the river seemed to have resonance. Mr (QWAG 2) spoke repeatedly about 'breaking out' 96

the river from concrete. Mr (QWAG 1) recounted the following story about how he appreciated the wilder side of the river:

'Chinbrook Meadows, I've visited it many times since its been restored and I visited it recently in a storm, thinking I'd like to see what its like in a storm and I was not the only person in the park, visiting it just because it was a storm, and it was a real storm, it was not the sort of thing you'd expect local people to go out in. But one of the guys I talked to said it was just great because it had all these different moods and that was the lovely thing about it.'[QWAG 1]

One of the areas in which discussion about this theme came to light was in discussions about the areas of the park, usually along the river bank, where the grass would not be closely mown, but where wildflowers and other native plants would be sown and left to grow tall as a meadow effect.

This was quite controversial for a few of the people I spoke to. FOCM 2 in particular was very much opposed to long grass in a park, on the basis it encourages a 'multitude of sins'.

Another member of FOCM commented on how wild areas were not necessarily the most amenable for people:

'by the river bed, you know by the river side - which is lovely - and you think, well its lovely and, wild, but how lovely for it to be kept low and short as an area, you could sit and have picnics, you can't sit and have picnics can you in that, sort of spiky long grass, its not comfortable' [FOCM 3]

While another replied that she hoped it would be an attractive aesthetic feature:

'I quite like it long, you know, by the river, I quite like that sort of... as I say we haven't really seen you know, what its going to be like, ...because it might be quite, you know in a couple of years it might be really colourful, mightn't it, hopefully, with sort of poppies and things like that, and butterflies could come back and... I'd quite like that, sort of, you know, wild area.' (FOCM1)

One commented that as well as being good for wildlife it was also an economy:

'they're trying to achieve a balance between a park and a natural area, and in order to have a natural area, in order to encourage wildlife they must retain long grass, meadow land, and, but its also an economy if you think about it, so they've left large stretches, including the slopes uncut, so as to encourage meadowgrounds, grasshoppers and wildlife' (FOCM 4)

The words that people used to describe the long grass areas are particularly revealing as people negotiated the difference between an intentionally wild area, and a neglected place overgrown with weeds. Ms (FR 1) commented on how 'what people are saying is 'oh look, they've left weeds', they don't realise its special bedding'. Ms (SP 1) commented on how she was concerned to find out from the council as to whether the new areas of Sutcliffe Park would be left to go to 'bramble' and 'jungle' or whether it would be managed, such as by cutting once a year, to create a 'wildflower meadow'.

The language used is particularly demonstrative because although part of the difference between a weed and a wildflower is an aesthetic judgement, it is also a difference of intention – a weed being a plant where it is not wanted. Hence the discussions about weeds and wildflowers were partly about wanting the park to be looked after, and to appear looked after. As Ms (SP 1) pointed out, if somewhere looks tidy it tends to stay tidy.

This negotiation of language was also clear in the discussions at Chinbrook Meadows about what the park now was. One member (FOCM 6) in an extract already quoted (p.89) corrected himself when he referred to it as a park, speaking of it instead as a 'meadows'. See also the following extract where FOCM which followed on from this person explaining how he hadn't realised it was going the park would flood:

'nah it was never mentioned until possibly a year ago, when it was said, of course its gonna get flooded... we knew it was going to happen because when the rain comes in the winter it floods there's no two ways about it and we thought, but when we complained about it, they said, of course we knew it was gonna flood, it's a flood plain!

And my argument was then, its supposed to be a park, but no no it's a meadow, so I don't know what they really call.., to me a meadow is where horses and cows go to, and a park is where people play, now I could be wrong there...'

The comments were made partly in jest, but they still point to the fact that the flooding was bringing a new dimension to the park that was not necessarily welcome. See also this extract:

FOCM 3: 'So I wonder what they're building down the other end that we've got to have their water....'

KR: 'I suppose the argument is its better to hold the water there than let it flood downstream'

FOCM 3 'well, because they're building some posh houses probably, downstream, so we've got to have their water, that's what I'm saying!'

Wilderness and risk

Part of the objection to the long grass was the fact that they could disguise dropped needles, and that these would pose a risk for children playing in the grass and the fact that many people are unwilling to accept a more 'wild' environment if it means greater risk underlies many of the objections to the restoration work. Nature itself, of course, is not always benign:

'The environment then is equally capable of becoming hostile, as much as it is looking calm and tranquil on any given day you can observe that calmness and tranquillity and enjoy it and savour it, but it has elements of danger in it too... [FOBRP 1]

However, for one member at least, the benefits were thought to outweigh the disbenefits. When talking about the risk of flooding Mr (QWAG 1) commented:

'I mean my take is it will never be enough, there'll always be a flood and we ought to have, I mean, our recompense for that ought to be a decent river that's an attractive amenity for people and real wildlife resource and so we will never get away from the flooding but we should at least have a real river as a result of that' [QWAG 1]

This interviewee spoke about how the issues of safety in a naturalised river always came up when discussing restoration, and about his counterarguments:

'It [the issue of safety] always comes up, and its always been an easy one to deal with when you're talking to the public. Talking to politicians, and talking to people in authority who are responsible for parks, for safety, is a major stumbling block, but that's because they perceive it as a real stumbling block with their constituency or their clients, but when you get, when you get the public, it will always come up and they will understand completely the answers... and the answer is that, the answer I think is to put it all in perspective and to point out that roads are very dangerous and we learn to live with those and that we look after our children if they're very small, and watch them, that, in a sense there are other attractions that are far more dangerous to young people and we have all sorts of problems with young people not having anything exciting to do in their lives...people want excitement and interest in their lives and a river does provide that, and really, the danger element is minimal.'[QWAG 1]

7.4 Summary

Policy Implications

The range of interpretations that are placed on the physical configurations of nature in cities emphasises the need for 'environmental' projects such as river restoration works to be explained, interpreted and negotiated with local residents before during and after implementation, if they are to be accepted, appreciated and cared for.

In part, this can be done in quite practical ways, and the concerns of some people assuaged, as one of the interviewees mentioned, at a level that is beyond language. For example, 'wild areas' can be clearly defined as such, bordered by fences or otherwise clearly demarcated to give the clear impression that they are left as such for a clear wildlife purpose, and not just to cut costs. Though it is difficult in times when budgets for such things as parks are being cut, having more staff around in an urban green space does mean that it holds less fear for the vulnerable e.g. women, children and the elderly.

As described above, perceptions may start to shift through participation. However, this seems to be a slow process and one that is hindered by the limitations of community involvement discussed in the previous chapter, and also by the fact the community groupings tend to form around people with similar interests and attitudes, so that the opportunities for negotiation are limited.

Chapter 8 - Conclusions

This thesis has discussed the 'myths, motivations and practicalities' of community involvement in urban river restoration, by reference to three projects recently undertaken in urban parks in the London boroughs of Greenwich, Lewisham and Brent. The intention was to use these specific examples to illustrate and discuss the challenges inherent in wider debates about restoration, wilderness, urban nature, and the value and purpose of community involvement in such local environmental projects.

A qualitative methodology was applied, making use of both semi-structured interviews and a discussion group, held with a selection of those members of the public who had been involved in some way in the projects at each site. Experiences and perceptions of the process of participation were explored, as well as assessments of the river restoration work itself. In the preceding chapters, these comments have been analysed in the context of the grey literature and current academic research.

Key findings

River restoration in urban areas is being undertaken for a variety of reasons. The three purposes identified in these three case studies were: for flood defence (Sutcliffe Park), as compensation for further development on the floodplain (Chinbrook Meadows), and as a stimulus to urban regeneration (Brent River Park). The ecological benefits of the restoration were motivating factors for the project leaders in each case, but were given quite different interpretations and emphases, especially in terms of how these benefits would coincide with the needs and wishes of the local community.

Similarly, efforts were made by the project leaders to involve the local community in each case, but with varying effort and consistency, and to varying perceived 'success'. It was found that assessments of the experience of getting involved were mixed and were influenced by, among other things, the form that an individual's involvement had taken, their perception of the motivations of the project leaders, and previous experience of participatory processes.

This research does highlight some very positive examples of the input that community groups can have to such a project, and in two of the case studies (Sutcliffe Park and Chinbrook Meadows) it was a community group that was influential in initiating the restoration work in the first place. At Brent River Park a park user group was established as part of the formal process of community involvement, and this group has been particularly active in organising events and in making links with the wider community.

However, there were also negative assessments of getting involved. Some people spoke of the 'frustration' of trying to get their point of view taken seriously, about the suspicion that can develop between different sectors of a community if influence is seen to be shared unequally. Many people also spoke about the difficulty of maintaining momentum once the project has been completed.

Personal motivations for involvement were seen to cover a range of eco-centric, anthropocentric and environmental apathy, value orientations, with individuals exhibiting ambivalent and complex attitudes towards urban nature, restoration and wilderness. In particular it was found that the idea of restoration as 'liberating nature' had a strong resonance for some people, while for others this was balanced with a cautious attitude to the idea of a more 'wild' urban nature, because of the risks it could entail.

Strengths and Weaknesses of the Methodology

A qualitative research method was the most appropriate approach, given that feelings and perceptions were sought, and the flexibility of the semi-structured interviews was useful in bringing out unexpected framings and understandings. The discussion group was particularly helpful in that it added another dimension to the conversations, people could correct each other, disagree, and it also highlighted the points on which there was consensus. A second discussion group, held with people who had got involved at another site, or through different channels would have made an interesting comparison. It would have been particularly good to have brought participants together from the three different case studies, so that they themselves could have discussed what was common and what was different about their experiences, instead of making the comparison from my own interpretations.

This study aimed to elicit the experiences of those who did actually participate in some form in the restoration projects, and while it would be interesting to compare their understandings with those who did not get involved at all, that would really be a different study, and to do this would have meant sacrificing some depth in the analysis, given the time constraints. However, there is one group of people whose views would have added a relevant dimension to the research, and that is the school children and members of the youth group who took part in the consultation processes at each site, or who took part in some of the organised events, such as the bulb planting or saw the shows at the launch party. This would have given a more balanced age range for the interviewees - all bar one of the people I interviewed were over 35, with a high proportion retired or semi-retired. In part this is due to the fact that people who are retired are more likely to get involved with such projects given that they have more time to do so. But speaking to a younger group might have brought out some valuable comparisons, particularly since many of the people I spoke to emphasised how important they thought the project could be for young people.

Relevance to wider debates and to policy

The choice of urban river restoration proved to be an interesting example of how theoretical debates about urban nature, restoration, and the value and purpose of community involvement, are developing in practice. It does have a quite unique advantage in that it is an example where the three trends have all been an influence and inspiration, to a greater or lesser extent, and it serves to show how each influences the other. It also demonstrates what complexity there is behind an apparently simple and, it might be thought, inherently positive, practice.

For policy, this research would recommend that greater public participation in local environmental projects does have the potential to bring many benefits. However, it needs to be promoted in a way that is sensitive to local conditions, the difficulties of making participation work well in practice, and the often complex and ambivalent attitudes of local people, if it is to realise its full potential.

A more 'wild' and ecologically rich urban nature is potentially acceptable to some members of the public and furthermore, the idea of 'liberating' and 'bringing to life' a natural process can particularly engage the imaginations and enthusiasms of some people.

Others, however, are more responsive to a concept of an urban nature that is tamed, neat and tidy and therefore looks cared for and appreciated, whilst being amenable and safe for people. There are ways these two views can be respected and combined in projects that aim to conserve, enhance, or restore, urban biodiversity. For example, physical features such as fences or other boundaries can be used to 'explain' that certain areas are intentionally left more wild. Making sure there is adequate investment in staff and in maintenance also goes a long way to creating a sense of safety and of care. There is furthermore some indication that attitudes are constructed and negotiated through the process of participation in such a project, and therefore greater public participation may be a way to slowly reach greater consensus. It is clear, however that on a certain level, attitudes to nature, and human relationships with it, are likely to remain complex and ambivalent.

References

Ansari W E L, Philips C J, Zwi AB, (2002), Narrowing the gap between academic professional wisdom and community lay knowledge: perceptions from partnerships, *Public Health*, **116**, pp. 151-159

Barton N, (2000), The Lost Rivers of London, Historical Publications Ltd, London

Bioregional, (no date), *The Local Lavender Project* [ONLINE] Available from: http://www.bioregional.com/programme_projects/ecohous_prog/local_lavender_finfo.htm [Accessed August 2004]

Bhatti M, Church A, (2001), Cultivating natures: homes and gardens in late modernity, *Sociology*, **35**, (2), pp. 365-383

Brent Council, (no date), *Consultation*, Section of report on the consultation carried out for the river restoration work at Brent River Park, 1999-2003, provided courtesy of Joyce Ip, Brent Council

Brownlea A, (1987), Participation: Myths, realities and prognosis, *Social Science and Medicine*, **25**, (6), pp. 605-614

Burgess J, Limb, Harrison C, (1988), Exploring environmental values through the medium of small groups: Theory and Practice, *Environment and Planning A*, **20**, pp.309-326

Council for National Parks, (1998), Wild by Design in the National Parks of England and Wales. A guide to the issues, Council for National Parks, London

Department for Environment, Food and Rural Affairs (DEFRA), (2001), *National Appraisal of Assets and Risks of Flooding and Coastal Erosion in England and Wales*, DEFRA, London

Degen, M Whatmore, S Hinchliffe, S Kearnes M, (2003), Geography Discipline, The Open University. *Re-inhabiting the city: Making vernacular knowledge count in urban wildlife policy and practice* Paper presented at the RGS/IBG annual Conference September 2003 [Online] Available from

http://www.open.ac.uk/socialsciences/habitable_cities/habitable_citiessubset/habitable_citi

Denzin N. K, Lincoln Y.S (eds), (1998), *Collecting and Interpreting Qualitative Materials*, SAGE publications, California

Dinnage P, (1995), River Quaggy Flood Alleviation Scheme – Sutcliffe Park, Report to the Committee of Leisure Services at Greenwich Council, 05.04.95, Item no. A.21

Eden, S, Tunstall, S M, Tapsell S M, (1999) Environmental Restoration: environmental management or environmental threat? *Area*, **31**, (2), pp.151-159

Eden S, Tunstall S, (2001), *Restored to life? Urban river restoration projects and local communities*, paper prepared for the Association of American Geographers' Annual Meeting in New York 2001, session on 'Cultural and Political Ecology in an Urban and Industrial World'

Eden, S, Tapsell S, (2000), Translating Nature: river restoration as nature-culture, *Environment and Planning D: Society and Space*, **18**, pp. 257-273

English Nature, (2003), Urbio, Autumn 2003, 4,

Environment Agency, (2001), *Quaggy River Flood Alleviation Scheme (Scheme ref 3376)*Thames SE Area, Environmental Statement, November 2001

Environment Agency, (no date), 'Changing the Channel at Chinbrook Meadows' *Eligibility* for the Deputy Prime Minister's Award for Sustainable Communities, courtesy of the Environment Agency

Environment Agency, (2002), River Restoration A Stepping Stone to Urban regeneration. Highlighting the Opportunities in South London, Environment Agency Pamphlet

Eyre M, (2000), Invertebrates and disturbed habitats In Barker G, (ed), (2000), *Ecological Recombination in Urban Areas: Implications for Nature Conservation*, English Nature, Peterborough

Everard M, (2004), Investing in Sustainable Catchments, *Science of the Total Environment*, **324** (1) pp. 1-24

Everard M, Powell A, (2002), Rivers as living systems, *Aquatic Conservation Marine and Freshwater Ecosystems*, **12**, pp.329-337

Fischer F, (2002), Citizens, Experts, and the Environment: The politics of local knowledge, Duke University Press, Durham and London

Gobster (2000) Restoring Nature: Human Actions, Interactions and Reactions, in Gobster P H, Hull R B (eds) (2000) *Restoring Nature: Perspectives from the Social Sciences and Humanities*, Island Press, Washington D. C.

Gobster P H, Hull R B (eds), (2000), *Restoring Nature: Perspectives from the Social Sciences and Humanities*, Island Press, Washington D. C.

Goodwin P, (1998), 'Hired Hands' or 'Local voice': understandings and experience of local participation in conservation, *Transactions of the Institute of British Geographers*, **23**, pp. 481-499

Groundwork Thames London Gateway South (GTLGS), (2001), *Chinbrook Meadows* feasibility study, Feb 2001, courtesy of the Environment Agency

Groundwork Thames London Gateway South (GTLGS), (no date), Chinbrook Meadows report, courtesy of the Environment Agency

Harrison C, Burgess J, Millward A, Drawe G, (1995), Accessible natural greenspace in towns and cities: A review of appropriate size and distance criteria, English Nature Research Report 153

Harrison, C Davies, G, (2002), Conserving biodiversity that matters: practitioners perspectives on brownfield development and urban nature conservation in London, *Journal of Environmental Management*, **65**, (1), pp.95-108

Hinchliffe S, Degen M, Kearnes M, Whatmore S, (no date) *Living cities: a new agenda for urban natures* [ONLINE] Available from:

 $http://www.open.ac.uk/socialsciences/habitable_cities/habitable_citiessubset/habitable_ci$

Accessed [April 2004]

Jordan W R, (2000), Restoration, community and wilderness, in Gobster P H and Hull R B (eds) (2000) *Restoring Nature: Perspectives from the Social Sciences*, Island Press, Washington D.C.

Kaltenborn B, Bjerke T, (2002), Associations between environmental value orientations and landscape preferences, *Landscape and Urban Planning*, **59**, pp. 1-11

Kearns A, (1995), Active citizenship and local governance: political and geographical dimensions, *Political Geography*, **14**, (2), pp. 155-175

London Borough of Brent, (no date), Brent River Park Project [ONLINE] Available from: www.brent.gov.uk/RiverBrent.nsf [Accessed July 2004]

London Borough of Brent (2003) River Brent Restoration Project – Phase 2, Report from the Director of Environment to London Borough of Brent Executive, 21st July 2003 [ONLINE]

Available from:

www.brent.gov.uk/Democracy.nsf/0/9fcfaec407e622fe80256d4800361587?OpenDocument [Accessed August 2004]

London Rivers Association, (2003), Turning the tide, *London Bulletin* [Online] Available from: www.alg.gov.uk/doc.asp?doc=8705&cat=1096 [Accessed April 2004]

Mabey R, (1996), Flora Brittanica, Sinclair Stevenson, London

Macnaughten P, Jacobs M, (1997), Public identification with sustainable development: Investigating cultural barriers to participation, *Global Environmental Change*, **7**, (1) pp. 5-24

Macnaughten P, (2003), Embodying the environment in everyday life practices, *The Sociological Review*, **51**, (1) pp. 63-84

Mance G, Raven P A, Bramley ME, (2002), Integrated river basin management in England and Wales: a policy perspective, *Aquatic Conservation: marine and freshwater ecosystems*, **12**, 339-346 [Online] Available from: http://www3.interscience.wiley.com/cgibin/jtoc?ID=5593 [Accessed July 2004]

Massini P, (2003), *Relinquishing the Renaissance?* In English Nature (Autumn 2003), *Urbio*, **4**, p.23

Matthews H, Limb M, Taylor M, (1999), Young people's participation and representation in society, *Geoforum*, **30**, pp.135-144

Mayor of London, (2001), *The draft London Plan, Annex 2: the Blue Ribbon Network*, [ONLINE] Available from:

http://www.london.gov.uk/mayor/strategies/sds/draft_london_plan_download.jsp [Accessed July 2004]

Merchant C (1982) The Death of Nature: women ecology and scientific revolution, Wildwood House, London

MerseyBasin Campaign, (2003), *Public participation in the Water Framework Directive: Opportunities, constraints and challenges for participation*, Working Paper Series, produced following a Conference held October 15th 2003 at UMIST, Manchester [ONLINE] Available from:

www.merseybasin.org.uk/research_and_reports/drctv_water_framework/default_page [Accessed June 2004]

Midgley M (2004) The Myths We Live By, Routledge, London and New York

National Rivers Authority (NRA), (1992), Ravensbourne Catchment Landscape Assessment, Report prepared by Land Use Consultants on behalf of NRA Thames Region

Nolan, P A Guthrie, N, (1998), River rehabilitation in an urban environment: examples from the Mersey Basin, Northwest England, *Aquatic Conservation: Marine and Freshwater Ecosystems*, **8**, pp.686-700

Quaggy Waterways Action Group (QWAG), (1995), *Operation Kingfisher – Quaggy River Restoration Project*, Initial draft received by the Environment Agency 2/6/95

Rapson, J, Thomas K, (2000), SuperTramps, in Barker G (ed), (2000), *Ecological Recombination in Urban Areas: Implications for Nature Conservation*, English Nature, Peterborough

Ravetz J, (1999), Citizen participation for integrated assessment: new pathways in complex systems, *International Journal of Environment and Pollution*, **11**, (3), pp. 331-350

Rhoads, B L, Wilson, D, Urban M, Herricks E E, (1999), Interaction between Scientists and Nonscientists in Community-based Watershed management: Emergence of the Concept of Stream Naturalisation, *Environmental Management*, **24** (3) pp:297-308

Rohde, C L E Kendle, AD, (1994), *Human well-being, natural landscapes and wildlife in urban areas. A review*, English Nature Science

Robertson D, Hall R B, (2003), Public ecology: an environmental science and policy for global society, *Environmental Science and Policy*, **6**, pp. 399-410

Scrase I and Sheate W, (2003), *Institutions, interests and ideas: thirty years of flood defence assessments in England and Wales*, unpublished draft, 26 August 2003

Shaw P, (2000), Species pools in cities: how far are communities in open communication? Fungi of woodchips. In Barker G (ed) (2000) *Ecological Recombination in Urban Areas: Implications for Nature Conservation*, English Nature, Peterborough

Shepherd P, (2000), Origins of city flora and fauna in Barker G (ed), (2000), *Ecological Recombination in Urban Areas: Implications for Nature Conservation*, English Nature, Peterborough

Tunstall, S M, Tapsell, S M, Eden, S, (1999), How stable are public responses to changing local environments? A 'before' and 'after' case study of River Restoration. *Journal of Environmental Planning and Management*, **42** (4) pp.527-546

van Ast J A, Boot S P, (2003), Participation in European water policy, *Physics and Chemistry of the Earth*, **28**, pp. 555-562

Whatmore, S, Hinchliffe, S, (2003), Living Cities: making space for urban nature, *Soundings. Journal of Politics and Culture* [Online] Available from: http://www.open.ac.uk/socialsciences/habitable_cities/habitable_citiessubset/

Wood, R Handly, J Kidd, S, (1999), Sustainable Development and Institutional Design: The Example of the Mersey Basin Campaign, *Journal of Environmental Planning & Management*, **42** (3) pp:341-355

Zakus J D, Lysack C L, (1998), *Revisiting community participation*, Health policy and planning, **13**, (1), pp. 1-12