Chapter Eight –

Meeting the Challenges of the WFD

8 Chapter Eight – Meeting the Challenges of the WFD

8.1 Introduction

One of the objectives of this research was to test a process of ecologically informed participatory design in the context of ecological planning within river catchments. This was carried out in action research in the Irk Valley. The results of this planning process were outlined in Chapter 6, and the participants' experience of the process was analysed in Chapter 7. Key challenges of the WFD were identified in Chapter 2. In Chapter 4 these challenges were elucidated, and criteria for assessing methodologies that aim to help meet these challenges were developed. In this chapter the results of the DesignWays process and the analysis of participants' experience are assessed against these criteria.

8.1.1 Structure of this Chapter

This chapter is structured around the first three research questions, which are informed by the five challenges of the WFD. Each section exploring a challenge of the WFD includes:

- a discussion of participants' experience;

- a discussion of the results of the planning process;

- and a comparison to the previous reports prepared for the Irk Valley.

There is a summary of DesignWays's ability to meet the challenge at the end of the sections, which takes the form of a table using the criteria developed under the five challenges of the WFD in Chapter 4. These five tables are summarised in the conclusion. Each of the sections answering the research questions concludes with a table summarising the key points raised in response to the question.

Figure 8-1 Research Methodology - Step 6
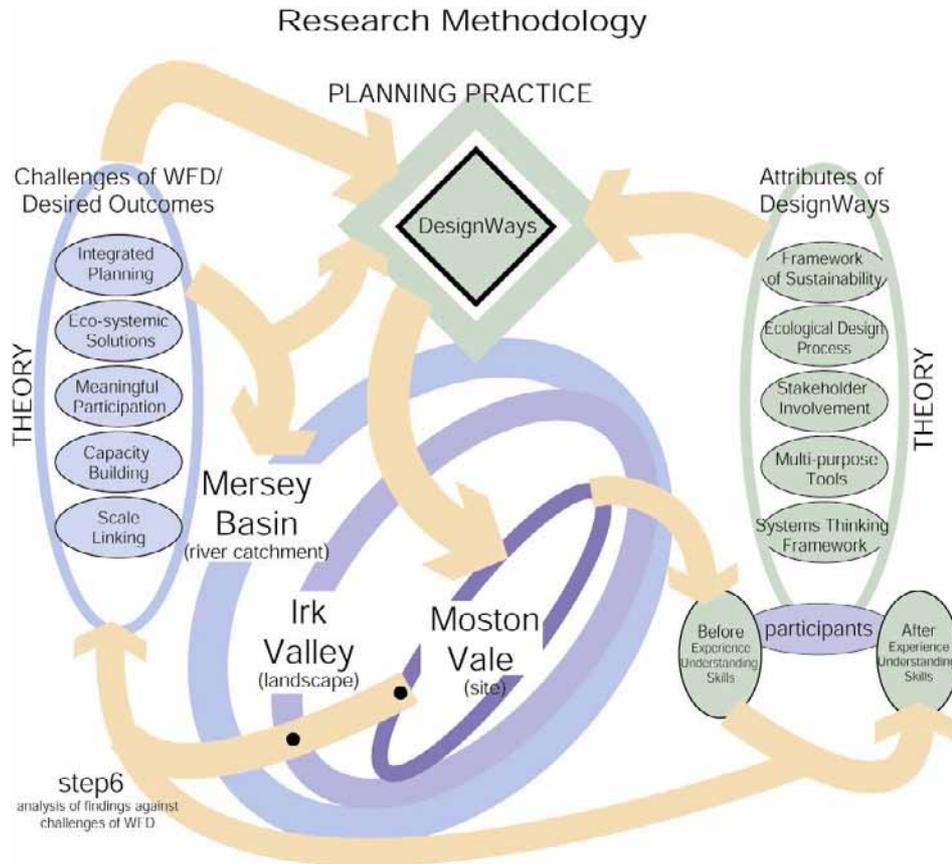
8.2 Research Question 1 – Integrated, eco-systemic solutions

The spirit of the WFD is expressed in the objective to clean up all of the waters of Europe to the point where they can support fish and wildlife populations similar to what might be in the rivers if there were no humans in the area. Given the state of rivers such as the Irk, the fifteen-year timeline set for this objective is very ambitious, even with derogations for heavily modified water bodies.

Research Question 1. What are the characteristics of an effective process for developing integrated, ecologically sound solutions in river catchments?

This question is answered through a discussion of the first two challenges of the WFD detailed in Chapter 4, those of enhancing integrated planning and developing eco-systemic solutions. The following section looks at these two

325

challenges in turn, and explores the extent to which DesignWays helps to meet the challenges. In answer to the research question, it concludes with a discussion of the characteristics necessary to meet the challenges.

8.2.1 Challenge 1 - Enhancing integrated planning

Confronted with a plethora of facts and figures about water quality, biodiversity, abstraction rates, etc., what is often lacking is a meaningful way to organise these data. As discussed in Chapter 4, integrated planning can be enhanced by a focus on '*high priority goals'* that cross boundaries and sectors. Such a focus helps to avoid sub-optimal solutions and '*counterproductive measures'* (e.g. White, G. F. 2000, pg. 30). Commonly shared, ambitious goals also help to sustain a long-term planning process through political change and other difficulties, a key finding of research by the author into the Mersey Basin Campaign's success over 17 years (Tippett, J. 2002).

8.2.1.1 Discussion of participants' experience

High priority goals are formulated at two levels in DesignWays. Firstly, The Natural Step (TNS) framework of sustainability is taught early in the process as a framework for decision making. Secondly, goals for the particular project are synthesised from the emergent ideas and the process of testing these ideas against the sustainability principles. These goals are then used in the decision making process.

Dialogue about the meaning of sustainability in the particular context is encouraged, in which cultural norms and values are related to a framework of sustainability. This process attempts to create "*an environmental discourse that recognizes and incorporates the social construction of meaning",* which Meppem and Bourke (1999, pg. 392) suggest, "*can more effectively accommodate the development of pragmatic environmental policy".*

The educational framework of sustainability was seen as important by several participants for providing a sense of how the planning process fits into a larger

326

whole. One participant with considerable experience of working with the community in environmental education spoke of its value, reflecting:

> *"I think most of the time people aren't given information. They are asked questions about their opinions, if they are consulted, without having any kind of background to the whole picture really. I mean, 'do you want a woodland or do you want a motorbike track or a litter bin at the end of your street?'. It is never put into context for people. So people just come along with what they thought of last, or whatever their major concern is"* *(Environmental Education Warden at Mersey Valley 2003).*

As a tool DesignWays aims to help participants develop a more systematic way of making decisions, testing new ideas against clear and comprehensive sustainability criteria and against the group's goals. This builds on the practical nature of the TNS tool, which was seen as *"almost a set of rules that guide you there. It's not something to aim for but a tool that you can use and apply… it was one of the strongest driving forces behind the process" (Creative Director of Countryscape 2003a).*

Several participants saw this as the most enjoyable and interesting component. Two people who commented on how the process had inspired them had initially described themselves as cynical about current application of the sustainability concept. At the end of the process, one of them said, *"Actually I was really inspired!".* Before learning the simple tools of DesignWays and TNS she had felt *"scared of those sorts of things, because I am not an ecologist" (Environmental Education Warden at Mersey Valley 2003).*

A few participants commented that the holistic nature of the process was overwhelming at times. All participants, however, felt that it was important that there was consideration of the different aspects of an integrated plan. For instance, the *IVP Project Officer (2003a)* said of the process:

> *"I think it has made me look at things outside my normal field; urban drainage systems… eco-housing and business parks were not high on my agenda. But the bigger picture was really, really useful".*

8.2.1.2 Discussion of results of the planning process

There were several examples of ideas for sustainable management of resources developed in the workshops. Many of these reflected a holistic view of water flow in the catchment. The 'water cycle' section on the Landscape EASEL (Figure 8-2)

327

elicited much discussion. It encouraged participants to consider water in terms of the processes of flow, storage and filtering in the landscape and human-made structures. A further branch of the template covered catchment characteristics. All of the participants felt the process gave them a way to clarify threats to ecological integrity in the area.

Figure 8-2 Landscape EASEL filled in for Irk Valley

Developing the Water 'Nodes and Networks' Template (Figure 8-3) stimulated several ideas about how to manage water in a more sustainable way. This led to a discussion about water use and efficiency.

Figure 8-3 Water 'Nodes and Networks' Template filled in for Irk Valley

In the discussion of the long-term sustainability of the area, restoring the water flow through ecosystems in the landscape was considered to be important. An idea that emerged from brainstorming was the reduction of hard surface areas, especially through developing pocket parks in terrace pavement areas, which

could also act as zones for managing rain water flow from the surrounding built-up area. In the Moston Vale workshops, it was suggested that the new business park development should manage water flow in SUDS on site.

The process of testing ideas against long-term goals was seen as helpful in many instances. An example included encouraging a holistic consideration of the idea of uncovering Moston Brook, which would require treatment of the excavated landfill material. Participants felt it was important not to attempt such an uncovering this unless it could be achieved in a sustainable way.

8.2.1.3 Comparison with previous open space strategies

The two reports developed for an open space strategy in the Irk Valley focus on the open spaces, with some mention of the links with the sectors which impact upon these spaces, e.g. regeneration (ABROS 1999; Glen Kemp Hankinson 1997). The strategy document views the river as "*the main component of a rejuvenated open space pattern*", and mentions the need to improve water quality in the area (Glen Kemp Hankinson 1997, pg. 20). The concept of sustainability is introduced in terms of maintenance in the parks. Whilst mentioning the Environment Agency's plan to upgrade the sewage and combined sewage storm water systems along the length of the river, the report does not mention SUDS or management of water flow through landscape. What is missing from these reports is a holistic view of the water system and its associated landscape, and the possibilities for improving its quality through sustainability initiatives in the whole catchment.

8.2.1.4 Ability to meet challenge

Table 8-1 shows the key criteria for meeting the challenge of 'Enhancing integrated planning' identified in Chapter 4. The table indicates whether or not the DesignWays process helps to meet these criteria, based on the assessment of this process. The column for 'Comments' summarises key issues arising from the analysis.

329

Table 8-1 Meeting the Challenges of the WFD - Enhancing integrated planning

1.	Met criteria?	*Meeting the Challenges of the WFD* **Enhancing integrated planning**
Criteria		**Comments**
information shared and capable of being meaningfully interpreted by many actors	■	• This was seen as a strong point of the workshops at both levels of scale • A few people were confused at the Moston Vale workshops, interviewees agreed 4 workshops were needed instead of 3 • Needs further communication about resources developed in workshops so more people are aware of them and can use them
actions are coordinated, with the aim of achieving beneficial synergies	▨	• The importance of a lack of communication between different actors and sectors as a limit to coordinating activities was emphasised in the 'before' interviews • Involvement of different stakeholders was seen as important, and the toolkit provided a means for them to communicate together fruitfully • Process helped participants to make connections between disparate areas
long-term effects of measures considered, attempt to preserve flexibility of action for future generations	■	• Discussion in this respect mainly centred on the nature of regeneration and the need to develop housing and infrastructure that was still going to be sound in several decades • The fact that plans were created that reflected what people wanted was seen as increasing the likelihood of it being maintained and therefore still available for communities in the future • Whilst all participants agreed that the process encouraged a strong sense of sustainability, several mentioned that more could have been done to specify a longer time frame in the site level planning, but recognised this may have needed more workshops, and that thinking more than 10 years ahead can be difficult and off-putting for participants
ideas are placed into a larger context and a holistic view is taken	■	• Seen as a strong point of the workshops, both through the sustainability framework and the holistic nature of the EASEL • Several participants commented that this process had broadened their understating of sustainability and the context of their work
create a vision to aspire to and test options against long-term goals	■	• Several participants mentioned that this process provided a compelling vision, which had had an impact on outside stakeholders and decision makers • The IVP Project Officer thought that creating a visionary plan was important as it meant that when money became available for projects, there would already be an idea of what people wanted to develop in the area, helping to guide the spending • Long-term perspective seen as helpful in Moston Vale workshops to help people think of how site would be used and maintained • More time needed to be spent developing goals, and there needed to be more involvement from key stakeholders and decision makers, and from more community members for the Moston Vale site

Legend	
Met this criterion	■
Partially met this criterion	▨

8.2.2 Challenge 2 - Going beyond 'end-of-pipe' to eco-systemic solutions

Ison (1993) talks of the need for a second order change in the context of participative eco-design. He suggests that first order change implies '*more of the same*' with some differences; whereas second order change implies that participants step outside the system, looking at it from a different perspective. It 1t is "*change which changes whole systems*" (Ison 1998, section Conclusions, para. 1). DesignWays can help participants conceive of such second order change.

Such a change from 'business as usual' will require: a broad base of participation in planning, new perspectives on the relationship between humans and the environment, and learning skills to apply these new perspectives. These requirements imply a need to focus on the process of ecological design.

8.2.2.1 Discussion of participants' experience

The tools of DesignWays are designed to help participants create systems that don't *cause* pollution. This requires an approach that goes beyond simply looking for ways to recycle materials after use, especially if the recycling constitutes a down-cycling in terms of material quality. In speaking about what he had learned about ecological design through this process, the Project Officer at Red Rose Forest (2003b) said:

> *"Trying to get away from recycling, from putting bottles into a recycling bin. Why are we recycling, how do I make use of it, how do I reduce the waste in the first place and is there anybody who can make use of it? It was looking at it from a bigger picture…. how can you produce a new feature that you don't need to recycle anyway?".*

Many multi-stakeholder processes bring members from environmental NGOs and ecological scientists into the dialogue to 'represent' nature (e.g. Jamal and Eyre 2003). In DesignWays it is considered important to include NGOs and groups interested in protecting and enhancing the ecology of an area into the dialogue process (in particular to provide local knowledge and as resources for implementation). It is not, however, considered to be sufficient to rely on environmental experts for the ecological input. The process itself helps *all* participants extend their understanding of the underlying dynamics of ecosystem

331

processes, and the interactions of human settlements and infrastructure with those dynamics. It provides guidelines to help participants consider ecological interactions.

Participants on this process considered it important that elements of ecology, social capital, the built environment and the economy were considered, as this helped them to broaden their perceptions. They felt that they developed skills in forging links amongst these different areas. The ecological design templates *"helped the group to understand ecology in its broadest sense, by highlighting the links between people and their built and natural environments" (Creative Director of Countryscape 2003b).*

Asking participants to consider and maximise the ecological and social assets of the area was seen as important by interviewees, because community members *"realised what assets they had and how it impacted the area that they live in, instead of looking at the problems. People were surprised by how many brown leaves [assets] they were coming out with, which is really nice" (Community Link Officer Groundwork 2003).* One resident said that this was the element of the process she most enjoyed, realising *"what is actually in the area at the moment because I think it is a long time since we realised how many facilities you don't use at all… I was actually quite surprised when I saw how much was still here" (Chair MVRA 2003).* Figure 8-4 shows one such asset that was discussed in the workshops, and which was seen as an important resource for the future plan, as it has a small nursery. Using this nursery to provide plants for regenerating landscapes could help develop social and economic capital in the area.

Figure 8-4 Community Gardens in the Irk Valley

Increasing awareness of assets is an important aspect of protecting both local distinctiveness and biodiversity. Tognetti (1999) reminds us that the loss of certain resources is irreversible, especially loss of biodiversity and cultural patterns. The first stage of protecting and enhancing these assets is to realise that they exist. As one participant (who works in the area) discussed her knowledge of Moston Vale after the workshops:

> *"To me it was just a landfill site before. It was in between the houses and the business park! People were always moaning about it saying 'oh there are motorbikes going over it and cars being burnt out'. I didn't realise, it is really interesting where the brook goes and I knew nothing about the witching stone and what had been there before".*

She went on to say, *"I've learned far more now about the Irk Valley than I could have thought possible, really" (Community Liaison Officer at City Council 2003a).*

8.2.2.2 Discussion of results of the planning process

An example of ecological design ideas developed in this process is discussed below.

Harpurhey Reservoirs are a Site of Biological Importance, and also the area with the most heavily contaminated land in North Manchester (Figure 8-5). There are many opportunities for enhancing existing wetlands and developing their potential for bioremediation on this site.

333

Figure 8-5 Contaminated land at Harpurhey Reservoirs

Such opportunities offer the possibility of testing creating bioremediation techniques, such as the constructed wetlands used to clean heavily polluted waters developed by Ocean Arks. The 'Restorer Technology' works like a bioremediation raft (Figure 8-6). It is "`an assembly of engineered ecologies incorporated into floating rafts… used to 'restore' stressed or polluted bodies of water back to health"(Ocean Arks International 2003).`

There are aspirations to develop the reservoirs into a visitors' attraction. The idea of making the role of plants in bioremediation part of this attraction was developed in the workshops. This led to discussions about forging links with local school science programmes to assist with monitoring changes in water quality. A Bioremediation Raft could incorporate a Science Pavilion, enhancing opportunities for hands-on learning for local schools. Several of the synergies developed in the workshop around Harpurhey Reservoirs are shown in Figure 8-7.

Creating links between arts gardens, adult skills training and retail in the area would help to promote local industries and market locally produced goods. In this example, several of the 'elements' had been discussed in the brainstorming sessions about new ideas for the area, with Abraham Moss College being identified in an early workshop as an important asset. The process of forging connections between the elements, encouraged by the ecological design tools,

334

helped to add layers of potential beneficial synergies to the design from these fairly simple building blocks.

Figure 8-6 Proposed Bioremediation Raft on Harpurhey Reservoirs

Figure 8-7 Ecological Design Links at Harpurhey Reservoirs
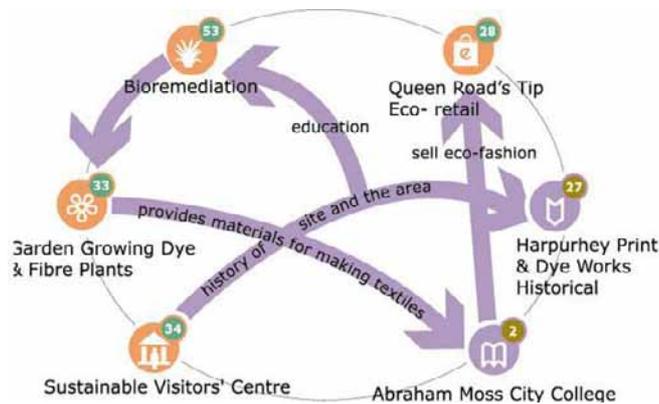
8.2.2.3 Comparison with previous open space strategies

The proposals for Harpurhey Reservoirs in the two earlier reports for the Irk Valley are described and compared to the ideas developed in the DesignWays process below.

335

The earlier reports introduced the development of open space areas, such as Queen's Park Tip, in terms of "*reducing the impact of large areas of derelict/underused land on the general quality of the environment*", and the likely increase in pressure on the existing open space as other areas of derelict land are developed[66] (Glen Kemp Hankinson 1997, pg. 43). The reports did not cover the type of business development that was envisioned for some of the existing open space that was to be sold for development, and no links were made between these and the areas that were to remain as open space. In the DesignWays workshops the nature of the business development was discussed, as was the potential to manage water in a more sustainable way, and the enhancement of biodiversity through landscaping in the physical development of the sites. A potential connection was made with the planned retail development at Queen's Tip. As a gateway site to the Irk Valley, this was seen as an important link to the businesses of the area, potentially providing a showcase for local, sustainable products.

In the previous reports a physical footpath link to Abraham Moss College is discussed. The dialogue process of the DesignWays process was able to go a step further, discussing programmatic links that could help deliver bioremediation and environmental improvements. These added dimensions would not happen with just physical improvements.

In a similar vein, the previous reports mention installing art works, and the value of historical interpretation. They do no, however, make the connection between the art works and interpretation.

Remediation of the site was discussed, including estimated costs at £330,000, and £310,000 for environmental and habitat improvements (ABROS 1999). The end use for the contaminated land was seen as car parking or facilities. In the plan developed with DesignWays, concepts of creative bio-remediation and interpretation of the remediation related to the history of the site (a dye works) were developed.

---

[66] There are plans to develop 123.8 hectares of current open space (21% of the current 593.4 hectares). By 1999, approximately 73 hectares had been developed (ABROS 1999).

8.2.2.4 Ability to meet challenge

Table 8-2 shows the key criteria for meeting the challenge of 'Going beyond 'end-of-pipe' to eco-systemic solutions' identified in Chapter 4. The table indicates whether or not the DesignWays process helps to meet these criteria, based on the assessment of this process. The column for 'Comments' summarises key issues arising from the analysis.

Table 8-2 Meeting the Challenges of the WFD - Going beyond 'end-of-pipe' to eco-systemic solutions

2. Criteria	Met criteria?	*Meeting the Challenges of the WFD* **Going beyond 'end-of-pipe' to eco-systemic solutions** Comments
design systems which do not cause pollution during life cycle and which reduce total resource throughput	(partially met)	• Definite shift in understanding of how ecological design can be applied to different systems evidenced in 'after' interviews • Requires on-going application to project design and involvement of regeneration professionals (goal emerged from process) • Requires more education and involvement from residents and consumers (goal emerged from process) • Needed more involvement from local businesses and key decision making stakeholders • Both of the above could be enhanced with more cycles of the design process, but this still requires input from stakeholders with relevant technical knowledge
consider human infrastructure and technologies as whole systems, looking at all their interactions	(met)	• The holistic nature of the process was appreciated, some participants commented it could be made simpler at points and needed more simple worksheets to introduce some of the tools • Several participants commented that they would like to learn more about how to *apply* the ecological design principles • In this process, there was a brief introduction to ecological design principles in the workshops, and further ecological design was carried out by the facilitator in developing the final plans, it is also possible to offer a further series of workshops to enhance participants' learning of the application of ecological design
'build' upon existing assets, ecological and social	(met)	• Considered a strong point of the workshops at both levels of scale • Mentioned in interviews that community members felt more proud of their area after the workshops, and that the 'powers that be' had taken more of an interest in the area (previously seen as neglected and as a problem area)
focus on appropriate scale, matching technology to end need	(partially met)	• Requires more consideration by key utilities and regional players, but seen as important for future iterations of the design process • Participants commented that learning about examples of sustainable technologies was useful
focus on maintaining and restoring ecosystem health	(partially met)	• Requires more information about, and synthesis of, landscape ecology information for the area • Provides framework to integrate this information • Encourages all participants to understand ecosystem dynamics and their interaction with human infrastructure and actions

Legend	
Met this criterion	(black)
Partially met this criterion	(grey)

8.2.3 Answering the research question

Research Question 1. What are the characteristics of an effective process for developing integrated, ecologically sound solutions in river catchments?

As discussed in Chapter 5 not all participatory processes necessarily include a focus on sustainability and environmental impacts. Discussing the potential of participation in planning to deliver sustainable development, Rydin (2003, pg. 11) states:

> "*There is a real concern that the protection of core assets and functions provided by the environment and an appreciation of the very real limits that environmental capacity places on socio-economic activity are being lost in the shift towards sustainable development".*

It is this trend that prompted the inclusion of an educational framework of sustainability as a key attribute of the DesignWays process. It is important that a process for developing integrated solutions encourages planners to consider the root causes of the problems. The literature about implementing the WFD recognises this factor. The question this poses is, 'Can we attempt to design systems with beneficial synergies, which minimise negative unintended consequences?'.

In a discussion of information, communication and systems theory, Leydesdorff (2002, pg. 133) reminds us, "*Meaning is generated interactively by using language"*. Whilst principles and design tools are essential components of a shift towards sustainability, this research points to the importance of considering ways of using these tools as a societal process, aiming to make the process engaging and meaningful for participants. Table 8-3 summarises the key points arising in this discussion of the first research question.

338

Table 8-3 Answering Research Question 1 - Summary

Research Question 1

Characteristics of an effective process for developing integrated, ecologically sound solutions in river catchments

Attribute	Characteristics
Educational framework of sustainability	- Starts with sustainability focus - Strives for clarity in sustainability principles - Establishes credibility of sustainability framework with participants - Encourages thinking about connections between social, ecological and economic capital - Provides a means for participants to consider long-term effects of actions - Encourages discussion of human needs and different ways they can be satisfied
Ecological design process	- Provides tools to apply sustainability principles to real-life situations - Futures orientated perspective - Includes tools to stimulate creative thinking - Helps create systems that don't cause pollution, looking at the root causes of problems - Provides tools for revealing existing assets in the area (social, ecological, built and economic) - Encourages enhancement and protection of existing assets - Provides a structure for considering different impacts of resource flows and connections in the environment - Provides a means to integrate local and perceptual knowledge with technical information - Uses ecological design tools to develop relationships between elements and flows, which can be modelled after ecosystems - Considers spatial patterns in the built environment and landscapes - Provides different ways for participants to understand the concept of ecological integrity, its underlying processes and patterns, and how these can be protected and enhanced
Creative involvement of stakeholders in planning process	- Provides different mechanisms to encourage the integration of stakeholders' perspectives and knowledge into the planning process - Provides channels for stakeholders with particular areas of expertise and interest to test decisions and options - Relates sustainability criteria to participants' knowledge and aspirations - Provides hooks (such as colourful, moveable pieces) to enliven the process of dialogue about sustainability
Scaleable design language to link different geographic levels of scale	- Encourages thinking about environmental impacts of design elements and decisions across different levels of scale - Encourage discussion about the interpretation of generic sustainability principles in a particular context - Encourages focus on the landscape level of scale (sufficiently large to develop synergies between design elements, plan for integrated resource use and develop networks of habitats in the landscape) - Provides mechanisms for site level of scale planning to provide more detailed information and local knowledge to the landscape level of scale plans - Uses site level projects to provide examples of ecologically sound planning that can be implemented quickly to maintain interest in larger-scale planning
Underlying framework of systems thinking	Provides a framework for understanding dynamic change and interrelations in complex systems

8.3 Research Question 2 – Meaningful participation through capacity building

This research focuses on the process of active participation, with an assumption that skills development and learning is not only a desirable component of such participation, but will form a necessary part of implementing any far-reaching environmental legislation. The second research question is:

Research Question 2. What are the characteristics of an effective process for engaging meaningful participation through capacity building in ecological planning?

This question looks at the related areas of participation and capacity building, and is answered by looking at the second two challenges detailed in Chapter 4, those of 'encouraging meaningful participation' and 'developing capacity in stakeholders and planners to meet the challenges of the WFD'. The following section discusses these two challenges in turn, and explores the extent to which DesignWays helps to meet them. The section ends with a summary of the characteristics of an effective process for engaging meaningful participation through capacity building in ecological planning.

8.3.1 Challenge 3 - Encouraging meaningful participation

Encouraging participation of stakeholders and community members in the process of planning helps to develop long-term solutions which will work in a particular context, and which are likely to achieve lasting benefits and support. As described in the previous chapter DesignWays has many components that aim to enhance the quality of meaningful participation, both in the structure of its toolkit and in the processes that are used to animate the toolkit.

8.3.1.1 Discussion of participants' experience

'Before' interviews with the participants helped the author gain an understanding of participants' prior wide ranging experience of participatory techniques. Three participants had no experience of participatory planning at all, six participants had limited experience of active participation, and three had been involved in projects that invited active involvement in planning. Two participants had had some prior

340

experience in facilitating workshops. The techniques that participants had experienced included:

- community mapping;

- 'Planning for Real';

- workshops and presentation skills training;

- meetings with residents;

- outreach;

- art and performance activities;

- local champions;

- websites;

- work with children;

- creative conservation techniques;

- and practical implementation with community groups.

The most similar of these to DesignWays is 'Planning for Real'. In response to the question in the 'after' interview, 'How would you compare this process to 'Planning for Real'?', the one participant who had experienced this process said:

> *"With ' Planning for Real', there was a planner on the table, there were coloured pens, there were little models, there were things representing trees and bushes and buildings and things. I don't know if it was just the way it was run, but it wasn't really clear what people had to do… Some ideas came out of it, but not on the scale of something like this because people didn't' seem to be doing it in a logical way. I like the way that [DesignWays] facilitates. Right from the beginning it's a very clear way of thinking about it: what we have, what we could have, what the barriers are".*

This quote emphasised the importance of the structured process. Later in the interview, the same participant reflected on another difference between Planning for Real and DesignWays, the use of the EASEL to look at intangible as well as physical aspects of an area:

341

"People wouldn't think about the other things if they are just looking at the actual physical stuff. I think that we have to look at all of it, the social, economic and cultural things as well as physical and environmental"
(Community Liaison Officer at City Council 2003a).

Key characteristics that participants thought were different between this process and those they had experienced before included:

- the fact that it was done from a sustainability perspective from the outset, rather than seeing sustainability as a *'bolt on'*, this was seen as *"much more interesting" (Project Officer at Red Rose Forest 2003a);*

- *"building links between issues… this holistic approach is key to it" (Creative Director of Countryscape 2003a);*

- *"residents' opinions were taken into account from the start instead of us coming up with the ideas and asking them what they think" (Community Link Officer Groundwork 2003);*

- *"it makes people contribute more" (Community Liaison Officer at City Council 2003a);*

- *"you got much more involved with ordinary people" (Project Officer at Red Rose Forest 2003a);*

- *"the fact that right from the start it is looking at positives rather than negatives. I think that was one of the big things for me" (Project Officer at IVP 2003a)*;

- *"it does have a process behind it and that you can follow the steps" (Creative Director of Countryscape 2003a);*

- *"the fact that it did rely quite heavily on creativity to generate the ideas"* and *"uses mind mapping as a process all the way through" (Creative Director of Countryscape 2003a);*

- and that the process allowed for *'focus over a longer period of time'* than is common in planning workshops (Project Officer at IVP 2003a).

Table 8-4 below shows the problems with the DesignWays process raised by participants in the 'after' interviews. The main problems discussed by participants (in terms of number of participants talking of them, *and* the amount that was said) can be grouped under three major themes. The first is that it takes time and effort. This problem is not limited to DesignWays, but is a generic problem of

342

participation, although DesignWays is a more involved process than many methodologies.

The second theme relates to the positioning of the process within the decision making structure. As participants commented, there would need to be changes in the planning system if these types of integrated processes were to be effective.

The third theme relates to the non-traditional nature of the process. Several participants felt that stakeholders and community members would need to be able to see examples of the process in action to be able to appreciate its value.

Table 8-4 Problems with DesignWays discussed in 'after' interviews
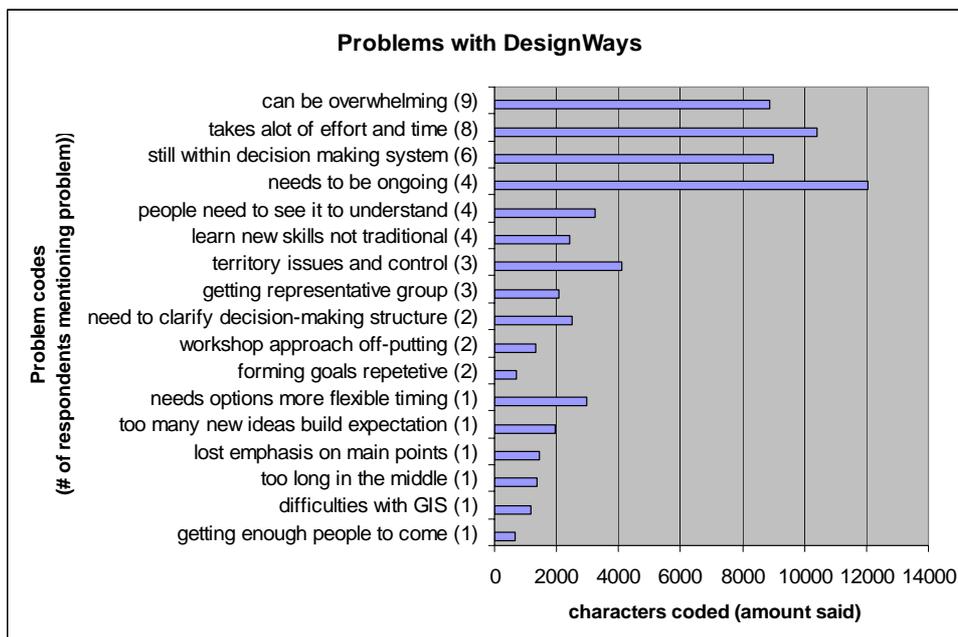
A common criticism of participatory techniques is that they take too much time. In the anonymous surveys, two participants on the DesignWays process said they thought the series of workshops was 'slightly too short', two thought they were a 'good length', three thought they were 'slightly too long' and one thought they were 'too long'. As discussed in Chapter 7 in Section 7.8 'Conclusion' on pg. 320, none of the stages of the process were seen by the participants to be expendable,

and all had at least one, up to six, respondents commenting that they were 'essential'[67].

The order of the DesignWays stages is important, but it is flexible enough to be tailored to different workshops times and formats. It is also possible for participants to attend just one or two workshops and still provide input. In particular, several of the early workshops are designed to allow for broader input, such as the sustainability framework workshop (Figure 8-8), at which there was double the attendance of the other workshops.

Figure 8-8 Participants at sustainability framework workshop for the Irk Valley


Participants stressed the need for more than one opportunity to attend the workshops in any one planning cycle. Not only would this help participants to catch up on workshops they had missed, it also has the advantage that stakeholders and residents would have the opportunity to see how the process was developing, and choose to enter at a later date. This was mentioned as a potential improvement, in particularly for fostering greater community input. Several participants said that people might need to see the workshops and their outcomes before they could understand their value.

---

[67] Two suggestions were made to reduce the time taken for the workshops. Firstly, to do more of the spatial analysis outside of the workshops using GIS. Secondly, it was suggested by one participant, and agreed by several others, that several of the stages of filling in the EASEL could have more usefully be done as a day long workshop, as time was wasted becoming re-acquainted with the categories of the EASEL and through laying the leaves and charts out. It was felt that this would speed up the process and make the different stages clearer. It might then be possible to offer more workshop time to applying the ecological design principles for those who were interested in taking this aspect further.

It is important to attempt to make the participatory process useful for the participants, so that they feel their time is well spent. If the process is enjoyable, participants are less likely to feel that it is too long. The participants on the Irk planning process were asked in the 'before' interviews about their motivations for attending the workshops, which are summarised in Figure 8-9.

Figure 8-9 Model of participants' motivation for attending Irk Valley Planning Process
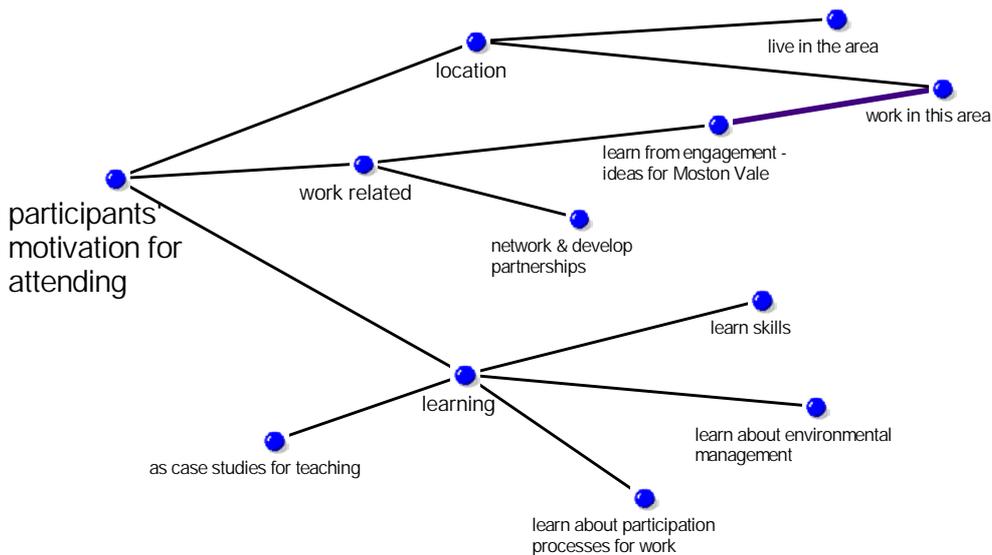
Interviews with participants on this process showed that project officers were able to learn from different stakeholders, and gain ideas helpful for their own work. Six out of seven respondents to the anonymous survey said it was 'valuable' to have the process offered as an Open College Network accredited unit. One felt this was of 'average' value. In terms of encouraging people to spend their limited time on a process, it is important that the process is enjoyable. The value of a good atmosphere (and food[68]) cannot be underestimated.

Sanoff (2000) suggests that structured participatory techniques, which can require significant planning time to prepare, were developed in response to criticism of early participation in planning in the 70's that it was "*time-consuming, inefficient, and not very productive"*. Many participants said that they were impressed with how much had been achieved in the time spent on the DesignWays process. The fact that the process was structured was mentioned as

---

[68] It is interesting to note that it can be difficult to obtain funding for refreshments, seen as expendable niceties.

important, because participants felt that they were being asked to participate in a process that was organised, and maximised use of their time. One participant who had experienced an in-depth active involvement process for planning in an urban fringe contrasted the two experiences, saying of the DesignWays workshops: *"I am amazed that we did actually get the results that we did in that time" (Creative Director of Countryscape 2003a).*

The fact that participants themselves helped to develop the envisioning outcomes helps to make productive use of time. The *Environmental Education Warden at Mersey Valley (2003)* described this:

> *"There was none of that big felt tip and a flip chart piece of paper stuff that drives you demented and drives everybody else demented as well, writing big lists of things that you then talk about one by one and people fall asleep and then you throw the piece of paper away. There was none of that, it was much better".*

Further limiting factors to delivering meaningful participation are discussed in more detail in the following chapter.

After the process several interviewees reflected on the value of the participatory techniques of communication employed for engaging dialogue: *"I think it was very effective because I guess a lot of people had never thought about anything like this. They had probably always been used to things being done for them without any input from them whatsoever" (Moston Resident 2003).* The process was seen as providing *"a good way of getting around 'them and us'. It is a good way to throw everyone into the mix and give an equal footing, which is great" (Creative Director of Countryscape 2003a).*

Misra (2002, pg. 303) suggests, `"Meaningful participation can be measured in terms of the extent of control over the decisions that shape the final product"`. In this planning process it was made very clear at each stage of communication that there was no promise of money for delivery, and that this was only an opportunity to try out ideas. Two participants said that the best part of being involved for them, despite this limitation, was a realisation that things could be different. One resident said:

> *"I couldn't believe [at the final presentation] what you had been able to do. If anybody had said to me, in an ideal world what would you like to see? That is exactly what I would like to see" (Chair MVRA 2003).*

Two other participants, one a project officer and the other a resident, said that the part of the process that excited them the most was seeing the ideas developed in a *'bottom-up'* process in the final products. Participants were able to see how their ideas had been used in the final plan:

> *"Especially at the end of the meeting when they were looking at the plan because they had put things there, and they were there on this fantastic plan" (Community Link Officer Groundwork 2003).*

Such transparency is an important aspect of developing meaningful participation. Active involvement implies that there is opportunity to proactively design solutions and options, not only to respond to predetermined ideas. The process itself can help people develop their ideas, *"I think it was a more interesting way of doing that rather than just sit there with a questionnaire. With a questionnaire you don't realise that you know as much as you do about the area" (Chair MVRA 2003).* One resident said, *"it was surprising how much you could get involved" (Chair MVRA 2003).* One participant commented:

> *"I like the idea of 'putting the pens in the hands of the residents' because normally the way that we work is, the landscape architects make the plan and we take it back to the residents. With DesignWays the residents sat around the table with the leaves and the map, actually discussing amongst themselves where they think things should be placed on the map. I think it made a big difference in the final plan as well. I could see people looking at it and saying "Oh, that is what I suggested and I thought that should go there" and I thought that was really, really exciting. I enjoyed that" (Community Link Officer Groundwork 2003).*

One criterion for evaluating success of a participatory process is whether the participants *themselves* saw it as valid and engaging. One participant described the experience as *"a powerful democratic process"* and commented *"the outcomes seemed magnificent" (Irk Resident 2003a).* The *Project Officer at IVP (2003a)* commented *"the information that we have provided over a relatively short space of time is going to be really useful".*

The need for enthusiasm was mentioned in a 'before' interview, *"we are not going to get anything done if there is no passion behind what we are doing" (Project Officer at IVP 2003b).* Several participants mentioned that the process was enjoyable, one said *"all the participants are proud about it... I was surprised about the energy and enthusiasm generated" (Creative Director of Countryscape 2003a).* This comment was

347

reflected by a further participant, *"I left the workshop feeling inspired and enthused about the ideas that had been mooted" (Environmental Studies Lecturer at Greater Manchester HEI 2003a).*

The importance of being able to question statements and proposals arising in participatory processes was emphasised in a discussion of 'Future Search' by Polanyi (2002). In DesignWays participants are able to place icons, showing relative importance, limits, relationship to system conditions by any of the ideas recorded in the workshops. Ideas can be moved and rearranged. Questions can be written on moveable 'note cards' (the facilitator can also write questions down in order to ask for clarification on an idea that is unclear on a leaf). Writing of what she had learned on the course, the Environmental Studies Lecturer at Greater Manchester HEI (2003a) stated:

> *"It was really useful looking at these big questions [such as reliance on fossil fuels] and asking what we can do with local space so that we aren't dependent on these things, and yet we are creating employment which is really badly needed in that area? But there is a dominant ideology that organisations don't want employees, they want as few as possible. Well we want people to have useful jobs that are going to make a difference to where people live instead of thinking it is more efficient to cut half our staff. But it did allow you to make those connections".*

Several participants remarked on the importance of the reflection on the process of decision making that was sparked by the use of the T/EASEL icons. Several participants commented on the fact that it helped them to develop areas of consensus which were then used in the design process, as illustrated in this quote:

> *"It's quite a useful way of doing consultations, because usually what we do is send out questionnaires to people and it always comes back with these are the problems that need solving, and we would like to have this and we would like to have that. But it tends to be from individuals so you don't come up with something that is an agreed consensus of what people want" (Environmental Strategy Officer at City Council 2003a).*

He went on to say that another advantage of having residents and stakeholders working together is that it allows them to talk over what is actually involved in implementing particular ideas, perhaps even putting them in the position of having to face the reality of, and share the responsibility for, making necessary choices.

348

The fact that DesignWays includes stages of testing ideas against the system conditions of The Natural Step and against the group's goals was identified as important by several of the participants. The *Community Liaison Officer at City Council (2003a)* felt that this aspect of the toolkit could be important in overcoming the potential problem that participatory planning can produce unrealistic plans.

The fact that project officers and residents worked together during the workshops was seen as important in developing realistic plans, as the residents were able to learn through dialogue about the constraints and possibilities for the site. Teaching planning and design skills helps to create a balance between developing a compelling vision and working out realistic ways of achieving that vision. By making the decision making process transparent and including participants in the process, a better understanding of the tradeoffs and complexities inherent in planning is developed.

The *Project Officer at IVP (2003a)* commented on the final plans, *"there is nothing on there that is not achievable and that again is a good measure that we have not been over exuberant in what can be achieved".*

8.3.1.2 Discussion of results of the planning process

The most obvious result of this process is that the Moston Vale plan is seen as the basis for regeneration of the site in Phase One of the Newlands Project, partly in response to the enthusiasm generated by the planning process for the new plan (Figure 8-10). The author has discussed the plans and the process with the landscape architects from Groundwork who are drawing up the plans and pricing out the components. The process has had a clear effect on decisions makers, for instance *"The visioning event seems to have raised the profile of Moston Vale and positively enhanced the powers-that-be's view of the area and its potential"* (Project Officer at Red Rose Forest, 2003 email). Another participant commented:

> *"Even people that weren't doing it have been influenced by this work. So it's been invaluable in this respect. It's proved its value, apart from the fact that I think it is good value for me personally and I think good value for the project" (Environmental Strategy Officer at City Council 2003a).*

Figure 8-10 Community members viewing Moston Vale plan at MVRA meeting
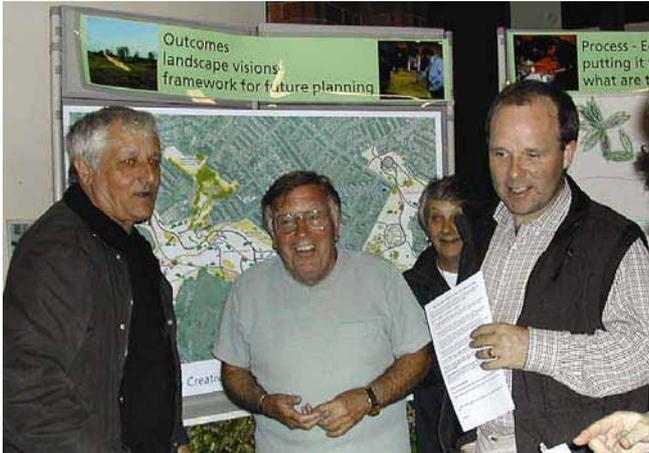
The resources developed for the Irk Valley will feed into ongoing consultation in North Manchester, and are being used by several of the participants who work in the area to stimulate discussion about future possibilities.

All of the participants interviewed said that they felt there was some measure of success from the process. Several said that there would need to be further testing in several months to see if the effects were long lasting. Figure 8-11 shows the relationship between participants' views of what would constitute measures of success for the project summarised from the interviews conducted 'before' the DesignWays process, and the summary of their response to the question 'Would you say the process has achieved some measures of success?', in the 'after' interviews. The diagram was built from codes in the NVivo software used to analyse data from the interviews.

Figure 8-11 Diagram showing participants' perception of success of project
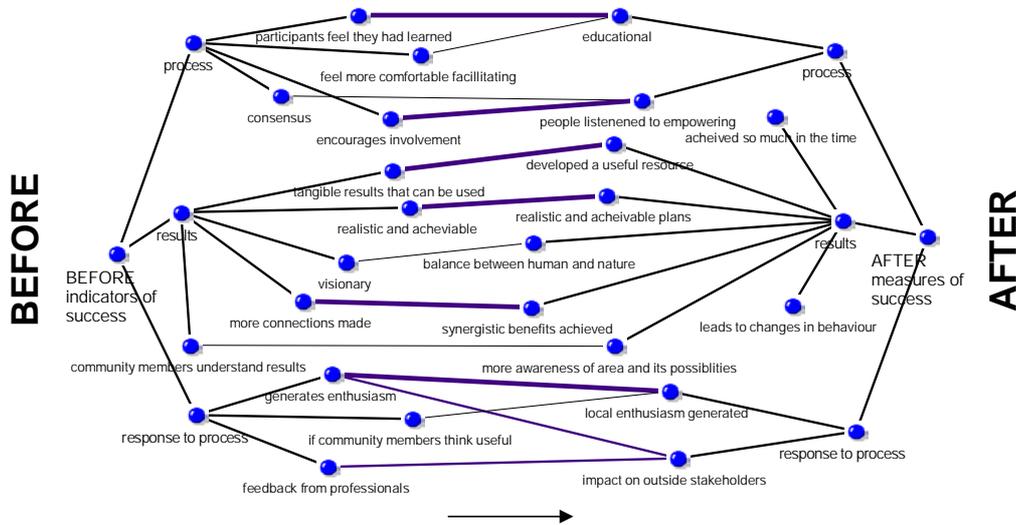
As can be seen from this diagram, most of the factors that participants felt would represent indicators of success for the project were met in some way. The thick lines show a clear connection between the ideas of success from 'before' and 'after'. Thin lines show a weaker link. Two measures of success that were mentioned in the 'before' interviews, but not in the 'after' ones were: *'if community members can understand results'* and *'if community members think it is useful'.* Interviews with community members showed that they could understand the results, and that they felt the process was useful. A further indicator that was mentioned 'before', but not 'after', was *'consensus'.* Whilst this was not explicitly mentioned after the process as a measure of its success, several participants commented on the process of building consensus, for example: *"just one of the benefits of it is that you get an agreed consensus on the local level and on the larger level about the best way to move forward" (Environmental Strategy Officer at City Council 2003a).*

The measure *'feel more comfortable facilitating'* was not explicitly stated as a measure of success in the 'after' interviews, but all of the participants on the Irk planning process said they had learned more about how to facilitate by attending these workshops. There were two measures of success that participants thought the process had achieved that had not been mentioned in the 'before' interviews: that the process *'achieved so much in the time',* and it *'leads to changes in behaviour'.* This

351

last measure of success is particularly significant in the light of the widely recognised need to change the behaviour of stakeholders in order to meet the ambitious objectives of the WFD.

8.3.1.3 Comparison with previous open space strategies

The two earlier reports for the Irk Valley Project incorporated information from consultations with relevant City Council departments, and with other stakeholders, including private and voluntary sector organisations. This consultation did not include participatory workshops amongst the stakeholders, and the reports did not analyse the process of participation.

8.3.1.4 Ability to meet challenge

Table 8-5 shows the key criteria for meeting the challenge of 'Encouraging meaningful participation' identified in Chapter 4. The table indicates whether or not the DesignWays process helps to meet these criteria, based on the assessment of this process. The column for 'Comments' summarises key issues arising from the analysis.

Table 8-5 Meeting the Challenges of the WFD - Encouraging meaningful participation

3.	Met criteria?	*Meeting the Challenges of the WFD* **Encouraging meaningful participation**
Criteria		**Comments**
attempt to involve and inform all relevant stakeholders, including those outside 'normal sphere'		• the process itself offers the advantage that it is designed to be enjoyable and useful for different stakeholders, this needs to be complemented by good stakeholder mapping and outreach • the process would have been improved by more time identifying and actively recruiting stakeholders and community members • the holistic nature of the process was seen to encourage participants to consider the perspectives of different sectors
process is seen as fair, with attempt to give all stakeholders a voice in resultant dialogue		• the process was seen as *'less intimidating'* than traditional workshop formats, and encouraged participants to provide input • several participants mentioned that people who were loath initially to contribute did eventually do so • the process was seen as '*neutral'*, designed to facilitate participation, not push a particular agenda or goal, and allowed for creative thinking and speculation • several participants mentioned a feeling of 'ownership' of the product, suggesting they felt that the process was seen as fair
opportunity to proactively design solutions and options, beyond responding to predetermined ideas		• this was a process of active involvement in creating plans • capacity building to enable participants to feel confident to develop solutions was considered important • it was seen as important that this process looked at the whole area, opening up possibilities outside the scope of a particular project
the process is seen as valid and engaging		• Moston Vale residents said they continued to attend the workshops, despite the fact that they were told there was no promise of funding for the project, because they were enjoyable • of the respondents to the anonymous surveys, three participants said the process 'far exceeded' their expectations, three said it 'exceeded' and two said it 'met' their expectations. None said that the process was lower than expectations. • several participants on the Irk process said that it was enjoyable and was worth doing, despite being a large time commitment outside of their normal work duties • several interviewees mentioned the fact that there was a high level of enthusiasm amongst participants following the process
participants are able to exert change in the decision making process and results of participation are used		• at the presentation to the MVRA, community members appeared to feel that their concerns were reflected in the final plans, several Irk participants said they thought people's responses were positive • the process itself makes the connection between participants' input and the final plans visible, further research could determine whether or not this factor encourages use of these ideas
sufficient resources for participation are provided (e.g. information, tools for analysis)		• the toolkit itself was seen as useful • it was difficult to access technical data in compatible and easy-to-use format, this could have been alleviated with more involvement of agencies such as the Environment Agency • several participants mentioned that better use could be made of GIS to develop analytical maps for use in workshops
diversity of technical expertise integrated with community and stakeholder knowledge and aspirations		• all stakeholders who attended both the Irk and the Moston Vale workshops felt that this provide a useful tool for bridging a range of experience and skill levels and facilitating productive dialogue • Moston Vale residents felt this provided a useful tool for them to learn about project officers' ideas and knowledge whilst feeling able to integrate their own knowledge into the process *(continued next page)*

353

3.	Met criteria?	*Meeting the Challenges of the WFD* **Encouraging meaningful participation**
Criteria		**Comments**
uncertainties in data and predictions are discussed	*(partially met)*	• this mainly emerged from dialogue enhanced by the use of the decision making icons and sustainability criteria • this aspect could be developed as more technical information is incorporated
encouragement to question fundamental assumptions and goals	*(met)*	• participants recognised that taking a holistic view of goals and priorities may mean that projects and schemes are questioned • use of icons and participant interaction with the toolkit were important in terms of allowing participants to question and develop their own views of the ideas emerging in the workshops
resultant plans are seen as innovative *and* viable	*(met)*	• process was seen as developing innovative plans • several participants mentioned that they did not think they could have come up with the same ideas without the design process • the IVP Project Officer felt that the plans were viable • representatives from the Forestry Commission felt that 90% of the Moston Vale plan could be delivered
use of participation is communicated to participants and the wider public	*(partially met)*	• this is not so much a part of the DesignWays process as part of the overall participation programme (e.g. it is hoped that Newlands will fund the production of leaflets for the Moston Vale project) • the toolkit provides a structure that facilitates writing reports, a long-term aim is to develop an interactive web portal • for this process, reports were sent to all participants, interested stakeholders and were posted on the web, along with the maps and databases created during the workshops • the final workshop was seen as very important in terms of allowing participants a chance to see the results of the plan and to communicate with regional stakeholders about their experience and the results, all respondents to anonymous survey said this stage was 'essential' • workshops for regeneration officers working in the area could familiarise them with the resources in the plan and database
process is designed to add value to existing activities and to fit in with participants' context	*(met)*	• it was important for both the IVP Project Officer and the Chair of the MVRA that the workshops were sufficiently flexible to be able to fit in with their existing programmes • different project officers on the workshops felt that they had benefited in terms of their own work • focus on existing assets and activities raised awareness of ongoing work in the area and possible synergies between projects • 6 out of 8 respondents to the anonymous survey said they felt it was valuable to have this offered as an OCN accredited course, some participants mentioned in interviews that it helped to justify the time taken to their workplaces
an attempt is made to reduce the effects of entrenched power positions on outcomes	*(partially met)*	• some discussion of power relations emerged from dialogue about the EASEL, several participants thought it was useful to allow this discussion to emerge in an unforced manner • one participant suggested that the process of decision making and funding in the area could have been better explained • several Moston Vale participants said they found it useful to discuss the process of planning and implementation with project officers during the site level workshops

Legend	
Met this criterion	■
Partially met this criterion	▨

354

This process of building relationships through participation can help to increase the capacity of stakeholders to actually make the types of changes towards a sustainable future that were discussed in the first part of this chapter. The ability to increase stakeholders' capacity, and thus ability to implement sustainable plans, is discussed in the following section.

8.3.2 Challenge 4 - Developing capacity in stakeholders and planners to meet the above challenges

"Overflowing landfills, befouled skies, eroded soils, polluted rivers, acidic rain, and radioactive wastes suggest ample attainments for admission into some intergalactic school for learning disabled species" (Orr, D. 1994, pg. 50).

The context of constant change and uncertainty in terms of implementing plans requires an adaptive management approach, and enhanced skills in a broad range of stakeholders. There are particular difficulties in terms of integrating participation into planning processes, which requires new skills and knowledge of a wide range of stakeholders. The importance of capacity building for the possibility of creating a sustainable future was highlighted by participants in response to the question 'What do you think are the threats to ecological integrity in the Irk Valley?' in the 'after' interviews. Every respondent cited limited capacity in his or her response, ranging from ignorance, to lack of will, to a lack of vision. The *Environmental Studies Lecturer at Greater Manchester HEI (2003a)* responded, *"the fact that as a community, we are ecologically illiterate doesn't bode well for the future".* The following section discusses the challenge of capacity building in the context of this action research.

8.3.2.1 Discussion of participants' experience

Meaningful participation requires "*utilization of each individual participant's knowledge resources*" (Kar and Kar 2002, pg. 378). The skills and knowledge of the participants has an effect on the actual outcome of the plan. It is important to attempt to engage people with local knowledge and specific areas of expertise to carry out this design process. DesignWays provides

355

an effective tool for eliciting this information and making it useful for design. It also provides participants with an opportunity to learn from others' points of view. This aspect was stressed in several interviews, for example, *"you could see from the different things that people put in that people had different ideas and different perspectives" (Community Liaison Officer at City Council 2003a)*.

All of the participants who attended the Moston Vale workshops, both community members and project officers, agreed that the tool provided a useful bridge between people with different levels of experience and knowledge. This was despite reservations on behalf of the *Project Officer at IVP (2003a)* as to how well the process would be viewed in the community workshops:

> *"Initially I wasn't sure how the 'DesignWays Flow' would come across with local people…But I think the longer it went on, I was doing people a disservice in terms of what their input and opinion would be. I think it flowed quite well in terms of what they got out of it, and the way it went".*

Community members saw the process as useful for finding out more about the project officers' work and what the constraints on their ability to deliver projects are. The project officers who attended the Moston Vale workshops commented that they were able to learn from community members about the area and their concerns.

All of the participants on the Irk process felt that the toolkit provided a useful tool for facilitating communication between different types of stakeholders, which was described as *"such a diverse mix, both professional and non professional" (Project Officer at IVP 2003a)*. Several participants said that the experience was useful for their work, in particular in learning about opportunities to develop links between projects. The active nature of the steps of the process were discussed as important for encouraging people who didn't know each other to talk together. The use of creative thinking techniques was also seen as important in this regard:

> *"I suppose because you didn't really know what was expected of you … you feel you haven't got to show your ignorance or you have got to work within certain boundaries. So that did give space …it was fun and what came out of it was that there were no experts" (Environmental Studies Lecturer at Greater Manchester HEI 2003a).*

In terms of social learning, two concerns were raised in the interviews. Firstly, project officers and facilitators need to cultivate an 'attitude of listening', even though the nature of the participatory communication encourages participants to input and stimulates dialogue between different stakeholders. Secondly, it is still important to have a broad range of stakeholders in the room, the toolkit itself does not substitute for a mix of people.

An important aspect of participation in the DesignWays process is learning skills. These range from strategic planning, to creative thinking, to group communication skills. By actively engaging people in thinking about the future of their area, it is possible to develop what practitioners of systems thinking call a `learning organisation'` (e.g. Senge et al. 1994). Such inquiry into the future builds skills in all participants, thus broadening the possibilities for creative solutions and increasing the practice of ongoing adaptive management to move towards those solutions.

One participant, who had had more training in creative thinking techniques and strategic tools for planning than many of the others, mentioned, *"I think it has been a good bit of CPD[69]!" (Environmental Strategy Officer at City Council 2003a).* Talking at an IVP Steering Group meeting in response to a question about the length of time the process takes, he said, *"What you have to remember is that it is educational, it influences how you think, it's always there. You take it with you to your other work".*

Another participant said that the most important aspect of the workshop for her was that at the end, she had more confidence in *communicating* about sustainability. She went on to say:

> *"It struck me you could introduce complex, they are regarded as complex, concepts to the general public. I already know these things I just haven't had the names for them. So now I can hang these other things onto hooks and make a structured whole that I can then present to people (Environmental Education Warden at Mersey Valley 2003).*

Commenting on his view of what residents had gained from the process, the *Project Officer at IVP (2003a)* said, *"One resident was really articulate, and I thought if you have picked that up from one or two workshops, then what a bonus".*

---

[69] CPD - Continuing Professional Development

As active involvement in planning is most effective when ongoing, it is useful if professionals and practitioners develop skills for *facilitating* meaningful participation. The fact that participants were asked to facilitate a small workshop in the final presentation with regional stakeholders and community members was seen as valuable by some participants, including those who were nervous about doing so before the workshop. Participants who did attend felt this helped to show them that they could use their newly learned skills. Since that time, several of the participants have assisted the author in facilitating workshops using the toolkit. Several participants commented that they would feel more confident if they could use a toolkit, with the leaves, pre-prepared mind maps, etc. in workshops in the future. Further training, in particular on the-job training, working with an experienced facilitator to begin with, was seen as important to help participants learn how to apply the toolkit. This 'scaffolding' of training was modelled in the Moston Vale workshop, where project officers with more experience of the process assisted in the workshop in small groups, thus reinforcing their own learning, and building skills and confidence.

The ability of DesignWays to help participants to change behaviour was seen as a measure of success by some participants, as one said:

> *"People get into certain patterns of thought and that is the way to do it, but if you can't actually see connections and realise that they are actually part of it and that they are part of the solution. I thought about the way I go about things. I think people can make a difference" (Environmental Studies Lecturer at Greater Manchester HEI 2003a).*

8.3.2.2 Discussion of results of the planning process

One example of skills learned during the process is discussed in more detail to illustrate the results of the process. Five of the participants interviewed before the process said they had no experience of applying ecological design in practice, and five said they had limited experience, most of which came from ecological landscape management. Figure 8-12 was developed as a model in analysis. It shows a comparison of participants' perceptions of ecological design before and after attending the DesignWays process for the Irk Valley. This gives an indication of capacity building.

358

Figure 8-12 'Before and after' - understanding of ecological design
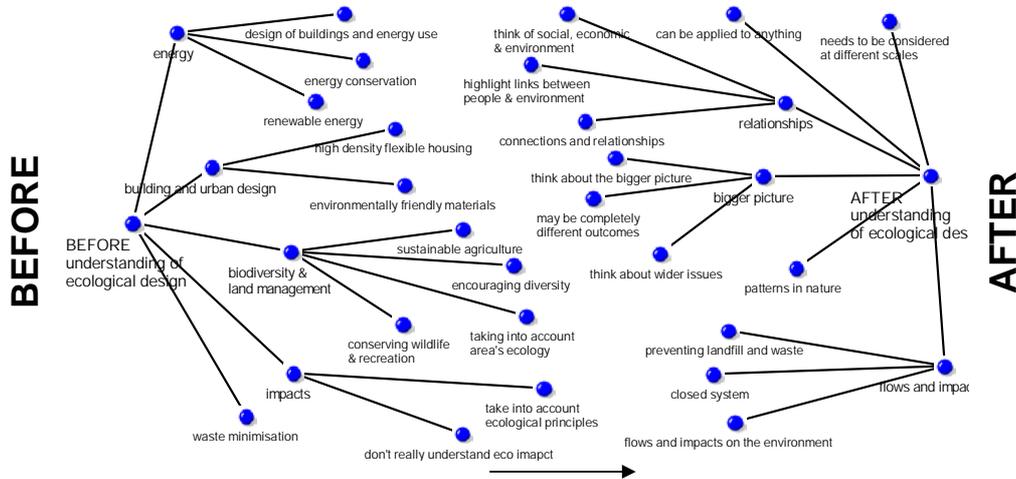
As can be seen from this diagram, participants on the workshop had a general understanding of ecological design before it started, mainly in terms of the possible fields to which it can be applied and its possible outcomes, e.g. energy efficiency and conserving wildlife. The concepts of ecological design from the 'after' interviews show a more holistic and refined understanding, focusing on principles and processes.

8.3.2.3 Comparison with previous open space strategies

Whilst there was likely to have been a degree of learning amongst the consultees for the report, as they were asked to provide input, this outcome is not discussed in the reports. The reports themselves have provided information for subsequent work in the Irk Valley.

8.3.2.4 Ability to meet challenge

Table 8-6 shows the key criteria for meeting the challenge of 'Developing capacity in stakeholders and planners to meet the above challenges' identified in Chapter 4. The table indicates whether or not the DesignWays process helps to meet these criteria, based on the assessment of this process. The column for 'Comments' summarises key issues arising from the analysis.

Table 8-6 Meeting the Challenges of the WFD - Develop capacity in stakeholders and planners to meet the above challenges

4.	Met criteria?	*Meeting the Challenges of the WFD* **Develop capacity in stakeholders and planners to meet the above challenges**
Criteria		Comments
develop a shared understanding of problems and options	■	• several project officers mentioned the value of learning with residents, stepping outside their normal role of leaders • being able to see the emerging picture and compare participants' ideas was seen as helpful in developing understanding
encourage social learning	■	• the toolkit was seen as helpful for highlighting areas of consensus and conflict • several participants commented on the way the process encouraged productive and enjoyable dialogue
develop communication and networking skills	▨	• several participants said that they would like to develop contacts made during the workshops • the value of a clear framework for communicating complex sustainability ideas was mentioned by several participants
develop creative thinking and planning skills	■	• the code 'capacity building and ecological design skills' was within the top ten of most-used codes emerging from analysis • participants commented that learning design skills was helpful for them and would be helpful for others in similar areas of work • two participants in particular said that learning skills of ecological design had broadened their perspective of the scope of their work • several community members mentioned the value of the emphasis on creativity in terms of being able to develop new ideas
develop integrated decision making skills and encourage an adaptive management approach	■	• several participants saw learning the TNS systems conditions as the most important part of the process, and many commented on the importance of applying them to decision making • this requires more cycles of review and further design, preferably using the same design process to enhance ease of communication
professionals and practitioners develop skills for *facilitating* meaningful participation	▨	• all of the participants in the Irk Valley workshops felt that they had improved their ability to facilitate participatory processes, though three said they would want practice, several mentioned they would need further training to feel comfortable • several participants said they would like to be able to have a toolkit available for facilitating, though several said they were already using the principles (e.g. Mind Mapping) in their work • this criterion could be better met with a progression of training, working with trainees as they practice facilitating
develop institutions, trust and norms that support implementation of eco-systemic solutions	▨	• the discussion of values and goals was seen as important, and led to a further discussion about the nature of the planning system and the fact that this would need to change in order to facilitate the types of changes that were being discussed in the workshops • participants from Moston Vale said they felt gained a better understanding of the work of the project officers and planners

Legend	
Met this criterion	■
Partially met this criterion	▨

8.3.3 Answering the research question

Research Question 2. What are the characteristics of an effective process for engaging meaningful participation through capacity building in ecological planning?

The above discussion points to the value of engaging participation in planning through capacity building, as well as several of the difficulties inherent in this endeavour. Advances in educational theory and understanding of the nature of participation provide an important backdrop to the unfolding story of implementing sustainable development. The need for capacity building to be active points to the importance of attempting to achieve it through project-based learning in participation. In this process "*the people whose attributes and relationships are improved utilise the existing stock of physical, financial and natural capital to improve their situation and the overall stock of capital*" (Macadam et al. 2003, para. 1). Table 8-7 shows the characteristics of an effective process for engaging meaningful participation in ecological planning, in answer to the second research question.

Table 8-7 Answering Research Question 2 - Summary

Research Question 2

Characteristics of an effective process for engaging meaningful participation through capacity building in ecological planning

Attribute	Characteristics
Educational framework of sustainability	• Participants actively involved in applying sustainability criteria to their ideas • Uses sustainability criteria in decision making with participants to help create viable plans • Provides a framework for dialogue, encouraging discussion about the nature of scientific understanding of the environment • Relates discussion to local knowledge and perceptions of the area
Ecological design process	• Teaches skills so that sustainability principles can be applied to participants' own work and contexts • Codifies design process to enhance communication about the process and the learning of design skills • Structured process to provide clarity and facilitate participation • Creative thinking skills are taught and practised to enhance ability to imagine different future possibilities • Provides means for participants to see links between their areas of interest and those of other stakeholders • Focuses on the positive attributes and assets of an area
Creative involvement of stakeholders in planning process	• Starts with participants' own understandings and perceptions, which leads to a process of exploring shared understandings • Enables participants to contribute to the design of options • Helps participants to develop a framework for future action • Sufficiently flexible to be deployed in ways conducive to 'adding-value' to existing activities and partnerships • Provides different ways to learn and provide input • Tactile process with moveable pieces encourages 'hands-on learning' • Creates a physical artefact that can be interrogated and manipulated by participants • Use of 'multiple intelligences', and visual representation of ideas • Creates space for participants to step outside of usual thinking habits • Encourages participants to consider the viewpoints and needs of different sectors of society • Encourages participants to consider long-term goals and shared values as a platform for decision making • Encourages participants to question underlying assumptions and the ideas emerging in the process • Allows practitioners to develop skills for *facilitating* participation
Scaleable design language to link different geographic levels of scale	• Provides skills and tools that can be used in different contexts • Principles are embedded in the tools and processes, encouraging consistency in application • Tools designed to make the process of facilitation easier, allowing for multiple groups to synthesise information, and enabling participants to manage their progression through the process • Transferable tools facilitate social learning, highlighting areas of consensus and difference that emerge at different levels of scale • Encourages participants to consider connections and relationships (both unintended negative consequences and potential beneficial synergies) between projects at different levels of scale
Underlying framework of systems thinking	• Provides metaphors for animating communication • Provides opportunities for discussing mental models and world views • Explores relationships between humans and natural systems

8.4 Research Question 3 – Linking across levels of scale

The need to link small-scale and large-scale planning in a dynamic in which each supports and informs the other has been discussed in Chapters 4 and 5. The third research question is:

Research Question 3. What processes and tools help to link such planning across different geographical levels of scale?

This is answered through a discussion of the fifth challenge of the WFD identified in Chapter 4.

8.4.1 Challenge 5 - Linking actions and measures across multiple geographic levels of scale

This action research was carried out at two levels of scale (site and landscape). The results were discussed in a regional context with stakeholders in the Mersey Basin. The following section discusses participants' experience of working at multiple scales, and of the components of the DesignWays process that help to facilitate translation across scales.

8.4.1.1 Discussion of participants' experience

Ison and Maiteny (1997) speak of the need to go beyond dualistic thinking in terms of the metaphors of having either '*bottom-up'* or '*top-down'* planning, recognising that change requires action at more than one level of scale. In DesignWays a fluid process of integrating the two 'directions' of planning is encouraged through the process design. Ideally, DesignWays should be applied at more than one geographical level of scale in parallel. Stakeholders from the different levels are encouraged to contribute to planning at both levels of scale, encouraging ongoing communication (Figure 8-13).

363

Figure 8-13 Iterative process, movement of participants between levels of scale
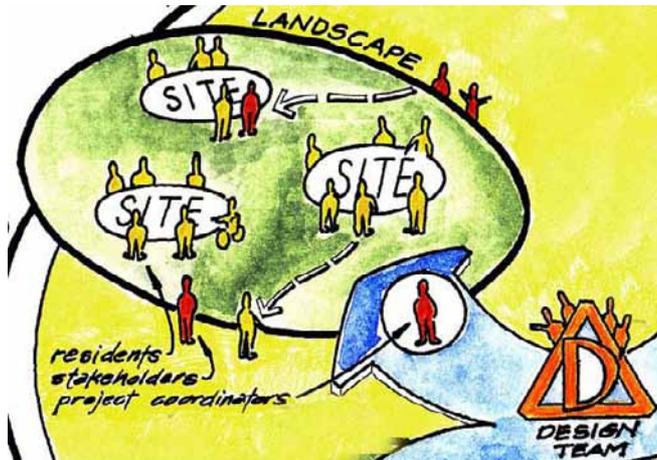
In addition to such a parallel processes, the nature of the toolkit was seen as important in facilitating communication at the two levels of scale, *"the tool itself is transferable and therefore it makes it that much easier to use in the future. You can use it holistically, you can use it in focus, you can use it on a table and can be scaled down accordingly" (Project Officer at IVP 2003a).*

The scaleable nature of the EASELs and the simple design language meant that participants on the Irk and Moston Vale planning processes were able to communicate with regional stakeholders in workshops in the final presentation (Figure 8-14), demonstrating the process as well as the product.

Figure 8-14 Local and landscape participants using DesignWays with regional stakeholders

Research funded by the Rowntree Foundation into environmental concerns for disadvantaged groups in the UK discussed the need to make environmental planning relevant to local people, "*Attention is often focused on relatively 'minor' problems such as dog mess, litter and general dereliction rather than issues like pollution*" (Burnigham and Thrush 2001/2002, pg. 21). The challenge is how to use a process like DesignWays to draw local concerns and ideas out, and to work with participants to see what is important to inform the local planning process. Speaking of how the learning about ecological design had changed his view of planning, the Project Officer at Red Rose Forest (2003a) commented:

> *"There is much more to it than coming up with a plan for Moston Vale and drawing it up, there is a lot going on… it was quite a complicated, a much bigger process, than 'we'll put some footpaths in, a playground and some fences around it'. You can see it is not just limited to the site it's all the people around it and how they fit in and what do people want? How can you best get it to happen?"*

The ideas from the Moston Vale workshops were further refined and discussed in the longer planning process for the Irk Valley, where they acted as a smaller scale example of the framework being developed. This was seen as an advantage by the participants on planning process at the Irk Valley level of scale, as it gave them a project that could be more easily understood, and an outcome that could be delivered on the ground. This was illustrated in a comment from a participant who attended workshops for both processes, *"the Moston Vale site is quite a good scale to get your head around and because I have been there quite early on I could actually physically imagine it" (Environmental Studies Lecturer at Greater Manchester HEI 2003a).*

An important finding of an 18-month study into stakeholder participation in regional planning was:

> "Efforts should be made to demonstrate how the often apparently abstract visions of the early drafts of RSS/RPG [Regional Spatial Strategies/Regional Planning Guidance] actually relate to stakeholders" *(Shaw 2003, pg. 333).*

A tiered approach, linking planning at different levels of scale might be helpful for such demonstrations of the implications of regional strategy. A design process

365

based on a framework applicable at different levels of scale, such as DesignWays, can help integrate planning across scales. This needs to be delivered through programmes that help embed this process within decision making structures and implementation strategies.

In order to maintain interest and support, a process like this needs some form of ongoing involvement. One advantage of combining planning at the site and landscape levels of scale is that the site level of scale is more likely to be implemented quickly. Working to enhance existing activities has several advantages, it is possible to show what can be done, building confidence in the possibility of change, and it is possible to develop 'small wins' helping to maintain interest over time. By working with organisations that are delivering projects on the ground, it is possible to build capacity within the community to deliver and manage the projects that they plan.

Grounding of overarching sustainability principles in particular projects and small-scale areas provides essential data, which can be fed into an overall Decision Support System or database of data and knowledge. Thus, a two-way relationship can be established (Figure 8-15). An overall framework of knowledge about a catchment is used to provide the information for planning at the project and landscape level of scale.

Figure 8-15 Two-way flow of information
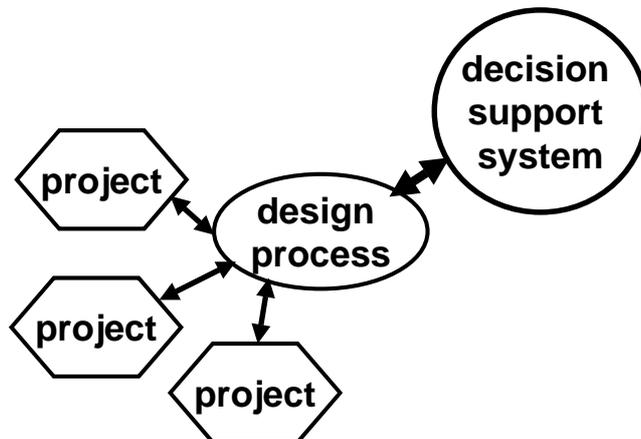
Integrating site level planning with strategic planning can be help to forge connections between local, perceptual knowledge and more technical, 'scientific'

knowledge of an area. In DesignWays, community maps of people's perceptions are used to stimulate dialogue about environmental issues in the area. One participant commented on this process: *"A map is just to look at, whereas if you have talked about it in a human and landscape context, it makes it more real for you" (Programme Coordinator at Red Rose Forest 2003).*

Stakeholders discussed possibilities for engaging schools and community groups in the planning exercises in the Irk Valley, such as 'Friends of' groups in the monitoring of biodiversity and changes in habitat. Suggestions were made to include school groups in monitoring water quality following bioremediation in polluted areas, and to involve community groups in archaeological digs and studies. Thus the information discovered could form part of the communication about the area and forms the basis for interpretive materials for recreational trails. Thus the physical design was integrated with programmes and activities to engage community members in developing knowledge about the area.

These ideas were recorded in the Mind Maps and the database developed from the planning process. The maps and planning frameworks which emerged from the process could form the basis for an interactive database for recording such information, linking the ongoing monitoring of the state of ecosystems' health to the framework of knowledge of the area developed during the planning process. This can then inform further iterations of planning.

This two-way flow of information implies that not only is information from participation made available to enhance the building of knowledge in the area, but also that the information collected is made readily available to the public. This implies enhanced public access to research findings, as advocated by groups such as the Public Library of Science (2003).

Such a flow of information requires particular attention to data management. It is difficult to synthesise technical and landscape information from different sources. Data sets tend to be gathered by different bodies at different levels of scale, which is likely to exacerbate this technical difficulty. As data is aggregated, the fine-grained information at a higher resolution is lost. In synthesising datasets, careful attention needs to be paid to issues of scale.

367

Good cartography is not easy. Developing maps that show relationships across different levels of scale and don't violate data integrity requires careful attention to the underlying data, graphic conventions and the way that the information is presented. Good meta-data, 'data about data', is essential for working with data sets from different sources and at different levels of scale. Possible implications of this research for supporting Decision Support Systems is discussed in more depth in Tippett (2004b).

Integrating planning across scales requires stakeholders to develop capacities that allow them to work across traditional boundaries (Williams 2002). The discussion about goals in the Irk Valley planning process showed that participants were developing an awareness of scale issues in planning, in particular of the need to make changes to facilitate 'planning for sustainability', such as changes in planning requirements, at a larger level of scale than the landscape. One participant described the process of working at different levels of scale:

> *"I thought that was interesting because you could see the bigger picture and concentrate on smaller areas and you could do that for almost anything. You could see the bigger picture of how do we want this whole area to look and then guide it on the smaller areas and how they contribute to the bigger picture. That is quite useful" (Community Liaison Officer at City Council 2003a).*

The value of working at both the landscape and site levels of scale, with a two-way flow of information between large scale planning and the local, was recognised by many of the participants. The Moston Vale planning process was seen to benefit from being part of the planning process for the larger Irk Valley in several ways. The fact that stakeholders from the Irk Valley workshops came to the Moston Vale workshops meant that residents were able to discuss ideas and the process with them. The residents were able to see how their neighbourhood fitted into the larger Irk Valley.

8.4.1.2 Discussion of results of the planning process

Many of the ideas developed in the Moston Vale workshops related to regeneration, in particular to social programmes and institutions, in the surrounding urban area. Vandalism is a major problem when implementing ecological regeneration in open spaces in urban areas. If the planning process

368

helps to involve more people, and helps them to see how their urban sites relate to the landscape, and vice versa, participatory processes may help to reduce this problem. By tying the participatory process at the site level to one looking at the larger area of the Irk Valley, and working with stakeholders who were also looking at this level of scale, the workshops at Moston Vale were more effectively tied into an overview of regeneration in the area. Several of the ideas developed in the Moston Vale workshops were for the surrounding area. The ideas that were developed in the Moston Vale workshops informed the Irk Planning process. This is demonstrated in the wealth of detail shown in the section taken from the map 'Creative Futures - Irk Valley, Ecological Design' (Figure 8-16), and the legend for this section (Table 8-8).

Figure 8-16 Cluster of ecological design ideas developed near Moston Vale site

Table 8-8 Legend for ecological design ideas developed near Moston Vale site

Icon #	Future Possibility	Comments and Resources	EASEL
1	Community recycling facilities	There is a lack of recycling facilities in this area - develop programmes to enhance re-use and recycling of building materials.	Elements & Settlements
2	Model ecological urban renewal in buildings and infrastructure to support new development	Planning guidance - best practice, guidelines for solar orientation, use housing market renewal fund to encourage new sustainable development, model, retrofit houses using solar energy, passive and active.	Elements & Settlements
3	Wind energy resource on high area	These could include low cost Windsave windmills, once they are more widely available. See www.bwea.com	Elements & Settlements
5	Eco-industrial cluster	Promote new light manufacturing in the area through eco-industrial clusters, encouraging reuse and recycling as well as linked manufacturing processes.	Elements & Settlements
7	Demonstration eco-house	Potential new houses on MANCAT site to include an eco-demonstration home (could be housing for students), rehabilitation of college buildings could model sustainable building practices, and the campus could become a training ground for eco-construction and maintenance	Elements & Settlements
15	Ecological, local scale treatment of sewage	A greenhouse/ecological sewage system (biological waste treatment) for on-site sewage, used as a science and engineering classroom and starter for forestry nursery - see http://www.oceanarks.org/	Elements & Settlements
20 - 24	SUDS - Sustainable Urban Drainage	Use clearance areas to develop pocket parks, integrated with SUDS to gather storm run off from roofs and from roads	Elements & Settlements
36	Farmers' Market	Temporary stalls can be set up in front of community pavilion, also used as an event to attract people to the Moston Vale Site	Social Capital
37	Community Pavilion	Community pavilion can be used for arts activities, performances, workshops and refreshments for sporting events	Social Capital
89	Bio-monitoring	Work with existing school science programmes to develop and monitor ecological restoration and bioremediation.	Activities

370

8.4.1.3 Comparison with previous open space strategies

The 1997 report developed for the Irk Valley talks about the need to improve management on the open spaces sites, so that it includes "*community involvement, realising educational potential, promoting healthier lifestyles and programming activity*" (Glen Kemp Hankinson 1997, pg. 51). A draft plan was created for the Moston Vale site, as one of four detailed areas in the report. A comparison between the two plans developed for the Moston Vale site could be misleading, as the plans developed in the 1997 report did not benefit from workshops with residents and were not as detailed. It is possible, however, to see some advantages of participatory input into the detailed plan produced in the DesignWays workshops.

The suggestions for the Moston Vale plan in the Glen Kemp Hankinson (1997) report centre on improving access and physical links between the site and other areas in the Irk Valley. A few suggestions are made for artwork and focal points, along with some general indications of areas for informal planting. The participatory DesignWays workshops were able to draw attention to the particular history of the place, so that the landscaping and planting enhance local history and the landscape memory of the brook. A better sense of how the site might be used by residents, grounded in local knowledge, allowed for more detailed plans for recreational facilities to be developed, along with ideas of how existing programmes in the area may be able to use and enliven these facilities. The 1997 report does not focus on the links between the landscapes and the potential for regeneration in the area. Ideas for improving the landscape so that it acts as a positive catalyst for regeneration in the area were important outcomes of working at two levels of scale. Table 8-9 shows the key criteria for meeting the challenge of 'Linking actions and measures across multiple geographic levels of scale' identified in Chapter 4.

371

8.4.1.4 Ability to meet challenge

Table 8-9 Meeting the Challenges of the WFD: Linking actions across levels of scale

5.	Met criteria?	Meeting the Challenges of the WFD Linking actions and measures across multiple geographic levels of scale
Criteria		**Comments**
develop an awareness of scale related issues in planning	■	• encouraged by having two planning processes running simultaneously, assisted by having the same format for each, so that participants could easily see similarities and differences • structure of toolkit encouraged participants to consider impacts and connections across different levels of scale
provide opportunities to develop strategic, integrated plans at the landscape level of scale		• the Irk Valley plans were seen as valuable in providing a vision for developing the smaller scale sites in the area, and a view of how to move forward
planning tools to encourage synthesis of 'bottom-up' and strategic planning in a two-way relationship	■	• the transferable toolkit facilitates a communication and translation of ideas across levels of scale • developing a large scale framework as well as a site level plan was seen as useful by all the participants • the ideas developed in the Moston Vale workshops informed and enriched the strategic planning at the landscape level of scale • the Moston Vale site plan was seen as providing a concrete example of what could be done, thus building interest
ongoing process of communication between actors working at different levels of scale		• sessions several participants said that more could have been done to link the two levels of scale, but this was not reflected by the participants who had attended the Moston Vale workshops (it is not necessary for all of the participants at the landscape level of scale to attend at both levels of scale, but it is helpful if some do) • the process would have been strengthened if some participants from Moston Vale had been able to attend the Irk planning process • the final workshop in which regional stakeholders participated in a workshop with residents and stakeholders looking at key issues arising from the planning process was seen as important by all interviewees that attended it
programmes to integrate planning processes at different levels of scale		• several participants mentioned they found it useful to have the two processes going on in parallel, and that the ideas from Moston Vale were easily integrated into the Irk plan, and vice-versa • community members said that they thought having the workshops as part of the Irk Valley planning process made the workshops for Moston Vale more valuable, as the ideas were put in a bigger context and they were able to learn more about how their site fitted into the larger Irk Valley area • the toolkit facilitates communication and planning for these programmes, but needs to be used in a context which develops programmes at different levels of scale • the IVP had encouraged such processes before the project, e.g. with field trips for community members to see different projects and to gain a sense of the whole Irk Project area, and through inviting some community and business representatives onto the steering group as well as councillors and planners

Legend	
Met this criterion	■
Partially met this criterion	

372

8.4.2 Answering the research question

Research Question 3. What processes and tools help to link such planning across different geographical levels of scale?

In a discussion of implementing the WFD, WWF– Scotland (2003, pg. 2) suggests that facilitating "*effective participation of all stakeholders in such an integrated way will require the use of a single process of planning for them to engage in"*. A challenge of integrating processes across different levels of scale is to maintain a balance between using a single process of planning, and allowing for the development of richly nuanced local knowledge.

Table 8-10 summarises characteristics of an effective process for linking planning across different levels of scale, in response to the third research question.

Table 8-10 Answering Research Question 3 - Summary

Research Question 3	
Processes and tools help to link such planning across different geographical levels of scale	
Attribute	Characteristics
Educational framework of sustainability	• Uses transferable principles that encourage thought about global impacts of local actions • Includes steps to encourage participants to consider the impacts of their own actions on the local and global environment and social equity
Ecological design process	• Tools focus attention on impacts across different levels of scales • Encourages consideration of local sourcing of resources • Consideration of landscape patterns encourages linking of habitats
Creative involvement of stakeholders in planning process	• Encourages dialogue and social learning amongst community members and stakeholders with concerns at different levels of scale
Scaleable design language to link different geographic levels of scale	• Provides a common language for communication, facilitating communication between scales • Allows participants to draw connections between scales for themselves, by making similarities and differences easy to see • Assists in integrating local concerns and issues at the site level with a strategic overview developed at the landscape level
Underlying framework of systems thinking	• Provides transferable principles that help focus attention on dynamic processes working at different levels of scale

8.5 Conclusion

Table 8-11 shows a summary of the more detailed tables developed above to analyse the ability of DesignWays to meet the challenges of the WFD.

373

Table 8-11 Summary - Ability of DesignWays to meet WFD challenges

Summary - Ability of DesignWays to meet WFD challenges	
Challenge 1. Enhancing integrated planning	
information shared and capable of being meaningfully interpreted by many actors	■
actions are coordinated, with the aim of achieving beneficial synergies	▨
long-term effects of measures considered, attempt to preserve flexibility of action for future generations	■
ideas are placed into a larger context and a holistic view is taken	■
create a vision to aspire to and test options against long-term goals	■
Challenge 2. Going beyond 'end-of-pipe' to eco-systemic solutions	
design systems which do not cause pollution during life cycle and which reduce total resource throughput	▨
consider human infrastructure and technologies as whole systems, looking at all their interactions	■
'build' upon existing assets, ecological and social	■
focus on appropriate scale, matching technology to end need	▨
focus on maintaining and restoring ecosystem health	▨
Challenge 3. Encouraging meaningful participation	
attempt to involve and inform all relevant stakeholders, including those outside 'normal sphere'	■
process is seen as fair, with attempt to give all stakeholders a voice in resultant dialogue	■
opportunity to proactively design solutions and options, beyond responding to predetermined ideas	■
the process is seen as valid and engaging	■
participants are able to exert change in the decision making process and results of participation are used	▨
sufficient resources for participation are provided (e.g. information, tools for analysis)	▨
diversity of technical expertise integrated with community and stakeholder knowledge and aspirations	■
uncertainties in data and predictions are discussed	▨
encouragement to question fundamental assumptions and goals	■
resultant plans are seen as innovative *and* viable	■
use of participation is communicated to participants and the wider public	▨
process is designed to add value to existing activities and to fit in with participants' context	■
an attempt is made to reduce the effects of entrenched power positions on outcomes	▨
Challenge 4. Develop capacity in stakeholders and planners to meet the above challenges	
develop a shared understanding of problems and options	■
encourage social learning	■
develop communication and networking skills	▨
develop creative thinking and planning skills	■
develop integrated decision making skills and encourage an adaptive management approach	■
professionals and practitioners develop skills for *facilitating* meaningful participation	▨
develop institutions, trust and norms that support implementation of eco-systemic solutions	▨
Challenge 5. Linking actions and measures across multiple geographic levels of scale	
develop an awareness of scale related issues in planning	▨
provide opportunities to develop strategic, integrated plans at the landscape level of scale	▨
planning tools to encourage synthesis of 'bottom-up' and strategic planning in a two-way relationship	■
ongoing process of communication between actors working at different levels of scale	▨
programmes to integrate planning processes at different levels of scale	▨

Legend	
Met this criterion	■
Partially met this criterion (dependent on application)	▨

The analysis of DesignWays's ability to help meet the challenges of the WFD developed above shows that this process has many benefits. The characteristics

374

that help to meet these challenges were summarised in Table 8-3, Table 8-7, and Table 8-10.

Implementing sustainable development poses several interrelated challenges. This will require new skills and competencies amongst a wide range of stakeholders and actors. The DesignWays process was developed to attempt to meet many of these challenges. The value of a holistic approach was demonstrated in the above discussion. As Commoner (1992) reminds us, however, 'there is no such thing as a free lunch'. The underlying emphasis of DesignWays is on harnessing participants' creativity and using ecological design to maximise beneficial synergies so that human culture can sit more conformably within ecosystems. The price of the 'lunch' is that such a process takes time and effort. It requires skilled and knowledgeable facilitation, and a considerable commitment from participants. There is a high up-front input of time and effort to develop goals and plans, with many of the benefits only discernible in the long run. In addition to requiring additional resources, taking an integrated approach requires many different actors to work together. This can be difficult to coordinate and may be perceived as threatening to people used to established procedures and roles. In answer to the fourth research question, the following chapter explores the institutional and programmatic factors that limit the use of integrated, active involvement processes such as DesignWays, and develops recommendations to help improve planning practice. In response to the fifth research question, it concludes with a discussion of how the DesignWays process fits into the broader field of ecological planning and systems thinking.