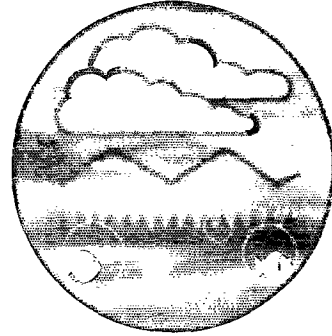
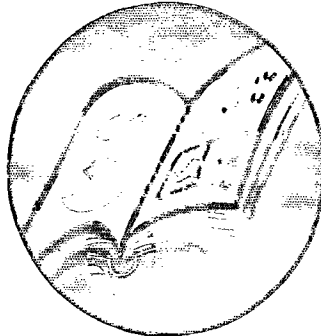
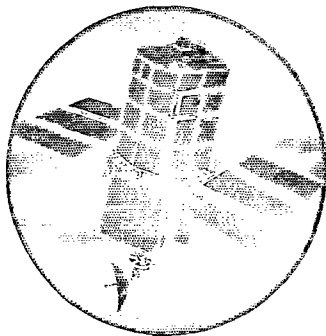


Prioritising the Issues in Local Environment Agency Plans through Consensus Building with Stakeholder Groups



Research and Development

**Project Record
W4/002/1**



ENVIRONMENT AGENCY



All pulps used in production of this paper is sourced from sustainable managed forests and are elemental chlorine free and wood free

Priortising the Issues in Local Environment Agency Plans through Consensus Building with Stakeholder Groups

R&D Project Record W4/002/1

Judy Clark, Jacquelin Burgess, Nicole Dando, Darren Bhattachary, Kate Heppel, Peter Jones, John Murlis and Peter Wood

Research Contractor:

Environment and Society Research Unit, Department of Geography,
University College London

Further copies of this report are available from:
Environment Agency R&D Dissemination Centre, c/o
WRc, Frankland Road, Swindon, Wilts SN5 8YF



tel: 01793-865000 fax: 01793-514562 e-mail: publications@wrcplc.co.uk

Publishing Organisation:

Environment Agency
Rio House
Waterside Drive
Aztec West
Almondsbury
Bristol BS32 4UD

Tel: 01454 624400

Fax: 01454 624409

S-09/98-B-BCQT

© Environment Agency 1998

All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the Environment Agency.

The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability whatsoever for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained herein.

Dissemination status

Internal: Released to Regions
External: Released to Public Domain

Statement of use

This report records the trailing of the methodology for prioritising issues within LEAPS using a consensus building approach. It is a complete record of the work of the stakeholder group in prioritising the issues in the New Forest LEAP. The report is of relevance to any person who wishes to analyse in more detail the methodology set out in the Technical Report W114. It is also of use to those wishing to learn practical lessons for setting up a stakeholder group.

Research contractor

This document was produced under R&D Project W4-002 by:

Environment and Society Research Unit
Department of Geography
University College London
26 Bedford Way
London
WC1H 0AP

Tel: 0171 5045508

Fax: 01713807565

Environment Agency Project Manager

The Environment Agency's Project Manager for R&D Project W4-002 was:
Nick Berry, Southern Region

CONTENTS

1. Introduction	4
1.1 Purpose of the project	4
1.2 Outline of the project	4
2. Methodology: overview	6
2.1 Multi criteria analysis	6
2.2 The Workshops	6
2.3 Organisation and running of the workshops	8
3 The Stakeholders	10
3.1 The composition of the New Forest Stakeholder Group	10
3.2 Recruiting the Stakeholder Group	10
4 The Workshops	14
4.1 Workshop 1 [W1]: <i>Introductions, costs, benefits and risks associated with the issues in the New Forest LEAP</i>	14
4.1.1 Objectives for W1	14
4.1.2 Preparation for W1	14
4.1.3 Structure of W1	15
4.1.4 Summary of substantive points raised in discussions during W1	16
4.1.4.1 Initial discussion	16
4.1.4.2 Small group discussions	16
4.1.4.3 Final discussion	19
4.1.5 Feedback to Group members after W1	20
4.2 Workshop 2 [W2]: <i>To produce a list of agreed criteria with their underlying value judgements for use in prioritizing the issues in the New Forest LEAP</i>	20
4.2.1 Objective for W2	20
4.2.2 Preparation for W2	21
4.2.3 Structure of W2	23
4.2.4 Genesis of the criteria list	25
4.2.5 Feedback to Group members after W2	33
4.3 Workshop 3 [W3]: <i>To assess each of the issues in the New Forest LEAP against the top ten ranked criteria</i>	33
4.3.1 Objective for W3	33
4.3.2 Preparation for W3	33
4.3.3 Structure of W3	33
4.3.4 Review of discussion during W3	39
4.3.4.1 Initial discussion of ranked criteria	39
4.3.4.2 Multi-criteria analysis in operation: assessing issues against criteria	40
4.3.4.3 Final discussion	44
4.3.5 Results of the MCA	47
4.3.6 Feedback to Group members after W3	51

4.4 Workshop 4 [W4]: <i>to review and agree the ranked list of issues in the New Forest LEAP, and evaluate the R&D process</i>	51
4.4.1 Objectives for W4	51
4.4.2 Preparation for W4	52
4.4.3 Structure of W4	52
4.4.4 Review of the prioritised list of issues in the New Forest LEAP and evaluation of the process	54
4.4.4.1 Initial discussion	54
4.4.4.2 Sub group discussions	54
4.4.4.3 Final discussion: the Group's evaluation of the MCA process	56
4.4.5 Feedback to the consultants after W4	61
4.4.6 Final prioritised list of issues in the New Forest LEAP, amended in the light of discussion in W4	62
5. Evaluation of the Project	64
5.1 Evaluation of the recruitment procedure	64
5.2 Evaluation of the Workshops	64
5.2.1 Evaluation of W1	64
5.2.2 Evaluation of W2	66
5.2.3 Evaluation of W3	67
5.2.4 Evaluation of W4	69
5.2.4.1 Two problems in W4	69
5.3 Stakeholders' evaluation of the MCA results and of the Project	70
5.3.1 Decision-making on the basis of multi-criteria analysis	70
5.3.2 The LEAP document and the issues identified in it	71
5.4 Written feedback from six of the Stakeholders	72
6. Conclusions and recommendations	80
6.1 Conclusions	80
6.2 Recommendations	81
7. Appendices	84
1. New Forest LEAP Group Workshop 1: List of Costs, Benefits and Risks	84
2. Rationale for revised issues list	94
3. New Forest LEAP Group Workshop 1: Criteria produced by pairs	95
4. Spreadsheet showing MCA calculations using 'group' criterion weights	99
5. Order of priority using individual's criterion weights	100

EXECUTIVE SUMMARY

This document provides a detailed report of the testing of an experimental methodology for prioritising issues in Local Environment Agency Plans (LEAPs) using the New Forest LEAP. This methodology combines a deliberative procedure with a formal decision analysis technique - multi-criteria analysis (MCA). An overview of the methodology (section 2) is followed by a detailed description and analysis of each stage of the process. The first stage involved the recruitment of a stakeholder group from amongst organisations in the LEAP area whose interests encompassed the whole area and/or key activities within it (section 3). This group then worked through the methodology in a series of four structured workshops (section 4). During the first the group assessed the costs, benefits and risks of the issues identified in the New Forest LEAP, a task which provided the context for the second workshop during which the group developed a set of criteria for evaluating the issues in the LEAP. The third workshop saw the group assessing each issue against each criterion. During the final workshop they discussed and agreed the results of the MCA (a list of the issues in the New Forest LEAP arranged in priority groups) and reviewed the process itself. This detailed record of the testing of the methodology is followed by an evaluation of the various stages and a report on the stakeholders' own evaluation of the project, both as a group and as individuals (section 5). Overall, the experiment was judged to be a success by both the consultants and the stakeholders and is recommended to the Agency as a means of determining priorities within LEAPs. Section 6 provides a summary of the benefits of using the methodology and a list of recommendations derived from the experience of carrying it out.

1. INTRODUCTION

1.1 Purpose of the project

This project was commissioned by the Environment Agency with the aim of finding ways of improving the prioritisation of issues identified within Local Environment Agency Plans (LEAPs).

The objectives of the project are:

- to set out a method for prioritising issues identified within LEAPs
- improving the consultation and involvement process of the key stakeholders within a LEAP area

by providing the Agency with a consensus and coalition building methodology which recognises the constraints of limited resources.

This project record provides a detailed account of the application to the New Forest LEAP of the methodology developed by the consultants. It complements the R&D Technical Report, W114, **Prioritising the Issues in Local Environment Agency Plans through Consensus Building with Stakeholder Groups**. For further information about the project contact Nick Berry, Economic Planner (Southern Region) and Project Manager or Mat Carter, Customer Services Manager (Hampshire Area, Southern Region), responsible for production of the New Forest LEAP.

1.2 Outline of the project

The aim of the R&D carried out by the Environment and Society Research Unit (ESRU) of University College London (UCL) was to produce a framework and practical guidelines for the inclusion of economic appraisal into the LEAP process. This was done in four stages:

- review and evaluation of methods of economic appraisal
- preparation of a procedure for a deliberative approach to economic appraisal of LEAPs through multi-criteria analysis
- setting up stakeholder group to test this procedure by applying it to a LEAP in progress.
- reviewing the results from testing the methodology

The consultants proposed a deliberative and inclusive approach to satisfy these requirements. Interest in more inclusive practices in policy and decision making is now growing very rapidly. The traditional model of public consultation is one of top down, one way dissemination of information about plans and proposals in which consultees are passive recipients who do no more than indicate their preference for one option or another. The new consultative practices are based on the idea that decisions will be more robust if based on a measure of consensus between those with a stake in what happens. Such practices stress a

multi-voiced interactive process of debate and consensus building in which knowledge, values and ideas are shared among participants.

The consultants developed a procedure for economic appraisal of LEAPs which combines a standard technique of policy and project appraisal - multi-criteria analysis (MCA) - with practices used in the new approach to consultation; in particular, the use of a stakeholder group. The process thus combines systematic appraisal with group deliberation procedure where the emphasis is as much on the process as on the product. This approach is innovative not in its elements but in their combination. The use of stakeholder groups to work on environmental policies and projects is becoming more common, and decision conferences using structured group processes are a well-known management tool within organisations. However, we know of no other work which combines stakeholder group deliberation with a formal systematic appraisal technique in the context of determining priorities for environmental action. Our project was thus an experiment in every sense of the word.

We recruited a group of stakeholders from the New Forest to test the procedure. The Group comprised individuals representing the majority of organisations who have an interest in the outcome of the New Forest LEAP. The Group's overall task was to review and prioritise the issues addressed in the New Forest LEAP Consultation Draft which was being finalised as the fieldwork began. The Group was asked to identify the range of costs and benefits associated with the issues identified in the New Forest LEAP, and rank the issues in order of priority.

As we show in the evaluation section (5) of this Report, the experiment was successful. It showed that a deliberative yet systematic approach has many advantages, both for the stakeholders and the Agency. The Stakeholder Group were overall supportive of the process and made many useful suggestions for improving it further.

2. METHODOLOGY: OVERVIEW

The deliberative process devised by the consultants married a procedure for deliberation with a technique for prioritisation. This section begins with an overview of the technique - a form of multi criteria analysis (MCA). This is followed by an overview of the workshops; that is, the procedure for deliberation.

2.1 Multi-criteria analysis

The basic principles of MCA are quite straightforward. It usually involves drawing up a matrix which combines issues or policy or project options with a range of criteria or attributes which represent the decision criteria in a way that relates to the specifics of the plan, policy or project in question. Appropriate measures are established for each attribute and information gathered concerning the performance of each option against each criterion (its score). This information can be quantitative (monetary and non monetary) or qualitative. In some cases attribute values (scaled appropriately) are used as scores and in other cases a scale is used; for example each option is given a score between 1 and 10.

Most techniques require the weighting of each criterion according to its perceived relative importance. The procedure used to combine scores and weights varies according to the specific technique. The usual output is a set of numbers or a set of rankings which show the alternatives in order of preference, although the results may be expressed graphically.

The MCA technique used in this case was a mathematically simple one using summation of weighted scores. There were several reasons for this. First, the numbers involved would not warrant complex mathematical treatment. Second, the procedure used had to be transparent. This would not be achieved if people could not easily follow the way in which the numbers were manipulated. Moreover, any opaqueness in the mathematics could have detracted from the deliberative process.

The Stakeholder Group began by reviewing and revising the issues list presented in the Consultation Draft of the New Forest LEAP. It then determined the criteria for assessing each issue. Criteria were weighted by individuals and aggregated by the consultants to give group weightings. The next stage involved assessment of each issues against each criterion - again this was carried out by the Group. The consultants then substituted scores for the Group's qualitative assessments and calculated a total score for each issue. The higher the score, the higher the priority.

(More information about the MCA technique can be found in the Technical Report.)

2.2 The Workshops

As explained above, the MCA was tackled in stages during a series of four workshops. First, the Group derived a list of criteria acceptable to everyone. Second, the criteria were weighted according to their importance and the least important criteria were discarded. Third, the Group 'scored' each issue against each of the criteria. Finally, the consultants produced the ranked list from this by summing weighted scores and separating the issues into priority groups on the basis of those scores.

However, it was not tackled mechanistically. The Group began by reviewing the issues and discussing the costs and benefits associated with them, which provided a context for the MCA. At each stage participants had an opportunity to deliberate; in determining the criteria, in assessing the issues against the criteria and in reviewing the results. The consultants recognised that the structure and organisation of the group process would be central to the success of the experiment. We could not expect automatic support from participants and nor could we expect the group simply to follow instructions. They would need persuading of the rationale and of the importance of trying the method even if they were not fully convinced of its utility, and they would also need opportunities to reflect on the method and the process. The integration of deliberation and formal analysis required considered planning,

The Group met four times at approximately fortnightly intervals, with the first three workshops being held at the Crown Hotel in Lyndhurst and the final one at the New Forest District Council Offices, also in Lyndhurst. (Lyndhurst was chosen as the location for the workshop as is near the centre of the LEAP area.) Each workshop lasted three hours from 4 to 7 pm. The late afternoon/evening timing chosen to make it easier for stakeholders to fit the workshops into busy lives. Refreshments were provided beforehand. The first three workshops were followed by an informal buffet meal, with a more formal meal after the fourth to celebrate the end of the Group's work.

It should be noted that offering a meal after each workshop was not simply to provide sustenance for hungry participants and Team members. The opportunity to eat also provided space for informal socialising, important for getting the group to 'gel', for networking between individual participants, and for enabling the Team to get to know the individuals. The value of informal networking was explicitly articulated by several group members; in particular in making cross sector links and links between industries, and in getting to know people whom they would only otherwise meet in confrontational circumstances. Informal socialising was also important for the Team, especially when it came to planning who would work with whom in the workshops. Similarly, celebrating the completion of the Group's work was an essential part of the group process, allowing the Group to disband with a sense of completion and a job well done.

The dates of the workshops, and the main tasks carried out by the Group at each workshop, and by individuals between workshops, are summarised in figures 2.1 and 2.2 below.

Figure 2.1: Workshop dates

1	Tuesday 28 October 1997
2	Monday 10 November 1997
3	Thursday 27 November 1997
4	Thursday 11 December 1997

Figure 2.2: Workshop Tasks

Prior to Workshop 1 (individuals)	To identify costs, benefits and risks of issues in the LEAP of interest to the group member and those whom he or she was representing.
Workshop 1 (group)	To review the issues in the New forest LEAP and produce a comprehensive, inclusive list of the costs, benefits and risks associated with the issues proposed in the New Forest LEAP
Prior to Workshop 2 (individuals)	To think about criteria against which the issues in the New Forest LEAP might be assessed.
Workshop 2 (group)	To produce an inclusive list of criteria for assessing the issues in the New Forest LEAP
Prior to Workshop 3 (individuals)	To score each criterion on the list produced in workshop 2 on a scale of 0 to 100
Workshop 3 (group)	To evaluate the issues against the final list of 10 criteria
Prior to Workshop 4 (individuals)	To review the list of issues ranked in priority groups according to the results of the MCA
Workshop 4 (group)	To review and agree the ranked issues list and to review the process.

2.3 Organising and running the workshops

Planning was essential if the workshops were to run successfully and the consultants drew on their extensive experience of group discussion and teaching methods to devise procedures for working on the tasks. Each workshop was run according to a pre-planned schedule, albeit one which allowed flexibility if, for example, the group wished to discuss issues not anticipated by the team, or took a longer or shorter time to complete a task.

In planning each workshop, the team covered the following:

- overall objectives
- devising a task or tasks to achieve these objectives
- devising routines for achievement of each task
- devising ways to record the results of work on each task
- seating for whole group discussions
- determining the make up of sub-groups and pairs where the group was divided into smaller units to carry out tasks; overall we tried to ensure that each participant had an opportunity to work with every other participant in a small group or a pair

- the focus of whole group discussion
- how to promote inclusiveness and defuse conflict
- timing: how long would each task take?
- room allocation for tasks where the group was divided
- opening and closing of each workshop, particularly trying to ensure that the group was thoroughly briefed at the start and that each workshop ended on a coherent and 'high' note
- allocating specific roles to team members before and during the workshop
- materials required

Some of the tasks were piloted with staff and postgraduates from the UCL Department of Geography prior to the relevant workshop. A team of 6 (7 for workshops 2 and 3) ran each workshop. The skills of team members, gained through practical experience of working with the public and with discussion groups of various types, and through their roles as educators, were as crucial to the success of the workshops as was thorough planning.

The Team comprised:

Facilitators

Jacquie Burgess, Department of Geography, University College London
 Judy Clark, Department of Geography, University College London
 Nicole Dando, Department of Geography, University College London

Participant Observers

Darren Bhattachary, Department of Geography, University College London
 Kate Heppel, Jackson Environment Institute, University College London
 Kersty Hobson, Department of Geography, University College London (workshops 2 and 3)
 Peter Jones, Jackson Environment Institute, University College London

Specialist Advisors

John Murlis, Director Jackson Environment Institute, UCL
 Peter Wood, Professor of Economic Geography, UCL

All workshops were also observed by Agency staff.

Jacquie Burgess facilitated all the whole group discussions. Tasks which involved division of the Group into smaller units (2 or 3 sub-groups) were each run by one of the three facilitators. Where members of the Group worked in pairs each was assigned a team member to act as assistant as well as observer of the pair; these observers made written notes. Whole group and sub-group discussions were recorded for and the participant observers made written notes of all whole group and sub-group discussions. Recording and note taking were essential because of the experimental nature of the project. Along with Team debriefings the recordings and notes thus obtained enabled a thorough analysis of the process. However, even without the requirement to analyse some note-taking would be needed in order to collate the work of each workshop and feed it back to the Group prior to the next workshop.

The results of every stage and sub-stage of the process were recorded using visual methods. As well as providing the consultants with an immediate record of what the Group had achieved visual recording also provided an easy way of communicating the results of the work of sub-groups and pairs to the whole group during the workshop.

3. THE STAKEHOLDERS

3.1 The composition of the New Forest Stakeholder Group

Although a Stakeholder is defined as anyone who has a stake in what happens a Stakeholder Group does not necessarily comprise everyone who has a stake. Its composition depends on the purpose for which the group is convened and the tasks required of participants. The technical nature of the LEAP, its geographical coverage, the range of organisations interested in its outcome, its focus on particular aspects of the environment, and the Agency's desire to build partnerships with organisations with whom it would need to work to address many of the LEAP issues, indicated a rather more 'expert' group than would be appropriate in other contexts. However, it would not have been appropriate to confine membership to technical and environmental experts; it was essential that the group included people with a wide range of interests and knowledge, particularly local knowledge.

Therefore, we looked to organisations with key interests (organisations with a remit covering the LEAP area and/or key activities within it) to supply members. The make up of the group we proposed did not include, for example, representatives of geographically local interests such as local residents' groups, and nor did it include individual members of the public. In addition, experience suggested that a fair range of interests would require roughly equal representation from each of the three main sectors of activity in the area (statutory, voluntary and private) and that the group should have no more than eighteen members.

The criteria for membership of the LEAP Stakeholder Group were as follows:

- live and/or work within the LEAP area
- command authority within their own organisation
- are able to represent their constituency
- possess excellent local knowledge
- are skilled in the assimilation and assessment of technical information
- can work to a tight timetable
- can attend all four workshops

3.2 Recruiting the Stakeholder Group

The Agency is advised by Area Environmental Groups (AEGs) in respect of its aims and objectives, and AEGs may advise on the vision for a LEAP. However, the AEG effectively represents the Agency. Thus the Agency could be accused of bias if participation in the prioritizing exercise, part of its external consultation, were restricted to the AEG. Moreover, AEGs cover a wider area than LEAPs and their membership may therefore not encompass particular local interests nor specialised local knowledge. For these reasons it thus was considered inappropriate to recruit the New Forest Stakeholder Group from within the Hampshire AEG.

However, in view of the AEG's role it was considered appropriate to present the project to the Hampshire AEG and to request its assistance with the composition and recruitment of the New Forest LEAP Group. The consultants put forward a list of 18 organisations who could

potentially provide members for the LEAP Group (see Figure 3.1). The members of the AEG agreed with most of the suggestions but were keen to include someone from the New Forest Committee (NFC), specific representation of freshwater fishing interests, and, as Exxon and Esso were now the same company, additional private sector representation. In addition, AEG members suggested useful contacts. The AEG was also not persuaded of the use of the word Stakeholder to describe the group, and so it became known simply as the New Forest LEAP Group.

Figure 3.1: Preliminary suggestions for membership of the New Forest LEAP Stakeholder Group

<u>Public sector</u>
Environment Agency
New Forest District Council: officer
New Forest District Council: elected member
English Nature
The Forestry Authority
The Verderers
<u>Private Sector</u>
Esso
Exxon Chemicals
Southern Water
Yachting/boating commercial interests
Smaller farmers (owners and tenants)
Large developer: housebuilder
<u>Voluntary Sector</u>
Hampshire Wildlife Trust
Council for the Protection of Rural England Hampshire branch
Royal Society for the Protection of Birds
Hampshire Friends of the Earth
Representative of camping/caravanning interests
Representative of sea angling/leisure fishing interests
Note: Maximum number of members - 6 per sector

The AEG's suggestions were followed up and other changes were made as it became clear to the consultants that some of the initial proposals were inappropriate. Both the developer and the sea angling interests were dropped because neither large developments nor sea angling proved to be, or likely to become, important activities within the LEAP area. Camping and caravanning are more important activities but most of the issues impinging on tourism would be similarly perceived by local residents. In any case, it proved impossible to find a local representative.

Group members were recruited by telephone. The project was explained and once an interest had been shown a summary outline of the project was sent. This enabled prospective members to give informed consideration to joining the workshop. In the event, relatively little difficulty was encountered in recruiting group members, probably because many had already been

apprised of the project by an AEG member and were already at least partly persuaded of its value.

The most difficult part was coordinating the dates of the workshops. Initially we offered 3 dates for each workshop, and chose the date that best suited a majority of members. We then had to do a certain amount of cajoling to persuade the remainder to accept the dates chosen. That most of those approached were willing to participate, and that people were willing to accommodate dates that were difficult for them, is perhaps a testament to the importance attached to the project.

However, we did encounter some difficulties. For some potential stakeholders there were problems of timing and time. The constraints of production of the Consultation Draft of the New Forest LEAP and the timing of the project meant that we were able to give potential group members very little notice (about one month). In addition, finding someone who could devote the necessary time proved too difficult for two of the voluntary organisations. Both Hampshire Wildlife Trust (HWT) and the Verderers found themselves unable to find anyone to participate from within their respective organisations. In both cases the solution was to be represented by another group member. But while this proved satisfactory in the case of the HWT who were represented by the member from the Royal Society for the Protection of Birds (RSPB) it was not satisfactory in the case of the Verderers. The person from the NFC was also designated to represent the Verderers. Her unhappiness with this role was clear and she resigned after the first workshop.

Once people had committed themselves to participating attendance was almost perfect. The one exception was the Forestry Commission (FC). Owing to unforeseen local difficulties their representative excused himself from the first two workshops. The FC offered to send another representative to the third and fourth workshops but the consultants felt that it would be difficult for a newcomer to join in so late in the day when key issues had already been rehearsed, and, just as importantly, a newcomer might disturb the group dynamics.

However, we did recruit an additional member after the first workshop. The Commoners Defence Association (CDA), a unique group but a key local Stakeholder in terms of the New Forest, had been missed from our initial list and the advice we received indicated that smaller farmers could be represented under the umbrella of the National farmers Union/ Country Landowners Association. The absence of the CDA was noted by a number of group members at the first workshop, and because they expressed concern we decided that we had to recruit a representative. The only other absence was that of the Southern Water representative at workshop 3, who was unable to make it from work commitments on the east coast.

The participants in the New Forest LEAP Group are listed in Figure 3.2. Some were already known to each other through participation in New Forest affairs; others were complete strangers.

Figure 3.2: Members of the New Forest LEAP Group

<u>Public sector</u>	
Julia Norman	New Forest District Council (officer)
Jean Vernon-Jackson	New Forest District Council (member)
Neil Hill	English Nature
John Adams	Environment Agency
<u>Voluntary sector</u>	
Chris Corrigan	RSPB and Hampshire Wildlife Trust
Michael Chilcott	Hampshire CPRE and New Forest Association
Sue Tait	New Forest Friends of the Earth
Brian Lappin	(freshwater fishing) Brockenhurst Manor Fly Fishing Club
Steve Green	(sailing) Calshot Sailing Club and Southampton Water
Sailing	Association
<u>Private sector</u>	
Stephen Wright	NFU and CLA
Tim Moore	Commoners Defence Association
David Withinshaw	Exxon Chemical
Brian Cobby	Southern Water
Andrew Starling	Associated British Ports

4. THE WORKSHOPS

In this section we present a full account of the organisation and outcomes of the three workshops where the Stakeholder Group completed the tasks of agreeing costs, benefits and risks of each issue in the New Forest LEAP; negotiated their criteria for the appraisal of the issues; and undertook the assessment of all 33 issues against each criterion. The final workshop, devoted to an appraisal of the outcomes of the MCA and an evaluation of the whole process, is discussed fully in section 5.

4.1 Workshop 1 [W1]: *Introductions, costs, benefits and risks associated with the issues in the New Forest LEAP*

4.1.1 Objectives for W1

The objectives of W1 were:

- to review the issues addressed in the Consultation Draft and to elicit suggestions for amendments
- to elicit a comprehensive and inclusive list of significant costs, benefits and risks for each issue, by adding to those already identified in the LEAP. This would provide the Agency with a comprehensive list of costs, benefits and risks, and provide the context for determining appraisal criteria in workshop 2.

4.1.2 Preparation for W1

Prior to W1 participants were sent a briefing which stated the workshop's objective and gave participants some questions to consider concerning the issues addressed in the New Forest LEAP Consultation Draft. They were asked particularly to familiarise themselves with Section 8 which sets out the environmental issues that the Agency has identified. A copy of the LEAP document was sent out separately (by the Agency) and the Team also sent group members a photocopy of Section 8, in case the letter from the Team arrived before the LEAP document.

The Agency had already identified some of the costs, benefits and risks associated with acting, or not, on the issues. The terms 'cost' and 'benefit' were interpreted widely, to encompass more than financial aspects and elements which could be expressed in monetary terms. A cost represents an expected loss to someone or something; a benefit represents an expected gain to someone or something; and a risk identifies that there is a probability of the specified adverse impact occurring.

In preparation for W1, people were also asked to identify the costs, benefits and risks of issues which concerned them and those whom they represented. These were to be written on the *post-its* sent with the briefing, using different colours for costs, for benefits and for risks, and brought to the workshop. Time constraints would not have allowed participants to write down costs benefits and risks during the workshop, and the task provided a focus for participants' first reading of the LEAP document.

The Team had prepared sheets for each of the 39 issues with columns headed costs, benefits and risks where participants could stick their *post-its*. (We had already posted up the costs, benefits and risks identified by the Agency, using different colours to those that the group members used.) We also had a blank sheet for extra issues and concerns; participants were particularly invited to indicate issues that they believed were missing.

This method was used because we needed a quick way of eliciting the costs and benefits that would at the same time allow individuals to see what other members of the group put forward. The use of colours facilitated easy differentiation between the Agency's costs, benefits and risks, and those of the participants.

4.1.3 Structure of W1

The Group were welcomed first by Jacquie Burgess and then by Veronica Jones from the Agency's Head Office. Ms Jones' welcome, which emphasised the Agency's support for the project and commitment to wider participation in the LEAP process, was valuable in helping to gain participants' support for the project. This was followed with a whole group discussion of the LEAP and the issues identified in it. Its purpose was to allow participants to introduce themselves, raise any concerns, and ask for clarification about the LEAP, the project and the process.

After brief introductions Jacquie Burgess began the discussion with the questions that had been sent to the members, focusing on potential concerns about the issues raised in the LEAP:

- are all the significant issues included?
- are the issues presented in a way which is easy to understand?
- is it clear what the Agency's objectives are in relation to each issue?
- are there any issues for which the 'do nothing' option would be appropriate?

Following this initial discussion which lasted approximately 20 minutes, a short break then allowed people to put their prepared *post-its* onto issue sheets which were stuck on the walls around the room. We did not ask group members to identify their organisation on their *post-its* as we felt that they might prefer anonymity. Some people did identify themselves and in retrospect people would not have minded identifying themselves.

Participants were then allocated to one of three sub-groups. (In planning W1 the Team had little knowledge of the participants. Each sub-group was allocated one third of the issues (13 in all) and asked to sort and discuss the costs, benefits and risks associated with those issues in order to come up with a full list for each issue. Each group took 'their' issue sheets with them to a separate room, and at the end of the session returned with them to the main room and replaced them on the walls. This session took rather longer than anticipated and even with extra time no sub-group managed to cover all of its 13 issues.

W1 concluded with a second whole group discussion, which began with reports from the three participant observers. The initial idea had been that this would draw out general problems of identifying costs and benefits, and common themes that might be developed into appraisal criteria. In the event this discussion was shorter and more general than had been envisaged. At the end of the workshop participants were given a briefing for W2, accompanied by a written handout.

4.1.4 Summary of substantive points raised in discussions during W1

4.1.4.1 Initial discussion

Many of the Group had not had an opportunity to look at the complete document as it had not arrived until the morning of the workshop, which made it difficult for some members to comment. Those who had already been consulted (for example English Nature and the RSPB) were in a much better position to make informed comment. There were a number of points made in this preliminary discussion, most of which concerned the late arrival of the LEAP, and its substance.

- It is generally difficult for voluntary organisations to react and give considered thought, let alone in the time they had had
- The general sections of the LEAP do not always correspond very well with specific issues; some are missing and some are inadequately framed
- If you get relationships between different groups right, then issues can be tackled effectively.
- Issues are well identified from a wildlife perspective.
- Subsidiary issues are not necessarily considered to be subsidiary by every Stakeholder.
- It is important to recognise that there are other management plans and other bodies with statutory duties; linkages and overlaps with other plans and organisations need to be recognised and integrated; for example, the shoreline management plan.
- The LEAP might help to assist in the process of the Environment Agency making links with other statutory bodies
- The Agency cannot avoid international and EC conservation and environmental protection obligations but some concern that EU legislation takes the ability to respond away from the Agency.
- What are Environment Agency's terms of reference?
- What is the AEG?

4.1.4.2 Small group discussions

Members broke into three small groups to consider the costs, benefits and risks associated with approximately 13 of the main (M) and secondary (S) issues (see Figure 4.1) identified in the New Forest LEAP Consultation Draft. The composition of the groups and the issues they tackled was as follows:

Group A:

Members: John Adams, Michael Chilcott, Brian Cobby, Steve Green, Maddy Jago,
Issues allocated: M5, M6, M7, M9, M11, M13, M21, S1, S2, S8, S9, S10, S16

- **M5: Groundwater and surface monitoring:** general feeling that people in the group didn't have sufficient technical expertise to comment on this issue and that they could not get enough from the LEAP document to understand it; is sharing the economic cost a benefit or a cost? need to know if data is of commercial or environmental use to ascertain costs and benefits.
- **M6: Low summer flows:** linked to M7; could assist in control of trickle irrigation (M12).

- **M7: Reduced stream water quality:** need more technical information to assess costs and benefits
- **M11: Pennington STW outfall:** issue already resolved.
- **M13: Flood Defence Management System:** members unsure about agency's responsibilities regarding flood defence; a bit of a 'non-issue'.
- **M21: Over-abstraction:** responsibilities of Agency unclear to members.
- **S1: Inter-relationship between Agency and other statutory bodies** within the New Forest: a crucial area; need to get common aims and objectives; a key area, not a subsidiary one; how do groups and their responsibilities interact?

Group B:

Members: Neil Hill, Julia Norman, Andrew Starling, Sue Tait, Dave Withinshaw

Issues allocated: M10, M14, M15, M16, M17, M18, M22, S3, S6, S7, S11, S12, S17

- **M10: Keyhaven pond:** should be retitled 'improved management'; a priority habitat under 1992 EC directive; knock-on costs of alternatives to land-fill behind pond need to be considered; managed retreat not an option as landfill must be protected from the sea; consider financial cost of compensating land-fill operator if restricted.
- **M15, M16: Acid deposition and sulphur dioxide emissions:** should be combined; needs a wider context; should consider at national level but not an excuse for doing nothing locally; should local industries bear all the costs? LEAP should be complimentary with other plans to tackle such issues and taken forward in partnership with other initiatives.
- **M14: Sea level rise:** local initiatives should concentrate on vulnerability assessments; should not be blinkered by concentrating on those issues which can be addressed within LEAP area; should tie in with shoreline management plan and estuarine management plan; must not reinvent issues.

Group C:

Members: Chris Corrigan, Brian Lappin, Jean Vernon-Jackson, Stephen Wright

Issues allocated: M1, M2, M3, M4, M8, M12, M19, M20, S4, S5, S13, S14, S15

- **M1: Debris dams:** a contentious issue; a fundamental issue for anglers; middle way between complete removal and complete retention; risks need to be considered in social context - flooding developed areas has bigger costs than in areas of grazing; more education needed.
- **M2: Valley mires:** a high priority; NFC already has money (£2m) for valley mire restoration; commoners may have alternative views; recreation can damage mires.
- **M3: Natural river courses:** needs considerable study as costs and benefits difficult to discern; impacts for farmers, anglers and nature; uncertainty as to effects of restoration; would help to identify general principles of implementation, plus caveats; would help to be more location specific; need more holistic appraisal.
- **M4: Recreation and watercourses:** riding damages watercourses; public safety may be an issue; must consider moving car parks; biggest risk public outcry
- **M8: Trickle irrigation:** must quantify the problem first; who bears the costs? farmers happy in principle with licensing
- **M19 and M20: Sea trout decline and Obstructions to free passage:** much more information available on these issues than Agency seems to think; from a fishery point of view less serious an issue than debris dams; M20 linked to M1.

Figure 4.1: Original list of issues

(Second draft of the New Forest Leap Consultation Report page 32)

Issue No.	Description
M 1	Disruption of stream ecology due to the removal of debris dams from New Forest watercourses
M 2	Loss of biodiversity and the water resource associated with damage to valley mire systems
M 3	Loss of biodiversity associated with engineering works on natural river courses
M 4	Loss of biodiversity associated with recreational use of water courses
M 5	Limited knowledge on the nature of the water resource due to lack of groundwater and surface water monitoring
M 6	Low summer flow rates in certain New Forest streams
M 7	Reduced stream water quality during summer low flow
M 8	Excessive unlicensed surface water abstraction for trickle irrigation
M 9	Reduced recreational water quality at Calshot (NB Agency could press Southern Water to further improve treatment at Ashlett Creek STW)
M 10	Degradation of the Keyhaven Pond at the Lymington and Keyhaven Nature Reserve
M 11	Continuing prohibition of shellfish production in the vicinity of the current Pennington STW outfall
M 12	Improved management of urban and agricultural surface water run-off
M 13	Development of the Flood Defence Management System (FDMS)
M 14	The impact of sea level rise on intertidal areas (coastal squeeze)
M 15	Inadequate understanding of the effect of acid deposition on ecology
M 16	Inadequate understanding of the impact of sulphur emissions
M 17	Inadequate understanding of the combined impacts of process emissions
M 18	Public concern over odour control at industrial sites
M 19	Decline in sea stocks of sea trout
M 20	Obstructions to free passage of sea trout
M 21	Over abstraction due to licenses of right
M 22	Poaching pressure on sea trout stocks

S 1	Clarification is required over the inter-relationship of powers and responsibilities between the Environment Agency and the Forestry Commission
S 2	Implications of the habitats Directive for the Environment Agency
S 3	Poorly defined role of the Agency as the contact point for those species which occur in the LEAP area and which are listed in the Biodiversity Action Plan.
S 4	Loss of biodiversity associated with damage to mire systems outside of the SAC, not necessarily known to the Agency
S 5	Loss of biodiversity associated with deepening of ephemeral water bodies
S 6	The threat to aquatic ecology of New Forest water courses caused by the spread of alien species
S 7	Reduced nature conservation value of Lymington Reed Beds SSSI
S 8	Groundwater contamination at Ampress Works public water supply
S 9	The control and maintenance of privately owned flood defence structures
S 10	Expansion of the flood warning dissemination service
S 11	Defining the role of the Agency in local air quality management
S 12	Inadequate understanding of the effect on public health of PM ₁₀ arising from waste handling facilities
S 13	Fish population conservation
S 14	Lack of knowledge of fish stocks in still waters
S 15	Lack of free public fishing in the Bartley Water
S 16	Irregularities in the classification of shellfish waters
S 17	A consenting protocol and river conservation strategy for the Lymington River SSSI has not been agreed with EN

4.1.4.3 Final discussion

In this final session, the Group were frustrated that they had not had sufficient time, either to assimilate the LEAP document properly, or to ensure they had dealt fully with the range of issues presented to them. The main issues from the discussion reflected these feelings.

- Concern from some members that they were not sufficiently informed about either the Agency or the LEAP process, and that they lacked sufficient technical knowledge to comment on some of the issues.
- It would be useful to have some sort of 'context/education' session to start with, to provide information about the Agency, the LEAP and technical matters.
- LEAP representative and catalytic, though big picture issues such as development and tourism need to be considered.

- Need for better partnerships and links but that should not detract from progress already made, for example through New Forest Committee.
- The Group was in general positive about being involved in this consultation process - it's better than traditional cost-benefit analysis.
- Process should be adapted to take account of concerns/feelings of people in the group.

4.1.5 Feedback to Group members after W1

Two days after W1, each member of the group was sent a summary of the costs, risks and benefits identified by participants. This is reproduced in Appendix 1. Members were also sent the summary of the main points raised in discussion. The third feedback item was a summary of suggestions made during the workshop for revising the issues. These suggestions were as follows:

- Combine S2 and S1 and re-categorise as a major issue
- Combine M15 and M16
- Discard M9 and M11 (actions already implemented and both due for completion in 1999)
- Change title of M10 to 'Improved management of ... (rather than 'Derogation of ...)
- Add water management at Manor Farm gravel extraction site
- Add management of intertidal/subtidal area, including dredging

Participants were asked to respond individually if they did not agree with the proposed changes or wished to add other issues. Two replies were received, one suggesting that dredging should not be included and one suggesting that issues be grouped according to category.

We had hoped to have a revised issues list prepared in time for W2. However, as the Agency also decided to make some changes, revision of the issues list was only completed in time for a revised list to be handed out at W3. This list is shown in Figure 13 (section 4.3) and the reasons for changes to the list in the Consultation Draft are set out in Appendix 2. Group members were given a note explaining the proposed changes at W2.

4.2 Workshop 2 [W2]: To produce a list of agreed criteria with their underlying value judgements to be used in prioritizing the issues in the New Forest LEAP

4.2.1 Objective for W2

The objective for this session was to produce a list of agreed criteria to be used for assessing the issues in W3.

4.2.2 Preparation for W2

At the end of W1, the Group was given a brief outline of the task for W2. Each participant had received a handout explaining the criterion concept, outlining a method of deriving criteria, and indicating how the criteria would be used during W3. In the period between W1 and W2, group members were asked to think about the sort of criteria that might be appropriate for the task. It was suggested that the results from W1 could be used in this context, and also that members might like to consider how their own organisation or those they represented might determine priorities. Finally, we included as examples some suggestions for criteria (Figure 4.2), included in a table which contained blank spaces for people to write in their own criteria.

In the handout for W2 a criterion was defined as a value-based standard against which each criterion could be assessed. Value-based means that there is a value judgement underlying each criterion which indicates the direction and scope of assessment. For example, an alternative (but less likely) value judgement for the first criterion listed in Figure 4.2 could be based on the ostrich principle: 'Issues which are likely to get worse should be addressed later rather than sooner'. This value judgement would not give the same assessment results as the value judgement given in Figure 4.2.

Figure 4.2: Criteria suggested as examples

POTENTIAL CRITERION	UNDERLYING VALUE JUDGEMENT
To what extent is the problem identified in the issue likely to get worse?	Issues which are likely to get worse should be addressed sooner rather than later.
To what extent would tackling this issue affect other issues or achieve other objectives?	Issues which have positive implications for other issues should be given preference.
To what extent would tackling this issue require changes in established uses or traditional activities?	Established uses and traditional activities should be maintained.
To what extent would tackling this issue benefit other species?	Biodiversity should be protected because loss of species is a serious problem and the Environment Agency has duties relating to conservation.
To what extent would tackling this issue benefit the health and safety of the public?	The health and safety of the public should be safeguarded.

Two issues of concern which arose during W1 were addressed in the handout.

1. *How could issues be prioritised if the specifics of actions proposed to solve them were not known?* In the handout, we acknowledged that some participants might find some of the proposed actions contentious but argued that **the Group was essentially concerned with a**

higher level question, that of priorities. So the ranking of issues was not concerned with whether the action proposed for a specific issue was the 'right' one to solve that problem. For example, people may disagree that the erection of low flow weirs is the best way to tackle low flows in some New Forest streams (issue M6), but whether this is so was not part of the Group's agenda. Rather, the question facing participants was whether it is more important for the Agency to address the low flow issue, or to address, for example, reduced water quality at Calshot (issue M9), or damaged valley mires (issue M2), or obstructions to the free passage of sea trout (issue M20), or some other issue.

2. *What are criteria?* The need to clarify the concept of 'criteria' was made evident in group members' questions about the W2 briefing at the end of W1. **The core of MCA is systematic appraisal, which means comparing issues using the same criteria for each one. We defined a criterion as 'a value-based standard against which each issue can be assessed'.** We suggested that the following three stage process could be helpful in deriving criteria.

- (1) Make a general observation which applies to some/all of the issues identified in the LEAP or with the costs/benefits/risks associated with them.
- (2) Make explicit the value judgement involved in this observation.
- (3) Restate the value judgement as a criterion against which each issue can be qualitatively assessed.

For example:

- (1) Observation: Some of the issues are likely to get worse if not tackled soon. It may cost more to reverse the damage if the problem is not tackled soon, and there might be knock on effects. The damage could become irreversible.
- (2) Value judgement: Issues which are likely to get worse should be addressed sooner rather than later.
- (3) Criterion: To what extent is the problem identified in the issue likely to get worse?

The Group's choice of criteria, like the choice of any criterion, would be subjective, based on the values of those who developed them. In anticipation of a potential debate on objectivity (a debate which did not in fact materialise) this subjectivity was acknowledged. For this reason it was important that the value judgements underlying the criteria were made explicit.

The final part of the handout explained what the Group would do with the criteria. This was the Group's first introduction to the MCA method (although the name was not used). This strategy, of introducing the Group to the formal method in stages, was deliberate. We felt that to present it 'all in one go' could be confusing and might detract from achieving immediate objectives. The idea of assessing issues against criteria was put forward at this stage as another reason for being explicit about the value judgements, and to explain why it was necessary to frame explicit criteria in the first place.

In W3, members would be assessing each issue against the criteria chosen by the Group, using qualitative 'scales' of the form 'high', 'medium', 'low' and 'not relevant'. The way that each issue is 'scored' relates to the way the underlying value judgement is framed. For example, (taking one of the criteria used as an example (Figure 4.2)), an issue which is very likely to get worse would score 'high' because the presumption in the value judgement is that

such issues should be addressed sooner rather than later. The need to score issues against criteria would need to be borne in mind when formulating the criteria.

4.2.3 Structure of W2

Two key decisions structured the organisation of W2. These were to adopt:

- a cumulative strategy for the derivation of criteria. This involved people working in pairs, then in small groups, and finally as a whole group. Criteria would be progressively refined at each stage.
- a process of inclusion rather than consensus for selection of criteria. We anticipated that some of the suggested criteria would not be acceptable to all the participants. To insist on consensus where this might be difficult to achieve would promote a defensive attitude by at least some of the participants, and so a 'democratic' approach was preferred. Each participant would be able to put forward his or her view in a context designed to allow difference. Individuals would later be able to score the criteria according to their own view of the relative importance of each, and the Team would 'average' these to give a 'majority' view.

After welcoming the Group, W2 began with an introduction to MCA, now giving the technique a name. The introduction focused on what would happen after the criteria were produced; that is in W3 the Group will assess the issues against the criteria that the Group have determined. To illustrate this a handout was provided showing some hypothetical assessments (Figure 4.3). It was emphasized that the value judgement underpinning each criterion would indicate the direction of assessment, and that an issue which scores 'high' against many criteria would become a high priority for action while an issue which gains lots of 'lows' and 'not relevants' would become a low priority for action. It was explained that the Team would do the arithmetic to turn the Group's assessments into a list of priorities which would be reviewed in W4.

Figure 4.3 : Hypothetical example of assessing issues against criteria

	Issue M2 Valley Mires	Issue M9 Water quality at Calshot	Issue M15 Acid deposition
To what extent is the problem identified in the issue likely to get worse?	HIGH	LOW	LOW
To what extent would tackling this issue benefit other species?	HIGH	LOW	MEDIUM
To what extent would it be possible to maintain established uses or traditional activities if this issue is tackled?	LOW	HIGH	HIGH

This was followed by a brief outline of the task for this workshop: to produce an inclusive rather than a consensual list of criteria. That is, the final list would include all criteria

proposed, even if some did not have the support of the whole group. Individual members would be asked to score the proposed criteria in the interval between W2 and W3. This scoring would allow individuals to express the importance of each criterion and an 'average' would be used to produce a final list of weighted criteria.

We intended this introduction to open up the method for discussion, and indeed some participants asked for clarification. However there were fewer questions than might have been anticipated: mostly concerning the derivation of the criteria and their associated value judgements.

The Group were then divided into matched pairs; matched in the sense that both members were perceived by the Team to hold compatible perspectives. The idea of matched pairs was that individuals would be able to discuss 'their' criteria with a sympathetic partner, which would be more productive in helping people to clarify what they meant and what their values are than would more antagonistic partners.

The task for each pair was to work on the criteria that each had brought with them, plus the suggestions made in the briefing for W2, with the aim of producing a set of criteria acceptable to both, or to either one. It was anticipated that there would be overlaps and similarities, and that pairs would refine both the criteria they had brought with them and the ones suggested to them. Pairs were free to do this in their own way, but it was suggested that they might like to think about the following questions:

- What are the value judgements underpinning criteria?
- Do any criteria overlap?
- Do any criteria represent a specific aspect of a more general criterion?
- How applicable are criteria to the set of issues?
- Can issues be assessed against criteria? i.e. is criterion expressed in the form 'To what extent..?'
- Could assessments like high, medium, low and 'none/not applicable be used?
- Are criteria expressed so that 'high' means the same thing in each case? that is, high means high priority for the issue in terms of that criterion?
- Are criteria of equal importance?

Pairs were given about 40 minutes, and were able to complete the task in the time allotted. The results of their deliberations were written onto prepared strips of green card (one criterion and associated value judgement per strip), in preparation for work in sub groups. Pairs then coalesced into 3 sub-groups, each pair (or member of a pair) taking 'their' criteria with them. The use of cards meant that members of the sub-groups could quickly grasp what was on the table for discussion; something that would have been more difficult had we used, for example, written lists. As each pair joined its group they set out their criteria cards on the table for whole group to look at.

We anticipated that some pairs would have produced similar criteria expressed differently; that some pairs would have produced criteria that overlap, and that some criteria might represent a specific aspect of a more general criterion. The sub-groups were asked to match up similar criteria from the pairs and agree on a way of expressing them, and to decide what to do about overlapping and sub-criteria. We had insisted on pairs putting the value judgement as well as the criterion on the card as we felt that this would make the sub-group's

task easier, especially as the sub-groups inevitably contained a wider variety of interests than the pairs, with more potential for conflict.

As with the pairs, each sub-group was asked to write each of their criteria plus the associated value judgement onto a strip of card, using blue for consensual (agreed by whole sub-group) and grey for non-consensual. People were also asked to underline key words, mark each card to identify the sub-group, and writes so that card could be read from a distance. Again this was for purposes of easy communication. When the sub-groups had completed their work the results were to be stuck on the walls of the main meeting room for everyone to see. (Different colours were used not only to facilitate communication between participants, but also to make it easy for the Team to follow the genesis of the criteria.)

The criteria produced by the sub-groups were arranged on the walls of the meeting room so that similar criteria were placed adjacent to one another. It had been intended to have a final session with the whole group to agree wording where criteria were similar, and to come to a decision on any overlapping criteria. However the 45 minutes allocated for sub-group work proved insufficient, with sub-groups taking up to 75 minutes to complete their work. By this time people were tired. We decided to draw the workshop to a close while the atmosphere was still one of enthusiasm and satisfaction. The workshop finished with a short plenary, and participants, having seen what the workshop had produced, seemed happy for the Team to undertake the final revision and produce a list of criteria.

4.2.4 Genesis of the criteria list

These were rich and fruitful discussions; all the members of the Group participated fully; sharing the criteria they had brought to W2, and negotiating to produce an agreed set. Members were very willing to debate the value judgements that underpinned their criteria. A wide variety of issues were discussed as pairs worked to produce criteria. These included:

- the precautionary principle and whether it could be used as a criterion
- what LEAPs should and should not include
- what sustainable development might mean in terms of relations between the national and local economy
- problems with using the word 'traditional' in the context of local economic and social relations
- the special character of the New Forest and what that meant
- the relative value of private property and common goods
- what constitutes irreversibility
- relationships between economic pressures and environmental needs (the two are not always opposed)
- the need for adequate scientific knowledge
- national and international law
- cooperation and partnerships between different agencies, and different sectors of local activities
- public health and individual risk
- political pressures in decision-making and the need to maintain public support
- how to relate costs and benefits - who gains?

The twin devices of making value-judgements explicit and asking people to consider the 'measurability' of criteria helped to focus discussion. The value-judgements were particularly important in making meanings clear and helping people to see quickly where there was agreement and where there was difference. Conflict over the importance of different criteria was avoided because participants did not have to reach consensus on this, only on the validity of different criteria.

The outcome of W2 was 27 blue (consensual) and grey (non-consensual) cards containing criteria and associated value judgements. These 27 criteria, many of which overlapped, were derived from suggestions put forward by the pairs (Appendix 3). The process of sorting and refining is summarised in Figure 4.4, which shows the numbers of criteria produced by pairs (column 2) and groups (columns 5 and 6). This shows that the sub-groups reached a very high level of consensus regarding the criteria that each produced.

Figure 4.4: Numbers of criteria produced by pairs and groups

Pair	Number of criteria produced by pair	Group	Number of criteria considered by group	Criteria produced by group (consensual)	Criteria produced by group (non-consensual)
CC/SW	7	1	18	9	0
BL/AS	7	1			
TM/JA	4	1 and 2			
NH/ST	4	2	15	6	2
SG/JN	7	2			
BC/DW	10	3	16	10 (+1)*	0
MC/JV-J	6	3			

* wanted to include financial cost as a criterion but not sure how to

Pairs and groups were asked to produce criteria which are 'measurable' and to indicate the value judgement underpinning each criterion as this shows the 'direction' of the criterion. Some pairs found it easier than others to assimilate this idea. One pair produced rather complex criteria that would be difficult to measure while another phrased some of their criteria in terms of 'what ...' rather than 'to what extent ...', again making the criterion difficult to measure as criteria phrased in this way require absolute (yes or no) rather than relative assessments (high, medium etc).

Participants were able to express their values but at times had problems translating a value into a criterion. This was not wholly resolved by the pairs/groups process and value judgements were at times implicit in the associated statement rather than expressed in terms of 'should' or 'ought'; for example *'threat of legal action if not delivered'* which translates into 'the Environment Agency should not risk legal action'.

Some of the value judgements incorporated an argument for holding that view; for example *'economic activity should be maintained to support the rural population/ maintain the social*

fabric of the Forest'. However, the criteria most out on a limb i.e. pertaining to detail, complex, with an unclear value judgement, tended not to survive group scrutiny.

A common problem was the provision of a statement of 'fact', rather than a value judgement, to underpin a criterion. For example, one criterion proposed was '*To what extent is scientific knowledge limited?*' and its associated value judgement was expressed as '*There is a need for good scientific understanding.*' Good scientific understanding is desirable but this can be argued both ways i.e. wait for complete scientific understanding to act, or apply the precautionary principle. The way this value judgement is phrased gives little idea of what the value judgement underlying the criterion actually is.

The suggestions for criteria that came from the pairs and the groups showed considerable overlap, as indicated in Figure 4.5.

The contributing criteria and their underpinning value judgements are shown in Figure 4.6. The number preceding each contributing criterion indicates the sub-group which proposed that criterion. Key words in each criterion and value judgement, as identified by the sub-group, are underlined. There was inevitably some rewording in moving from the contributing criteria (that is, contributed by the groups) to derived criteria because of the need to reconcile similar criteria.

Other reasons for rewording the criteria were assessability (criteria need to be framed in the form '*To what extent would tackling this issue/ failure to tackle this issue ...*') and consistency (criteria need to be framed so that assessments run in the same direction). This re-wording presented some difficulties, especially where suggested criteria were clearly similar but their underlying value judgements diverged, and where criteria overlapped such that there seemed to be important differences between them.

The final list of criteria produced by the Team from the stakeholders' work is shown in Figure 4.7.

Figure 4.5. Genesis of criteria

Criterion content	suggested by (out of 7 pairs)	number of similar criteria ¹	agreement on value judgement	suggested by (out of 3 groups)	number of similar criteria ¹	Final criterion ²
legal/statutory obligations	6	6 ³	yes	3	3	A
partnership/issue involves others	6	6	no	3	5	B*
species/ habitats	4	5	yes	3	4	C*
human health and safety	3	4	yes	2	2	G*
local economy	3	3	yes	2 ⁴	2	E
issue/ problem not just local	3	3	yes	1	1	J
level of scientific understanding/ precautionary principle	3	3	no	1	1	K
commoning/ traditional activities/ unique status of New Forest	2	2	yes	2	2	F*
problem will get worse/ irreversibility	2	2	yes	2	2	D*
public amenity/ nuisance	1	1	na	1	1	H
public money leading to private gain	1	1	na	1	1	L
anticipate future legislation	1	1 ³	na	1	1	M
protect property	1	1	na	1	1	N**
encourage recreation	1	1	na	1	1	P**

Notes.

1. Similar/ overlapping criteria counted as having similar content, so the number of criteria may be greater than the number of pairs or groups.

2. * in this column indicates a version of one of the five criteria suggested as examples by the team. Some pairs ignored these criteria, assuming that they would be automatically included. ** in this column indicates a criterion that was not agreed by the whole group

3. One pair's criterion included anticipation of future legislation as well as current obligations; this criterion is counted twice.

4. Group 3 also discussed economic criteria but could not decide what criterion to use. They hoped that another group would come up with a suitable criterion.

Figure 4.6: Derivation of the criteria

A: To what extent is resolution of this issue a legal requirement? (Legal obligations must be met.)

- 1: To what extent is resolution of the issue a legal requirement? (Legal obligations must be met.)
- 2: To what extent is the issue a statutory duty? (ENVIRONMENT AGENCY must comply with statutory duties.)
- 3: To what extent is there a statutory obligation (including Europe and agenda 21) to tackle this issue? (the law should be obeyed.)

These criteria are clearly very similar. Group 1's wording has been adopted as the most succinct.

B: To what extent would tackling this issue require the Environment Agency to work in partnership with other agencies? (The Environment Agency should work in partnership with other organisations within a cross-organisation strategic approach.)

- 1: To what extent would issue develop partnerships to resolve conflicts? (Developing partnerships of high priority.)
- 1: To what extent is the issue already being managed? (There is a need to take account of work that has been done.)
- 2: To what extent does this issue compliment the work of other bodies? (A cross-agency/body strategic approach is a good thing.)
- 3: To what extent is this issue shared with other agencies? (Shared issues more likely to attract sufficient resources)
- 3: Will solving this issue command wide public support? (Wide public support assists 'getting it done'.)

These were the most difficult criteria to put together. All three sub-groups seem to agree the importance of the principle of working with others, though not all for the same reasons. If the ENVIRONMENT AGENCY works in partnership it is very likely that existing work on the issue will be taken into account. Wide support is likely to be a consequence of working in partnership.

C: To what extent would tackling this issue benefit non-human species and habitats? (Biodiversity should be protected and the Environment Agency must contribute to the UK Biodiversity Action Plan in line with government policy.)

- 1: To what extent does action jeopardize other species' interests? (The relationship between issues needs to be properly understood.)
- 1: To what extent would tackling this issue benefit species and habitats? (ENVIRONMENT AGENCY must contribute to UK Biodiversity Action Plan in line with government policy.)
- 2: To what extent would the proposed issue protect and enhance biodiversity? (We should protect biodiversity.)
- 3: To what extent does this issue threaten eco-systems of recognised importance? ((Threatened ecosystems should be protected.)

It is clear that everyone agrees that species and habitats should be protected. The derived criterion is framed in terms of benefits for reasons of consistency. If a species or habitat is put in jeopardy by acting on an issue then that issue would be assessed as none (no benefit) against this criterion.

D: To what extent is the problem identified in this issue likely to get worse? (Issues which are likely to get worse should be tackled sooner rather than later; in particular high priority should be given to issues where delay would lead to irreversible decline.)

- 1: To what extent would tackling this issue prevent irreversible decline? (Potential irreversible change to be given higher priority.)

- 3: To what extent is the problem identified in the issue likely to get worse? (Issues which are likely to get worse should be tackled sooner rather than later.)

Group 3 proposed this criterion, taken from the team's list. The value judgement has been reworded to include group 1's point about irreversible decline; if delay in tackling an issue would lead to irreversible decline then that issue would be assessed as high against this criterion.

E: To what extent would tackling this issue benefit the local economy? (Maintaining/ creating employment should be given high priority.)

- 1: To what extent would tackling this issue affect the local and/or UK economy? (There is a need to reconcile conflicting/legitimate interests.)

- 2: To what extent would tackling this issue threaten the economy? (Jobs are important.)

Group 3 also wanted a criterion that included the economy, but ran out of time before they could find a way to express it.

F: To what extent would tackling this issue maintain the unique status/ international importance of the New Forest? (The Environment Agency's actions should not affect the 'New Forestness' of the area.)

- 1: To what extent would failure to address this issue damage unique status of the New Forest? (Important for traditional activities.)

- 2: To what extent does this issue protect the unique international importance of the New Forest? (New Forest is a good thing.)

Both groups used the word unique and the term 'New Forestness' is used to express that; what makes the New Forest the New Forest.

G: To what extent would tackling this issue benefit public health? (Public health should be safeguarded; danger to human life is unacceptable.)

- 2: To what extent does the issue threaten human health and safety? (Danger to human life is unacceptable.)

- 3: To what extent does the issue affect public health? (Public health should be safeguarded.)

Group 3 agreed that public health is different to risk to individuals (the example given was a case of drowning); this is covered in criterion H.

H: To what extent would tackling this issue benefit the quality of life for residents in the LEAP area? (Improving amenity, reducing risk and redressing nuisance should be given high priority.)

- 3: to what extent would dealing with this issue benefit the quality of life (e.g. safety, amenity, nuisance? (Enhanced quality of life should be encouraged.)

To residents was implicit in group 3's discussion.

J: To what extent is the issue in question a local issue? (Predominantly non-local issues should be tackled at regional or national level.)

- 3: To what extent is this a local LEAP issue? (Non-local issues should be tackled in regional/ national LEAP.)

K: To what extent is the issue well understood scientifically? (Priority should be given to

tackling issues which are well understood.)

- **1:** To what extent is the issue well understood scientifically? (Priority can be given to well understood issues.)

The value judgement here suggests that this criterion is concerned about effectiveness; if an issue is not well understood action may be ineffective. Considered in this way, this criterion would also apply to issues where the action proposed is some sort of research.

L: To what extent would tackling this issue result in opportunities for private gain? (Public money should not be spent on private gain.)

- **3:** To what extent does dealing with this issue affect private gain? (Public money should not be spent on private gain.)

This criterion differs from N in that group 3 saw private in terms of creating new opportunities rather than protecting property.

M: To what extent are actions relating to this issue likely to be affected by potential future legislation? (Future legislation will have to be complied with.)

- **3:** To what extent is the issue likely to be affected by potential future legislation? (Future legislation will have to be obeyed.)

N: To what extent would tackling this issue maintain the security of private property? (Property should be protected from loss.)

- **2** (not agreed by whole group) To what extent will addressing this issue affect important (?) property? (We should protect property.)

P: To what extent would tackling this issue maintain opportunities for recreation? (Recreation is important and should be encouraged.)

- **2** (not agreed by whole group) To what extent will addressing this issue threaten recreational opportunities? (Recreation is important and to be encouraged.)

This criterion differs from H in that it refers to recreational opportunities for everyone.

Figure 4.7: Final list of Criteria derived from those put forward during W2

CODE	CRITERION	UNDERLYING VALUE JUDGEMENT
A	To what extent is resolution of this issue a legal requirement?	Legal obligations must be met.
B	To what extent would tackling this issue require the Environment Agency to work in partnership with other agencies?	The Environment Agency should work in partnership with other organisations within a cross-organisation strategic approach.
C	To what extent would tackling this issue benefit non-human species and habitats?	Biodiversity should be protected and the Environment Agency must contribute to the UK Biodiversity Action Plan in line with government policy.
D	To what extent is the problem identified in this issue likely to get worse?	Issues which are likely to get worse should be tackled sooner rather than later; in particular high priority should be given to issues where delay would lead to irreversible decline.
E	To what extent would tackling this issue benefit the local economy?	Maintaining/ creating employment should be given high priority.
F	To what extent would tackling this issue maintain the unique status/ international importance of the New Forest?	The Environment Agency's actions should not affect the 'New Forestness' of the area.
G	To what extent would tackling this issue benefit public health?	Public health should be safeguarded; danger to human life is unacceptable.
H	To what extent would tackling this issue benefit the quality of life for residents in the LEAP area?	Improving amenity, reducing risk and redressing nuisance should be given high priority.
J	To what extent is the issue in question a local issue?	Predominantly non-local issues should be tackled at regional or national level.
K	To what extent is the issue well understood scientifically?	Priority should be given to tackling issues which are well understood.
L	To what extent would tackling this issue result in opportunities for private gain?	Public money should not be spent on private gain.
M	To what extent are actions relating to this issue likely to be affected by potential future legislation?	Future legislation will have to be complied with.
N	To what extent would tackling this issue maintain the security of private property?	Property should be protected from loss.
P	To what extent would tackling this issue maintain opportunities for recreation?	Recreation is important and should be encouraged.

4.2.5 Feedback to Group members after W2

Each member of the group was sent a copy of the final list of 14 criteria (Figure 4.6) and an explanation of how this list was produced by the Team (Figure 4.5). (Despite the difficulties encountered in deriving it, this list was accepted by the Group). Members were asked to rank each criterion on a scale from 0 to 100 so that the list could be reduced to 10 and each criterion could be given a weight, in time for W3. They were asked to return their scores to the Team prior to W3 to allow a final list, with weights, to be produced before the session.

4.3 Workshop 3 [W3]: *to assess each of the issues in the New Forest LEAP against the top ten criteria*

4.3.1 Objective for W3

The purpose of this workshop was to assess each of the issues against each of the ten criteria using a qualitative scale of *high, medium, low* and *not applicable*.

4.3.2 Preparation for W3

Each individual member of the Group was sent the full list of criteria, together with their value judgements and alternative forms of expression. Each individual was asked to rank the criterion on a scale of 0-100 in terms of their relative importance for assessing the priority of issues in the LEAP. Eleven (of 14) sets of scores were received by the Team prior to W3 and these were aggregated to produce a list of 10 criteria for the Group to work with in W3 (the numerical weights were not needed for the task). Four criteria were discarded through this ranking procedure (J, L, P and N in Figure 4.7).

It was clear from the numbers that the 3 remaining sets of rankings (which were brought to W3) would have to be markedly different from those already received to cause any change in the criteria that were discarded. It also seemed unlikely that the 'group' order of relative importance would change markedly. This proved to be the case, with criteria B and D swapping places when 14 sets of scores were used rather than 11. But lacking a full response we were unable to provide the Group with actual numerical weights before the start of W3.

The final criteria list used in the MCA is shown in Figure 4.8. It is identical to that given to the Group for workshop 3 except that it includes numerical weights. Figure 4.9 shows the revised issues list. The Group assessed each of these issues against each criterion.

4.3.3 Structure of W3

As with W2, we began with a general introduction to clarify the task: i.e. to assess each issue in the LEAP against each criterion. The assessment procedure was carried out by pairs and small groups. Details are given in Figure 4.10. Pairs were matched as 'experts' regarding that criterion (for example the two NFDC representatives were given criterion H) and, with one exception, pairs covered the lower ranked criteria. The exception was criterion C for which the obvious participants were those from RSPB and English Nature.

Figure 4.8 : Weighted Criteria agreed by the Group

CODE	WEIGHT	CRITERION	UNDERLYING VALUE JUDGEMENT
A	14. 09	To what extent is resolution of this issue a legal requirement?	Legal obligations should be met.
C	12. 77	To what extent would tackling this issue benefit non-human species and habitats?	Biodiversity should be protected and the ENVIRONMENT AGENCY should contribute to the UK Biodiversity Action Plan in line with government policy.
F	12. 17	To what extent would tackling this issue maintain the unique status/ international importance of the New Forest?	The Environment Agency's actions should not affect the 'New Forestness' of the area.
D	10. 68	To what extent is the problem identified in this issue likely to get worse?	Issues which are likely to get worse should be tackled sooner rather than later; in particular high priority should be given to issues where delay would lead to irreversible decline.
B	10. 93	To what extent would tackling this issue require the Environment Agency to work in partnership with other agencies?	The Environment Agency should work in partnership with other organisations within a cross-organisation strategic approach.
G	9. 22	To what extent would tackling this issue benefit public health ?	Public health should be safeguarded; danger to human life is unacceptable.
K	8. 69	To what extent is the issue well understood scientifically?	Priority should be given to tackling issues which are well understood.
H	7. 62	To what extent would tackling this issue benefit the quality of life for residents in the LEAP area?	Improving amenity and redressing nuisance should be given high priority.
E	7. 42	To what extent would tackling this issue benefit the local economy?	Maintaining/ creating employment should be given high priority.
M	6. 43	To what extent are actions relating to this issue likely to be affected by potential future legislation?	Future legislation will have to be complied with so its potential impact should be considered.

Figure 4.9: Revised Issues list used for multi criteria analysis

Issue No.	Description
M 1	Disruption of stream ecology due to the removal of debris dams from New Forest watercourses
M 2	Loss of biodiversity and the water resource associated with damage to valley mire systems
M 3	Loss of biodiversity associated with engineering works on natural river courses
M 4	Loss of biodiversity associated with recreational use of water courses
M 5	Limited knowledge on the nature of the water resource due to lack of groundwater and surface water monitoring
M 6	Low summer flow rates in certain New Forest streams
M 7	Reduced stream water quality during summer low flow
M 8	Excessive unlicensed surface water abstraction for trickle irrigation
M 9	Reduced recreational water quality at Calshot (NB Agency could press Southern Water to further improve treatment at Ashlett)
M 10	Degradation of the Keyhaven Pond at the Lymington and Keyhaven Nature Reserve
M 12	Improved management of urban and agricultural surface water run-off
M 13	Development of the Flood Defence Management System (FDMS)
M 14	The impact of sea level rise on intertidal areas (coastal squeeze)
M 15	Inadequate understanding of the effect of acid deposition on ecology
M 16	Inadequate understanding of the impact of sulphur emissions
M 17	Inadequate understanding of the combined impacts of process emissions
M 18	Public concern over odour control at industrial sites
M 19	Decline in sea stocks of sea trout
M 20	Obstructions to free passage of sea trout
M 21	Over abstraction due to licenses of right
M 22	Poaching pressure on sea trout stocks

Issue No.	Description
S 1	Clarification is required over the inter-relationship of powers and responsibilities between the Environment Agency and the Forestry Commission
S 2	Implications of the habitats Directive for the Environment Agency
S 3	Poorly defined role of the Agency as the contact point for those species which occur in the LEAP area and which are listed in the Biodiversity Action Plan.
S 5	Loss of biodiversity associated with deepening of ephemeral water bodies
S 6	The threat to aquatic ecology of New Forest water courses caused by the spread of alien species
S 7	Reduced nature conservation value of Lymington Reed Beds SSSI
S 8	Groundwater contamination at Ampress Works public water supply
S 9	The control and maintenance of privately owned flood defence structures
S 11	Defining the role of the Agency in local air quality management
S 12	Inadequate understanding of the effect on public health of PM ₁₀ arising from waste handling facilities
S 14	Lack of knowledge of fish stocks in still waters
S 15	Lack of free public fishing in the Bartley Water
X	Manor Farm (see Jean Vernon-Jackson)

Figure 4.10: Composition of pairs and groups for W3

pair	facilitator	criterion	to group	facilitator	criterion	observer
Brian L Brian C	Nicole	K	1			
Chris Neil	Kate	C	1	Nicole	A	Kate
(split pair) Sue	Peter	B	1			
Michael (split pair)		B	2			
	Kersty	M	2	Judy	D	Peter Kersty
Andrew John						
	Judy	G	2			
Steve G David						
Tim Stephen	Darren	E	3			
				Jacquie	F	Darren
Jean Julia	Jacquie	H	3			

Three out of the four highest weighted criteria were dealt with by small groups. Because the higher weighted criteria have a greater effect on the outcome, the consultants felt that it was important that as many participants as possible were involved in the assessment. Pairs and groups were assisted by facilitators whose brief was to join in where necessary; for example if people were encountering problems in understanding the task or seemed to have got stuck with a particular issue. In practice, all the facilitators worked closely with their pair or group.

In the **introduction to the session**, the Group were given the following explanation of the task.

- Assessment of criteria brings us back to the costs and benefits that we worked on in workshop 1. In a sense the criteria represent those costs and benefits which are important to the Group. But whereas in workshop 1 all we did was identify costs and benefits, here we are asking ‘to what extent....?’ costs and benefits would accrue from tackling each issue in relation to each criterion.
- Pairs/groups will be trying to assess each issue against each criterion using the qualitative scale high, medium, low, or not applicable. For some issues, against some criteria, the outcome could be negative, and so the scale has been refined so that high, low and medium can be positive or negative rather than just positive. A negative outcome in essence represents a cost or a threat.

- For each criterion there is probably more than one way to make an assessment but we not only have criteria, we also have value-judgements - these indicate why the criterion is important. For example criterion C '*To what extent would tackling this issue benefit non-human species and habitats?*' is used because *biodiversity should be protected*. So, in assessing an issue against criterion C you will be thinking about the impact on species and habitats if the Agency were to tackle this issue rather than do nothing.
- Taking criterion C again, as an example, to begin it seems applicable to almost all issues but probably not to M19 (odour control). So against this criterion M19 would rate not applicable. Otherwise outcomes look mostly positive except, for example, maybe a negative outcome if the Agency tackled issue S15 (public fishing in Bartley water).
- But how positive would the outcome be? For example, again using criterion C, would a benefit to many species count as high while benefit to a few would count as low? or would considerations of rarity or international importance need to be considered?
- How each pair/sub-group make 'their criterion' work is up to them but their decisions should be guided by the value judgement and discussions in workshop 2.
- Always remember, however, that 'high (positive) means that if the Agency were assessing its priorities against that criterion alone then an issue assessed as high would have the highest priority. At the opposite end of the scale, a high negative means lowest priority against that criterion. For example, a high negative score against criterion C would mean that tackling that issue would be very harmful to non-human species and habitats, and so against criterion C that issue would have a very low priority.

In addition to this general guidance, we also provided the Group with some practical guidance about how to progress the task.

- High, medium and low are relative terms and what they mean will emerge as you work through the procedure
- It is quite difficult to determine a working definition of what the criteria means in abstract so start with no more than a brief discussion - 5 minutes - of key ideas
- then start on the assessment
- Off the top of your head - rate each issue as positive or negative and then as high medium or low against the criterion - do this quickly and intuitively and have an uncertain pile for any you are not sure of
- As you do this initial sort, stick up post-its representing your decision on the assessment sheet - we use post-its because it's easy for you to change your mind
- then go back and consider your assessments again - the key point here that each issue should be assessed as consistently as is possible against 'your criterion'
- when you change your assessment change the post-it
- pairs/groups may have to go through several iterations
- if you get stuck move on quickly and come back to the problem later
- if pairs need more information consult other members of the group

- an experiment - we don't know if it will work - asking you to try and to tell us about any problems you encounter

Pairs and groups ran consecutively, and the timings planned for this workshop gave both pairs and groups about an hour each to assess all the issues against their allocated criterion. A break was timetabled between pair and group work to allow pairs to consult others if they were uncertain about any particular issue. This was also an opportunity to review the work of other pairs. The second break after the small groups session but before the final plenary, again to allow for review of the work of other groups.

Again visual methods were used to facilitate communication of results. For each criterion an 'assessment sheet', with space to assess each of the 33 issues on the revised issues list (Figure 4.8) was prepared beforehand. Participants used different coloured *post-its* for the 4 categories of assessment (high = yellow, medium = orange, low = pink and not applicable = purple). These were placed above or below a line on the sheet according to whether the assessment was positive or negative. Not applicable *post-its* were placed over the line. Completed assessment sheets were pinned to the walls of the main meeting room. This visual representation enabled participants to pick up very quickly on the work of others.

In this workshop there was a second reason for using coloured *post-its*; it would make it easier for a pair or group to change an assessment than if that assessment had been written down. Flexibility of the recording technique would also make it easier for pairs or groups to review and reappraise any of their assessments.

In the event both pairs and groups found there were substantial time pressures. In most cases, the pairs and the three small groups had insufficient time after the first 'pass' to review all the assessments they had made. Neither did the final plenary incorporate a review of the process although it had been hoped that there would be time for this. In fact, it acted as a 'wind up' session only and took place without group 2 who were still finishing their assessments of issues against criterion D.

4.3.4 Review of discussion during W3

4.3.4.1 Initial discussion of ranked criteria

In the introductory discussion with the whole group, individuals were shown the weighted/ranked list of criteria for the first time. It had been necessary to produce a cut-off around 10 criteria; given the scale of the task to be undertaken (prioritizing 33 issues against 10+ criteria in 3 hours). In the weighted list, four criteria had 'fallen off the bottom', and were not be considered by the Group. These are listed in Figure 4.11.

Figure 4.11: Criteria not considered by the Group

Code	Criterion	Underlying value judgement
J	to what extent is the issue in question a local issue?	predominantly non-local issues should be tackled at regional or national level
L	to what extent would tackling this issue result in opportunities for private gain?	Public money should not be spent on private gain
N	to what extent would tackling this issue maintain the security of private property?	Property should be protected from loss.
P	To what extent would tackling this issue maintain opportunities for recreation?	Recreation is important and should be encouraged.

Four individual stakeholders expressed some surprise at the weighted list. Their concerns were expressed in the following ways:

- the weighted list did not accord with their individual ranking (in the case of J, for example; and the position of B [*to what extent would tackling this issue require the Agency to work in partnership with other agencies?*] in the weighted list
- was criterion A actually of any value since statutory requirements had to be met regardless? This was countered by an argument that the LEAP offered opportunities to challenge third parties when legal requirements were not in fact being met
- it was surprising to one member that “non-human species are rated so much more highly than humans!”, reflecting the socio-economic characteristics of the bottom-weighted criteria. (This comment is relevant in W4 discussions.)
- there was more widespread concern about how the criteria should be interpreted. What shades of meaning were there? This was the case, again, for J. and also for F (*to what extent would tackling this issue maintain the unique status/international importance of the New Forest?*)

In answer to these concerns, the Team agreed to compute the MCA on the basis of each individuals’ weighting of the criteria, as well as that of the whole group; and emphasised the importance of each pair/small group clarifying at the outset of their task what the criterion meant; and applying that meaning consistently across the issues.

4.3.4.2 Multi-criteria analysis in operation: assessing issues against criteria

We present below 3 examples of pairs working on a specific criterion against the list of issues; followed by observation of one of the small groups working on criterion A.

1. Paired session: DW and SG: working with criterion G: *To what extent would tackling this issue benefit public health?*

SG began by telling DW how he had weighted the criteria using a sorting process - first putting them into 3 piles - most important, medium importance, least important - and then weighting within the three piles. So he related to the idea of a sorting process to begin the assessment. Could this work for the current task? In fact they did not proceed like that with the assessment but went through the issues one by one, deciding on the spot and referring back if necessary to see what they had done with other issues. They had different styles of making judgements: DW was quite happy to make a judgements and move on whereas SG wanted to articulate different arguments where he wasn't sure. SG's insistence on rehearsing arguments, though a bit slow for DW's taste, did work well. It gave them a basis for applying the criterion reasonably consistently because they could refer themselves back to earlier arguments and why they had applied the criterion in a particular way. They got through the list within the timescale - just but highlighted a number of problems.

- Lack of knowledge: would there be a public health effect and if so what? On a couple of issues (e.g. alien species) they took advice.
- What about indirect effects? Do you count them and if so how. In this context they had a long discussion about M3 and M4 before deciding to ignore indirect effects.
- How to deal with issues that addressed lack of knowledge: if the issue was addressed and new knowledge found that would indicate an effect on health would this count as an impact on public health from addressing the issue? This was most troublesome to assess and in the end they opted for pragmatism - yes an impact but couldn't know its magnitude so assess as low positive.

They both found the process tiring and were flagging by the time they got to the S issues. The facilitator (JVC) needed to move them on to complete the task in time.

2. Paired Session: CC and NH: criterion C: *to what extent would tackling this issue benefit non-human species and habitats?*

To begin with the pair went quickly through the list deciding on whether each issue had a negative or positive effect in terms of the criteria or whether it was non-applicable. Overall three issues were determined as non-applicable (M18, S12 and S15); the tackling of one issue (M1) was thought to have a negative effect on non-human species and the rest had a positive effect. There were a number of points made in their discussion.

- both would change the underlying value judgement which matches criteria C from 'biodiversity should be protected...' to 'biodiversity must be protected' because UK has signed up to biodiversity plan
- both were confident that they could decide whether an issue was of 'high, medium or low' effect without a definite discussion. When encouraged to comment on what basis they were deciding the priority they decided on (i) scale of impact combined with (ii) whether an issue was of national, local or European significance
- Both used the LEAPS document to read about each issue in turn; more specifically they concentrated on the last paragraph for each issue which summarises the action that the Environment Agency is going to take. Without this summary paragraph (e.g. M20 or M21) they decided that they could not satisfactorily decide on effect. In some cases they commented that the actions described in the paragraph were not detailed

enough to decide properly e.g. M14 in which case they generally dropped the issue from a high (+3) priority to a medium priority (+2).

The discussion between CC and NH was very technical requiring quite a lot of expertise in the subject and knowledge of the area; they were unwilling to comment when they felt that an issue was outside their area of expertise e.g. trickle irrigation. However, they managed to stick a post-it to every issue.

3. Paired session: SW and TM Criterion E: *to what extent would tackling issue benefit the local economy.*

This pair worked very closely with their facilitator (DB). They began by clarifying what 'local economy' meant and agreed that tourism and farming were the main industries the LEAP could economically effect. Both were engaged throughout the MCA process. The exercise took a long time and both expressed great relief when they had finished; the prospect of then having to join a small group and complete another round was a terrible disappointment to them both! Progress generally was slow, reflecting the two personalities and their understanding of what was required of them. For example, TM needed clarification over many of the issues in context to the task, while SW would often expand on individual issues in an anecdotal way. The nature of the MCA task (especially when there is so much to do) is not kind to this way of engaging. The key points from their experiences:

- They did not feel confident about the scientific basis of many of the LEAP issues and frequently turned to DB for clarification of particular issues.
- It took some time for them to consider the economic aspects of groups beyond the commoners and agricultural sector. Because both were involved in agriculture, any of the LEAPs proposals that in some way were connected to a cost for farming (for example the issue of trickle irrigation) were assessed as a large negative economic impact for the area as a whole.
- With regard to the ranking of issues by the criteria, there was uncertainty as to who would bear the costs (financial) over any proposed plan of the ENVIRONMENT AGENCY; for example whether it would be centrally or locally funded.
- Constant reference was needed to the main LEAP proposal for clarification of the issues. Due to the rather inconsistent nature of the LEAP, information provided was far from perfect. It is important to bear this in mind as judgements were constructed through the translation of this material.

4. Group Discussion: CC, NH, BL and ST: Criteria A: *To what extent is resolution of this issue a legal requirement?*

The group began with an initial discussion about the meaning of the criterion and how it might be applied to the issues. Addressing the issue raised at the start of W3, one member wondered how this criterion could be scaled, but was persuaded by the argument that part of a solution to an issue may be a legal requirement whilst other things that are not legal requirements might be needed to solve the problem. The group agreed that it was probably helpful to define 'legal' in the context of specific legislation and specific issues. The group began with M1 Debris dams. One member felt that this issue is not correctly written up in the

LEAP and that it gives inaccurate information concerning the number of debris dams, and quotes the Salmon Act of 1971:

“But this one is not accurately written up in the LEAP. Nor is the history of it. And the implication of this is that there are loads of debris dams which there are not. And that a debris dam is the same thing as a timber accumulation which it is not. Now the provision of debris dams is actually an impediment to migrating sea trout, and impeding migratory fish is an offence under the salmon Act of 1971. So because this is not properly presented in the first place from all points of view that have an interest, we are about to pronounce and put in tablets of stone something that hasn't been properly debated.”

There was conflict over this issue (M1) and a number of suggestions that they should leave it and move on to others. BUT they were worried about ‘abandoning’ it. One member felt that in this case the legal requirements are conflicting and asked whether the habitat directive “trumps” the Salmon Act?

Moving on to M2, there was a general consensus that the habitats directive (HD) has ‘the answer’ - the issue should be given high positive if the HD says it's a good thing. In the case of M2 the action is legally required by the HD and accompanying regulations; in the same way M3 and M4 are also viewed as high positive.

One member asked for further clarification about what high/medium/low categories mean in these issues? There was agreement that M3 and 4 are both high because they affect features of European importance. M5, the group decided, from a legal perspective this issue is either low or not applicable. This prompted a discussion of the definition of a ‘legal requirement’ - could Environment Agency be taken to court for not reviewing the abstraction licences? The group decided that if an issue can be tackled by direct legislation it should be given a +3 (yellow) priority, but if the legislation is slightly removed or “a bit further down the line” the issue should be given a +1 (pink) priority

The categorisation was very much dependent on limited knowledge of legislation and the discussion was driven by NH and CC because of their knowledge of the Habitats Directive. BL contributed confidently when issues affect fish because he has a copy of 1971 Salmon Act. M15/16 & 17 are designated +1 priority because legislation is thought to have indirect effect

BL thought that some issues should be joined together (e.g.. all sea trout issues) and asked whether Environment Agency has legal requirements to maintain fish stocks in the sea? -He felt that stocks are important because they govern the migration of fish etc. Much discussion over Acts and Directives concerning fish -with consensus that these issues need packaging and bringing together as one

The group were happy for a while with their definition of high and low positive priority but no medium or negative gradation. Later, they expressed some concern over having identified some issues as a low priority and others as non-applicable. On revisiting the decisions the group were not sure what ‘low’ priority really means but kept to their initial *post-its*. There was some discussion as to whether issues which have been determined as non-applicable should be made negative to de-prioritise them (as suggested by Nicole) but the group were not happy with this and; they decided not to change the groupings.

More generally, people were getting very tired by this stage of the workshop, and tempers were beginning to fray. There was a sense of some decisions being made too quickly as people rushed to finish the task.

Once they had gone through the list, a general discussion ensued about whether this criterion should be included in the MCA process. This was sparked by CC who argued that if an issue is a legal requirement it has to be carried out and therefore is prioritised immediately anyway. ST felt that the Environment Agency did not include waste issues and had abdicated responsibility for this in the LEAP. More generally, ST expressed concern about having no control over issue selection: "All we are doing is shuffling and ranking things. We have not been given any real power or control about deciding what the issues are in the first place."

4.3.4.3 Final discussion

The paired and small group tasks took a considerable time to complete. At the end of the sessions, sheets with the assessments were fixed to the walls of the meeting room so everyone could review progress. Two small groups gathered round the table and reviewed the process while waiting for the final group to reappear. An interesting discussion ensued which is presented in summary form below.

The debate started when Nick Berry asked whether or not the costs of each proposed actions were perhaps something that should have been made explicit in the criteria. For example, would it have been right to tackle an issue that was extremely expensive, if there were five other cheaper ones that could too be done given the resources. Would, Nick asked, this information effected your decision? This comes back to the point over whether the criteria have missed out extremely important issues. The discussion centred around three main points:

- That all of the criteria had been legitimated by the Group. Costs were not a part of this.
- That there was some need for these issues to be judged in relation to costs.
- That the criteria are stand alone criteria. One could add on a point about costs, and it would not effect the judgements concerning issues so far. (NB There would be a problem with the weighting allotted to such a new criteria.)

BL: You are developing a theory and you have to go back and forth, and because we are the guinea pigs. It's not unexpected that you would have difficulties when you try to so this we find the system doesn't quite work somehow. It throws up anomalies, but not to worry because the process is about trying to find what those anomalies are.

JV-J: The person who wrote the document seems to have very little understanding about where all the other agencies fit into the picture and I think that would have been helpful if there were more awareness of how things actually happen.

?(SW)? : A good example of that is the coastal plan. A very expensive and comprehensive plan that has been done.

JN: They were given a copy of it.

SW: It just doesn't need looking at again.

Nick Berry: If you had one of the issues and you knew that to look at it would cost £1000, would you give a different answer to you knew it was going to cost £100,000? If to address one issue meant that you couldn't address five others?

JN: It has been a problem ... trying to judge the scale of the problem, the scale of the issue.

Nick B: Scale and cost.

Nicole: That would have been have been covered. You didn't have to know the scale of the issue, if you had had a cost criterion.

JN: But we didn't and there is no indication in the document about what it would cost to address the issue.

Nick B: You must have all voted cost criteria out. You must have given it a low priority.

JN:: But it wasn't there in the first place.

NB: There would be no point in that information being there if you didn't have that as one of your criteria.

BL: Hang about. There is quite a lot of reference to cost in there if you read it. And least in terms of low medium high.

J V-J: You don't know how genuine those costs are. Its around... When you don't go to tender you don't know at all.

BL: That's beyond the remit.

J V-J: : But I'm not certain how seriously I would take the costs in there.

CC: : It depends. If your £100,000 project is really really important, and you've got to do it; you are going to do it.

Nick B: So it should be one of the criteria along with these.

JB: How would you phrase it?

Nick B: Costs per person?

Several voices: Some things aren't quantifiable. Biodiversity....

JB: Is it "to what extent would more projects be done at a lower cost?"

CC: : No. Surely that comes out at the end of this process. You will have a load of projects identified. You could easily prioritise those within nature conservation, i.e. how many Warblers do you get for the pound or something.. The difficulty is that you come out with a whole load of projects and it's way too much to be done. You will

then have to do an exercise to look at how does this wildlife one compare with this air quality one or...

Nick Berry: So would simply having some idea of the scale of the cost helped you in looking at these other criteria?

CC: I wouldn't have applied it. I would have put the same answer.

Chorus: : yes

JB: The cost is second order. You are saying that once you have got the priorities, then you look at the cost?

CC: You see what is most important for nature conservation. The you cost it up and make your difficult decisions.

Darren: Each of these criteria are supposed to be regarded independently. You could add a cost criterion at the end which will not effect anything else.

Nicole: I would say that if this group felt that costs were an important criteria, they would have brought it in. They would have come along and said this is going to cost too much money .. I could do ten projects with that. That would have emerged as a criterion.

JB: And it hasn't.

BL: And I don't think it should be either. Because statutory bodies are the people who process the funds, and what they are seeking to elicit from this process are what a group of people who have an interest, believe are the most important issues and the least important. Then, whether we like it or not, they are faced with the management problem of figuring out how to address the importance they have been told about and the issues as they were listed, in relation to the money and resources they have got available.

CC: It would have got horribly bogged down if we had started to worry about that...

JN: The other aspect is knowing the extent of the problem, whether its a big thing happening all over the Forest or whether its just happened there, would have happened a little bit.

BL: That's related to the quality of the LEAP document.

At this point discussion terminated with the arrival of the last small group. The issues raised are important though, pertaining to questions of judgement and whether matters may be prioritised without full knowledge (of costs) to hand. The point made is not that of (dubious) substantive knowledge of costs, but what criteria are important to people. The group could have chosen cost if they had wished. It could be argued that such quantitative information input comes in at the stage of workshop 3 when 'experts' assess the issues using the criteria chosen.

4.3.5 Results of the MCA

The assessment of each issue against each criterion as completed during W3 is shown in Figure 4.12. These scores were then combined with the criterion weights to give a set of weighted scores for each issue and thus a total score for each issue. The total scores were used to put the issues in rank order and the differences between total scores were used to place issues into initial priority groups. The boundaries were drawn where the difference in total scores was greater than 10.

Two sorts of sensitivity analysis were then used to test the robustness of the results to changes in the numbers used.

- the calculation was performed omitting one criterion at a time
- the calculations were performed using criterion weights derived from individual's scores for the criteria.

In both cases, although there were some changes in the detailed order, issues for the most part remained within the priority groups into which they had been put on the basis of the total scores. The results were most sensitive to Sue's and Steve's criterion weights.

The results of the MCA exercise are shown in Figure 4.13. The spreadsheets are presented in Appendix 4. Appendix 5 shows how each issue would be ranked if the criterion weights used were derived from each of the participants' criterion scores, rather than derived from the scores of all the group members.

Figure 4.12: Assessment of issues against criteria

Key: 3 = high 2 = medium 1 = low 0 = not applicable
 nd = no assessment made (0 used in analysis)
 L/M = assessed low and medium (1.5 used in analysis)

critterion	A	C	F	B	D	G	K	H	E	M
weight	14.09	12.77	12.17	10.93	10.68	9.22	8.69	7.62	7.42	6.43
M1	3	-3	3	3	0	0	3	0	-2	0
M2	3	3	3	3	3	0	3	0	-2	1
M3	3	2	3	2	1	0	3	L/M	-1	1
M4	3	2	2	3	1	0	3	-3	2	0
M5	1	3	3	0	0	1	-2	0	0	3
M6	3	2	3	1	2	0	3	3	3	3
M7	3	2	3	1	3	1	3	3	2	1
M8	0	2	2	0	2	0	3	3	-3	3
M9	3	1	1	1	0	3	3	3	3	3
M10	3	3	2	3	3	0	2	0	-1	1
M12	3	2	0	2	1	0	2	2	-2	2
M13	3	1	2	0	0	2	1	3	3	0
M14	3	2	3	3	0	0	2	1	nd	3
M15/16	1	2	1	2	0	1	-2	2	-1	0
M17	1	1	1	1	0	1	-2	2	-1	0
M18	3	0	1	1	0	1	0	3	-3	-1
M19	3	2	2	1	2	0	3	1	2	0
M20	3	2	2	2	0	0	3	1	2	0
M21	3	2	3	2	0	1	3	3	-3	1
M22	3	2	2	2	2	0	3	1	3	0
S1	3	3	3	3	1	0	0	1	0	1
S2	3	3	3	3	2	0	0	0	0	0
S3	0	3	3	3	1	0	0	0	0	0
S5	3	3	3	3	2	0	3	0	-3	0
S6	3	3	3	3	2	0	3	2	3	0
S7	3	3	0	3	0	0	2	0	nd	0
S8	3	1	0	1	0	3	-1	3	-1	2
S9	3	1	1	2	1	0	0	2	-2	3
S11	0	1	0	2	0	-1	0	3	0	3
S12	3	0	0	2	0	2	-1	3	0	0
S14	0	1	1	1	0	0	-1	1	0	3
S15	0	0	0	1	0	0	0	1	1	0
X	3	3	2	3	3	0	3	3	1	nd
assessed by	BL CC NH ST	CC NH	TM SW JV-J JN	ST MC	MC AS JA SG DW	SG DW	BL [BC away] ND	JV-J JN	TM SW	AS JA

Figure 4.13: Results of Multi Criteria Analysis

Key:

Column 1: Issue number

Column 2: Shows the score that each issue received in the Multi-criteria analysis. Scores for each issue were calculated by multiplying the weight for each criterion by the score the issue received against that criterion and then adding together all the weighted scores for that issue. The weight for each criterion was derived from the scores that each group member allocated to the criteria.

Column 3: Shows the rank order of the scores.

Column 4: Shows the priority group into which each issue falls. Priority groups were determined from the difference between scores and the sensitivity of the results to changing the criterion weights.

Issue	Score	Rank order	Priority group	
S6	235	1	1	
M6	227	=2		
M7	227	=2		
X	226	4		
M2	200	5	2	2a
M9	196	6		2b
M22	191	7		2b
M10	186	8		2b
M14	181	9		2b
S5	175	=10		2c
S1	175	=10		2c
M3	173	=12		2c
M19	173	=12		2c
S2	171	14		2c
M21	169	15		2d
M20	163	16		2d
M4	154	17		2e
M13	152	18		2e
M12	131	=19	3	
S7	131	=19		
S9	119	21	4	
S3	18	22		
M8	117	23		
S8	113	24		
M5	100	25	5	
S12	97	26		
M1	84	27	6	
M15/16	73	28	7	
M18	69	29		
S11	68	30		
S14	54	31	8	
M17	50	32		
S15	26	33	9	

The outcome of the process, expressed in a re-ordered listing of the issues in the LEAP is given in Figure 4.14.

Figure 4.14: New Forest LEAP Group - Results of multi criteria analysis

Issue	Description	Score	Rank order	Priority group	
S6	The threat to aquatic ecology of New Forest water courses caused by the spread of alien species	235	1	1	
M6	Low summer flow rates in certain New Forest streams	227	=2		
M7	Reduced stream water quality during summer low flow	227	=2		
X	Manor Farm	226	4		
M2	Loss of biodiversity and the water resource associated with damage to valley mire systems	200	5	2	2a
M9	Reduced recreational water quality at Calshot	196	6		2b
M22	Poaching pressure on sea trout stocks	191	7		
M10	Degradation of the Keyhaven Pond at the Lymington and Keyhaven Nature Reserve	186	8		
M14	The impact of sea level rise on intertidal areas (coastal squeeze)	181	9		
S5	Loss of biodiversity associated with deepening of ephemeral water bodies	175	=10		2c
S1	Clarification is required over the inter-relationship of powers and responsibilities between the Environment Agency and the Forestry Commission	175	=10		
M3	Loss of biodiversity associated with engineering works on natural river courses	173	=12		
M19	Decline in sea stocks of sea trout	173	=12		
S2	Implications of the Habitats Directive for the Environment Agency	171	14		
M21	Over abstraction due to licenses of right	169	15		2d
M20	Obstructions to free passage of sea trout	163	16		
M4	Loss of biodiversity associated with recreational use of water courses	154	17		2e
M13	Development of the Flood Defence Management System (FDMS)	152	18		
M12	Improved management of urban and agricultural surface water run-off	131	=19	3	
S7	Reduced nature conservation value of Lymington Reed Beds SSSI	131	=19		

Issue	Description	Score	Rank order	Priority group
S9	The control and maintenance of privately owned flood defence structures	119	21	4
S3	Poorly defined role of the Agency as the contact point for those species which occur in the LEAP area and which are listed in the Biodiversity Action Plan .	118	22	
M8	Excessive unlicensed surface water abstraction for trickle irrigation	117	23	
S8	Groundwater contamination at Ampress Works public water supply	113	24	
M5	Limited knowledge on the nature of the water resource due to lack of groundwater and surface water monitoring	100	25	5
S12	Inadequate understanding of the effect on public health of PM₁₀ arising from waste handling facilities	97	26	
M1	Disruption of stream ecology due to the removal of debris dams from New Forest watercourses	84	27	6
M15 M16	Inadequate understanding of the effect of acid deposition on ecology Inadequate understanding of the impact of sulphur emissions	73	28	7
M18	Public concern over odour control at industrial sites	69	29	
S11	Defining the role of the Agency in local air quality management	68	30	
S14	Lack of knowledge of fish stocks in still waters	54	31	8
M17	Inadequate understanding of the combined impacts of process emissions	50	32	
S15	Lack of free public fishing in the Bartley Water	26	33	9

4.3.6 Feedback to Group members after W3

Following W3, each participant was sent a copy of the table of assessments (Figure 4.12), of the results using 'group' weights for the criteria (Figure 4.13) and of what the results of the MCA analysis would have been if that individual's weights for the criteria had been used instead of the group weights (Appendix 5). These last show that the majority of group members individual scores closely resembled those of the Group. The two exceptions were ST and SG.

4.4 Workshop 4 [W4]: *to review and agree the ranked list of issues in the New Forest LAP, and evaluate the process*

4.4.1 Objectives for W4

The purpose of this final workshop was to allow the Group to: review the results of their MCA and agree any changes to the ranked list of issues that had been produced; and then to evaluate the whole process as a means for prioritizing issues within LEAPs.

4.4.2 Preparation for W4

Each participant had been sent a copy of the table of assessments (Figure 4.12), of the results using 'group' weights for the criteria (Figure 4.13) and of what the results of the MCA analysis would have been if that individual's weights for the criteria had been used instead of the group weights. In the covering letter, the explanation was given as follows:

Thank you all for putting much effort into last meeting's assessment exercise. The results are attached! We have included the assessment of the issues against the criteria, the final scores for each issue for the group as a whole, the rank order of issues for the group as a whole, and the rank order that would result if criteria weights based on your ranking of the criteria were used instead of weights based on everyone's rankings.

Individuals were asked to come to W4 prepared to discuss the following questions:

1. Results of the MCA

- Have you any reservations about the assessments of the issues against the criteria?
- Are there any surprises in the list of priorities (columns 3 and 5)? Why are they surprising to you?
- Which group priorities (column 4) do you agree with? And which do you disagree with?

2. The process of deliberation over the prioritization of issues in the LEAP

- What did you find valuable about the process?
- What did you find difficult/feel did not work well?
- Can you suggest any improvements - to the method, the process or the organisation?

4.4.3 Structure of W4

This final workshop was divided into three elements. In the first, the whole group was invited to respond to the prioritised list of issues in the New Forest LEAP. There was an explanation of the results, including how the numbers were derived and what they mean. Questions were put to the Team and then discussion was focused on members' reactions.

Following this debate, members were split into two small group discussions (one was substantially larger than the other as a result of room limitations). The task for the small groups was to agree the **priority groups** identified through the MCA process, given that the final version of the LEAP Consultation Report will renumber the issues in the order of priority identified by the Stakeholder Group; and that over the next 5 years the Agency will be able to tackle around 15 of the issues identified in the New Forest LEAP.

The suggested procedure for this task was to look at the margins between priority groups, as follows:

- Ascertain agreement within sub-group - which issues in the priority groups 1, 2 and 3 should definitely remain in one of these groups doesn't matter which one and which should be moved to group 4 or below? At this stage what matters is which issues should be in priority groups 1,2 and 3, and which should not, not exact places in the list.
- If any issues should be downgraded from priority groups 1,2 and 3, which issues should be upgraded? Replace the downgraded issues with the upgraded ones. At this stage exact place in the list does not matter.

It was emphasised that; all changes must be agreed by the whole sub-group - other wise the priorities in the list stand, and similarly that all changes must then be agreed by the whole group.

The sub groups comprised:

Group A ST; JN; CC; AS; SW; BC; MC; JA; J V-J; (with JB; KH; PJ; plus Environment Agency observers)

Group B SG; NH; DW; TM; BL (with JVC, ND; DB)

In the final session, the small groups' rapporteurs summarised the outcomes of the discussions, and then we moved into the final session with the whole group. The Group was asked to consider four questions in particular.

1. To what extent is this process a 'good' one for decision making?
 - What are its strengths?
 - What are its weaknesses?
 - What was difficult/didn't work?
 - How could it be improved?
2. To what extent did the criteria prove appropriate to the task?
 - Are there any you would now discard?
 - Are there any you would add?
 - Are they transferable i.e. are they unique to the New Forest or could a group in a very different catchment use a similar set of criteria?
3. To what extent do the group consider themselves representative of their constituencies?
4. At what stages in the LEAP process should a Stakeholder Group be involved - i.e. where and when can such a group most usefully contribute?

4.4.4 Review of the prioritised list of issues in the New Forest LEAP and evaluation of the process

4.4.4.1 Initial discussion

The Group met in a different venue, in a different room which was more cramped than that previously used; they were also conscious of being observed more closely by Environment Agency staff. This first group discussion was quite unsettled. Some individuals had difficulty in following the method by which the priorities had been produced and this created some initial confusion.

The key points from this first discussion were as follows:

Many, including the Team, were at first perplexed by counter intuitive issue ranking with which they, as individuals did not agree. For example: "No I certainly, no way would I have put alien species as number one... It seems like committees making camels." to which another member responded sharply "That's not fair.!" Another member commented: "I was surprised how close mine were, virtually the same order [as that of the group]. If I had chosen important issues I would not have put them in that particular order." During discussion, most agreed that the priority list was logical given the collective application of MCA, and accepted the ranking because they respected the process. Two individuals whose personal weightings were most out of line from that of the Group found this more difficult to accept; arguing that any individual's rating of all the criteria would have arrived at quite different results; and that there had been a "lack of consistency of appraisal" with the method. The question of criteria selection and appropriateness was addressed in the final session.

Objections to the list related to the initial selection of issues in the LEAP for appraisal (based as they were on limited consultation); and this became a major item for discussion in the final session. One member expressed anxiety that these priorities were to be used as a practical working list for the LEAP, for she did not believe they constitute the significant issues for the New Forest district.

There was discussion about the commensurability of issues and whether they can be ranked in a single list. Some argued that it was possible to categorise issues of different kinds and at different scales, but problems remain of how to compare priorities between categories.

Some concerns were expressed about the lack of expertise brought to the process. Were the issues with which people had least expertise or knowledge pushed towards the bottom of the prioritised list? This view was countered by an argument that those matters towards the bottom of the list were of national rather than local significance. Also, many accepted that the pairs assigned to the application of the criteria had reasonable level of expertise. This related to a more general issue of lack of time at the workshops to complete the tasks thoroughly.

4.4.4.2 Sub group discussions

These took rather different directions which reflected the size of the group and the setting in which it met.

Group A was the larger of the two groups, and continued its discussions in the main meeting room. A number of substantive points were made in this session.

1. Presentation of the initial LEAP document was a recurring theme of debate for the group. A thorough understanding of an issue (including the presentation of preliminary information and the options for action) was thought to be extremely important to the process. Specific points were:

- the preparation of the document requires further thought
- the length of time provided to read the document needs to be reviewed
- not all options for action have been tabled within the LEAP - in some cases the options are unclear
- there was general dissatisfaction with the list of issues provided in the LEAP and a general consensus that some should be amalgamated in some way

2. There was still surprise expressed at the priorities given to some of the issues. However, during discussion, members became more supportive of the outcome. It was noted that if individuals worked back through the process thinking through the criteria and how they were applied, it became clearer as to why the issues were ranked in the order they were. There was considerable discussion, too, about the relationship between intuitive, snap judgements of priorities compared to the systematic process the group had actually gone through to achieve the results.

3. Some concern was expressed for the consistency by which the issues were scored for each individual criteria, but in general the members of the group felt that;

- pairs of 'experts' could satisfactorily assess each issue against an individual criteria
- negative scoring is required in the process to take into account the costs and benefits of an issue

4. More information or a presentation about the Environment Agency and its role at the beginning of a process was deemed to be important in order to determine what criteria fall into the remit of the Agency

Group B concentrated on how the use of the criteria worked in prioritizing the LEAP issues. The main points of discussion were as follows

1. Individuals found it occasionally difficult to operationalise the criteria because of confusion over the wording, and the direction of the evaluation. The value judgements were supposed to help in this process but were sometimes not worded clearly enough. Individuals might have been interpreting the criteria in different ways. M1 had been incorrectly scored (given a -3 when it should have had a +3). There was confusion over the meaning of the criteria so in fact M1 goes into priority group 2c.

2. One member asked whether priority groups 1 and 2 should be swapped because group 1 deals with a very small part of stream ecology whereas group 2 issues seem to be an overall issue so should have greater importance. Then the Group realised that did not matter because all the stream issues are high up the list. What matters most is around the cut off point and members were largely satisfied with those, with the exception of S3.

3. The point was made that some of the issues (such as those relating to fishing) should have been amalgamated. This would have reduced the number of issues to be prioritised and made the process more coherent.

4. One member commented that “in this process you expect to see the unexpected because we have taken an amalgamation of so many views and put them together that that would create something different than would have been thought by individual intuition”. And that was accepted as a positive outcome of the process. S6 came out at the top. Individuals accepted that it might have fallen off the bottom if we had used intuition initially because only many people might have not thought it was important. So this process may have saved issues from incorrectly falling off the list by enabling people to dig a bit deeper to discover what was important.

5. On occasions, individuals felt they lacked expertise in judging certain issues. But overall, the consensus actually achieved through the process was felt to be remarkable given the wide range of views.

4.4.4.3 Final discussion: the Group’s evaluation of the MCA process

In the last hour of W4, the Group had the opportunity to evaluate the process they had been involved in over the last 8 weeks. This was a frank and positive discussion (somewhat marred by the inability of the Agency observers to keep quiet and listen to what was being said).

Overall, there was a great deal of support for the process; an encouragingly good general grasp of the MCA process; qualified acceptance of the outcome; and widespread objections to having issues predetermined in the LEAP. There was a sense of members having a greater acceptance of others’ positions, a move towards less entrenched and adversarial positions.

The main points from the final discussion can be summarised under four headings, representing the four main issues for the Group.

1. The production of the LEAP document

The Group were in accord that there should have been earlier, more widespread, and better-informed consultation about the possible inclusion of issues in the preliminary LEAP document. Doubts were cast on the capabilities of the Consultants appointed to produce the LEAP - in terms of their grasp of the full range of environmental issues (especially in their omission of waste issues and the Manor Farm site); and inadequacies in their initial approach to expert consultees. This was linked to some wider uncertainties about the roles and remit of the Environment Agency, and lack of knowledge about the LEAP process.

Two comments serve for illustration;

“Thinking about the way the issues have been identified in the first place. I think we felt that it would have been beneficial to the process to have had an earlier consultation stage, to have been able to contribute to identifying the issues that were put in to the draft report.” (public sector Stakeholder)

“I know the consultants did write to certain people but I don't know who. They came to us and because we didn't really understand what it was all about, at that stage we thought we would let them produce something and then we'll comment. A negative

way of doing it. But now, knowing what they [LEAPs] are about we will probably comment on the next one.” (private sector Stakeholder)

The matter of what issues were to be included in the LEAP prior to the MCA re-emerged as the final point in the W4 discussion, and there was consensus that the Stakeholder Groups should have had a much greater input into that process. Group members raised matters such as wider ownership of the issues in the LEAP; the better exchange of information between different partner organisations; explanations of why certain issues (such as waste minimisation generally, or the Manor Farm site in particular) were not included in the LEAP draft; and whether or not employing independent consultants to produce the consultative draft of the LEAP was cost effective. If the Stakeholder Group were convened at an early stage, they could contribute to the initial trawl of potential issues for the LEAP.

One of the voluntary sector members’ criticisms are relevant to the production of LEAPs nationally, as well as the specific New Forest LEAP:

“I think you should go back to the point made, that there were 200 response to the NFDC [New Forest District Council] invitation at a very early stage. You haven't done that yet. You have used this list - and I used the word in our group ..this bizarre list of issues. The public will look at this list of issues, and they will have at least the problem that we had. Whereby you are dealing with global warming on the one hand and pollution of the borehole in Ampress works on the other. The scale of those issues is so far apart that the public won't be able to handle that. I think the word is bizarre frankly. It is a strange list of issues and the way that they have come out of this process, which I support , - I support the process - but that is strange as well. So I think your public consultation exercise could be a bumpy ride coming in to it at this stage.”

2. Organisation of the Workshops: the problem of time allocated to specific tasks

There was some divergence of views among the group members about the amount of time they would have liked in order to complete the tasks. For some, the process was too rushed. In W2, more time should have been allocated to agree the specific meanings of some of the criteria, and more time could have been given to ensure that all criteria were included. Time pressures were particularly severe for these participants in W3, and there was concern (in the light of the final priorities list) that members had not had sufficient time to revisit their judgements on individual issues against their criterion. Others disagreed, preferring to maintain momentum and keep the process driving forward. They doubted whether the quality of the end product would have been much better if more time had been allocated. One participant commented that more time between sessions would have enabled people to consult more widely (thus addressing the question of limited expertise), but this would adversely affect the very positive group dynamics that developed over the life of the project.

“I suggest that perhaps there should have been some review of those numbers because when I tried to understand what the ultimate scores were, I looked through this score sheet and I found some of them difficult to understand. And I had to put question marks against them, and if I had had time to that previously or a session to do it, maybe one could have brought that up and asked ‘well why did you score that 3 or 2 or whatever’ because it didn't seem obvious. I just know that it would have made a lot of difference at the end of the day.

[JB: Accounting for the judgements, in terms of sharing them with the larger group?]

“It would certainly have helped with this negative and positive thing wouldn’t it? If there had been some debate about it.”

3. The Multi-Criteria Analysis

The final prioritization of issues had exposed sharply the differences between:

- judgements made on the basis of intuition, emotional commitment, gut feeling
- judgements made on the basis of professional and personal commitments
- judgements made on the basis of ten independent criteria

In the final session, discussion clarified these different forms of judgement, and members recognised their partiality in terms of their ranking of the issues, as illustrated in this extract of discussion:

“Thinking more generally about the actual process itself I felt that up until workshop 2 there was a high degree of agreement about what the real priorities were that need to be addressed in LEAP, and I can remember that when we stuck all the cards up on the wall, that you had things like biodiversity, the Habitats Directive, nature conservation in general, things like valley mires, and that worked very well. And then suddenly when this came out [refers to criteria list] it didn’t seem to reflect the great deal of agreement that we had and some of the single issue things came up very high when actually there was only one little green thing on the wall saying low priority. So somewhere in the process I think there is a problem in translating what we generally agreed as a group in to the actual actions”.

To which another participant responded:

“We hadn’t measured what we generally agreed at that juncture. We had a visual appreciation of a lot of bits of paper on a wall but we hadn’t debated them. We had applied any scientific measures of them. So I don’t think that that level of agreement that you perceived at that time, really did exist.”

The selection of criteria: the Group debated the criteria at some length. In the initial session, one member had questioned whether the criteria were in fact appropriate for the appraisal of what was, in essence, an environmental plan:

“Some of the criteria, , seem to be totally inappropriate criteria -based on the remit of the LEAP- and they are very human based (...) The fact that we have things like, um, criteria G and H, the public health and quality of life of residents. And when you look in the actual LEAP document, there seems to be nothing in the aims and objectives there is nothing about that. In fact when you look at public health, they [Environment Agency] always say oh go to the health and safety or the council. In fact to have two very human based criteria has skewed I think a lot of the results”

But the majority of Group members were not sympathetic to this view, arguing that the criteria were being applied independently to all the issues. The point made does reinforce the

fundamental importance of ensuring that the remit of the Agency in its LEAP planning process is made absolutely explicit.

There was some debate in the final session about the relevance of criterion A: which was then validated by the Group because there was some mistrust that agencies and/or private enterprise would necessarily conform to the letter of the law. A concern was expressed that there had not been a criterion which recognised explicitly the spatial scale of problems which reflected, again, the presence of S6 at the top of the list. How widespread a problem was the spread of alien species in New Forest watercourses? Finally, one member raised some doubts about criterion F: but the rest of the Group felt certain that each LEAP are would be able to recognise and work with its own local distinctiveness.

One private sector member endorsed the criteria in the following way: ,

“Personally I think they are quite robust. They seem generic enough to be transferable. (...) There seems to be a criteria to cover each part of the community, ecological, human, in some way and it doesn't seem to be that one area of criteria is over bearing. If you had a different group putting the criteria together, I think you would have seen a similar consensus. There might well be slight changes and scope for saying that four criteria have dropped off and you could have included them. But what are looking at is just refining something that you have already got to a certain level. So once you have actually spent the effort that you have done here to bring something together - you will improve on it. But it will take a tremendous amount of work now to improve it just a small amount. So it seems to be something quite reasonable, and certainly transferable.

But how transferable was the question? There was support for an experiment which took a very different LEAP in a very different part of the country, and elicited criteria through the same process. To be able to compare the New Forest criteria with this second case would give more confidence in the general applicability of criteria.

Another member, whilst accepting the robustness of the New Forest criteria, was critical about the prospect of using them in any generic way. He argued that to present another Stakeholder Group in another part of the country with a predetermined list would engender the feelings of frustration and disempowerment this group felt about the predetermined selection of issues in the LEAP. A crucial part of the process, he argued, is the achievement of a negotiated list of criteria by the stakeholders involved in the appraisal.

“What I hear you saying is that if we say ‘yes, this is a satisfactory groups of criteria’ they are just going to be presented as an accomplished fact to the next group who are going to be consulted in some other part of the world. Bearing in mind our reaction at the end of the first workshop, I am wondering what their reaction is going to be when they are presented with a ready made set of criteria, as opposed to going through the agony and the learning process and the degree of commitment activity to develop ones that they can then be held accountable for as it were.”

4. The representativeness of the Stakeholder Group members

The question of the representativeness of the members of the Group, and the ways in which the MCA process is linked to the wider public consultation phase emerged in discussion about what the next step in the process would be. One group member asked whether the Agency

expected the wider public consultation to throw up a lot of new issues that were not covered in the existing LEAP document. He presumed that the Agency would then appraise those issues against the criteria and re-order the priorities in the LEAP. Nick Berry responded positively that as the main stakeholders in the area were present in the Group, he hoped there would not be too many new issues.

The Group was asked explicitly about their representativeness, how they had conveyed what was going on in the workshops back to their constituent organisations, whether they had felt they were making judgements on a professional and / or a personal basis, and what they felt they had gained from the process. Most agreed that they both represented their Stakeholder constituency and also participated as individuals. Some people commented that having been so long involved within their organisations, they knew instinctively what the approach of their own members would be. Others, especially those with statutory agency and business interests to represent, commented that they had begun the process with a strong determination to ensure their organisations' views were represented, but found themselves much more engaged as individuals as the process developed.

One member of the Group had taken the criteria back into his company and trialed them with his colleagues. [This may explain his greater belief in the robustness and transferability of the criteria]. Two of the voluntary sector representatives had found the time between workshops too short to be able to consult more fully with their colleagues but they felt confident that the outcome would largely be acceptable. Without exception, all the members of the Stakeholder Group felt they had benefited from participating in the process and valued, especially, the opportunity to hear views and opinions different from their own. The process had improved understanding and contributed to building consensus.

To finish, here are two comments which illustrate these points:

"I came here thinking I was going to be closely representing the organisations that I represent, that is the primary producers, but I found myself doing in that less than I expected to do. I think one of the benefits to me is to come here and hear the other view (...) And so it's been good for me, even if in a selfish way, and I hope it's helped me contribute better because of that. But I am quite happy that I represented their views as they have been applied."

"It's very interesting really because it is while we were going through this process - we were one of the people that was asked to comment in quite detail on the LEAP itself. So I felt that there was a bit of conflict there because obviously our official stance was probably slightly different from our stance within this group. Certainly in the first workshop I was probably putting forward very much the company view; certainly on some of the issues that were raised that we felt quite strongly about. But as it developed, when we were actually down and scoring the criteria, I actually found myself doing it from a personal point of view rather than from a company point of view ... um ... which I felt was rather strange because I think that was from a wider understanding of the issues. Having said that I think that I don't think I would have scored it much differently having done it from a company view point because obviously we are thinking of the wider scope of the environmental issues and trying to get away from what we considered as inaccuracies or statements within the report that we weren't particularly happy with. We were trying to look at the wider context."

4.4.5 Feedback to the consultants after W4

Given the pressures of a group context - which may inhibit individuals from making more critical comments, the last task required of the Stakeholders was to take a pro-forma away with them to complete and return anonymously to the Team.

The questions asked of the stakeholders were as follows:

1. What was your view of the Environment Agency before you became involved in the New Forest LEAP group?
2. Has your view of the Environment Agency changed as a result of being involved in the New Forest LEAP group?
- 3.. Were you aware of the New Forest Local Environment Agency Plan (LEAP) before you became involved in the New Forest LEAP group? If so, what were your expectations of the LEAP?
4. What, in your view, are the strengths of the New Forest LEAP consultation report?
5. What, in your view are the weaknesses of the New Forest LEAP consultation report?
6. How did you find working with other people in the group?
7. Has participating in this process changed the way you think about making decisions about the environment?
8. What was the most valuable to you personally about being involved in the group and in this stage of the LEAP process?
9. What are your views about the performance of the research team; for example, concerning facilitation of tasks, organisation of meetings and provision of feedback?

As of 24.12.97, 6 evaluation forms had been returned to the Team. These comments are incorporated into Section 5 of this Project Report.

4.4.6 Final prioritised list of issues in the New Forest LEAP, amended in the light of discussion in W4

It was agreed at the final workshop that M1 had been wrongly scored against criterion 3. The score should have been +3, not -3. This changed the score for M1 from 84 to 161, and its place in the prioritised issues list (Figure 4.15) from 27 to 17. This puts M1 into priority group 2 rather than into group 6. Issues M4 to S12 on the list each move down a place but remain in the same priority groups. As M1 was the only issue in priority group 6 priority groups 7, 8 and 9 now become groups 6, 7 and 8 respectively.

Figure 4.15: The final prioritised list of issues in the New Forest LEAP

Issue	Description	Score	Rank order	Priority group	
S6	The threat to aquatic ecology of New Forest water courses caused by the spread of alien species	235	1	1	
M6	Low summer flow rates in certain New Forest streams	227	=2		
M7	Reduced stream water quality during summer low flow	227	=2		
X	Manor Farm	226	4		
M2	Loss of biodiversity and the water resource associated with damage to valley mire systems	200	5	2	2a
M9	Reduced recreational water quality at Calshot	196	6		2b
M22	Poaching pressure on sea trout stocks	191	7		
M10	Degradation of the Keyhaven Pond at the Lymington and Keyhaven Nature Reserve	186	8		
M14	The impact of sea level rise on intertidal areas (coastal squeeze)	181	9		
S5	Loss of biodiversity associated with deepening of ephemeral water bodies	175	=10		2c
S1	Clarification is required over the inter-relationship of powers and responsibilities between the Environment Agency and the Forestry Commission	175	=10		
M3	Loss of biodiversity associated with engineering works on natural river courses	173	=12		
M19	Decline in sea stocks of sea trout	173	=12		
S2	Implications of the Habitats Directive for the Environment Agency	171	14		
M21	Over abstraction due to licenses of right	169	15		2d
M20	Obstructions to free passage of sea trout	163	16		
M1	Disruption of stream ecology due to the removal of debris dams from New Forest watercourses	161	17		2d

M4	Loss of biodiversity associated with recreational use of water courses	154	18		2e
M13	Development of the Flood Defence Management System (FDMS)	152	19		
M12	Improved management of urban and agricultural surface water run-off	131	=20	3	
S7	Reduced nature conservation value of Lymington Reed Beds SSSI	131	=20		
S9	The control and maintenance of privately owned flood defence structures	119	22	4	
S3	Poorly defined role of the Agency as the contact point for those species which occur in the LEAP area and which are listed in the Biodiversity Action Plan .	118	23		
M8	Excessive unlicensed surface water abstraction for trickle irrigation	117	24		
S8	Groundwater contamination at Ampress Works public water supply	113	25		
M5	Limited knowledge on the nature of the water resource due to lack of groundwater and surface water monitoring	100	26	5	
S12	Inadequate understanding of the effect on public health of PM₁₀ arising from waste handling facilities	97	27		
M15	Inadequate understanding of the effect of acid deposition on ecology	73	28	6	
M16	Inadequate understanding of the impact of sulphur emissions				
M18	Public concern over odour control at industrial sites	69	29		
S11	Defining the role of the Agency in local air quality management	68	30		
S14	Lack of knowledge of fish stocks in still waters	54	31	7	
M17	Inadequate understanding of the combined impacts of process emissions	50	32		
S15	Lack of free public fishing in the Bartley Water	26	33	8	

5. EVALUATION OF THE PROJECT

5.1 Evaluation of the recruitment procedure

The AEG's support and advice was undoubtedly important to the successful recruitment of the group. The Agency does not have a high profile in the New Forest LEAP area and without networking through the AEG it seems likely that we would have found recruitment less easy. However, in retrospect there were some pitfalls in relying too much on the AEG. Some of these have been mentioned above - the failure to recruit from the Commoners' Defence Association, and the difficulty that the NFDC representative had in representing the Verderers. Another concerned the localness of Associated British Ports, an organisation represented on the AEG but one which proved to be less than local in the context of the LEAP group.

While it was clearly essential to enlist the AEG's assistance, it would also have been useful to use a snowball technique to ensure comprehensive representation from the start. This would involve asking members, once they had been recruited, which organisations in their sector they felt should be represented.

From the point of view of the organisations involved it would have been better had we started recruiting earlier (up to two months before the first workshop). Had we done so, both Hampshire Wildlife Trust and the Verderers might have been able to provide their own representatives. The Forestry Authority (who in the end were not represented at the Group) might also have been able to find a representative.

A third issue concerns the time given up by voluntary groups to participate. Voluntary groups such as RSPB, and HWT already have huge demands made upon slender resources in terms of responding to and participating in initiatives from government and statutory organisations. For entirely voluntary groups such as CPRE and FOE, the situation is even more pressing as members work in their own time. It may be appropriate to consider an attendance allowance for representatives of voluntary groups to recompense them, or their organisation, for their time.

5.2. Evaluation of the Workshops

5.2.1 Evaluation of W1

As with all groups, there was a certain amount of suspense at the first workshop. The Team hoped that their careful planning would pay off; some of the participants showed some uncertainty about their roles and about the team's expectations of them. However, our expectation that as professionals participants would contribute, and do so in an appropriate and considered way, was borne out.

Most participants had not received the full document until the morning of the workshop and it was difficult for those who had not had time to read it to comment on it from an informed position. There was also much ignorance of the Agency's role and functions. But while some of the suggestions made were perhaps ill-informed there was a feeling that the issues were not always best framed and that some of the actions were unclear.

Nonetheless, in the initial discussion participants expressed positive views about being invited to take part in a consultation process before the LEAP is finalised. There was concern that linkages and overlaps with other plans had not been sufficiently considered, but also a more positive feeling that the process might help aid the establishment of such links and partnerships. The conservation interests were particularly pleased with the recognition given in the LEAP to conservation and biodiversity issues.

Working in sub-groups enabled members to discuss a smaller number of issues in detail. People preferred to discuss the issues rather than focus specifically on sorting the costs and benefits identified on the *post-its*. However, costs and benefits entered into each sub-group's discussions and the way the discussions proceeded had other benefits. Members' different expertises enabled clarification of technical issues, and some used the opportunity to find out more about particular issues. And as discussions were inclusive rather than confrontational participants were able to acknowledge different interests' perceptions of the costs and benefits; and members had space to air strongly held views about the effectiveness and appropriateness of some of the actions proposed to address the issues. In some cases, differences were clarified and people began to understand others' positions better. In retrospect it is clear that some people needed to be able to get burning issues off their chests in a non-confrontational way before they could move on to working cooperatively.

There was some frustration in the sub-groups concerning the identification of costs and benefits. Participants' comments indicated that they felt this was due to inadequate framing of some of the issues and actions, and also (for some) to a perceived lack of technical expertise. However, in retrospect it was also probably due to lack of definition within the LEAP of what constituted a cost, a benefit, or a risk and consequent inconsistencies in what were identified as costs, benefits and risks. The Team had had some problems in following the Agency's logic in this respect, so it is probable that the same applied to participants although, for whatever reason, this concern was only articulated by one group member and not taken up by others in the group.

The final group session focused more on the process than on themes from the group discussions. It became clear that, even had the full LEAP document arrived earlier, members would have liked to start with a 'context/education' session in order to fill gaps in their knowledge about the Agency's remit and functions, the LEAP process, and some of the more technical issues. More positively, there was a general feeling that this approach was better than conventional cost-benefit analysis and could prove very constructive. The focus on process also meant that the methodology was discussed, and members were able to reflect briefly on the idea of using criteria. It was explained that the key question to be tackled by the group was 'How important is it that the Agency addresses this issue in order to come up with priorities. Although some members were skeptical that it would be possible to rank the issues without first agreeing how to address them (that is, agreeing the action to be taken), most of the group seemed prepared to try.

In retrospect we had perhaps aimed at achieving too much for a first workshop. However, the flexibility of our approach enables us to adapt to the group, as we did by allowing small group discussions to run on longer than planned as participants clearly wanted to continue.

As a way of providing a context for considering potential criteria the workshop worked well. The issues clearly had to be debated. If we had not provided space for discursive deliberation of the issues but simply asked participants to read the LEAP document and then made the

task for the first workshop determining the criteria, debates over the issues would inevitably have been rehearsed at the same time, to the detriment of that task.

5.2.2 Evaluation of W2

Given that the process is an experiment this workshop went very well. The task of developing criteria was achievable; participants tackled it willingly, and seemed to find the process stimulating and enjoyable. The atmosphere was one of cooperation rather than confrontation, with people listening to others as well as expounding their own views, and actively seeking new expressions of language and more creative ways to frame the value judgements.

This creativity and collaboration were promoted by the emphasis on inclusiveness (the reassurance that all criteria would count for something) and the emphasis on making the value judgements explicit. Participants did not have to agree to endorse others' values but only the validity of the criteria that they put forward because the point at issue was whether a criterion **could** be used to assess the issues, not whether it **should** be. This meant that participants could focus on understanding, on teasing out their own and others' views, and on working out similarities and differences. In addition, and in some contrast to workshop 1, all participants felt that they could contribute as the debate was perceived to turn less on specialist knowledge. At the same time people seemed less afraid that they lacked technical expertise and more confident of debating meanings; for example, in relation to the ecosystem system concept and health and safety.

The strategy of compatible pairs followed by more encompassing groups worked well in building consensus about the validity of criteria. But the relative lack of conflict was not because people were not willing to be disagreeable; views were often expressed trenchantly, especially in the groups. Rather, conflict was defused because people were meeting in a forum where they had to work together but were not forced to defend their interests adversarially. Putting different interests together in this situation not only made for productive discussion but also meant that the underlying politics can be acknowledged without getting in the way. Thus the process enabled people who might otherwise have been locked in fierce opposition to move out of their trenches, rather than digging them in.

Even so, the extent of consensus was surprising. The Team had anticipated that the pairs would not find it too difficult to discuss values and agree criteria (as proved to be the case) because they were chosen for compatibility. It was much more surprising that the groups found so much to agree on, so much so that we ran out of blue cards on which groups had been asked to write criteria that the whole group agreed with.

Moving from pairs to the small groups not only proved successful as a means of achieving the objectives of the workshop, but also in terms of building the group. The first workshop of any group is in a sense probationary. The participants are feeling their way and prepared to take on board the process to which they are being asked to contribute. Even if a first workshop has had some difficulties participants will usually be prepared to return. But by the second workshop the honeymoon is over. If this fails the group is likely to disintegrate, regardless of what it is being asked to do. The second encounter is thus crucial in terms of group dynamics, for the future of the group process depends on the group solidifying at this point. From this perspective the workshop certainly succeeded. While at the beginning of

the workshop it was the Team's enthusiasm for the project that was clearly carrying people forward by the end of the workshop their enthusiasm was matched by the group's. In terms of the criteria themselves the results were in many ways encouraging. Those that the group came up with were wide-ranging. For example, they matched quite closely those developed for the Valcoast study (Davos et al. 1997; see W114 Technical Report), with perhaps the exceptions of criteria concerning effectiveness and cost. For example, the group did not propose criteria such as '*to what extent would the action proposed to address this issue be effective*' or '*to what extent would the action proposed to address this issue use Agency resources?*'. Lack of information in the LEAP would perhaps have made these criteria more difficult to assess, but not impossible.

The workshop also failed to produce a final criteria list for lack of time. Although the participants seemed content with the final list produced by the Team it is our view that it would have been preferable for the group to have completed the task.

One way of overcoming the problems of omissions and lack of time would have been to provide the group with a predetermined list of criteria. We chose not to do this because we were anxious not to stifle the process of producing criteria. However, in view of what the group came up with in comparison to the sort of list the Team would have generated we were perhaps worrying unnecessarily. But, it is also clear from the way the group worked that the production process was crucial to the group having 'ownership' of the criteria. If a predetermined list, which participants would refine by adding discarding and rewriting, were adopted, then the process by which a group did this would have to be structured such that at its completion this crucial sense of ownership was experienced.

5.2.3 Evaluation of W3

The Team were anxious about the amount of work required by the Stakeholders in this session: applying 10 criteria to 33 issues was a huge task; and the timings of the session were very tight. On the other hand, the Group and the Team were working very well together and everyone was committed to the process. All were present for this session apart from BC who was unable to get back to Lyndhurst from a meeting in East Anglia.

Everyone worked very hard, and it was necessary to drive the process through. Some pairs needed considerable guidance and direction from their facilitator; others romped through the list of issues without too much trouble. But everyone was able to do the task and could see the point of what they were doing. Our concerns that individuals would focus too much on individual issues rather than pursue their relative rankings were not justified. Similarly, the question of whether the score should be positive or negative was understood by participants, as was the 'not applicable' category.

Each pair attached the appropriate coloured *post-its* to a grid containing all 33 issues. These long strips of assessments were stuck to the wall of the main meeting room as each pair finished. The visual nature of the process with *post-its* in different colours meant that people could have a sense about what was going on. When people walked into the main meeting room, it was possible to see what others had done. It also enabled pairs to make adjustments to their decisions as they moved through the process.

The main problems in W3 were those associated with the scale of the task in the time allocated. Everyone was tired by the end of the pairs session, exhausted by the end of the

small groups' sessions. There was no time for reflection or any re-evaluation of any decisions. It would be preferable to work with fewer issues rather than fewer criteria. And to allow time for whole group appraisal of pairwise judgements.

Six lessons were learned from the application of the criteria to the issues in W3:

1. **The wording of each criterion and its underlying value judgement is crucially important. The assessors must have an explicit, agreed understanding of the meaning of the criterion.** The first task was to clarify and agree between each pair their understanding of the criterion they were working with, and then to apply that meaning systematically across the range of issues.
2. **Limit the appraisal of issues to the specific (agreed) meaning of the criterion.** It is tempting to allow other issues to creep into the appraisal, and several people described the process of evaluation as practicing **tunnel vision**, i.e. the priority given must only be according to the criterion itself. Other criteria will be brought to bear on the issue by other assessors.
- 3 **Specify the level of expertise/knowledge required to use the criterion.** The Team had encouraged participants to seek help from others who had more expertise on particular issues than they themselves. But this was somewhat constrained by the time-task pressures. A number of people expressed some anxieties about not being able to make what they felt were sound judgements about the application of their criterion to specific issues.
4. **People were prepared to compromise in attaching priorities in pairs and in the small groups.** The process promotes and realises participants' willingness to compromise. Despite people's tiredness and frustration at not being able to devote sufficient time to their judgements, there were no major disputes, and the whole process was completed in remarkable good humour. The post-meeting refreshments were essential after this session!
5. **The Stakeholders required more time to appraise, as a whole group, the decisions of each pair against each criterion.** The chronic lack of time in the session meant that decisions towards the end of the meeting were perhaps more arbitrary in some cases than participants would have wished. This problem can be addressed in a number of ways: fewer issues to rank; issues grouped together (perhaps by theme? business plan budget allocations?); remove necessity for the small group phase and move instead to a whole group review. It would not be advisable to reduce the number of criteria. More consideration needs to be given to the development of a cost criterion: the discussion at the end of W3 suggested that the stakeholders saw cost more as an internal responsibility for the Agency staff once the list of issues had been ranked according to the criteria produced by the Group. Given the time pressures in W2, this needs to be re-visited.
6. **The stance and involvement of Agency staff in the process is vitally important.** One representative of the Agency (JA) sat as the Agency Stakeholder. Other staff who were present were there to provide information as required about any aspect of the LEAP; and to take responsibility for amending the Consultation draft in whatever ways were felt appropriate in the light of the Stakeholder discussions. Mat Carter (responsible for production of the New Forest LEAP) fulfilled this role well, and the Stakeholders welcomed feedback on how, for example, the number of issues in the LEAP had been reduced; how certain issues had been

discarded in the light of additional information from individual members of the Group, and Manor Farm had been added to the list of issues.

But another member of the Agency LEAP team clearly very difficult not to intervene during the small group discussion to correct what she saw as people's misapprehensions; and to attempt to steer the discussion. We would anticipate that there would be even greater difficulties of 'ownership' by Agency staff when the draft LEAP has been produced entirely 'in-house' rather than by consultants', as in the New Forest case. A recommendation about training Agency staff in group facilitation techniques is made in Section 6.

5.2.4 Evaluation of W4

Handing the task of prioritising to a stakeholder group represents a new departure for the Environment Agency. We recognise that the Agency took something of a risk in agreeing to try to take forward the priorities identified by the group (subject to limitations imposed by virtue of its remit and its statutory duties). However, this agreement was crucial in recruiting and retaining the members of the group; they were prepared to try out the process because they were reassured that they could actually 'make a difference'. We were pleased that Roger Vallance was able to attend this last meeting. He was able to thank the members for all their hard work, and emphasise the importance the Agency attributes to this R&D.

It was also important that we made explicit to the group the experimental nature of the project. We emphasised that the process was open to change and that their suggestions would be taken seriously. This led to much useful constructive criticism throughout the project but especially in W4.

The last meeting of any group which has been engaged in an intensive process will be difficult in certain respects. It is vitally important to acknowledge that the experience is coming to an end and to allow people time to deal with their feelings about termination. It is important to celebrate success - and there were undoubtedly many good things to have come out from the Stakeholder Group. Friendships had been made; people had gained both personally and professionally from the experience; they had committed exceptional amounts of time to the process; and worked hard to achieve the outcomes.

For these reasons, W4 was structured as a series of review and evaluation sessions with maximum amount of time given to the views of the stakeholders about the MCA prioritised list, and their evaluation of the total process. The quality of discussion presented in Section 4.4.4.4 provides strong support for the necessity of W4; and its effectiveness in legitimating the criteria produced by the Group, and their application to the LEAP issues. The methodology can certainly be refined and this will be dealt with in the Recommendations.

5.2.4.1 Two problems in W4

There were two unfortunate aspects of W4 - both of which were beyond the control of the Team. These contributed to tensions within the Group which had not been there previously.

- We were unable to hold W4 in the same venue as the previous meetings. NFDC kindly allowed us to use a committee room in the Council Offices, and found a small meeting room to allow the Group to split. Unfortunately both rooms were rather small; and the air conditioning in the main room had to be turned off because it was too noisy. As the room

became hotter, a couple of members had difficulties in remaining alert; and there was some impatience to be finished.

- The small room compounded a separate problem experienced severely in W4 - but also apparent in W3. At this final meeting, there were several Agency observers. Mat Carter and Nick Berry had attended previous meetings and were known to all the stakeholders. Both had in fact contributed in previous sessions. In W3, Catherine Dolmen had represented MC who was on holiday, and she was also present for W4. Roger Vallence was present for the whole meeting. Two more Agency staff appeared part way through W4: Kate Treuan and Peter Kelly. The Agency observers sat in an L-shape in one corner of the room, immediately behind the stakeholders and in direct eye contact with the majority. This proximity, combined with the number of Agency staff, meant that the Group was much more conscious (and self conscious) of being observed. It was therefore, very unfortunate that some of the Agency staff compounded the difficulties by conducting their own conversations throughout the meeting. This background conversation got worse in the final plenary session, despite NB at one point asking his colleagues to be quiet. This rudeness made two or three of the Stakeholders rather cross and may have exacerbated criticism of the New Forest LEAP in the final session.

5.3 The Stakeholders' evaluation of the MCA results and of the Project

Through-out the discussions in W4, it was evident that there was a great deal of support for the process; an encouragingly good general grasp of the MCA process; qualified acceptance of the outcome; and widespread objections to having issues predetermined in the LEAP. There was a sense of members having a greater acceptance of others' positions, a move towards less entrenched and adversarial positions.

5.3.1 Decision making on the basis of multi-criteria analysis

All the stakeholders, and the Team, learned a lot during the course of the Project. Everyone involved was surprised at the outcome in terms of the prioritised list of issues. Its production, through the systematic application of 10 criteria, themselves produced from 14 initial criteria suggested by the stakeholders demonstrated to everyone how complex and multi-faceted decisions about the environment actually can be. A number of stakeholders found their intuitive ranking of issues did not accord with the list.

What factors might contribute to this intuitive ranking? Obviously, professional expertise and local knowledge will be important but there is also the probability that members learned about different issues through discussion with one another, and through their engagement with the LEAP document. It may be significant that the issue which generated most discussion and which contributed to some disillusion because it had been incorrectly scored was the first issue in the LEAP document, suggesting it was seen by the Consultants as the most important to deal with.

It also raises questions about how strongly the criteria do reflect stakeholders' negotiated values. We have several times stressed the problems of time pressure, and that stakeholders did require more time for reflection. It may be that facets of the stakeholders' everyday evaluations of environmental actions did not have time to emerge clearly enough in workshop 2. However, some of the business stakeholders (who are more familiar with MCA in their

professional lives) were more robust in their views that more time would not have necessarily produced a more diverse or more appropriate range of criteria.

Overall, the majority of the stakeholders endorsed the criteria, and was agreement that these could probably be transferred to other LEAPs. In support of their more general applicability, the New Forest criteria are not dissimilar to those produced in the VALCOAST project (Davos, et al, 1997; see W114 Technical Report). The exclusion of a specific financial cost criterion at this stage did reflect the views of the Group - that the Agency should decide how to allocate its expenditure once the ranked priority of issues had been negotiated through the MCA. We might argue that the absence of an 'effectiveness' criterion, in terms of the outcomes of issues was in fact strongly implied in discussion about criterion K :*to what extent is the issue well understood scientifically?*

But we would emphasise the insistence of the Stakeholders that any attempt to 'apply' these criteria in another area - without giving the new Stakeholder group the opportunity to develop or come to 'own' the criteria will compound the problems of being presented with a predetermined list of issues in the LEAP.

The significance of interpersonal relations among the stakeholders; and the essential requirement that everyone act in good faith cannot be emphasised too highly. Trust that all participants are playing fairly (and not indulging in tactical voting, for example) is crucial if the results are to be fully supported. In this last session, there was some feeling that one stakeholder had not achieved their 'desired outcome', and this caused some irritation among other members who felt they had compromised and who appreciated the achievement of consensus.

The consultants had conducted every step of the process with maximum transparency; everything that was discussed or recorded was fed back to all members; all results were sent to all members; all workings were made explicit and explained at length so as to ensure that everyone understood what was happening and supported it. From this last discussion, it was very clear to us that all commitments that are made to the stakeholder group must be kept, or there will be a massive loss of faith in the process.

5.3.2 The LEAP document and the issues identified in it

Levels of knowledge of the Environment Agency varied among group members; some were already working closely with Southern Region Officers; others and this was especially the case of the NFDC representatives, felt the local authority had not been consulted fully; whilst for others, the role and remit of the Environment Agency (and its LEAPs) were not well known. The Project facilitated the exchange of information, and it allowed stakeholders to build new relationships both between themselves, and the Agency staff.

The document, when subject to the intense scrutiny it received through the process, did not stand up well. Criticisms levied against it included the "bizarre" list of issues which varied enormously in range and scale; the omission of issues felt to be of significance to the New Forest; insufficient information on specific issues; and inadequate consultation with other statutory agencies/interested parties. (More detailed criticism is provided in 5.3). The Stakeholders felt that the LEAP, as it stood, did not justify the considerable amount of time and effort they had committed to the MCA process.

The Environment Agency staff repeatedly distanced themselves from ownership of the LEAP document - because the failures in consultation, and poor drafting(?) could be attributed to the Consultants. The stakeholders welcomed information that changes they had recommended had incorporated in revisions to the LEAP document throughout the life of the Project. However, we would anticipate significant problems in future stakeholder groups if Agency staff have produced and written the LEAP document itself, and then have it criticised so heavily.

5.4 Written feedback from some of the Stakeholders

At the time of writing (2.1.98), we have replies from six stakeholders who responded to our request for anonymous feedback on the Project. Responses are included verbatim to provide additional evidence of the strengths and weaknesses of the Project, and the contributions a Stakeholder MCA may add to the LEAP planning process.

1. *What was your view of the Environment Agency before you became involved in the New Forest LEAP group?*

S1. Quango with wide ranging powers and responsibilities. an extremely important organisation for protecting the environment.

S2. Saw it as the successor to NRA etc. - yet to establish its own identity.

S3. Insofar as I have encountered them professionally, e.g. in their previous incarnation as the NRA and HMIP (...), they have seemed to me an organisation which was reasonably certain of its responsibilities and its priorities.

S4. My view of the Environment Agency has been built up through being involved with projects and meetings related to the Agency. Therefore, I understood the basics of their role and responsibility and probably did not have the disadvantage of some who were frustrated by not knowing the basic responsibilities of the Agency.

S5. My view was that ENVAG is a government agency with accountability for environmental protection, with reduced powers compared with the "old" NRA, and expected to support "development" wherever there is a conflict between development and environmental protection. I would never question the sincerity, integrity of the staff, but I do question their ability to do their job in the face of political objection.

S6. I had no strong views on the Environment Agency before becoming involved with the New Forest Leap. I just assumed that they were another quango or privatised ex-government department with responsibilities in accordance with their title.

2. *Has your view of the Environment Agency changed as a result of being involved in the New Forest LEAP group?*

S1. No - except perhaps that taking on this experiment of multi-criteria analysis points to an organisation which can come up with innovative approaches to issues.

S2. Above comment still valid - Is it a wholly negative regulator ('policeman') - or a creative, positive force for the good of the whole environment?

S3. Initial reading of the LEAP document suggested far less certainty about their role and priorities. However I suspect this was more to do with the fact that the report was prepared by a consultant than any real change in the EA. The opportunity during this consultancy process to talk directly to representatives of the EA was very valuable and reassuring.

S4. My view of the EA has not changed as I appreciated that they undertook policy development projects. However, I welcome the consideration of new techniques that attempt to improve the consultation for 'environmental' issues.

S5. No.

S6. Not particularly. Clearly I know something more about their areas of responsibility and suspect that they have a rather difficult task since they are bound to upset some groups of people most of the time (though not necessarily the same group all the time). How clearly is their role actually defined I wonder? I would agree with many people in the group that a 'teach-in' on the Agency at the beginning of the sessions would have been useful and interesting.

3.. Were you aware of the New Forest Local Environment Agency Plan (LEAP) before you became involved in the New Forest LEAP group? If so, what were you expectations of the LEAP?

S1.. Yes I was aware. I expected the LEAP to be a delivery mechanism for achieving biodiversity targets and objectives as well as statutory obligations (e.g. for nature conservation).

S2. Yes - through the Robert Long consultation. Expectations were limited - the Robert Long letter was not impressive.

S3. Yes I was aware of it because we were notified that it was being prepared, and I organised the one meeting with Robert Long Associates. My main concern with the LEAP was the extent of overlap with other plans being prepared for the area for example, the New Forest District Local Plan and Coastal Management Plan, the Shoreline Management Plan, the New Forest Committees Strategy for the New Forest, the Forestry Commission's own management plans for the Crown Lands, the Solent Forum's Strategic Guidance for the Solent, Hampshire County Council's Strategy for Hampshire's Coast, and forthcoming management plans for the New Forest and coastal Special Areas of Conservation in this District. My expectation was that it would clarify the EA's role in the area, and the relationship of their work to these other plans; also that it would provide information which would feed back into future review of the District Local Plan and other documents.

S4. Yes. The LEAP document was sent to us for initial comment. As a national group we are also familiar with the general concept of LEAPs. Part of my specific role is to be aware of the legislative procedures and their implications that will

influence/impact our operations, so we were generally aware of the LEAP process and requirements.

S5. Yes. I expected to see a document which demonstrated positive defined plans proposed to overcome identified difficulties. These expectations have not been met to the degree expected and hoped for.

S6. I was aware that there were LEAPs. Again I was not too sure how extensive they were or their exact nature (I probably still don't). I thought the 'A' stood for action. The LEAP, in so far as it is represented by the document we have seen is not out of line with my expectations (bearing in mind the word 'action' would have implied recommendations rather than choices). However the LEAP falls short of what I might have hoped for since there appears to be little recognition of all the interacting environmental plans like: shoreline management, ports authority plans, air pollution, traffic etc.

4. *What, in your view, are the strengths of the New Forest LEAP consultation report?*

S1. It's a consultation document (although selecting the issues could have been subject to greater consultation). It recognises the importance of biodiversity.

S2. It handles successfully all the easy 'bits' - aims, objectives, description of the area etc.

S3. It sets out (albeit briefly) the main functions of the EA and it brings together a great deal of information relevant to the EA's activities in this area.

S4. No response.

S5. The report is wide ranging in content, well laid out and broadly comprehensive; however there are some omissions of identification of significant problems.

S6. (takes questions 4 and 5 together): The report appeared to be strong in some relatively (from my point of view) limited areas to do with flora and fauna. I am not at all against this, but I would like more recognition (or do I mean integration?) of the human aspects, although I realise that some members of the group would strongly disagree). I am not sure that the prior consultation was distributed very widely (and apparently didn't always reach the appropriate people in the areas which were consulted). Maybe a wider consultation may have been too difficult and in that case it could be argued that the flora and fauna cannot speak for itself. The point raised in the last workshop about the consultants having an interest in waste management was interesting. I didn't know about that, but it was only raised as an objection after the results of our deliberation were apparent.

The sort of specific item that was missing from the consultants' report was the effect of increasing use of bicycles. I assume it may be argued that items of this nature would be covered by their knock-on effect, but I know insufficient about expectations of growth in these specific activities such that comment would have been useful.

5. *What, in your view are the weaknesses of the New Forest LEAP consultation report?*

S1. Selecting the issues was not subject to a wide consultation at the outset.

S2. It fails on the difficult 'bit' - the issues. They form a bizarre list of strange bedfellows - with missions like Manor Farm - how many others?!

S3.

- The structure of the document is difficult to understand. I appreciate (...) how difficult it is to organise and present clearly large amounts of information and discussion for public consultation, but it is necessary and very important to make it clear, accessible, logical and easy to read/
- The document should clarify exactly what the EA want from the consultation - it should say somewhere in the introduction that this is an opportunity to include new issues relevant to the EA's work (which is why this aspect needs to be explained very clearly), to comment on the issues that have been identified, and to give a view on the suggested options for addressing them, and the priorities for action.
- The document refers to aims and objectives, but it is difficult to work from these through discussion of the area's characteristics to identification of the issues. Clearer expression of these would assist understanding of what the EA is trying to do, and what its priorities are. There are clues here and there about the EA's "key aims" e.g. para 6.8.1) but the aims and objectives expressed seem to relate more to the EA as an organisation than to the LEAP.
- The role and statutory responsibilities of Environment Agency are not adequately explained.
- There is insufficient recognition of the role and statutory duties of other authorities with related responsibilities for environmental management.
- The issues should have been identified in consultation with those who were involved in the process, in particular other authorities with statutory responsibilities for related aspects of environmental management in the area.
- The background to some of the issues was not adequately explained: there should be a much clearer relationship between discussions in Section 6 and 7 of the report and the issues that are identified in Section 8.
- Some of the issues are not sufficiently site specific (e.g. wear and tear on river banks, ephemeral ponds), making it difficult to assess the scale and significance of the problem.
- The issues vary considerably in scale, ranging from national/global to the minutely site specific. It would be helpful to have the broader issues related specifically to this LEAP area.
- Work which is the statutory duty of the EA, and which they therefore have no option but to undertake, should not appear as an issues, unless there are choices in the way it is done which have resource implications. A great deal of confusion arose from this in the group's discussions of the issues and the criteria for ranking them. Statutory duties should simply be identified as such, and a work programme attached to them.
- It might also help if the issues were subdivided in a way which reflects the various responsibilities (and possibly budgets) of the EA.

S4 The drafting and presentation of the issues would certainly have benefited from closer attention. Specifically because during the consultation process the wording and subject of the actual issue becomes extremely important. The range, terminology and 'meaning' of any issue is an important factor in the application of the criteria. For

example, if the issue is framed as 'lack of knowledge' rather than 'there is a problem' the result will be radically different. This is not to say the 'lack of knowledge' issues should be excluded, but rather, care must be taken that the framing is accurate.

S5. It has been prepared by a consultant and not by ENVAG personnel; some interests appear to have been consulted in depth, others not at all. One would have thought that with 24 of the total of 39 problems discussed having a fishery impact, a fishery representative would have been consulted. There are errors, inaccuracies and omissions as a consequence.

S6. (see above question 4).

6. *How did you find working with other people in the group?*

S1. The group worked together very well despite widely different interests and some difficult issues.

S2. Enjoyable and stimulating.

S3. I enjoyed working with the other people in the group; we seemed to work fairly amicably together. It is always interesting and useful to hear other people's perspectives and priorities; it is something tried to do in the planning process so far as possible, although given the range of subject matter covered, and the enormous range and diversity of those involved, it is difficult (and beyond resources) to do this in the concentrated and structured manner of the multi-criteria process.

S4

- I found the group worked well together and certainly most people made a valid contribution.
- There were certainly different understandings of the process as a whole by individuals. This led at some times to frustrations that some understood the process in more depth than others. Of course, in any group this type of situation will always occur. Nonetheless this point is significant in that some were assessing the system against a predetermined personal 'results' list. To my mind the most important contribution of MCA to the whole area of environmental consultation is that it takes out of the system people's prejudices and 'gut' feelings. Therefore to criticise the process for not matching what an individual thought would happen is wrong.
- I felt perhaps there was certainly a weighting towards 'environmental' interests. Business, although it may have broadly similar needs, varied between ports, chemicals, water and a farmer. On the other hand the environmentalists tend to support similar aims. I didn't feel too badly out numbered but perhaps during the weighting certain issues lost out considerably. I felt slightly annoyed that a comment was passed concerning 'tactical voting'; during the weighting of criteria. This certainly seemed outside the spirit of the process and brings in the earlier comment about attempting to achieve a predetermined result.

S5. It was not a new experience so it did not come as a "great new illuminating experience"! I thought that after the first meeting everyone was more relaxed, less tense.

S6. Very interesting group of people, it was most enjoyable. It is refreshing to move out of the very narrow confines in which I normally work.

7. *Has participating in this process changed the way you think about making decisions about the environment?*

S1. Putting a financial price on (for example) wildlife has always been difficult if not impossible. Refining multi-criteria analysis could be a very useful way forward.

S2. No - I have always had the problem of wanting to know the 'other side's' views, respecting them, and sometimes agreeing with them!! Pressure group work is easier is you just follow your own prejudices. This process supports my own approach.

S3. I think it may be useful to adapt the multi-criteria approach to our own consideration of priorities in the event that we are involved in having to make such choices.

S4. No. As our organisation deals with a whole range of issues the existing conventions about decision making remain. I would hope that those involved with particular problems will be ready to accept the existence of new assessment techniques. I am already aware of programmes that assess 'significance' based on a whole range of criteria. Certainly as your work develops and the MCA process is refined it will have a valuable role to play in 'consultation'.

S5. It has certainly reinforced my view that many decisions are actually founded on false premises which means that: -
either (1) it is vital to establish the relevant facts
or (2) if they are not, the outcome can be manipulated by "vested interests".

[Note: the 'process' referred to in the question is that of group consultation and establishment of consensus (at least to some degree!). It can be used to make decisions about any topic you like!]

S6. I have come across methods similar to this previously, although not in the environmental context. It was interesting, in my view, how the final ranking produced dismay among some participants. Now I think it is not unreasonable to question the exact weights given to various items (the high, medium low or 3,2,1), since they could clearly make a significant impact on final rankings. Of course Judy had carried out quite a few checks so I assume the exact sensitivities are well quantified. However, it should be recognised that if you use a systematic approach with agreed weights then account will be taken of all the factors appropriately. The dismay felt by some was because the end result did not tie in with their intuition. Unfortunately, if you cannot achieve an open-minded response to the work of the study group, much of its benefit will be lost, and you could find people unwilling to use the systematic method on other occasions and more generally. (I thought from my Company point of view the approach would be very helpful[when dealing with an emotive issue] A more systematic approach would achieve a better response. Not, however, if the analysis is viewed as "obviously wrong").

8. What was the most valuable to you personally about being involved in the group and in this stage of the LEAP process?

- S1. Most valuable thing for me was learning about the multi-criteria process.
- S2. Intellectually interesting to see familiar business techniques applied to decision making in environmental issues. Will take more interest in subsequent stages than would otherwise be the case.
- S3. Working with the group was interesting because of the opportunity it gave of hearing the views and priorities of other participants. Involvement at this stage of the LEAP process was valuable because it gave an opportunity to talk directly to those members of the EA who are involved and a feeling that it may be possible to influence the outcome of the consultation process.
- S4. Being personally involved in this project has been a useful experience both in the context of the local area and the future application of the LEAP process to the rest of the UK. There are significant possibilities for using the techniques in other areas and this involvement may be the start of that process. Having to make decisions with an impact on the environment can only be facilitated by techniques such as MCA.
- S5 (1) The chance to meet other interested parties and observe how they worked and learn about their views. (2) to realise that we were only being consulted on the "priority for treatment" of a "given list of problems", and not being consulted on whether there really was a problem, nor on what the facts were that pertained to it, nor on what should be done about it.
- S6. Three things: (a) finding out what is going on and being involved; (b) meeting a new range of guys with different interests and (c) hopefully contributing a fresh approach to the environmental planning process.

9. What are your views about the performance of the research team; for example, concerning facilitation of tasks, organisation of meetings and provision of feedback?

- S1. The enthusiasm of the team was a good motivator. The organisation of meetings was very good and a lot of thought had been put into the process. It was well-run. The only thing I can think of for improvement would be faster turn round of notes after the meetings, and papers/documents sent out earlier in advance of the first meeting.
- S2. Workshops 2, 3 and 4 went "like clockwork" - workshop 1 was a problem due to the group not having seen the LEAP draft and being short of information about EA. Presumably not the fault of the team who were enthusiastic, friendly, helpful and committed to achieving worthwhile results.
- S3. Overall I thought the work of the team was excellent: the tasks were well-organised and well-explained, the meetings were well organised and there was just enough feedback to enable continuation of the process.
- S4. I thought the organisation was excellent throughout the process. The meetings were well organised, both from a 'business' and a 'comfort point of view. Information was

always forwarded from the team as promised, and any questions that may have arisen could have been put to Judy very easily. Assistance at the meetings was readily available and there was plenty of opportunity to ask questions and contribute to discussions.

S5. I was genuinely impressed. It is reasonable to conclude that their process design worked, as judged by a number of success criteria. They appeared to genuinely welcome all reaction, whether critical or supportive, and maintained a calm and controlled directions of effort throughout the exercise. HOWEVER - where were the Forestry Commission, the Verderers, and the New Forest Committee? (refer to note (2) 8, above.

S6. The team were very good, most helpful in getting things going, keeping to schedules and organising the meetings. I was impressed with the summing up given at the end of sub group meetings. Just a shame there wasn't a bit more time available for session three when I think that some overall view of scores and a bit more discussion on the 'direction' of the scores may have helped to overcome some of the final negative views put out. On the other hand maybe whatever you did couldn't change entrenched views.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The **main conclusion** drawn from this test of the methodology for prioritising issues within a LEAP is that:

an expert group of major stakeholders is capable of undertaking a multi-criteria analysis of issues in a LEAP and producing an order of priority that can be endorsed by the group, through systematic assessment of issues against a set of criteria which encompass environmental, economic and social costs, benefits and risks.

The **major benefits** of using this methodology - MCA applied within a deliberative group process - are:

1. It is inclusionary of a wider range of organisations and individuals than are normally consulted in the early phases of the LEAP planning process.
2. The process brings stakeholders together for deliberation in a group. This allows areas of potential conflict to be identified and explored before the LEAP is implemented, something that the solicitation of comments from stakeholders in isolation cannot achieve.
3. Through the process stakeholders can come to better understand the role and remit of the Agency and the Agency can come to better understand the roles, concerns and priorities of stakeholders.
4. The process facilitates networking and partnership building between the Agency and potential partners. When done well, this form of stakeholder involvement in the early stages of the LEAP planning process enhances goodwill, improves intelligence gathering, and reduces potential conflict between the Environment Agency and its direct and participatory partners.
5. The non-confrontational structure of the workshops allows stakeholders to explore their differences and find areas of consensus on which to build. Individuals are able to acknowledge the validity of different perspectives on environmental matters, and are encouraged to work cooperatively and to seek to achieve a negotiated outcome where no one perspective dominates.
6. Through the intensive deliberations of the group, the issues in the draft LEAP are given a fuller and more testing appraisal than would otherwise be the case during public consultation.
7. The development of criteria encompass a fuller range of evaluative dimensions for judgement than would otherwise be the case.
8. The criteria are applied systematically to each of the issues, so each issue is evaluated on the same terms, terms which are agreed by all participants.

9. All stages of the decision-making process are open and transparent. Every member has maximum opportunity to question, challenge, learn and contribute to the identification of issues, development of criteria, and assessment of issues.
10. The authority of the product - the list of issues in order of priority - derives from the process. The results can be endorsed by the stakeholders because they have been achieved through a deliberative rather than mechanistic application of the MCA technique.
11. Results are achieved within a limited time because deliberation is focused through structuring the process into a series of discrete tasks.
12. Agency membership of the stakeholder group and the availability of Agency experts at workshops allows the Agency to participate in the process.

6.2 Recommendations

The New Forest LEAP group tested the feasibility of convening of an Expert Stakeholder Group to undertake a MCA to prioritise issues in a LEAP within a process of group deliberation.

The **main recommendations** for the methodology from this test are as follows.

1. A stakeholder group can be recruited within one month but to secure the participation of all the key organisations recruitment of stakeholders should start as early as possible, preferably about 2 months before the first workshop. The assistance of the local AEG should be enlisted but in addition each stakeholder should be asked which organisations in their sector they feel should be represented.
2. The evaluative process can be completed in 8 weeks, but a slightly longer timescale (up to 12 weeks) could be preferable. The longer timescale would allow stakeholders more time to reflect on the previous workshop, to prepare for the next workshop, and to consult with their constituencies between workshops. The benefit of the shorter, tighter timescale is in terms of enhanced group dynamics; and members not losing sight of the goals of the exercise, and so the process should not take more than 3 months. Feedback between workshops and the support of the group and facilitation team can keep the momentum going.
3. The sequence of tasks in the Workshops was correct but we would recommend the following changes:

Group members should have a longer time to appraise the draft LEAP before W1 and, ideally, more opportunity to contribute to the initial selection of issues

- The first workshop should include a verbal presentation on the roles and responsibilities of the Agency, and the LEAP process.
- The second workshop needs more time to ensure that the full range of criteria are elicited and agreed. If a preliminary list of criteria can already be offered this will help speed the process. But it is vital to ensure that the stakeholder group feels ownership of its criteria.

- The third workshop must have time to revisit the weighting of issues against the criteria to ensure that all decisions are sound and can be defended if necessary. This can be achieved providing there are fewer issues to evaluate.
- The fourth workshop needs to consider ways of confirming the ranked list of issues without unpicking the whole process. More thought needs to be given to this problem. It is very important to celebrate the outcome of the process in some way!

4. The issues identified in the LEAP must be clearly defined. The scale of each issue must be clarified and a rough estimation of the monetary cost of dealing with each issue (and who would bear this cost) would be helpful. Asking stakeholders to identify costs and benefits of tackling issues of which they have some knowledge provides stakeholders with a focus for thinking about the issues and assists the Agency with its Section 39 responsibilities. However, if risks associated with issues are also to be identified the difference between a cost and a risk must be made clear.

5. There should be a maximum limit to the number of issues to be prioritised. Thirty three was too many. We would recommend no more than 24 (and preferably less than that, if possible).

6. The criteria produced from this R&D must be tested further. It would be unwise to treat these criteria as definitive on the basis of one case study. They do correspond reasonably well with the criteria produced for the Valcoast study (Davos et al, 1997), with the exception of an explicit, first stage financial cost criterion. It will be important for the Agency to experiment with the New Forest Criteria in a different LEAP region.

7. The number of criteria used to evaluate and rank the issues should not be reduced. The Group was able to handle the number and range of criteria they produced. More clarification about the roles and responsibilities of the Agency, and the remit of the LEAP would help the stakeholders to clarify the objectives of the process and ensure the validity of the criteria.

8. The conduct of the process requires specialist skills. The mathematical elements of the MCA we used in this R&D will present no problems for Agency staff. However:

- recruitment of stakeholder group members;
- facilitation of whole group/small group discussions;
- acting as rapporteurs;
- elicitation of costs, benefits and risks;
- negotiation of criteria;
- application of criteria to issues;
- and evaluation procedures

all require personnel who are:

- intuitive;
- sensitive to the feelings of individuals, especially when they are working in groups;
- able to listen and interpret what is being said in all its layers of meaning;
- able to accept comment and criticism and work positively with it;
- able to deal with conflict sensitively and effectively;
- enthusiastic and supportive;
- flexible;
- able to maintain momentum in completing tasks without offending individuals or taking away ownership of the task;
- disinterested in the actual order of priority of issues
- and themselves committed to a successful outcome to the process.

It may be necessary to train volunteer Agency staff in these roles.

9. Every element of the process must be open and transparent; every item of information produced must be sent to all the members of the stakeholder group. Commitments made about sending results must be met as quickly as possible.

10. The commitment of the Stakeholders to the process was central to the success of the Project. Individuals voluntarily gave up substantial amounts of time (4 x 3 hour workshops, plus traveling time; plus individual work at home: say another 6 hours in total). Refreshments were provided before, during and after the workshops - but we would recommend that an *ex gratia* payment be considered, especially for the voluntary sector representatives who attend. It is vitally important that all members attend all four workshops. Payment might help further secure that co-operation.

7. APPENDICES

Appendix 1: New Forest Leap Group Workshop 1 - List of Costs, Benefits and Risks

Summary of additional costs, benefits and risks identified by Group Members

Note:

1. The Agency costs/benefits and risks have not been included. These can be found in the LEAP Consultation Draft.
2. Members were generally commenting at the level of the issue, not the options within that issue where these are identified in the LEAP.
3. Nine issues had no costs, benefits or risks added by group members: S4, S5, S6, S10, S11, S14, S15, S16 and S17.

M1	Disruption of stream ecology due to removal of debris dams from New Forest watercourses
COSTS	<ul style="list-style-type: none"> * Retain dams: Stop restoration of sea trout stock. Increased bank erosion and free fall. * (cost of removing dams) FC and EA monies wasted. Loss of internationally important habitats. Breach of European and domestic legislation. Formation of natural river systems which will benefit game fisherman eg. formation of pools and riffles. * possible implications for Commoners grazing and public access.
BENEFITS	<ul style="list-style-type: none"> * <u>Retain</u> dams, <u>Benefit</u> - NIL * maintenance of internationally important habitats and species. * Benefits to biodiversity.
RISKS	<ul style="list-style-type: none"> * retain dams: loss of grazing alleged; risks of loss of stock and danger to children. * flooding a problem when it affects buildings. * consider social context of risk - in developed areas or to grazing. * danger to children and animals often exaggerated. Only 1 pony death in 10 years.

M2.	Loss of biodiversity and the water resource associated with damage to the valley mire systems
COSTS	<ul style="list-style-type: none"> * Dissuade recreational use of forest where mires occur * restoration of mires covered under FC budget and LIFE funding.
BENEFITS	<ul style="list-style-type: none"> * Valley Mires FC/ENVAG restoration: water retention will raise summer water table and benefit adjacent grazing. * Reduce recreational use of important habitat * Maintenance as internationally important habitats. Reduce possibilities of flooding, i.e. mires hold water.
RISKS	<ul style="list-style-type: none"> * Loss of grazing alleged. * concern over reduced grazing by Commoners. NB: responsibilities of verderers. * Mires actually very important for grazing in drought years.

M3	Loss of biodiversity associated with engineering works on natural river courses
COSTS	<ul style="list-style-type: none"> * Restoration work will create labour and material costs * Cost to homeowners if flooding occurs.
BENEFITS	<ul style="list-style-type: none"> * Will restore levels of summer flows.
RISKS	<ul style="list-style-type: none"> * Restoration work may not have effect intended. * Has agency assessed risks well? * greater risk of localised flooding.

M4	Loss of biodiversity associated with recreational use of watercourses.
COSTS	<ul style="list-style-type: none"> * recreational management and restoration; - riding breaking banks down; - people/pressure. * who bears the costs?
BENEFITS	
RISKS	<ul style="list-style-type: none"> * risk to public safety * risk of public reaction

M5	Limited knowledge on the nature of the water resource due to lack of groundwater and surface water monitoring
COSTS	* site owner should be decontaminating site.
BENEFITS	<ul style="list-style-type: none"> * Helps with M6 and M7. * Investigations could be programmed over a number of years. Options not mutually exclusive. * Benefits other partners through sharing cost. * drainage - better understanding of impacts of drainage rights. * links to objectives of M6 and M7
RISKS	<ul style="list-style-type: none"> * that the benefit goes to a commercial body. * must be complete monitoring or no use? * Is reason for action commercial abstraction or environmental protection?

M6	Low summer flow rates in certain New Forest streams
COSTS	<ul style="list-style-type: none"> * Minimum flow weirs will require capital funds * weirs may damage wildlife.
BENEFITS	<ul style="list-style-type: none"> * Benefit to M7 * demonstration of impacts of trickle irrigation (leading to) change in legislation * aesthetic and amenity * helps effluent dilution understanding (leading to) better river quality * assist in abstraction licensing * modelling improved - benefit nationally? * recreational use * better understanding under different weather conditions.
RISKS	* silting may prove to be more than local - up to 200x u/stream.

M7	Reduced stream water quality during summer low flow
COSTS	<ul style="list-style-type: none"> * Cost developing and maintaining network * Cost of small works (30-40k each), 6 No. Larger works (70-80k each), 4 No. 6x40=£240k; 4x80 = £320k. TOTAL = <u>560k</u>
BENEFITS	<ul style="list-style-type: none"> * improved knowledge of groundwater resource, important. Monitoring. * EHO can prosecute in bad cases. * Env. friendly - aesthetic (reed beds).
RISKS	

M8	Excessive unlicensed surface water abstraction for trickle irrigation
COSTS	<ul style="list-style-type: none"> * cost of trickle irrigation is high * who bears the costs?
BENEFITS	<ul style="list-style-type: none"> * more efficient use of water * benefit to biodiversity
RISKS	<ul style="list-style-type: none"> * significant damage to agriculture/horticulture farming if extraction restricted.

M9	Reduced recreational water quality at Calshot
COSTS	<ul style="list-style-type: none"> * new Waste Water Treatment plant essential and would be permitted under New Forest District Local Plan. * Cost - £7.2 million.
BENEFITS	<ul style="list-style-type: none"> * UV Treatment. Benefit as 8.130 (?). Would meet future directives? * improved water quality
RISKS	<ul style="list-style-type: none"> * Small - due for completion 1999. * People will go elsewhere - loss of revenue.

M10	Derogation of the Keyhaven Pond at the Lymington and Keyhaven Nature Reserves
COSTS	<ul style="list-style-type: none"> * all options essential - not mutually exclusive. * cost met by gas user - see below * may be costs re: compensation in planning if new gravel site opened * employment costs if gravel license revoked - loss of employment * knock on costs of alternatives * compensation to landfill operators? * increased industry transport costs, transportation of waste to new sites. * what about landfill taxes?
BENEFITS	<ul style="list-style-type: none"> * clay or impervious lining could allow landfill gas production * a statutory requirement - 'do nothing not an option'. Could be nature conservation benefit. * keeping existing landfill void space would have off-site benefits.
RISKS	<ul style="list-style-type: none"> * this is an internationally important site for nature conservation. Hampshire CC. could risk prosecution if nothing is done.

M11	Continuing prohibition of shellfish production in vicinity of the current Pennington STW outfall.
COSTS	<ul style="list-style-type: none"> * the issue has moved on * needs new, longer outfall * cost £3 mill
BENEFITS	<ul style="list-style-type: none"> * to maintain livelihood of fishermen * improved water quality in vicinity of oyster beds.
RISKS	* Due for completion in 1999.

M12	Improved management of urban and agricultural surface water run-off
COSTS	<ul style="list-style-type: none"> * Loss of valley grazing * costs to developers, increase in house prices
BENEFITS	<ul style="list-style-type: none"> * create wildlife habitats * cleaner watercourses; reduce flooding
RISKS	<ul style="list-style-type: none"> * pesticides in run-off * pollution to watercourses; flooding of property

M13	Development of the Flood Defence Management System (FDMS)
COSTS	
BENEFITS	* NFDC need to identify areas at risk from flooding for inclusion in local plans.
RISKS	

M14	The impact of sea-level rise on intertidal habitats (coastal squeeze)
COSTS	<ul style="list-style-type: none"> * loss of valuable habitats behind sea wall * given sea level rise (leads to) + can't fall back on landfill site (leads to) loss of land, loss of habitat, loss of jobs * sea level rise - potential impact on habitat and built infrastructure should force this issue to the top of the agenda
BENEFITS	<ul style="list-style-type: none"> * shoreline management plan addresses this (now in draft - should be completed early 1998) * <u>MAFF funding</u> re; sea level rises - do we compensate landowners?
RISKS	<ul style="list-style-type: none"> * The risk gets higher as the level gets higher * bringing people along with managed retreat * Where does the line stop? natural retreat means holding a longer line * not taking account of the shoreline management plans/estuary management plans

M15	Inadequate understanding of the effect of acid deposition on ecology
COSTS	<ul style="list-style-type: none"> * Need for practical survey work * what is Agency remit re ambient air quality? test to see a problem * Costs on Councils, and targeting resources as best can * costs of statutory fees * should local industry bear all the costs? * reducing source emissions - need independent data
BENEFITS	<ul style="list-style-type: none"> * EHOs involved in monitoring industrial emissions * LEAPS - <u>interconnections</u> between industry / *monitored at source by industry * giving a national as well as a local picture * not a good understanding of air quality issues (leads to) re: input, output issues * not in isolation * local stuff on traffic emissions
RISKS	<ul style="list-style-type: none"> * Issue larger than LEAP and not being aware of other initiatives - PARTNERSHIP not reinventing the wheel * Not sure of the right problem is being worked * Significant funds diverted from other uses * Issue under Local authority control * getting to the wrong area/industry (leads to) liaison * re the geography where pollution comes from/goes to (leads to) total load coming from elsewhere

M16	Inadequate understanding of the impact of sulphur dioxide emissions
COSTS	* should local industries bear all the costs?
BENEFITS	* EHO already involved * NB Benefits to agriculture - sulphur shortage!!
RISKS	* See M15

M17	Inadequate understanding of the combined impacts of process emissions
COSTS	
BENEFITS	* EHO and (?) H/S already involved
RISKS	* Issue larger than LEAP * See M15

M18	Public concern over odour control at industrial sites
COSTS	
BENEFITS	* EHO deal with complaints
RISKS	

M19	Decline in stocks of sea trout
COSTS	
BENEFITS	* Immediate remedial action can be taken because causes <u>are</u> known
RISKS	

M20	Obstructions to free passage of sea trout
COSTS	* many of obstructions can be remedied at VERY LOW COST
BENEFITS	
RISKS	

M21	Over abstraction due to Licences of Right
COSTS	* Need to distinguish worst cases from the rest - deal with the issue over time
BENEFITS	* Benefits for biodiversity

RISKS	* Possible over-reaction to a problem which should be individually addressed
-------	--

M22	Poaching pressure on sea trout stocks
COSTS	* Educate magistrate in real costs to statutory bodies
BENEFITS	
RISKS	* Poaching a criminal activity when miscreant caught

S1	Uncertainty over the inter-relationship of powers and responsibilities between the Environment Agency and other statutory bodies within the New Forest
COSTS	* Time/delay * Partnerships necessary with NFDC as well as FC (and other bodies)
BENEFITS	* Less likely to break law * Reduce duplication * Saves money * Understanding needs * Common objectives * More national level influence
RISKS	

S2	Uncertainty as to the implications of Agency functions on the favourable nature conservation status of sites proposed for designation as pSPA, cSAC or pRamsar
COSTS	* (of uncertainty) Sort out relationship with English Nature
BENEFITS	
RISKS	

S3	Poorly defined role of the Agency as the contact point for those species which occur in the LEAP area and which are listed in the Biodiversity Action Plan
COSTS	* (of uncertainty) Create good working relationship with English Nature & other bodies + Hampshire Biodiversity Action Plan
BENEFITS	
RISKS	

S4: Loss of biodiversity associated with damage to mire systems outside of the cSAC, not necessarily known to the Agency

No costs, benefits or risks added

S5: Loss of biodiversity associated with deepening of ephemeral water bodies

No costs, benefits or risks added

S6: the threat to aquatic ecology of New forest watercourses caused by the spread of alien species

No costs, benefits or risks added

S7	Reduced nature conservation value of Lymington Reed Beds SSSI
COSTS	
BENEFITS	* Most of the factors <u>are</u> known. Proper use of new sluice gates would be significant.
RISKS	

S8	Groundwater contamination at Ampress Works public water supply
COSTS	
BENEFITS	
RISKS	* See M5

S9	The control and maintenance of privately owned flood defence structures
COSTS	
BENEFITS	
RISKS	* Enforce legislation on riparian owners * Cost/benefit ratio to private owners of flood control structures can be very poor and a disincentive to maintenance work

S10: Expansion of the flood warning dissemination service

No costs, benefits or risks added

S11: Defining the role of the Agency in local air quality management

No costs, benefits or risks added

S12	Inadequate understanding of the effect on health of PM₁₀ arisings from waste handling facilities
COSTS	
BENEFITS	
RISKS	* None of the options monitor health risks

S13	Fish population conservation
COSTS	* Proposal would terminate the BMFFC fishery Royden, Boldre at cost of £7,500 pa
BENEFITS	
RISKS	* "No stocking " would be challenged by BMFFC and would be <u>highly</u> publicised

S14: Lack of knowledge of fish stocks in still waters

No costs, benefits or risks added

S15: Lack of free public fishing in the Bartley water

No costs, benefits or risks added

S16: Irregularities in the classification of shellfish waters

No costs, benefits or risks added

S17: A consenting protocol and river conservation strategy for the Lymington River SSSI has not been agreed with English Nature

No costs, benefits or risks added

Appendix 2: Rationale for revised issues list

1. The Environment Agency is changing the titles of S1 and S2 as follows:
S1: *Clarification is required over the inter-relationship of powers and responsibilities between the Environment Agency and the Forestry Commission*
S2: *Implications of the Habitats Directive for the Environment Agency*
2. M15 and M16 will be considered together, as suggested by the group.
3. M9 will be retained because the Environment Agency could take further action, although this is not clear from the discussion of this issue in the LEAP document. The Agency could press Southern water to further improve treatment at Ashlett Creek STW using UV and other tertiary treatments.
4. M11 will be discarded as action is underway and due for completion in 1999.
5. The title of M10 will be changed to '*Degradation of*' as this is the issue.
6. Problems at the Manor Farm gravel extraction site will be included as a separate issue, numbered X.
7. The Environment Agency is going to discard the following issues:
 - S4: This is not an issue for the Environment Agency until it knows about undesignated valley mires.
 - S10: The Environment Agency is already expanding the Flood Management Defence service.
 - S13: A presumption against the introduction of fish from elsewhere is national Environment Agency policy.
 - S16: This situation is currently under review.
 - S17: This issue is an administrative matter.

Regarding other suggested changes:

1. The Environment Agency's role in the management of intertidal/subtidal areas comes under issue M14.
2. Dredging in Southampton Water is only of concern to the Environment Agency insofar as there is any potential for damage of freshwater fisheries. The dredging companies are working to Environment Agency guidelines regarding the migration of salmon.
3. In the final version of the LEAP the Environment Agency intends to drop the categories M and S but they are being retained for our purposes as renumbering could cause confusion.

Appendix 3: New Forest LEAP group workshop 2: Criteria produced by pairs

Chris Corrigan/Stephen Wright

To what extent can the EA tackle the issue easier independent of other agencies/individuals?

Issues under total EA control can be to deal with (unless all other players in agreement).

To what extent would tackling this issue benefit species and habitats?
Action

Value judgements as on sheet plus EA must contribute to UK Biodiversity Plans in line with Government policy.

To what extent is the issue/problem reversible?

Irreversible changes should be given a higher priority than reversible ones.

To what extent will tackling this issue benefit maintained to the local economy (eg through tourism)?

Economic activity should be support the rural population/ maintain the social fabric of the forest.

To what extent is the issue well researched with a clearly understood way forward? clear

Higher priority should be given to well established/researched problems with solutions.

To what extent are national and international standards are legal obligations being maintained ('sub-criteria' of health and safety criterion given.)

Important that international maintained.

To what extent would tackling this issue support commoning?

Commoning needed to maintain the ecological and social fabric of the forest.

Brian Lappin/Andrew Starling

To what extent is the issue already being managed?

There is a need to take account of work that has been/ is being done.

To what extent is time required to solve the issue?

Some issues can be solved immediately.

To what extent does action jeopardise other species/ interests?

The relationship between issues has to be properly understood.

To what extent is resolution part of a wider need or not?

'Stand alone' issues can be easily solved.

To what extent would failure to act cause irreversible decline?

We should try to address species habitat loss.

To what extent is scientific knowledge limited?	There is a need for a good scientific understanding.
To what extent would failure to act constitute a threat to (i) people (ii) stock (iii) species?	Not doing anything about an issue is not acceptable.

Tim Moore/John Adams:

To what extent would action deliver 'must do's'?	Threat of legal action if not delivered.
To what extent would resolving the issue protect the unique status of the New Forest?	Maintain traditional activities.
To what extent would tackling this issue develop partnerships to resolve conflict?	Finding new ways of ensuring a happy medium between points of view.
To what extent would action deliver statutory delivered. 'must dos'?	Threat of legal action if not
To what extent would benefit be delivered for local & UK economy?	Conflict between local values and UK demands on economy.

Neil Hill and Sue Tait

To what extent would resolving the issue <u>regularise</u> the workings of the <u>EA</u> ?	<u>Irregularities and inconsistencies in working practices & policy formation are unacceptable?</u>
To what extent does the LEAP issue complement <u>statutory & non-statutory plans</u> , etc?	The LEAP must be part of a whole other <u>strategic approach</u> .
To what extent is a lack of action or inappropriate action likely to lead to <u>prosecution</u> ?	British government and agencies have a <u>duty to maintain designated sites</u> to favourable conservation status, and enhance non-designated sites.
To what extent should the precautionary principle <u>of</u> be applied whenever there is uncertainty about environmental impacts? prevent	Where there are <u>threats of damage, lack of information</u> should not be used as a reason for postponing measures to environmental degradation.

Steve Green/Julia Norman

To what extent would this issue affect property?	Loss or damage to property unacceptable.
To what extent is the issue a statutory duty?	No choice in the matter.
To what extent does the issue involve other bodies?	Synergy.
To what extent does the issue affect human safety?	Danger to human life is unacceptable.
To what extent does the issue affect people's livelihoods?	Loss of livelihood unacceptable.
To what extent does the issue affect recreation opportunities?	Recreation to be encouraged.
To what extent does the issue affect human health?	Danger to human health is unacceptable.

Brian Cobby/David Withinshaw

To what extent is the issue affected by <u>external</u> influences outside of the LEAP area?	Greater the influence - greater need to work at regional not LEAP level.
To what extent is the issue affected by (a) existing (b) future <u>legislation</u> ?	Already controlled; must be obeyed. Anticipated; plan to comply.
What is the extent of the effect on <u>ecosystem health</u> ?	Greater the effect - the more important it is to work on the issue.
What is the extent of the effect on <u>public</u> is to health?	Greater the effect - the more important it work on the issue
Who stands to <u>gain</u> more, environment or financial?	LEAP should address environmental concerns.
What <u>proportion</u> of this issue affects the LEAP area?	Greater proportion - more important it is to carry out work.
What are the <u>cost</u> implications to the (a) EA (b) others?	Most economic solution should be determined to meet needs.
What is the effect of <u>non-maintenance</u> of the asset?	Extent of ecological damage
To what extent will public <u>opinion</u> affect the issue?	Low opinion suggests no issue.

What is the extent of the public nuisance?
it

Greater the nuisance the more important
is carried out.

Michael Chilcott/Jean Vernon-Jackson

To what extent is there a statutory obligation
(inc. Europe and Agenda 21) to tackle this issue?

The law should be obeyed.

To what extent is the problem identified in the
should
in the issue likely to get worse?

Issues which are likely to get worse
be tackled sooner rather than later.

To what extent is this a local EAP issue?

Non local issues should be tackled in
regional/national EAP.

To what extent does this issue threaten areas or
species of recognised importance?

Threatened areas or species should be
protected.

Will solving this issue command wide public
'getting it support'?

Wide public support assists
done'.

To what extent would tackling this issue benefit
health & safety of the public.

Health and safety should be safeguarded.

Appendix 4: Spreadsheet showing MCA calculations using 'group' criterion weights

critério n	A	C	F	B	D	G	K	H	E	M	total
weight	14.09	12.77	12.17	10.93	10.68	9.22	8.69	7.62	7.42	6.43	
M1	42.27	-38.3	36.51	32.79	0	0	26.07	0	-14.8	0	84
M2	42.27	38.31	36.51	32.79	32.04	0	26.07	0	-14.8	6.43	200
M3	42.27	25.54	36.51	21.86	10.68	0	26.07	11.43	-7.62	6.43	173
M4	42.27	25.54	24.34	32.79	10.68	0	26.07	-22.9	14.84	0	154
M5	42.27	38.31	36.51	0	0	9.22	-17.4	0	0	19.29	100
M6	42.27	25.54	36.51	10.93	21.36	0	26.07	22.86	22.26	19.29	227
M7	42.27	25.54	36.51	10.93	32.04	9.22	26.07	22.86	14.84	6.43	227
M8	0	25.54	24.34	0	21.36	0	26.07	22.86	-22.3	19.29	117
M9	42.27	12.77	12.17	10.93	0	27.66	26.07	22.86	22.26	19.29	196
M10	42.27	38.31	24.34	32.79	32.04	0	17.38	0	-7.42	6.43	186
M12	42.27	25.54	0	21.86	10.68	0	17.38	15.24	-14.8	12.86	131
M13	42.27	12.77	24.34	0	0	18.44	8.69	22.86	22.26	0	152
M14	42.27	25.54	36.51	32.79	0	0	17.38	7.62	0	19.29	181
M15/16	14.09	25.54	12.17	21.86	0	9.22	-17.4	15.24	-7.42	0	73
M17	14.09	12.77	12.17	10.93	0	9.22	-17.4	15.24	-7.42	0	50
M18	42.27	0	12.17	10.93	0	9.22	0	22.86	-22.3	-6.43	69
M19	42.27	25.54	24.34	10.93	21.36	0	26.07	15.24	14.84	0	173
M20	42.27	25.54	24.34	21.86	0	0	26.07	15.24	14.84	0	163
M21	42.27	25.54	36.51	21.86	0	9.22	26.07	22.86	-22.3	6.43	169
M22	42.27	25.54	24.34	21.86	21.36	0	26.07	7.62	22.26	0	191
S1	42.27	38.31	36.51	32.79	10.68	0	0	7.62	0	6.43	175
S2	42.27	38.31	36.51	32.79	21.36	0	0	0	0	0	171
S3	0	38.31	36.51	32.79	10.68	0	0	0	0	0	118
S5	42.27	38.31	36.51	32.79	21.36	0	26.07	0	-22.3	0	175
S6	42.27	38.31	36.51	32.79	21.36	0	26.07	15.24	22.26	0	235
S7	42.27	38.31	0	32.79	0	0	17.38	0	0	0	131
S8	42.27	12.77	0	10.93	0	27.66	-8.69	22.86	-4.2	12.86	113
S9	42.27	12.77	12.17	21.86	10.68	0	0	15.24	-14.8	19.29	119
S11	0	12.77	0	21.86	0	-9.22	0	22.86	0	19.29	68
S12	42.27	0	0	21.86	0	18.44	-8.69	22.86	0	0	97
S14	0	12.77	12.17	10.93	0	0	-8.69	7.62	0	19.29	54
S15	0	0	0	10.93	0	0	0	7.62	7.42	0	26
X	42.27	38.31	24.34	32.79	10.68	0	26.07	22.86	7.42	0	226

Appendix 5: Order of priority using individual's criterion weights

Column 1: Issue number

Column 2: Shows the score that each issue received in the multi-criteria analysis using 'group' criterion weights. Scores for each issue were calculated by multiplying the weight for each criterion by the score the issue received against that criterion and then adding together all the weighted scores for that issue. The weight for each criterion was derived by aggregating the scores that each group member allocated to that criterion.

Column 3: Shows the rank order of the issues using 'group' criterion weights (based on the scores in column 2).

Columns 4-17: Shows how each issue would have been ranked if weights derived from each individual's scores for the criteria had been used instead of the 'group' weighting.

Issue	Score	Rank order														
		group	TM	SW	MC	BC	SG	NH	ST	BL	CC	JN	AS	JA	JVJ	DW
S6	235	1	3	1	=1	2	2	2	1	1	=2	1	1	2	1	4
M6	227	=2	1	4	4	4	4	4	=9	3	=5	2	2	1	5	1
M7	227	=2	2	3	3	3	3	3	8	4	1	3	3	3	3	2
X	226	4	4	2	=1	4	5	4	4	2	4	4	5	4	2	5
M2	200	5	6	=5	5	6	11	5	2	5	=2	7	=8	13	4	7
M9	196	6	5	=5	7	5	4	8	23	8	17	5	4	5	11	3
M22	191	7	7	7	=8	8	6	0	12	7	8	9	6	=7	9	6
M10	186	8	9	8	10	7	=13	=6	7	6	7	10	12	=15	7	=8
M14	181	9	8	10	12	9	10	=6	=9	9	15	7	=8	6	13	10
S5	175	=10	14	11	=8	=11	=18	=11	6	12	=5	=14	17	7	6	=15
S1	175	=10	12	=16	=13	10	12	10	5	=10	13	8	15	9	14	17
M3	173	=12	10	12	11	14	15	13	13	=13	=10	12	13	10	10	11
M19	173	=12	11	9	15	13	8	=14	14	=13	=10	=14	7	14	15	=8
S2	171	14	15	=16	14	=11	16	=11	3	=10	12	11	16	=15	12	18
M21	169	15	13	15	6	15	=13	17	=15	16	9	13	14	=7	8	14
M20	163	16	=16	14	16	17	9	16	=15	17	16	17	11	11	16	13
M4	154	17	18	14	=18	16	22	=14	11	15	14	18	18	20	17	=15
M13	152	18	=16	18	7	18	7	19	22	=19	18	16	10	12	18	=15
M12	131	=19	19	20	=18	19	20	18	=20	18	=20	21	19	19	20	19
S7	131	=19	23	19	21	20	21	=20	18	=19	=20	=22	=21	18	19	=20
S9	119	21	21	22	23	21	25	=20	=20	21	23	20	23	22	24	22
S3	118	22	24	23	22	25	24	22	17	22	22	=22	24	=23	21	25
M8	117	23	20	21	20	23	=18	23	28	23	19	26	20	=23	=22	23
S8	113	24	22	24	24	22	17	25	=26	24	26	19	=21	21	25	=20
M5	100	25	25	27	28	24	26	24	19	25	24	24	26	26	28	27
S12	97	26	26	26	25	26	23	28	=26	26	28	25	25	25	26	24
M1	84	27	27	25	26	=27	33	26	25	27	25	28	27	=29	=22	26
M15/ 16	73	28	29	30	29	=27	28	30	24	29	29	27	29	28	29	30
M18	69	29	30	29	27	=30	31	31	28	231	27	30	30	=29	27	29
S11	68	30	28	28	30	29	27	27	32	28	32	29	28	27	32	28
S14	54	31	31	31	32	=30	29	29	31	30	31	31	31	31	32	31
M17	50	32	32	32	31	32	30	32	30	32	30	32	32	32	30	32
S15	26	33	33	33	33	33	32	33	33	33	33	33	33	33	33	33