OUTDOOR RECREATION AND NATURE CONSERVATION: CONFLICTS AND THEIR RESOLUTION

by ROGER SIDAWAY

DOCTOR OF PHILOSOPHY THE UNIVERSITY OF EDINBURGH



DECLARATION

Chapters 1 to 3, 5 and 6 and the annexes to this thesis have been composed by me.

Chapter 4 has also been composed by me but is based on research undertaken for the Dutch Ministry of Agriculture, Fisheries and Nature Management (i.e., Sidaway and van der Voet, 1993). I conducted the literature review and took the initiative in devising the evaluative framework and case study analysis in this study. My co-author, Han van der Voet, provided translations of the Dutch reports and interviews and contributed to the analysis.

ACKNOWLEDGEMENTS

Many people contributed to this endeavour, two in particular helped to instigate it.

Professor Bill Burch at the Yale School for Forest and Environmental Studies in his seminars, which I attended while on Study Leave from the Forestry Commission in 1968-9, inspired an interest in the application of social theory to environmental issues. In other circumstances I could well have stayed at Yale to undertake a rather different dissertation. Driving on the back roads of Texas in 1991, Bill listened as I described my initial research on conflicts and urged me to register for the doctorate I had postponed twenty years earlier. He has kept an avuncular eye on the project ever since.

Mike Collins, then Principal Research and Planning Officer at the Sports Council, backed a hunch and commissioned me in 1987 to review a series of case studies of conflicts between sports and nature conservation in England and Wales. At the end of that study, I drew some initial contrasts between conflict and co-operation. Never an idle man, Mike has always found time to comment on drafts and to encourage me towards completion and publication.

At the University of Edinburgh, I found a congenial place of study thanks to the positive response and encouragement of my supervisors, Dr Douglas Malcolm and Professor Barry Dent. They took a lot on trust from such a mature student. Teaching on the M.Sc. in Resource Management at IERM has provided an invaluable means of clarifying and explaining conflicts and conflict resolution to inspiring students.

Attempting to complete this study at the same time as I worked as a freelance consultant has lead to problems of time-management. But it has enabled me to draw on the results of commissioned research and I would like to acknowledge financial sponsorship or assistance at various times from the Countryside Commission, the Countryside Commission for Scotland, the Dutch Ministry of Agriculture, Nature Management and Fisheries, the Economic and Social Research Council, English Nature, the Nature Conservancy Council, the Peak District Joint Planning Board, the Sports Council, the World-Wide Fund for Nature and the Universities of Wageningen and Yale. I should like to thank the staff of these organisations involved in these projects and the many other people, too numerous to name, who kindly gave of their time by responding in interviews or who provided information on the case studies during the course of this research.

The second home of the study has been the Werkgroep Recreatie at the Agricultural University at Wageningen. For many years, Han van der Voet has been the pillar of strength holding the working group together and I have obtained great intellectual stimulus when discussing my ideas with members of the group. Han, in particular, has helped me in so many ways, by organising meetings, obtaining and translating material from the Dutch and acting as co-researcher and co-author of Getting on Speaking Terms. He and Grietje have provided me with much hospitality and fun at the house of Jan Steen in Rhenen. But above all he insisted that I extracted my self from the working pressures in Edinburgh and spent valuable hours in the Wageningen library.

Finally, the real inspiration has come from my partner and best friend, Monica Barry who has born the brunt of the long hours, the endless proof reading and typing. Many things have been postponed to complete this task, her belief in the endeavour has kept me going. Thank you.

Roger Sidaway

ABSTRACT

The study develops a series of theoretical frameworks to examine how environmental conflicts arise and how they may be resolved by testing the frameworks against empirical evidence from case studies. Documentary information and data from semi-structured interviews with key informants were analysed to provide the case studies of outdoor recreation and nature conservation, conducted in Britain, the Netherlands and the USA.

It was initially assumed that recreational impacts would give rise to conflicts in each of the three countries irrespective of the differing institutional and cultural settings. However, a comparison of case studies of conflict and co-operation, using a simple diagnostic framework, suggests that it is not the ostensible cause - the nature or extent of the impact of recreation on wildlife - that determines whether conflict or co-operation occurs; rather the motivation of the interest groups, their relationship and the institutional setting in which they attempt to broker a reallocation of resources. However, none of these factors appears to act alone, suggesting that multiple rather than single causality is more likely to be the norm.

A second framework was developed, based on concepts drawn from social theory: that conflicts arise over the distribution of and access to resources and that they are dynamic and pass through successive episodes. Such conflicts may or may not be resolved depending on whether the outcome is reached by the exercise of superior power or by negotiation and this provides a possible basis for attempting to predict the outcome of each episode. A third framework, based on theories of participatory decision-making, provides a method of assessing administrative decision-making and planning systems in terms of their ability to reduce conflicts by facilitating negotiation.

Elements of the second and third frameworks were combined into a fourth, which categorises the full range of possible outcomes of political struggle or negotiation into a simple typology. It further demonstrates that the detailed course or duration of a power struggle cannot always be predicted because the likelihood, nature and timing of interventions, particularly by government agencies, cannot be foretold. These can have considerable effects on the distribution of power which are not easily measured.

The study suggests that local environmental conflicts have to be seen within a broader perspective. The recreation versus conservation debate is partly a conflict over access to resources and partly symptomatic of a wider process of social change, whereby rising public expectations of increased access to the countryside are confronted with higher environmental standards.

The study attempts to utilise and develop theory to practical ends. A rigorous theoretical analysis of the empirical data provides clearer insights into which factors come into play at which stages of the dynamic process of conflict, a more realistic assessment of how decision-making can influence but not determine the outcomes of disputes and the crucial contribution of power as an impetus to secure and control access to resources.

CONTENTS

CHAPTER 1: INTRODUCTION	1
THE ORIGINS OF THE STUDY AND THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK	1
Initial Research Design	2
Scope and Purposes of Social Theory: Understanding of Social Change and the Resolution of Conflict	4
AIMS OF THE STUDY	6
Initial Working Assumptions	7
THE SELECTION OF CASE STUDIES	10
CHAPTER 2: EXPLORING THE NATURE OF CONFLICT: AN INITIAL ANALYSIS	13
INTRODUCTION	13
CONSIDERATION OF DIAGNOSTIC FACTORS	14
Substantive Issues	14
Motivations of Interested Parties	16
PROPOSITIONS RELATED TO GROUPS OF FACTORS	18
Impacts	19
Interests	19
Interactions	20
Institutional Settings	20
METHOD OF ANALYSIS	21
THE NATURE OF BIOLOGICAL IMPACTS	23
Commentary on Impact Factors	23
Overall Conclusions on Impacts	26
CHARACTERISTICS OF INTERESTS	27
Commentary on Interests	27

Overall Conclusions on Interests	29
INTEREST GROUP INTERACTIONS DURING A DISPUTE	30
Commentary on Interactions	30
Overall Conclusions on Interactions	32
THE CONTRIBUTION OF THE INSTITUTIONAL SETTING TO A DISPUTE	33
Commentary on Institutional Settings	33
Overall Conclusions on Institutional Settings	35
THE DEVELOPMENT OF A DIAGNOSTIC FRAMEWORK TO DISTINGUISH CONFLICTS	36
Discriminating Factors	36
AN APPLICATION OF THE FRAMEWORK	39
CONCLUSIONS	43
Triggers of Conflict	45
CHAPTER 3 : CONFLICT AS A DYNAMIC PROCESS	47
THE CLASSIFICATION OF CONFLICTS	47
Classifications based on Motives or Interests of the Disputing Parties and/or their Inter-relationships	47
Classifications based on the Outcome of the Dispute	48
Conclusions on Classifications	48
ALTERNATIVE PERSPECTIVES ON CONFLICT THEORY	51
Does Conflict Serve a Useful Social Function? - A Sociological Analysis	52
Interaction and Process: The Contribution of Managerial Theory	57
Phases of Conflict - An Analysis of Pondy's Conceptual Framework	59
Thurlings' Dynamic Analysis	61
Triggers of Conflict	63
SYNTHESIS: A DYNAMIC FRAMEWORK OF CONFLICT	64

• . . .

ASSESSING THE UTILITY OF THE DYNAMIC FRAMEWORK	71
The Designation of the Pentland Hills Regional Park	71
Motor Sports in England	75
Moorland Access in the Peak District National Park	78
CONCLUSIONS	85
The Utility of the Dynamic Framework	85
The Dynamic Framework as a Predictive Model	86
CHAPTER 4: THE CONTRIBUTION OF DECISION-MAKING TO CONFLICT RESOLUTION	88
INTRODUCTION	88
A REVIEW OF PARTICIPATION IN DECISION-MAKING	88
Decision-Making to Resolve Disputes	88
The Issues of Legitimacy of Decision-Making and Public Support	91
The Relationship between Planning Models, the Participants and Phases of Planning	92
The Distinction between Consultation and Public Involvement	94
Mediation as a Participatory Technique	96
The Limits of Mediation	97
Dispute Systems Design: The Issues of Representation and Accountability	101
Conclusions on the Review of Participation in Decision-Making	104
ANALYSIS OF CASE STUDIES	109
Introduction	109
Outline Description of the Rhine Delta Scheme	109
Evaluation of Planning and Management in the Grevelingen	111
Evaluation of Planning in the Oosterschelde	116
Evaluation of Planning in the Voordelta	124

Evaluation of Decision-Making in the Designation of National Parks in the Netherlands	132
CONCLUSIONS	139
CHAPTER 5: A REVIEW OF SOCIAL CONFLICT AND DECISION-MAKING	141
PROBLEMS OF PREDICTION - THE PARADOX OF POWER AND THE INFLUENCE OF DECISION-MAKING	141
A REVIEW OF THE CASE STUDIES	144
The Pentland Hills Regional Park	144
Motor Sports in England	145
Moorland Access in the Peak District National Park	145
The Designation of the Skomer Marine Nature Reserve	146
Planning in the Rhine Delta	147
Case Studies of Co-operation	148
Summary of Case Studies	149
POLITICISATION AND DECISION-MAKING	155
Synthesis: Decision-Making and Disparities in Power	157
INSTITUTIONAL POWER WITHIN THE STATE	160
SITUATIONS ILLUSTRATED BY THE CASE STUDIES	165
Interventions by Government Agencies as Interested Parties which may effect the Balance of Power	165
Interventions as Arbiter	166
REFINING THE DYNAMIC FRAMEWORK	168
CONCLUSIONS	171
The Value of an Analysis which Combines Decision-Making and the Processes of Conflict	171
Issues of Measurement and Prediction	172

CHAPTER 6: EVALUATION AND CONCLUSIONS	175
INTRODUCTION	175
SUMMARY AND ASSESSMENT OF THE FRAMEWORKS	175
The Diagnostic Framework of Conflict and Co-operation	175
The Dynamic Framework of Conflict	176
The Evaluative Framework of Decision-Making	178
The Integrated Framework of Conflict and Co-operation	178
DISCUSSION OF ISSUES RAISED BY THE STUDY	182
The Nature and Causes of Local Environmental Conflict	182
Environmental Decision-Making and Conflict Resolution	184
Theory and Prediction	186
Issues for Future Research	187
CONCLUSIONS ON HYPOTHESES	189
REFERENCES	190
ANNEX 1: EXAMPLES OF CONFLICT DEFINITIONS	200
ANNEX 2 : DEFINITION OF FACTORS USED IN THE EMPIRICAL ANALYSIS IN CHAPTER 2	203
ANNEX 3: SYNOPSES OF CASE STUDIES ANALYSED IN CHAPTER 2	206
Recreational Use of the Bob Marshall Wilderness Complex, Montana	206
Nature Conservation and Water Recreation on Rutland Water	209
Cliff Climbing at South Stack, Angelsey	211
Water Recreation and the Designation of the Oosterschelde Nature Reserve	212
Designation of Skomer Marine Nature Reserve	215
Countryside Access for Motor Sports in England and Wales	217
Wilderness Designation in North West Montana	220
Recreational Access to the Northern Woods, Maine	223
Moorland Access in the Peak District National Park	226
The Designation of the Pentland Hills Regional Park	229

LIST OF FIGURES

Figure 1.1	Case Studies used in the Analysis	12 -
Figure 2.1	Full Listing of Factors	22
Figure 2.2	Analysis of Impacts	23
Figure 2.3	Analysis of Interests	27
Figure 2.4	Analysis of Interactions	30
Figure 2.5	Analysis of Institutional Settings	33
Figure 2.6	Factors which do not Discriminate between Conflicts and Co-operation	37
Figure 2.7	A Diagnostic Framework to Distinguish between Conflict and Co-operation	38
Figure 2.8	Case Studies included in the Validation of the Diagnostic Framework	40
Figure 2.9	A Validation of the Initial Diagnostic Framework using Land Use Allocation Disputes	41
Figure 3.1	Alternative Approaches to Classifying Conflicts	50
Figure 3.2	Alternative Perspectives on Social Conflict	52
Figure 3.3	Coser's Analysis of the Function of Social Conflict	55
Figure 3.4	Phases of Conflict	60
Figure 3.5	Concepts Recognised by Various Authors Allocated to Phases of Conflict	66
Figure 3.6	A Dynamic Framework of Conflict	68
Figure 3.7	Alternative Outcomes of Conflict	. 70
Figure 3.8	A Dynamic Analysis of Conflict over the Designation of the Pentland Hills Regional Park	74
Figure 3.9	A Dynamic Analysis of Conflict over Motor Sports in England	77
Figure 3.10	A Dynamic Analysis of Conflict over Moorland Access in the Peak District National Park	79

Figure 3.11a	gure 3.11a Predicted Outcome of Conflict in the Pentland Hills Regional Park	
Figure 3.11b	1b Predicted Outcome of Conflict over Motor Sports in England	
Figure 3.11c	Predicted Outcome of Conflict over Moorland Access in the Peak District National Park	84
Figure 4.1	The Range of Dispute Resolution Techniques	89
Figure 4.2	Participation in Decision-Making	95
Figure 4.3	Attributes of an Effective Conflict Resolution Process	103
Figure 4.4	Arguments for Public Involvement in Decision-Making and Planning	104
Figure 4.5	An Evaluative Framework for Decision-Making	107
Figure 4.6	Matrix of Representation and Involvement	108
Figure 4.7	Summary of Events in the Rhine Delta 1953-1992	110
Figure 4.8	Analysis of Representation: Planning and Management in the Grevelingen	113
Figure 4.9	Evaluation of Decision-Making: Planning and Management in the Grevelingen	115
Figure 4.10	Analysis of Representation: Planning in the Oosterschelde	119
Figure 4.11	Evaluation of Decision-Making: Planning in the Oosterschelde	123
Figure 4.12	Analysis of Representation: Planning in the Voordelta	128
Figure 4.13	Evaluation of Decision-Making: Planning in the Voordelta	131
Figure 4.14	Analysis of Representation: Designation of Dutch National Parks	133
Figure 4.15	The Process of Designation for Dutch National Parks	136
Figure 4.16	Evaluation of Decision-Making: Designation of Dutch National Parks	137
Figure 4.17	Summary Evaluation of Dutch Case Studies	138
Figure 5.1	Integrated Analysis of Conflict and Decision-Making - The Pentland Hills Regional Park	150

.

Figure 5.2	Integrated Analysis of Conflict and Decision-Making - Motor Sports in England	151
Figure 5.3	Integrated Analysis of Conflict and Decision-Making - Moorland Access in the Peak District	152
Figure 5.4	Integrated Analysis of Conflict and Decision-Making - Skomer Marine Nature Reserve	153
Figure 5.5	Integrated Analysis of Conflict and Decision-Making - Planning in the Rhine Delta (Voordelta Episode)	154
Figure 5.6	Summary of Politicisation and Decision-Making in the Case Studies	156
Figure 5.7	Typology of Conflict and Co-operation according to Outcome and Illustrated by the Case Studies	158
Figure 5.8	Interventions of Government Agencies or the State which affect the Distribution of Power between the Parties and the Outcomes of Disputes	163
Figure 5.9	An Integrated Framework of Conflict and Co-operation	170
Figure 5.10	Summary of the Distribution of Power and Decision-Making	173
Figure 6.1	Strengths and Weaknesses of the Frameworks	181

.

CHAPTER 1: INTRODUCTION

THE ORIGINS OF THE STUDY AND THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK.

The origins of this thesis lie in a study of outdoor recreation and nature conservation in England and Wales (Sidaway, 1988) which analysed seven case studies concerned with recreational impacts on wildlife habitats or species. In four of these, although the potential for conflict existed, the interested parties co-operated to devise management measures which mitigated any potentially damaging impacts. In the three other cases, the parties competed strongly over access to the resource and these cases can be categorised as conflicts according to the definition given below.

The contrast, between conflict and co-operation, was highlighted in that report when it was suggested that conflicts could be distinguished by four prevailing circumstances, namely:

- divergent philosophies: when strongly held beliefs were in opposition;
- lack of basic understanding of relationships between species or habitats and humanity: when the biological impacts of the activity on the ecosystem are poorly understood by researchers or recreation interests;
- unwillingness to respond to dynamic situations: on the part of any interest group;
- poor communication: a failure to exchange information between the interest groups even when the channels of communication exist (Sidaway, 1988, 79).

In the cases of co-operation, where the potentially damaging impact was being managed, these four conditions were not evident. If the interest groups held divergent philosophies, these were suppressed to gain co-operation. The biological impacts of the activity on the ecosystem were understood. The interest groups were willing to respond to changing circumstances and communication was well established between them. In other words, the potential for conflict existed but co-operation was the norm and in this respect these examples provided virtual mirror images of the conflicts. The four features appeared to provide a simple framework for distinguishing between conflicts and co-operation.

Supported by a research grant from the Economic and Social Research Council¹, fieldwork was undertaken in the USA in 1990, and in Britain and the Netherlands in 1991 to examine how useful this analytical framework might be in diagnosing similar conflicts in those countries (see Sidaway, 1992a). Subsequently additional studies undertaken in Britain and the Netherlands by the author have provided further case study material but not all of the material collected between 1987 and 1994 is sufficiently detailed to withstand rigorous analysis.

Initial research design

The research on which this thesis is based consists of a series of case studies in each of the three countries comprising semi-structured interviews with selected key informants; documentation about the area and any controversy; and scientific papers on biological impacts, where these were relevant and available. The research developed into an iterative process, phases of fieldwork alternating with periods of analysis and the consideration of theory.

In the early stages, it had been assumed that recreational impacts would give rise to conflicts in each of the three countries irrespective of the differing institutional and cultural settings. However, a broader view of conflicts developed, although every attempt was made to retain the focus on conflicts associated with the impacts of outdoor recreation on nature conservation. While in Britain and the Netherlands it was possible to retain this focus, in the USA impacts are managed differently. European legislation on species and habitat protection is more far reaching; in the USA it is largely limited to protecting endangered species and that protection has been non-controversial².

A different method of selecting case studies was adopted in the USA. For reasons of economy, study areas were selected to provide clusters of land-use and access disputes. These were in North-west Montana, Western Wyoming, Colorado and Maine. The competing claims of conservation and recreation feature in the American case studies but are less central to major land use conflicts there. This broadening of focus is particularly important in attempting to

¹ Research grant R-000-23-1729

At the time of writing, September 1995, attempts are being made to limit the application of the Endangered Species Act in the USA.

compare conflicts in North America and Europe. The parallels between Britain and the Netherlands appear to be more exact.

In the Netherlands, recreational impacts are frequently mitigated through land use planning and potentially damaging activities are segregated by spatial zoning. After an initial visit in which a range of potential areas was considered, it was decided to focus on areas where the status quo was challenged by major changes in environmental policy. Case studies were conducted of the Oosterschelde, a tributary of the Rhine Delta in Zeeland and at Meijendel, a coastal dune area north of the Hague, to examine how the existing institutional settings coped with change.

The main fieldwork both in the USA and the Netherlands was preceded by a brief visit to an academic base (Yale and Wageningen Universities) to obtain an overview and advice on the selection of case studies and to organise a programme of interviews.

Meanwhile, the perspectives on conflict and associated theory broadened further. An attempt to produce a typology of conflicts based on interests proved inconclusive and a simplistic view of causality developed into a study of the processes of conflict. The later case studies included observations on the escalation of disputes, the interactions of interest groups and the balance of power between them, the institutional settings and whether they exacerbate conflict or facilitate its resolution. Another visit was made to the USA in 1992 to conduct a series of interviews with environmental mediators and to assemble literature on environmental mediation and theories of negotiation.

Further work was undertaken in the Netherlands in 1992-3, the author preparing a review of the literature of alternative dispute resolution, using the material obtained in the USA, to provide a component of two studies undertaken with the Agricultural University at Wageningen. The first was concerning with the social impact of gravel working in the province of Limbourg (van Keken et al, 1993) while the second, an analytical framework, was developed from the literature review, applied to the Oosterschelde case study and used to analyse policy planning in the

Voordelta of the Rhine (Sidaway and van der Voet, 1993³). An extensive review of the literature of social conflicts was undertaken using the library of the Agricultural University at Wageningen in the summer of 1993.

Given the author's familiarity with British studies of impacts, it became more important to concentrate on a few areas in greater depth than to increase the number of cases. Material obtained in previous research was reviewed, and up-dated where necessary for inclusion in this study. Two detailed case studies were conducted which cover the detailed processes of conflict: the designation of the Pentland Hills Regional Park, Lothian Region, and the access agreements currently being re-negotiated to moorland areas in the Peak District National Park. Following training in the USA as an environmental mediator in 1993, the author facilitated meetings of the Access Consultative Group established by the Peak Park Joint Planning Board and this provided further insight into the continuing conflict in that national park.

Scope and Purposes of Social Theory: Understanding of Social Change and the Resolution of Conflict.

Bottomore (1969) commented that "we are very far from possessing a sociological theory of conflict at the present time" and went on to note how interest in the theoretical aspects of social conflict had waxed and waned over the years although he was writing during a particularly active period of theoretical work. He suggested that theories of conflict should enumerate its diverse forms, state its incidence and extent, describe the varying balance between "division and conflict on one side, integration and harmony on the other", and investigate the causes and effects of conflict.

Perhaps one of the reasons why a consolidated body of theory has not developed is that social conflicts have many dimensions. They occur at different levels from the inter-personal to the international; they vary in nature; they follow different patterns under different conditions; their outcomes can be classified in many ways; and they attract the attention of theorists with differing

During this study, supported by the Dutch Ministry of Agriculture, Fisheries and Nature Management, the author conducted the literature review and took the initiative in devising the evaluative framework and case study analysis presented in Chapter 4. His co-author, Han van der Voet, provided translations of the Dutch reports and interviews and contributed to the analysis.

theoretical backgrounds and perspectives, with the result that the purpose of theorizing will also differ from time to time. Yet all this variability has not prevented numerous attempts to develop an all-purpose theory; the bravest attempts being those of psychologists who are prepared to generalise from inter-personal theory to provide solutions to global conflict (e.g., Deutsch, 1973).

Within sociology, a more usual claim is to develop a "middle range" theory which explains the relationship of certain variables within a particular social dimension. In this way a partial theory is developed which contributes to social theory in general (Coser, 1967). This research lies within that tradition. Lipset has commented on the limitations of grand theory and suggests "social science is however still at its best in advancing what Robert K Merton has called middle-level theories and then explaining specific time- and place-limited developments" (Lipset, 1985, 340).

Theories of social conflict can serve two particular purposes which are relevant to this study, those of understanding social change and reactions to it and those which are concerned with the resolution of conflict. Added to these perspectives are theories from management science, concerned with conflict within organisations and negotiation theory, which is the basis of much of the pragmatic approach to mediation and other forms of alternative dispute resolution. This range of theories is examined during the course of this thesis. However, rather than present one consolidated literature review, the relevant material is considered at various stages of the analysis.

Thus this study is concerned to forge links between theory and practice by examining theory in the light of the empirical case studies. This is something of a departure from much theoretical writing which draws on other theorising but rarely evaluates theory against empirical evidence.

AIMS OF THE STUDY

The overall aims of the study are

- to assess empirically the contribution of social theories of conflict and conflict resolution to the understanding of conflicts between conservation and recreation; and

- to consider whether the outcome of conflicts can be predicted.

These aims are addressed in a series of hypotheses:

Hypothesis 1

That it is possible to identify a series of characteristic factors which distinguish between conflicts and co-operation concerning conservation and recreation. These may be described using a conceptual framework, irrespective of their institutional, cultural and geographical settings.

To consider this Hypothesis a series of characteristic factors which distinguish between conflicts and co-operation are identified in Chapter 2 using a set of case studies and these are organised into a "diagnostic" framework.

Hypothesis 2

That it is possible to identify the underlying theoretical concepts and social processes which govern the development of conflicts, and which may be used to predict their outcomes. These relationships may also be expressed within a conceptual framework.

To consider this Hypothesis the relevant theoretical concepts identified in the review of social conflict literature in Chapter 3 are organised within a second framework which incorporates the factors identified in Chapter 2, but which is "dynamic" in that it recognises the development of conflicts over time. Selected case studies are then used to illustrate the possible outcomes of a dispute in a given range of circumstances.

Hypothesis 3

That the factors which lead to the resolution of conflicts between conservation and recreation by negotiation may be identified and used to assess the likelihood of resolution being achieved by consensus.

To consider this Hypothesis a literature review of participation in decision-making and planning in Chapter 4 is used to identify an "evaluative framework of decision-making". Case studies are then evaluated to assess the likelihood of achieving stable decisions by the development of consensus.

Hypothesis 4

That a combined analysis of the processes of social conflict and negotiated decision-making increases the likelihood of predicting the outcomes of conflicts between conservation and recreation.

This Hypothesis is considered in Chapter 5, when elements of the dynamic framework developed in Chapter 3 are combined with the evaluative framework developed in Chapter 4. This Chapter considers the feasibility of integrating the two strands of analysis into a predictive model.

The Hypotheses are formally reviewed in Chapter 6, where the general issues raised by the study are discussed.

Initial Working Assumptions

The distinction between biological impact and sociological conflict.

Underlying this analysis is a basic distinction between impacts and conflicts as the terms are often used synonymously, particularly in the planning literature. In this study, the term "impact" is used to denote the effect of one phenomenon or set of phenomena on another. Recreation activities can produce impacts on wildlife (biological impacts) or on people (social impacts). This study is largely concerned with the former as a potential source of conflict, particularly those biological impacts which have consequences for the conservation of species or habitats.

Definitions of conflict and co-operation.

A further distinction is made between the terms 'dispute' and 'conflict'. Both are considered to be sociological phenomena, reflecting different levels of disagreement between people. Here, the term dispute is used to refer to a basic level of argument. This may escalate into a *conflict* which is then defined as:

- an unresolved dispute between competing interest groups which has reached the public arena, is controversial and may have political consequences, i.e., one interest group is attempting to control the action of another or their access to a semi-natural resource.

This definition contains most of the features identified in other definitions of conflict given in Annex 1.

The reference to interest groups in this definition carries with it the assumption that there is a degree of social organisation evident in the type of conflict under investigation. Thus the concern is with relationships between groups rather than individuals, although individuals may play a prominent role, and that the conflict is structured around these relationships. It is feasible that environmental conflicts may be 'unstructured', that is, that there is controversy about competing social values which are not formally represented by interest groups (see Clark et al, 1994). This phenomenon is not investigated in this study.

A contrasting set of circumstances to conflict is considered, that of *co-operation* - in which there is agreement on goals between the interested parties, who take collective action to achieve their goals.

Brown and Marriott (1993, 234) identify a number of characteristics of public policy disputes:

- that the issues are often complex, many centred and involve value judgements;
- that the nature, boundaries between, costs of, numbers of participants are often unclear;
- that there is often a variety of participants who each believe that they represent the

public interest or a section of it, many of whom [believe they] act in principle rather than their own self-interest;

- that there are many possible outcomes to the dispute;
- that the standards adopted by society may change as understanding, values or technology develop; and
- the ability to implement the agreement over a period of time is likely to be as important as the agreement itself. [This latter characteristic highlights the importance of the decision-making structure and its contribution to the outcome to the dispute.]

Mernitz (1980) has also listed the characteristics of environmental disputes. In general the essential components are less clearly defined than in labour and community disputes. He suggests that the setting of environmental disputes is not well defined because of varying scales of conflict, settlement and influence; he also suggests that it may not be easy to identify the representatives of certain groups. The issues may be complex, involving externalities, economic factors and varying geographical areas. He considers that the outcome of environmental disputes may produce confusing results with a redistribution of resources, income and power.

Outcomes are described in various ways, usually with the assumption that some steady state can be reached which is then termed 'conflict resolution'. Scimmeca (1993) suggests that it is necessary to draw distinctions between 'resolution': which addresses the root causes of the conflict; 'conflict management': which may not; and 'settlement' which implies coercion by a stronger party. These issues are addressed in Chapters 3 and 4.

Organising frameworks, explanatory theories and predictive models.

This thesis follows the convention that *theories* provide explanation and understanding, that *frameworks* are used to organise concepts as part of the development of theory and that *models* may be used to predict the future course of events. This study is largely concerned with theory and its representation in organising frameworks.

THE SELECTION OF CASE STUDIES

As mentioned earlier, the author has conducted a series of approximately 22 case studies during the last eight years which contain an underlying or potential conflict concerning the allocation of (or access to) natural resources. However the level of documentation of these studies varies considerably. For ease of presentation, twelve studies have been selected which have the most detailed documentation.

Ten cases are covered in the introductory analysis in Chapter 2, three cases of co-operation:

- participatory planning in the Bob Marshall Wilderness Area in Montana, U.S.A.;
- the management plan for Rutland Water in Leicestershire; and
- the voluntary restrictions on cliff climbing at South Stack, Anglesey, North Wales;

seven conflicts over:

- possible loss of public access for recreation to privately owned forests in the State of Maine, U.S.A.;
- motor sports events in England; and
- moorland access in the Peak District National Park.

and four conflicts over the potential designation of:

- the inter-tidal areas of the Oosterschelde estuary in Zeeland, Netherlands as a State Nature Reserve;
- the inter-tidal areas off Skomer Island in Dyfed, South Wales as a Marine Nature Reserve;
- areas of National Forests in North West Montana as Wilderness Areas; and
- the Pentland Hills in Lothian, Scotland as a Regional Park.

The detailed analysis of the dynamic process of conflict in Chapter 3 concentrates on three of these cases:

- moorland access in the Peak District National Park,
- motor sports events in England; and
- the designation of the Pentland Hills in Lothian, Scotland as a Regional Park.

The evaluation of decision-making in Chapter 4 is illustrated by one conflict - the changing approach to policy planning in the estuaries of the Rhine Delta in Zeeland, Netherlands; and an examination of the designation process for Dutch National Parks.

The concluding analysis in Chapter 5 utilises a core of five case studies

- moorland access in the Peak District National Park,
- motor sports events in England;
- the designations of the Pentland Hills as a Regional Park,
- the inter-tidal areas off Skomer Island as a Marine Nature Reserve; and
- policy planning in the Rhine Delta.

An outline of each case study and its principal documentary sources is given in Figure 1.1. Synopses of the case studies considered in Chapter 2 are included in Annex 3. More detailed narrative accounts of the conflicts under consideration in Chapters 3 and 4 are given in those chapters.

COOPERATION: non-contentious	potential conflicts, impact managed		
LOCATION	TOPIC	PRINCIPAL DOCUMENTARY SOURCES	
Bob Marshall Wilderness Area, Montana	Preventative planning to reduce potential impact of hiking, camping, and horse riding within designated wilderness area.	Sidaway (1994a), Stoakes (1987), (1990)	
Dutch National Park designation	Consultative procedures	Sidaway and van der Voet (1993)	
Rutland Water, Leicestershire	Preventative planning to reduce potential impact of water sports on wintering birds. Knights (1982), Sidawa (1991a)		
South Stack, Anglesey	Management of impact of cliff climbing to reduce potential disturbance to nesting birds	Sidaway (1988) (1991a)	
CONFLICTS: contentious.			
LOCATION	NATURE OF THE DISPUTE	DOCUMENTARY SOURCES	
Oosterschelde, Zeeland	Method of restricting access following designation of state nature reserve.	Sidaway (1992b)	
Skomer Island, Dyfed	Method of restricting access following designation of Marine Nature Reserve.	Countryside Council for Wales (1993), Nature Conservancy Council (1986) (1987), Sidaway (1988)	
Various locations in England	Potential impact of motor sports events on local communities and wildlife.	Elson et al (1986), LARA (1993), Stevens (1995),	
Northern Woods Maine	Potential restriction of public access on sale of private forests for sub-division and development.	Kellert (1989), USFS and Governors' Task Force (1990).	
North West Montana	Possible designation of Wilderness Areas.	Montana Wilderness Association (1990b), interviews conducted by author in 1990.	
Peak District National Park, Derbyshire	Public access to private land and potential recreational disturbance to ground nesting birds	Peak Park Joint Planning Board (undated), Sidaway (1988).	
Pentland Hills, Lothian	Designation of Regional Park	Pentland Hills Technical Group (1972), Sidaway (1991b) (1992c)	
Voordelta of the Rhine, Zeeland	Method of restricting access following designation of state nature reserve.	Sidaway and van der Voet (1993)	

INTRODUCTION

The purpose of this chapter is to investigate empirically the nature of conflicts between interest groups competing for access to semi-natural resources. The starting point for considering the possible factors which contribute to conflict and co-operation was a series of empirical observations made in an earlier study (Sidaway, 1988). However, an initial review of the literature on social conflicts suggested that a wider range of factors could be involved, although few writers ground their theories in much empirical evidence. The focus of this writing varies but it is generally recognised that conflicts differ in scale, from interpersonal disputes, through those involving groups in the community, communities within the nation, to international disputes. Such is the appeal of universal theory that some writers move happily from individual to international relations apparently assuming that theories which explain the origins of conflict are generally applicable at all levels (e.g., Deutsch, 1973).

Whether this generalisation across different levels of conflict is justified is rarely critically examined although Coser (1956, 1967) has written separately on inter- and intra-group conflict (between and within groups). Beals and Siegal (1966) draw on the first of these works and provide an anthropological perspective on conflicts in rural communities in India. At one point they use the term "scope" to describe the size of social unit involved in a conflict and also the term "pervasiveness" to cover the number and kinds of relationships disrupted by a conflict. The latter term in particular is useful as it recognises that a local dispute may have national implications or alternatively that the course of the local dispute may be influenced by, for example, developments in the national political scene.

Yet Deutsch (1973) is also amongst those writers (e.g., Mack and Snyder, 1957) who identify different dimensions of conflict including the scale, level, nature or type, motivation of parties (e.g. beliefs and interests), communication between them, focus of decision-making, historical context, politicisation and intensity. More significantly, generalised theories tend to ignore fundamental features of conflicts such as the role of power within a social structure. This is a frequent sociological criticism of psychologically-based theories. For example, Scimecca (1993)

faulted the human needs theory of conflict resolution propounded by Burton (1990) for this reason, for its emphasis on genetic determinism and its failure to consider the contextual role of culture and social institutions. Brown and Marriot (1993) also criticise Burton's theory on the grounds that it is based on the needs of the individual and ignores the role of organisations in fulfilling human needs of co-operation and association.

Within the preliminary analysis provided in this chapter, the contributory factors of such conflicts were considered to fall within a somewhat narrower range of dimensions. This analysis considers the subject or basic issue of contention; the motivations or interests of the competing parties and their inter-relationships which might be structured by the institutional setting in which the conflicts occur. Different aspects of these groups of factors are briefly considered before they are examined empirically in a series of case studies.

CONSIDERATION OF DIAGNOSTIC FACTORS

Substantive issues

Deutsch (1973) suggests that the issue in contention not only lies at the heart of each conflict but is also an important factor which affects the course of a conflict. However, he suggests:

"The issue or issues in conflict between nations, groups or individuals may be diffuse and generalised, as in ideological conflict, or specific and limited, as in the conflict over possession of a certain property. The issue may be important or trivial to the parties involved; it may permit compromise or require submission of one side to the other" (Deutsch, 1973, 5).

He later lists five basic types of issues, namely, control over resources, preferences and nuisances, values (over what "should be"), beliefs (about what "is") and the nature of the relationship between the parties. Although access to and control of scarce goods or resources are widely recognised as an important sources of conflicts (for example, Coser, 1956, 201) these issues are not invariably in dispute. As Beals and Siegal (1966) point out, most societies develop mechanisms for allocating resources.

"...before we can offer our own definition of conflict, however, we must determine what is meant by scarce goods in each society, and we must somehow explain how scarce goods can be responsible on one occasion for the development of co-operation and on another for the development of conflict. From some viewpoints, it appears probable that conflict is least likely to occur over the allocation of scarce goods, the allocation of scarce goods is considered a principal function of society (Beals and Siegal, 1966, 18).

Their observation is illustrated by the case studies considered in this thesis. All concern access to or control of biological resources, but in many cases mechanisms have been adopted which prevent potential conflicts. But although access is a common element in these cases, it may not be the stated issue. Indeed the biological impacts of outdoor recreation appear to be the common problem and ostensible cause of the conflicts and potential conflicts alike. In which case, it may be that one particular aspect of the *impact* may be more likely to be a substantive issue and at the heart of the conflict than others and that this should be subjected to further analysis. Beals and Siegal go on to suggest that important aspects of conflicts may be "... the nature of the activity, an exchange of opposition, and the effect of that activity on the organisation." (Beals and Siegal, 1966, 20).

Mack and Snyder (1957) in a lengthy literature review identify a number of factors which may be among the underlying sources of or may accompany or intensify conflicts. They do not attempt to define conflict but suggest that it has the following essential properties:

- "1. Conflict requires at least two parties or two analytically distinct units or entities.
- 2. Conflicts arise from position scarcity and resource scarcity.
- 3. Conflict behaviours are those designed to destroy, injure, thwart, or otherwise control another party or other parties, and a conflict relationship is one in which the parties can gain (relatively) only at each other's expense.
- 4. Conflict requires interaction among parties in which action and counteractions are mutually opposed.
- 5. Conflict relations always involve attempts to gain control of scarce resources and positions or to influence behaviour in certain directions; hence a conflict relationship always involves the attempt to acquire or exercise power or the actual acquisition or exercise of power.
- 6. Conflict relations constitute a fundamental social-interaction process having important consequences.
- 7. A conflict process or relation represents a temporary tendency towards disjunction in the interaction flow between parties.
- 8. Conflict relations do not represent a breakdown in regulated conduct but rather a shift in the governing norms and expectations." (Mack and Snyder, 1957, 35-37).

They later identify conditions of conflict:

"...certain elements inherent in the nature of the parties to conflict, in the interaction relationships between partners, and in the social context will often account for the origin, form, intensity, duration, limits and resolution of conflict." (Mack and Snyder, 1957, 46)

to which they add two other important conditioning factors - power relationships and the availability of information.

These suggestions confirm that in addition to assessing the contribution of recreational impacts, as the ostensible matters in dispute, further analysis of the origins of conflict might concentrate on the nature or *interest* of the parties, the *interactions* between them and the social or *institutional* context within which the dispute occurs.

Motivations of Interested Parties

People organise around a "cause", which might be their material interests, their principles or their political agenda. Mack and Snyder (1957) suggest that conflicts can be about rights and issues or that they may be ideological and cultural in nature. Deutsch (1973), Van Doorn (1966) and Baumgartner et al (1978) emphasise the role of ideology, principles or viewpoints. The main distinctions within such motivations are between *beliefs*, i.e., values or concerns about future goals, and *interests* which are the economic concerns which may be threatened or advanced by conflict.

Lowe and Goyder (1983) suggest a basic distinction between principle and interest groups. Principle groups advance broad altruistic aims, while interest groups are concerned with immediate short-term material benefits. While the principle/interest distinction has its attractions, it is also difficult to use in practice. It may be that interest groups tend to move towards more principled arguments as a conflict escalates, meanwhile different factions within an interest group may argue from different standpoints. Typically, the national headquarters of an organisation will argue from a position of principle, which may help to legitimise the advancement of its interests or to serve the function of communicating with a wider reference group in a statement of common identity. Meanwhile some of its local members are more willing to concede principles to obtain the more tangible benefits of negotiation.

This clash of principle seems likely to occur within the conflicts between outdoor recreation and nature conservation that are the subject of this study. Outdoor recreation epitomises changing (and possibly rising) demands of a consumer society while conservationists are motivated by the advancement of *principles* that seek to regulate and control the rise of consumerism.

Interest groups seek to secure or control access to resources through the market or the political arena. Within the recreation sphere these access mechanisms have been fully described in a study of the topic in England and Wales (Centre for Leisure Research, 1986). However an interest group may elevate its concerns into a matter of principle (a public interest) and seek broader support to legitimate its case. If successful, legitimation comes in the form of legislation. To secure these goals the level of political organisation of interests may be important. Those interests which are politically well-organised may be better able to advance their interests than those that are not. This study also suggested that challenges to the status quo by competing interests and their responses to change may be significant in many disputes.

Although conflicting ideologies are a common feature of disputes, in resolved cases ideological differences are often suppressed in the bid for consensus, suggesting that interest groups with differing ideologies can reach settlements. This would require that the ideologies or underlying beliefs of interest groups remain unchanged, while their interest in a resource may be negotiable. Indeed environmental mediators make much of this point, stressing the need to differentiate between "position" and "interest". Fisher and Ury (1981), for example, use the latter term in a different sense from some other authors. One environmental mediator described the value of not challenging an interest group's ideological position, for example, the right of the National Rifle Association to use firearms within Los Angeles National Forest, California. In this way he was able to identify a negotiable goal (interest), the gain of a target practice site in a safe isolated gully (Tice, 1990, pers. comm).

Sidaway (1991b), in an analysis of public objections to the designation of the Pentland Hills Regional Park, suggested that it is possible to identify interests from their public expressions of concern and categorise these into, for example, material interests (having a commercial or proprietorial interest in the resource); and altruistic interests: (e.g., seeking public access to or conservation of the resource).

Inter-relationships

It has already been noted that Deutsch (1973) considers the nature of the relationship between the parties could be a contributory factor; conflict arising when the relationship is poor, cooperation when it is good. A variety of other authors, including Mack and Snyder (1957), think on similar lines. Both Amy (1987) and Druckman (1993) present typologies which categorise conflicts of interests, of misunderstanding and clashes of fundamental belief as alternative contributory factors to the initiation of conflicts. In this context, misunderstandings would arise from poor communication between the parties or a lack of information on the subject at issue.

Organisational and Institutional Factors

The way in which decisions are made and, in particular, whether the process of decision-making leaves the affected parties questioning whether justice has been done, could be another important aspect of conflicts. Along with Beals and Seigal's (1966) allocation mechanisms, Baumgartner et al (1978) suggest that there need to be "appropriate arrangements" for dealing with disputes. Whilst Mack and Snyder in their literature review (1957) identify the social and institutional context as one of the pre-conditions of conflicts, Deutsch (1973) identifies the social norms which regulate disputes as important factors in the social environment of conflicts.

Within such contexts, individuals rarely act alone. More characteristically they organise themselves into local groups, which may or may not have links into a wider political network. Other characteristics which may be significant could be the numbers of such groups operating in a given situation, the relationships between the membership or constituency and the individuals who are acting as representatives and whether organisations employ professionals to perform this role.

PROPOSITIONS RELATED TO GROUPS OF FACTORS

Thus substantive issues, interests as motivating factors, interactions between the disputing parties and the institutional settings, with their associated forms of decision-making, provide convenient groupings of factors for the subsequent analyses. The selection of these factors has been linked to four propositions based on an initial inspection of the case studies, namely that:

- a Conflicts are largely issue-driven. More exactly, the damaging effects of recreational impacts on ecosystems are in themselves the major cause of conflicts between outdoor recreation and nature conservation.
- b Conflicts stem from the nature of the *interests* involved in the dispute.
- c Interest group *interactions* (such as misunderstandings and poor communication) contribute to the escalation of a dispute into a conflict.
- d Management and decision-making processes (the *institutional setting*) can either exacerbate conflicts or contribute to their resolution.

Impacts

Proposition (a) suggests that the probability of conflicts arising might be increased by

- the (perceived) severity of the impacts that particular recreation activities have on species or habitats;
- the special conservation status of areas which might increase sensitivity of conservation organisations to their use for recreation (irrespective of any previous history of use);
- the frequency or extensiveness [incidence] of particular recreational impacts;
- high levels of use; and
- as was suggested earlier a lack of understanding of these impacts.

These five factors are described as factors 1-5 in Figure 2.1.

Interests

Proposition (b) suggests that the probability of conflict might increase or decrease according to

- the *nature* of the competing interests (a material interest in the resource might be ownership, commercial or management, alternatively there may be more altruistic interests such as conservation);
- the numbers of interest groups involved in the dispute, larger numbers leading to

increased complexity in relationships;

- clashes of beliefs or ideology;
- the advancement of interest as matters of principle by competing interests; and
- the awareness or sensitivity of groups to the interests of others (particularly the sensitivity of recreation groups to conservation issues) are other aspects of interest groups that might be material in conflicts.

These five factors are described as factors 6 - 10 in Figure 2.1.

Interactions

Proposition (c) suggests that the probability of conflict might increase

- when value judgements are made about the compatibility of activities with the management aims or sustainability of the resource (frequently referred to as appropriateness),

if there is a lack of communication between the interested parties;

- from reactions (particularly in the part of long-established interests) to new claims on the resource;
- the tactics or negotiation strategies used by interest groups during the course of the dispute; and
- the involvement of the news media.

These five factors are described as factors 11 -15 in Figure 2.4.

Institutional Settings

Proposition (d) suggests that the probability of conflict might be increased

- by the level of political organisation of the interest groups;
- whether or not management aims and the authority of the decision makers are accepted by all of the disputing parties;
- by the extent of public involvement in decision-making;
- by the type of decision-making (for example adversarial situations may be less conducive to co-operation between the parties than negotiations);
- by the existence of mechanisms to deal with changing circumstances; and
- the distribution of power.

These seven factors are described as factors 16 -22 in Figure 2.1.

METHOD OF ANALYSIS

The propositions are examined in turn using the set of case studies outlined in Chapter 1. Each of the four propositions is examined by considering the possible contributory factors that have been listed. When a factor appears as a consistent feature of each of the conflict case studies or each of the co-operation case studies, and shows consistent differences between them, it is considered to be a discriminatory factor. Each group of factors is considered in turn and the analysis is summarised in the following matrices:

- ▶ the nature of biological impacts are presented in Figure 2.2;
- the characteristics of interests are presented in Figure 2.3;
- interest group interactions during a dispute are considered in Figure 2.4; and
- institutional settings are considered in Figure 2.5.

Full details of the factors and how they were assessed are given in Annex 2, while synopses of each case study, showing the documentary sources from which the assessment is based, are given in Annex 3.

FIGURE 2.1: FULL LISTING OF FACTORS				
FACTOR CATEGORISATION				
NATURE OF BIOLOGICAL IMPACT				
1: Type of recreational activity	Activities listed			
2: Nature conservation status of area	Protected designations and notifications or impacts on charismatic or threatened species			
3: Incidence of impact	Extent, timing and/or frequency of impact			
4: Level of visitor pressure	Quantity of visitor use			
5: Understanding of impact	Understood or uncertain.			
CHARACTERISTICS OF INTERESTS				
6: Nature of interests	Material: (commercial or proprietorial); altruistic; managerial and/or professional.			
7: Number of interests	Number of interest groups.			
8: Conflicting ideologies	Opposed or shared by interest groups.			
9: Advancement of principles by interest groups	Motive presented as broad altruistic aim or material interest.			
10: Environmental awareness of interest groups	Response to impact is sensitive or insensitive.			
INTEREST GROUP INTERACTIONS DURING DISPUTE				
11: Appropriateness of resource use	Whether the appropriateness of (recreational) use of the resource is an issue in the dispute.			
12: Communication networks	Well established or poorly established; effective or ineffective.			
13: Reaction to new claim on resource	Adverse or tolerant when status quo is challenged.			
14: Negotiating strategies of interest groups	Confrontational or conciliatory.			
15: Involvement of media	High or low.			
INSTITUTIONAL SETTING				
16: Level of political organisation	Unorganised, organised or highly organised.			
17: Acceptance of management aims	Accepted or challenged.			
18: Public involvement in decision-making	No public involvement, limited or wide involvement.			
19: Type of decision-making	Adversarial or negotiative.			
20: Mechanisms to deal with change	Exist or absent			
21: Authority of decision maker	Accepted or challenged.			
22: Distribution of power	Balance between interests is equal or unequal.			

THE NATURE OF BIOLOGICAL IMPACTS

FIGURE 2.2: ANALYSIS OF IMPACTS					
CASES	FACTORS 1. Type of recreation activity	2. Nature conservation status of area	3. Type and incidence of impact	4. Level of visitor pressure	5. Understanding . of impact
CO-OPERATI	ON: non-contentio	us potential conflicts	, impact managed		
Bob Marshall Wilderness Area	Hiking, horse trails, primitive camping	Designated	Vegetation damage localised	250,000 visits p.a. to 607,500 ha.	Understood
Rutland Water	Non-motorised water sports	Designated	Disturbance to birds reduced by zoning.	500,000 visits, water area of 1254 ha.	Understood
South Stack	Climbing, bird watching	Undesignated but protected species	Disturbance to birds. Time and space specific	Not recorded (very low)	Understood
CONFLICTS;	CONFLICTS; contentious				
Ooster- schelde	Water sports	Designated	Disturbance to birds and seals. Time/location specific	Use not recorded, 2400 boats on 35,000 ha.	Uncertain, contentious
Skomer Marine Nature Reserve	Sub-aqua, canoeing, fishing.	Designated	Disturbance to birds and seals. Time/location specific	1500 divers p.a. MNR covers 1500 ha of sea bed	Uncertain, contentious
Motor Sports	19 types of motor sports	Designated and undesignated	Disturbance and site erosion. Location specific	Not recorded	Uncertain, contentious
Peak District Moorlands	Hill walking climbing	Designated	Path erosion and disturbance to birds. Location specific	22 million visits p.a. to NP of 144,000ha.	Disturbance uncertain, contentious

Commentary on Impact Factors

Activities (Factor 1) A wide range of activities were represented in both the conflict and factor case studies but there was no consistent relationship between them. For example, the impacts associated with motorised sports were almost invariably contentious but the biological impacts of this activity were only one minor aspect of a social conflict between motor sport organisations and neighbouring communities in which the image of the sport, based on noise, nuisance and

other disturbance, feature prominently (Elson et al, 1986). Meanwhile the impacts of other more traditional countryside recreation activities may be the subject of conflicts in some areas. For example, the alleged impacts of walking on moorland breeding birds in the Peak District National Park are considered potentially damaging, although more obviously damaging impacts of this activity, such as the trampling of moorland vegetation along the Pennine Way, are not. Water sports provide an example of two areas (admittedly in different countries) where the same activity can feature in an example of conflict or co-operation (e.g., Rutland Water and the Oosterschelde).

Conclusion No consistent pattern can be ascribed to the activity alone, this factor does not discriminate between conflicts and co-operation.

Nature conservation status of area (Factor 2) Although most of case studies were in designated areas, recreational impacts were managed without conflict in both designated and undesignated areas suggesting that this is not a critical factor. Further cases of conflicts and co-operation concerning the same activities but occurring in both types of area can be found (e.g. orienteering - see Sidaway, 1988). Nevertheless the decision to designate an area may initiate a conflict (e.g. Skomer, Oosterschelde).

Conclusion No consistent pattern can be ascribed to the conservation status of the area, this factor does not discriminate between conflicts and co-operation.

Incidence of impact (Factor 3) The extent of a recreational impact did not appear to be an important factor compared to its specific location, which may be very small (e.g. a nesting territory) and its timing (e.g. the nesting season). However while such localised impacts may be the subject of a dispute, the case studies illustrated that these impacts can also be successfully managed.

Conclusion No consistent pattern can be ascribed to the incidence of the impact, this factor does not discriminate between conflicts and co-operation.

Level of visitor pressure (Factor 4) As most of these impacts were highly localised, absolute levels of use were not an important factor. Impacts may be managed in very popular locations thus avoiding conflict (e.g., Rutland Water, Leicestershire and Precipice Path, Acadia National Park Maine), whilst conflicts have occurred over very low levels of use in critically located sites

(e.g. sub-aqua diving near cliff nesting birds at Skomer Island). What differentiates between these situations may be the different perceptions of risk by the interested parties, a characteristic of the interest group and not the impact itself. It is also worth noting that reliable statistics on levels of use are rarely available so that the relative levels of use of different areas could only be compared subjectively in the case studies.

Conclusion No consistent pattern can be ascribed to the level of visitor pressure, this factor does not discriminate between conflicts and co-operation.

Understanding of impact (Factor 5) The understanding of the biological impact of an activity has two components, whether information or research on the impact exists and how any information is interpreted. As almost invariably little specific research has been carried out on recreational impacts (Sidaway, 1994b), uncertainty contributes to misunderstanding and the significance of the impact in conservation terms is often contentious. The case studies demonstrate a marked difference between conflicts and co-operation in this respect. Interestingly in the two British co-operation cases, although relatively little specific research has been done on the impacts, their management is uncontentious as the risk of serious damage is accepted by recreation organisations. In the Bob Marshall Wilderness Area research has been limited to very few impacts but here also management is uncontenious. In the conflict cases, the impacts are contentious, for example, because the validity of one specific local study (Yalden & Yalden, 1989) has been challenged on behalf of the principal recreation interest (Watson, 1991), or the evidence of disturbance to cliff-nesting birds is based on occasional observation and its validity and relevance to the management of the underwater reserve was challenged by the diving organisations and the Sports Council for Wales (Sidaway, 1988).

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the level of understanding of the impact and the differing interpretations made by the competing interest groups so that these become a controversial feature of the conflicts studied.

Overall conclusions on impacts

Four of the factors which featured in this analysis - type of recreation activity (Factor 1), conservation status of site (Factor 2), incidence of impact (Factor 3) and level of visitor pressure (Factor 4) - were not consistent features of conflict or co-operation cases. Thus the existence of a recreational impact did not invariably lead to conflict and where such impacts featured in conflicts they were not the sole cause. In these examples, conflicts could be resolved or avoided by sensitive impact management. In the co-operation cases, the *understanding of the impact* (Factor 5) was not in contention even when little was known about the impact. While this could also be true in some conflicts, there were cases where much was known about the impact but its effects were in dispute. This factor did discriminate between conflict and co-operation cases and can contribute to the later analysis. Nevertheless the general conclusion is that it is how the issue is handled, not the issue itself, that determines whether a dispute will escalate into a conflict.

This analysis lends little support to Proposition (a) - that the deleterious effects of recreational impacts on ecosystems are in themselves the major cause of conflicts between outdoor recreation and nature conservation.

CHARACTERISTICS OF INTERESTS

FIGURE 2.3	FIGURE 2.3: ANALYSIS OF INTERESTS							
CASES	FACTORS 6. Nature of interests	7. Number of interests	8. Conflicting ideologies	9. Advancement of principles by interest groups	10. Environmental awareness of interest groups			
CO-OPERATIO	ON: non-contentio	us potential conf	licts, impact manag	ed				
Bob Marshall Wilderness Area	Proprietorial /professional, commercial altruistic/self	Four groups, 35 member task force.	Shared beliefs in wilderness designation	Issues not elevated to matters of principle	Sensitive response			
Rutland Water	Proprietorial /professional altruistic and self	Three groupings	Differences respected and ignored	Issues not elevated to matters of principle	Sensitive response			
South Stack	Proprietorial, altruistic, self and professional	Two	Shared beliefs in conservation	Issues not elevated to matters of principle	Sensitive response.			
CONFLICTS;	contentious							
Ooster- schelde	Commercial, altruistic, self and professional	Many: three groupings	Opposed	Issues elevated to matters of principle	Insensitive response			
Skomer Marine Nature Reserve	Proprietorial /professional altruistic and self	Two groupings	Opposed	Issues elevated to matters of principle	Insensitive response.			
Motor Sports	Proprietorial, altruistic, self and professional	Many: four groupings	Opposed	Issues elevated to matters of principle	Both sensitive and insensitive responses			
Peak District	Proprietorial /professional altruistic/self	Many: four groupings	Opposed	Issues elevated to matters of principle	Insensitive response.			

Commentary on interests

Nature of interests (Factor 6) Various combinations of interest were represented throughout the cases studies and there was no consistent pattern conforming to conflict or co-operation cases. Certain interests were difficult to categorise, notably for recreation activities which could be said to contain both altruistic and self-interested elements. Public land managers typically operate to

multiple aims and can therefore be inferred to be advancing both their own professional (material) interests as well as more altruistic goals which stem from their mandate. Yet apparently benevolent combinations of proprietorial/altruistic interest involving resource ownership by public or non-governmental organisations do not necessarily reduce the likelihood of conflict; for example, public ownership of Skomer Island or the Oosterschelde inter-tidal areas. Furthermore the professional/altruistic combination of interests provided by planners did not necessarily prevent conflicts as was seen in the case of motorsports in England and Wales. Conclusion As no consistent pattern can be ascribed to the nature of interests, including resource ownership, this factor does not discriminate between conflicts and co-operation.

Number of interests (Factor 7) The numbers of interested parties differed markedly from case to case with no consistent pattern between conflict and co-operation cases. Although a large number of interests might be thought to lead to complexity and therefore conflict, this was not necessarily the case. Most situations were simplified by the creation of informal coalitions of interest, which resulted in a small number of groupings.

Conclusion No consistent pattern can be ascribed to the number of interests, this factor does not discriminate between conflicts and co-operation.

Conflicting ideologies (Factor 8) The cases of co-operation demonstrate that a shared belief (in conservation) may contribute to co-operation or that interests with deep-seated differences of belief can co-exist when those differences are set aside in the mutual interest of impact management. The opposite is true in conflicts where ideological differences are highlighted. Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the extent to which conflicting ideologies are advanced by competing interest groups in the conflicts studied and the extent to which they are suppressed in the cases of co-operation.

Advancement of principle (Factor 9)

The manner in which interest groups may advance a broad altruistic aim (such as freedom to roam or the conservation of nature) as a matter of over-riding principle is associated with the underlying clashes of ideology (Factor 8), which has been previously identified as a feature of conflicts.

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of case study. In conflicts, differences of ideology are elevated to matters of non-negotiable principle, whilst this does not occur in the cases of co-operation.

Environmental awareness of interest groups (Factor 10) An insensitivity of recreational users or interest groups towards the biological impacts that their activities may cause was a consistent feature of the conflict case studies. This does not occur in the co-operation cases.

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of cases.

Overall conclusions on interests

The number of interest groups and the nature of their material interests do not discriminate between cases of conflict and co-operation in this analysis, whereas conflicting ideologies, the advancement of arguments of principle by interest groups and their environmental awareness do.

This analysis lends support for Proposition (b) - that conflicts stem at least in part from the certain aspects of interest groups, notably their beliefs and the extent to which competing groups advance them during the course of a dispute.

INTEREST GROUP INTERACTIONS DURING A DISPUTE

FIGURE 2.4:	FIGURE 2.4: ANALYSIS OF INTERACTIONS						
CASES	FACTORS 11. Appropriateness of resource use	12. Communication networks	13. Reaction to new claim on resource	14. Negotiating strategies of interest groups	15. Involvement of the media		
CO-OPERATION	N: non-contentious	potential conflicts,	impact managed				
Bob Marshall Wilderness Area	Appropriate- ness not disputed	Well established	No new claims	Conciliatory	Not known		
Rutland Water	Appropriate- ness not disputed	Well established	Adverse response to tourism development	Conciliatory	Not known		
South Stack	Appropriate- ness not disputed	Well established	No external claims	Conciliatory	Not known		
CONFLICTS; con	ntentious						
Oosterschelde	Appropriate- ness disputed	Poorly established	Adverse to new regulations	Confrontational	High		
Skomer Marine Nature Reserve	Appropriate- ness disputed	Well established, ineffective	Adverse to new regulations	Confrontational	Not known		
Motor Sports	Appropriate- ness disputed	Poorly established	Adverse to existing and new motor sport venues	Confrontational	Locally high		
Peak District	Appropriate- ness disputed	Poorly established	Adverse to new recreation activities	Confrontational	High		

Commentary on Interactions

Appropriateness of resource use (Factor 11) Certain recreational activities may be considered generally compatible with the sustainability of the resource by its managers and other users, although these activities may be restricted on a seasonal and/or spatial basis. In these (cooperation) cases "appropriateness" (i.e. the principle of recreational use) was not an issue whereas it was a marked feature of conflicts. But the definition of "appropriate" use of a natural or semi-natural resource is subjective and is based as much on the values of the dominant interest group as it is on the harmful impacts of the activity. Thus appropriateness of use may

be used as an exclusionary device, legitimating and reinforcing the position of the controlling group with assertions about the harmful effects on wildlife of other users being used to legitimise their case (see particularly the discussion of motorsports in Harrison, 1991).

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of case study. In conflicts, the appropriateness of a recreation activity is likely to be questioned by other interests, although this labelling may be based on the perceived impacts on the resource or its social acceptability to existing users. This does not occur in co-operative situations.

Communication (Factor 12) Well established and effective communication is a feature of the cooperative cases, whereas the reverse is true of conflicts. In the latter cases, the channels of communication, whether these are formalised into consultative or advisory management committees or informal networks, are unlikely to exist. Where they do there may be other failures, such as representatives establishing good personal contacts with other interests but failing to liaise with their own organisations, e.g., Skomer where local communication was good but communication between national organisations was ineffective.

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of case study. In the cases of co-operation, good channels of communication are established, whilst this does not occur in conflicts.

Reaction to new claims on the resource (Factor 13) Resistance from established interests to new claims, whether these are new recreational activities or proposed new environmental regulations is a common feature of conflicts. The reverse would appear to be the case in the co-operation cases, although as no new claims were observed in most cases, it is not certain whether they would or would not be resisted. At Rutland Water the external threat of new development came from outside the co-operating body of water users.

Conclusion Due to the lack of evidence on the response to new claims in co-operation cases, this factor cannot be used to discriminate between conflicts and co-operation.

Negotiating strategies of the interest groups (Factor 14). There is a consistent relationship between the confrontational tactics adopted by interest groups in conflicts and the conciliatory stance of co-operating interests.

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of case study.

Media involvement (Factor 15) The lack of data particularly on co-operation cases precludes firm conclusions being drawn on the contribution of this factor. However as media interest in controversy is often encouraged by campaigning interest groups (e.g., the Oosterschelde and the Peak District) it seems more likely that media involvement may contribute to the escalation, rather than the initiation of a conflict, i.e., high media interest is a symptom and not a cause of conflict.

Conclusion Due to the lack of evidence on media involvement in co-operation cases, this factor cannot be used to discriminate between conflicts and co-operation.

Overall conclusions on interactions

On close examination it is unlikely that several of these factors are independent, they may be closely related or even measuring the same thing. For example, part of the confrontational strategy adopted by a campaigning organisation will be to develop close relations with the media and engage their interest in controversy. Co-operating parties have little interest in such tactics, and co-operation is of less interest to the media than conflict. Part of the resistance of an established interest to a new claim may be to challenge the credentials of that claim by suggesting that it is inappropriate and damaging to the sustainability of the resource. Thus Factors 11 and 13 may well be measuring the same thing.

Proposition (c), that interest group interactions (such as misunderstandings and poor communication) contribute to the escalation of a dispute into a conflict, is largely substantiated by these case studies.

THE CONTRIBUTION OF THE INSTITUTIONAL SETTING TO A DISPUTE

FIGURE 2	FIGURE 2.5: ANALYSIS OF INSTITUTIONAL SETTINGS						
CASES	FACTOR 16.Level of political organisation	17. Acceptance of management aims	18. Public involvement in decision- making	19. Type of decision- making	20. Mechanism to deal with change:	21. Authority of decision maker	22. Distribution of power
Co-operation	: non-contenti	ous potential c	onflicts, impac	t managed			
Bob Marshali Wilderness Area	Organised	Accepted	Wide involve- ment	Negotiative	Exists	Accepted	Evenly balanced
Rutland Water	Organised	Accepted	Wide	Negotiative	Exists	Accepted	Evenly balanced
South Stack	Highly organised	Accepted	No public involve- ment	Negotiative	Exists	Shared responsibil ity	Evenly balanced
CONFLICTS	; contentious						
Oosterschelde	Disparity: highly/ organised	Challenged	Limited	Adversarial	Absent	Accepted	Unequal
Skomer Marine Nature Reserve	Highly organised	Challenged	Limited to wide	Committee negotiative, Designation adversarial	Exists	Accepted	Evenly balanced
Motor sports	Disparity highly/ organised	Challenged	Limited	Adversarial	Absent	Accepted	Unequal
Peak District	Highly organised	Challenged	Limited	Adversarial	Exists	Challenged	Evenly balanced

Commentary on Institutional Settings

Level of political organisation (Factor 16) In most of the case studies a basic degree of organisation was evident and few individuals who were not members of organisation made direct representations or made a significant contribution to the debate. Moreover casual participation in some popular recreational activities, such as sightseeing and walking, cannot be formally represented by interest groups and these interests may be considered in a paternalistic way by the professional managers. In the conflict case studies, interest groups were highly organised, usually employing professional officers, but as there were also examples of professionals cooperating, for example in the agreements over voluntary restrictions on climbing at South Stack,

professionalism, per se, is not a consistent factor which discriminates between the two types of case study.

Conclusion This factor does not discriminate between conflicts and co-operation as there is no consistent pattern in the two types of case study.

Acceptance of management aims (Factor 17) There is a consistent pattern in which management aims were accepted in the co-operation cases but challenged in the conflicts.

Conclusion This factor does discriminate between conflict and co-operation cases as there is a consistent pattern in the two types of case study.

Public involvement in decision-making (Factor 18) Public consultation was almost invariably limited to the immediate stakeholders and although there were examples of wider consultation in planning exercises, there were virtually no examples of full public involvement from the initiation of a project throughout all stages into its management. The possible exception was the Bob Marshall Wilderness Area "Limits of Acceptable Change" exercise. However, in the case studies as a whole, there did not appear to be a consistent relationship between public involvement in decision-making and the prevention of conflict.

Conclusion As no consistent pattern can be ascribed to the extent of public involvement of interest groups in planning or decision-making, this factor does not discriminate between conflicts and co-operation.

Type of decision-making (Factor 19) In this analysis, adversarial decision-making was a major feature of the institutional setting of conflicts, whilst negotiative decision-making was a feature of the co-operation cases.

Conclusion This factor does discriminate between conflicts and co-operation as there is a consistent pattern in the two types of case study.

Mechanisms to deal with change: (Factor 20) A range of mechanisms to deal with changing circumstances can be found in both the conflict and co-operation case studies. The mechanisms include management or advisory committees and/or management plans which may be brokered with interested parties. This form of analysis does not allow the effectiveness of these mechanisms to be assessed but there is also the problem of ensuring that new external factors

are considered and formally represented in decision-making. Frequently existing interest groups exclude new interests from representation by erecting the barrier of "appropriateness" (see also Emmet's (1975) discussion of social filters in recreation and Centre for Leisure Research, 1986). Conclusion As no consistent pattern can be ascribed to the nature of interests, including resource ownership, this factor does not discriminate between conflicts and co-operation.

Authority of decision maker (Factor 21) The acceptance of the authority of the decision-maker is a consistent feature of almost all the case studies suggesting that the type of conflict being studied is likely to be resolved "within the system" (see Coser, 1956). Indeed in almost all public policy decisions of this kind, aggrieved parties can appeal to a superior body which has jurisdiction over the resource manager and whose authority is accepted. Thus in most of the conflicts studied the authority of the resource manager might be challenged but not that of his/her superior.

Conclusion As the authority of the ultimate decision maker was unchallenged in almost all of the cases studied, this factor cannot be used to discriminate between conflicts and co-operation.

Distribution of power (Factor 22) Although the distribution of power may be markedly uneven in certain conflict cases, this factor does not appear to feature in the conflict or co-operation cases in a consistent way. The balance of power portrayed in these case studies suggests some interesting principles. An unequal distribution of power at all political levels is illustrated by one-sided disputes favouring the stronger party, e.g., motor sports in Britain, (and in the recreational use of off-road vehicles in the United States) and the designation of the Oosterschelde Nature Reserve.

Conclusion As no consistent pattern can be identified in the distribution of power, this factor does not discriminate between conflicts and co-operation.

Overall Conclusions on institutional settings

In this analysis, only two factors discriminate between cases of conflict and co-operation: the acceptance of management aims and the type of decision-making.

There is limited support from the case studies for Proposition (d) - that management and decision-making processes (the institutional setting) can exacerbate conflicts or

contribute to their resolution.

This analysis lends support to the validity of the initial distinction that was made between impacts and conflicts, so that while an impacts may be the issue around which a conflict may form, many impacts are managed in a mutually beneficial co-operative manner. Thus it is the relationship between the interested parties that is crucial. Certain aspects of their competing interests, their interactions, and the institutional setting are characteristic of the way in which they attempt to broker a reallocation of resources. Two formulations can now be outlined, one is typical of conflict, the other of co-operation.

THE DEVELOPMENT OF A DIAGNOSTIC FRAMEWORK TO DISTINGUISH CONFLICTS

Discriminating Factors

From the foregoing analysis it can be seen that the factors fall into one of two categories:

- i) those that do not discriminate conflict from co-operation; and
- ii) those that clearly discriminate conflict from co-operation.

Factors in the first of these categories are listed in Figure 2.6. This list includes factors which do not discriminate because:

- a they are common to the conflict and co-operation case studies (Factors 2, 3, 7, and 21);
- b they are not a consistent feature of either conflict or co-operation case studies (Factors 1, 4, 6, 16, 20 and 22); or
- c there is insufficient data from the case studies to provide a strict examination of the role of the factor (Factors 15 and 18).

FIGURE 2.6: FACTORS WHICH DO N AND CO-OPERATION	OT DISCRIMINATE BETWEEN CONFLICTS
FACTOR	FEATURES
1. Type of recreation activity	No consistency -wide range of activities feature in conflict and co-operation cases.
2. Nature conservation status of the area	Conflicts occur in both designated and non-designated sites but changes in status can be at issue (see factor 13).
3. Incidence of recreational impact	Similar impacts may be the subject of dispute or be successfully managed.
4. Level of visitor pressure	No consistency - wide range of pressures feature in conflict and co-operation cases.
6. Nature of competing interests	No consistency - various combinations of interests feature in conflict and co-operation cases.
7. Number of interests	Although the number of interests varies, coalitions into smaller groupings are common and feature in conflict and co-operation cases.
15. Involvement of the media	Media attention is attracted to conflicts but there is insufficient evidence from the case studies to draw a firm conclusion on this factor.
16. Level of political organisation	No consistency - varying levels of organisation exist in conflict and co-operation cases.
18. Public involvement in decision-making	No examples of full involvement were observed.
20. Mechanisms to deal with change	No consistency - mechanisms exist in conflict and co- operation cases.
21. Authority of decision maker	Although often challenged at a local level, even in conflicts the authority of ultimate decision makers is accepted, as is the case in co-operation cases.
22. Distribution of power	No consistency - power may be evenly or unevenly distributed in conflicts, although it appears to be evenly balanced in the co-operation cases.

Those factors that can be used to distinguish conflicts from co-operation are set out in Figure , 2.7.

FIGURE 2.7: A DIAGNOSTIC FRAMEWORK TO DISTINGUISH BETWEEN CONFLICT AND CO-OPERATION						
DISCRIMINATING FACTORS	DISTINGUISHING FEATURES OF CONFLICT	DISTINGUISHING FEATURES OF CO-OPERATION				
IMPACT 5 Understanding of impact	Uncertainty and contention about impact	Impact understood and uncontentious				
INTEREST 8 Opposing ideologies	Competing ideologies much in evidence	Ideology shared or differences respected and ignored				
9 Advancement of principle	Issue elevated to a matter of principle	Not an issue				
10 Environmental awareness	Interest groups insensitive to environmental impact	Interest groups sensitive to impacts and agree preventative action				
INTERACTIONS	·					
12 Communication networks	Poorly established	Well established and effective				
13 Reaction to new claim on resource [11 Appropriateness of resource use]	Adverse reaction on the part of existing interests. For example, recreational use may be considered inappropriate	[uncertain from cases how a new claim would affect the situation] Appropriateness is not an issue				
14 Negotiation strategies of interests	Confrontational	Conciliatory				
INSTITUTIONAL SETTINGS						
17 Acceptance of management aims	Challenged	Accepted				
19 Type of decision-making	Adversarial	Negotiative				
Factors in italics featured in an earlier analysis (Sidaway, 1988) - see Chapter 1.						

AN APPLICATION OF THE FRAMEWORK

An attempt at validating the framework set out in Figure 2.7 has been undertaken using a further set of case studies in which the major issue in dispute is land use allocation. Thus recreational impacts on ecosystems are not the central issue in these cases, whereas the type of recreational access permitted and the future management of the area is. In two cases, areas of federally owned National Forest in the States of Montana and Wyoming proposed as Wilderness Areas and privately owned land in the Pentland Hills, Scotland proposed as a Regional Park, the conflict concerned whether the areas in question should receive protected status by being designated under a relevant statute. In the case of large tracts of privately owned forest land in Northern Maine, local recreational access has been long established by custom, occasionally on a fee paying basis. However this arrangement was threatened by a change of ownership of timber companies, the new owners seeking to realise the development value of prime lakeside sites within the forest.

These cases are briefly described in Figure 2.8. In each of these cases, the conflict was studied for a limited period and while it has been possible to follow subsequent events in the Pentland Hills Regional Park, this has not proved possible in the North American examples.

				· · · · · · · · · · · · · · · · · · ·	
FIGURE 2.8: CASE STUDIES INCLUDED IN VALIDATION OF THE DIAGNOSTIC FRAMEWORK					
AREA	RECREATIONAL ACTIVITIES	CONSERVATION STATUS OF SITE	SUBJECT OF [POTENTIAL] DISPUTE	SIGNIFICANCE OF RECREATIONAL IMPACT	
CONFLICTS: co	ntentious, unresolv	ed			
North West Montana (1989-90)	Hiking, riding, hunting (i.e. shooting), off- road vehicle use	National Forests containing endangered species	Logging versus Wilderness designation	Not an issue	
Northern Woods, Maine (1989-90)	Hiking, riding, fishing, hunting (shooting), off-road vehicle use	Mainly private forests containing endangered species	Residential and recreational development of lakeside areas versus local access for recreation	Not an issue	
Pentland Hills, Lothian (1972- 86)	Hill walking, game shooting,	Grazed upland containing small protected areas (SSSIs)	Designation as regional park	Minor aspect of multi-issue dispute.	

These three cases are examined by each of the nine factors suggested in the diagnostic framework (Figure 2.7) and this analysis is set out in Figure 2.9.

FIGURE 2.9: A VALIDATION	OF THE INITIAL DIAGNOSTIC FI	RAMEWORK USING LAND USE A	LLOCATION DISPUTES
FACTORS	PROPOSED WILDERNESS AREAS, MONTANA AND WYOMING	NORTHERN WOODS, MAINE	PROPOSED PENTLAND HILLS REGIONAL PARK, SCOTLAND
5 Understanding of impact	Potentially harmful impacts of logging on endangered species contested by timber companies and hunters	Impacts of lakeside development on existing recreation and conservation were understood	Impacts of recreational development on existing owners and users were uncertain
8 Opposing ideologies	Wilderness designation lobby opposed to economic development	Traditional recreational access and forest conservation opposed to property and development rights	Public welfare (recreational development) opposed by property rights, conservation and informal recreation
9 Advancement of principles	Each party taking a principled stand in the dispute	Each party taking a principled stand in the dispute	Each party taking a principled stand in the dispute
10 Environmental awareness	Logging interests insensitive to conservation values	Development interests insensitive to conservation values	Development interests insensitive to existing interests
12 Communication networks	Little direct communication between the parties, unilateral statements made to the media	Little direct communication between the parties, unilateral statements made to the media	Little direct communication between the parties, advisory committee ineffective in building trust, unilateral statements made to the media

FIGURE 2.9 (continued) FACTORS	PROPOSED WILDERNESS AREAS, MONTANA AND WYOMING	NORTHERN WOODS, MAINE	PROPOSED PENTLAND HILLS REGIONAL PARK, SCOTLAND
13/11 Reaction to new claim on resource (appropriateness)	Adverse reactions: Wilderness designation lobby to inappropriate road and logging proposals; Timber lobby to designation	Adverse reactions: Existing recreation users and forest conservationists to inappropriate development proposals; State adverse to Federal involvement	Adverse reactions: Existing interests united in opposition to inappropriate designation proposals and consequent recreational development
14 Negotiation strategies of interests	Confrontational tactics used by all parties	Confrontational tactics used by all parties	Confrontational tactics used by all parties
17 Acceptance of management aims	Forest management aims in dispute	Timber companies plans for development in dispute	Regional Council's plans for designation in dispute
19 Type of decision-making	Adversarial: rival legislative proposals, considerable media attention	[Unclear at that stage how decision would be made.]	Adversarial via public inquiry with legal representation

The conflicts considered in these case studies show almost identical patterns to those described earlier in the chapter. The understanding of impacts (Factor 5) is either uncertain or contested. each has sets of opposing ideologies (Factor 8) and one or more parties are using arguments of principle to defend or advance their interests (Factor 9). Environmental awareness (Factor 10) can be said to be low in each case as development interests, in particular, appear to be insensitive to environmental concerns. Good communication networks (Factor 12) have not been established and most contact between the parties has been limited to responding publicly to statements of others given to and reported by the media as part of a confrontational style of "negotiating" (Factor 14). In each case, existing interests have reacted adversely to the proposals of others (Factor 13), often depicting these proposals as inappropriate use of the resource (Factor 11) and challenging management aims (Factor 17) where they run counter to their interest. The confrontational style of negotiating is encouraged by an adversarial method of decision-making (Factor 19). Thus with one exception (the form of decision-making to be used regarding the Northern Woods, Maine) each of the three cases corresponds to the distinguishing features of conflict identified in the earlier case studies. This suggests that the framework may have more general application to other types of environmental conflicts, particularly those where recreational access is an issue.

CONCLUSIONS

This chapter has examined Hypothesis 1

That it is possible to identify a series of characteristic factors which distinguish between conflicts and co-operation concerning conservation and recreation. These may be described using a conceptual framework, irrespective of their institutional, cultural and geographical settings.

This has been done by analysing four propositions on the nature of conflicts using seven case studies concerning the impacts of outdoor recreation on conservation in Britain and the Netherlands, two land use allocation disputes in the USA and one in Britain. The analysis leads to the overall conclusion that the hypothesis is *confirmed*.

The conclusions relating to each proposition are:

Proposition (a) - that the damaging effects of recreational *impacts* on ecosystems are in themselves the major cause of conflicts between outdoor recreation and nature conservation-gained little support in that the existence of a recreational impact did not invariably lead to conflict and where such impacts featured in conflicts they were not the sole cause. Indeed there was evidence from the cases of co-operation that potential conflicts could be resolved or avoided by sensitive impact management. This suggests that it is how the issue is handled, not the issue itself, that determines whether a dispute will escalate into a conflict. Only one factor concerned with impacts (the *understanding* of the impact) discriminated between conflict and co-operation.

Propositions

- (b) that conflicts stem from the nature of the *interests* involved in the dispute;
- (c) that interest group *interactions* (such as misunderstandings and poor communication) contribute to the escalation of a dispute into a conflict; and
- that management and decision-making processes (the institutional setting) can
 either exacerbate conflicts or contribute to their resolution

were supported to the extent that three factors out of the five interest factors, three factors out of the five interaction and two of the seven institutional factors examined in the analysis discriminated between conflict and co-operation.

The analysis lends support to

- the validity of the initial distinction that was made between impacts and conflicts; and
- the general thesis that conflicts are a sociological phenomenon depending largely on the interactions of the interest groups, their competing interests and the institutional setting in which they attempt to broker a reallocation of resources.

Thus conflicts per se are not the sole cause of conflicts, indeed conflicts do not appear to stem from a single cause but from a combination of interests, inter-relationships and institutional factors, which appear to be closely interrelated. These factors might be reclassified into other groupings but the search for causality on these lines is likely to remain inconclusive. The

limitations of this analysis, and the utility of the diagnostic framework, are that relationships between factors and the extent to which they may change during the course of the dispute cannot be handled within an essentially cross-sectional and static analysis. It is the responses to change, whether initiated internally or externally to the dispute, that appear to be the key factors in triggering conflict.

Triggers of conflict

A common feature of the case studies examined in this chapter has been the disruption of an apparent state of equilibrium when a challenging interest group attempts to redefine (or gain some say in the control of) the use of the resource. The challenge to the status quo might be a formal process whereby the primary land use is changed, ownership transferred or perhaps the area receives an enhanced conservation status from its designation by an official agency. The disputes over the designation of the Pentland Hills as a regional park and the off-shore area around the island of Skomer as a marine nature reserve are cases in point. The latter case in particular demonstrates how a high level of co-operation over the management of a voluntary reserve was disrupted by official moves to designate it as a statutory reserve.

Alternatively, change may occur less formally: the area could be "invaded" by a new group of users (e.g., mountain bikers) or colonised by a new bird species or a conservation group may intervene, claiming that the resource is deteriorating as a result of recreational use. Established interest groups almost invariably react negatively to change. The only exception is where environmentally-aware recreation groups have been willing to consider and implement restrictions on their activity to mitigate their environmental impacts. This is well illustrated by the agreement of voluntary restrictions on cliff climbing to protect nesting birds at South Stack, which is one of many examples of this kind covering climbing areas in England and Wales.

In each of the case studies there is an underlying formal decision, for example, about land use allocation, which concentrates attention on possible challenges to the status quo, i.e., the present distribution of interests in a natural resource. Uncertainty about the future and ambiguity of public aims are also contributory factors. Once primary land allocation decisions have been made, and particularly when the land is in public ownership and designated as a national park or wilderness area, its status is unambiguous as far as recreation interests are concerned. Hence

the resistance to change based on fears that current activity will be curtailed.

These observations emphasise the dynamic nature of conflict and the analytical limits of the conflict/co-operation dichotomy. They suggest that further analysis of the processes of conflicts in their institutional setting is likely to be a more profitable way of learning more about the nature of conflict which could offer opportunities to predict the outcomes of environmental disputes. This is the subject of the next chapter.

CHAPTER 3: CONFLICT AS A DYNAMIC PROCESS

THE CLASSIFICATION OF CONFLICTS

The empirical analysis in Chapter 2 categorised the factors which discriminated between situations of conflict or co-operation in four groups, namely: biological impacts, conflicting interests, inter-relationships and social institutions. This grouping is only one of many that have been adopted by various writers in classifying conflicts. Most classifications have been diagnostic in purpose, attempting to identify the causes of conflict using the paradigm of cause and effect in which, like clinical medicine, diagnosis of cause suggests a remedy.¹

Most typologies are usually based on classifications of:

- motives or interests of the disputing parties; and/or
- their interrelationships or the processes of decision-making; or occasionally
- the outcome of the dispute.

However, Deutsch (1973) commented that the substantive issue may or may not be important to the disputing parties. Conflicts are only partly about the nature of the dispute and are as much about the relationships between the parties in the broader context within which they are situated. Classifications and typologies are based as much on effects of conflicts as the ostensible causes and commonly combine a number of factors.

Classifications based on Motives or Interests of the Disputing Parties and/or their Interrelationships

Most typologies combine causes (issues and motives) with the process of conflict (interrelationships and outcomes) to categorise conflicts. Thus, Deutsch (1973) lists in his typology the characteristics of the parties; their prior relationships; the nature of the issue; the social environment; the interested audience; and the strategy and tactics followed by the parties.

Coser (1956, 22-23) analyses Talcott Parsons' use of the medical analogy and terms like "tension", "strain", "endemic" and "deviant behaviour" within a "sick society". He prefers to draw an analogy with adjustments in the earth's crust and to use the terms of tectonics like "earth tremor" and "earthquake" to register the intensity of conflicts.

Baumgartner et al (1978), considering industrial disputes, distinguish between the focus of the conflict (issues or procedures for reaching settlement) and the level of conflict (involving few or more actors) within a two-dimensional matrix. Meanwhile Van Doom (1966) considers some of the same elements by differentiating between conflicts of *interest*, based on economic concerns; *ideology*, based on principles; and the *distribution of power* within organisations. However, he does suggest many conflicts present combinations of these situations. Variations on this classification are suggested by Amy (1987) and Druckman (1993) distinguishing between three types of conflicts: conflicts of interest, misunderstanding or beliefs. The purpose of Amy's typology is to identify those conflicts in which mediation may be an appropriate form of conflict resolution. The classification suggests that mediation is feasible in the first two of his categories but not in the third, as fundamental beliefs are non-negotiable. However, he recognises that these three categories are not mutually exclusive and elements of each may apply in combination within a single conflict.

Classifications based on the Outcome of the Dispute

Some classifications attempt to take into account the effects of conflict as well as their characteristics. Thus Biels and Siegal (1966) distinguish between conflicts and "pseudo-conflicts". In their terminology a conflict which is non-disruptive and can be regarded as beneficial to society is termed a pseudo-conflict whereas a conflict proper results in social disruption. Deutsch uses similar concepts but different terms when referring to constructive and destructive conflicts. Mack and Snyder (1957) are working on similar lines when they refer to realistic conflicts based on genuine incompatibilities and non-realistic conflicts, which serve the function of releasing tension. These categories stem from the work of Coser (1956).

The range of classifications are summarised in Figure 3.1.

Conclusions on Classifications

Conflict has been recognised as multi-dimensional, various writers giving differing emphasis to particular characteristics of conflicts. Although certain relatively consistent patterns have been identified, no typology of conflicts has been generally accepted. But the purposes of these typologies has not always been made clear and given the complexities of variable relationships they tend to be generalised across a very broad canvas and have a weak empirical base. None

appear to cover the full range of factors and no one typology appears therefore to offer any practical advantage over any other.

Moreover, it is clear that a simple typology of the Amy/Druckman form does not discriminate between cases of the type studied in this research. There are elements of conflict of interest, belief and misunderstanding in each case study, along with influences from the decision-making process, which suggest multiple rather than single causality. In other words, it is not possible to identify mutually exclusive categories of conflict which might be used for identifying appropriate forms of conflict resolution, for example.

Bearing in mind the conclusion drawn in the previous chapter - that the conflict/co-operation framework cannot be used to predict the outcome of changed circumstances, when a new claim interrupts co-operation - typologies have a similar limitation. They are based on static categories which are not easily applied to dynamic situations. A more profitable approach is likely to be that of studying the processes of conflict. If future research is to concentrate on the processes of conflict and how disputes escalate rather than searching for root causes, it needs to consider the immediate events which trigger conflict, the processes of politicisation, the distribution of power and the possible forms of outcome to an environmental dispute. To advance this aim the next section considers the contribution of alternative forms of conflict theory which address the dynamic aspects of conflict.

AUTHOR/ GROUPING	Previous Chapter	Deutsch (1973)	Van Doorn (1966)	Amy (1987) Druckman (1993)	Baumgartner et al (1978)	Biels and Siegal (1966)	Mack and Snyder (1957)
MOTIVE	Issue Interest	Nature of issue Characteristics of parties	Beliefs Interests	Beliefs Interests	(Focus) Issues		
INTER- RELATION SHIP	Interrelation ship Institutional setting	Prior relationship Strategy and tactics Social environment Interested audience	Power	Misunder- standings	Procedures		·
OUTCOME		Destructive Constructive				Conflict Pseudo- conflict	Realistic Non-realist

ALTERNATIVE PERSPECTIVES ON CONFLICT THEORY

The alternative perspectives that have been taken by other social scientists have been classified using an analysis by Friedmann (1987), whose primary concern was to investigate, amongst other things, social theories of planning in the public domain. His full scheme covered a spectrum that extends from "managerial" approaches of systems engineering, policy science, public administration and scientific management into sociology and economics including institutional economics, historical materialism, neo-Marxism, the utopians, social anarchists and other radicals. He covered in outline the period from the beginning of the 19th century to the time of writing. Within this broad canvas he recognised a number of perspectives and aims.

Broadly speaking, perspectives of social mobilisation and social learning aim to change the political and social system and they differ as much in means as in ends. According to social mobilisation theorists, change comes about by political struggle at a macro level. Social learning is concerned with change within the system by politicisation and changes in the balance of power. As will be seen in the next chapter, some attempts at conflict resolution follow this approach. The political goals of social action or social reform are less explicit. What is attempted is an "impartial" scientific analysis of the social functions of conflict leading to a greater understanding of its role in the social system. The managerial approach is more concerned with goals of efficiency in which conflicts are to be resolved by policy analysis and problem solving. Thus, underlying the attempts at theoretical development is a tension between sociologists looking for explanation and management scientists looking for prediction.

The classification has been set out in simplified form in Figure 3.2.



FIGURE 3.2 ALTERNATIVE PERSPECTIVES ON SOCIAL CONFLICT PERSPECTIVE AIM METHOD							
PERSPECTIVE	AllWi	METHOD					
Social Mobilisation	Social change "of the System"	Political Struggle					
Social Learning	Social change "within the system"	Empowerment to achieve a balance of power					
Social Action or reform	Analysis of the social function of conflict	Explanation and understanding					
Policy Analysis Conflict management Problem solving, conflict resolution							

The two main perspectives that will be considered in this chapter are those of social action and policy analysis. The primary concern of social action theorists (typified by Weber (1948), Coser (1956) and others) is to relate theories of conflict to theories of social change and to suggest that conflict has a useful social function. The other broad approach could be termed "managerial", taken by policy analysts whose main aim is to resolve conflicts, if not to eliminate them altogether. The following sections consider these two alternative perspectives which shed light on the "function" and "processes" of conflict.

Does Conflict Serve A Useful Social Function? - A Sociological Analysis

There is a source of potential confusion in the use of the terms functional and "functionalism". Within sociology, "functionalism" can be traced back to Durkheim whose general thesis was that society is normally in a state of equilibrium based on moral consensus. Society is held together by the values that people in that society share. From this perspective, "functionalists" believe that "disequilibrium" or conflict is abnormal. (New Society, 1984, iii). The "structural functionalism" of Talcott Parsons also considered that conflict in society was "dysfunctional" and therefore an abnormal condition of society².

² For further discussion of this perspective see Coser (1956, 21-23).

An alternative perspective on conflicts was put forward by Karl Marx (trans. Bottomore, 1964) who emphasised the constant conflict between the two basic economic classes of people, the bourgeoisie who own the means of production and the proletariat who sell their labour. This theme was developed by Dahrendorf (1959) who argued that social organisations typically contain two groups whose interests are inherently opposed, those who rule and those who are ruled. Thus conflict is not limited to a class struggle over economic resources but can be a power struggle between interest groups. In Scimecca's view (1993), the Marxist analysis over-emphasises an economically determined system of social relationships and places greater emphasis on conflict than co-operation, which he considered to be more frequent in society. For this reason, many conflict analysts have turned to the social action theories of Max Weber which suggest that society varies between conditions of equilibrium and conflict. From this standpoint conflict is endemic in social life but tends to operate in favour of the powerful, that is, those with a vested interest in the status quo.

Scimecca (1993) assessed Weber's main contribution to conflict theory to be the explanation it provides of how power is legitimised and stabilised in society. He summarised the argument as follows:

- Coercion proves to be an ineffective basis for maintaining power as it is seen to be illegitimate.
- Powerful elements in society (or indeed the government) continually seek to convince others (the electorate) that their use of power is legitimate even though the distribution of power (power structure) favours the interests of the more powerful.
- Order is maintained by co-opting political challengers into the power structure or suppressing underlying conflicts.
- It is the legitimate use of power that holds societies together.

Thus Weber's conflict theory has four major components: the role of power; the emphasis on organised systems; legitimacy, and the individual who acts in his or her self-interest and marshals resources to achieve his/her own ends.

Duke (quoted in Scimecca, 1993) has also summarised the essential elements of Weber's conflict theory as follows:

- 1. Conflicts are endemic in social life.
- 2. Power is differentially distributed among groups and individuals in society.
- 3. Social order is achieved in any society through rules and commands issued by more powerful persons to less powerful persons and enforced through sanctions.
- 4. Both the social structure and the normative system of a society are more extensively influenced by powerful persons than by weaker persons (true by definition), and come to represent the interests of these more powerful persons.
- 5. Social changes are often more disruptive to powerful persons than less powerful persons. Powerful persons therefore generally support the status quo and oppose changes that would reduce their power.
- 6. However, changes in a society occur as a result of action by persons who stand to benefit from these changes and who accumulate power to bring them to pass. Powerful persons see that they can benefit from a particular change (e.g., industrialisation of a "backward" society), and they will usually not hesitate to foster such things (quoted in Scimecca, 1993, 216).

Although Lewis Coser's book is entitled "The Functions of Social Conflict" (1956), its underlying perspective was closer to Weber's social action than the structural functionalism of Talcott Parsons. Coser related conflict to social change which he suggested only comes from threats to social equilibrium. He therefore saw conflict as a stabilising process in social groups as it serves the functional purpose of allowing adjustments to be made in social norms or power, under certain circumstances. Thus what he called "flexible" social structures tolerate conflict and may even institutionalise it so that it can be used to eliminate dissatisfaction. The problems occur in "rigid" social structures which lack toleration or the institutional mechanisms for dealing with conflict and in those circumstances hostilities can accumulate. Conflict then becomes "dysfunctional" as it tears apart the system (Coser, 1956, 151-157).

Some ten years later, reviewing the reception that his theories had, he noted that he had been criticised from opposite directions from those arguing for theories of integration and social stability and those arguing for theories of conflict and social change (Coser, 1967, 5). He then argued that this is a false dichotomy and that there is a constant process balancing between stability and change. He noted that, as his earlier work concentrated on conflict and change within social groups or social systems, his critics had assumed that he was in favour of the status quo (and in that sense, identified with functionalism). In this later work, he continued to argue that social systems need flexibility to adjust - his "safety valve" thesis - and therefore argued for social change to relieve the tensions in society. The essential elements of Coser's propositions are summarised in Figure 3.3

FIGURE 3.3: COSER'S ANALYSIS OF THE FUNCTION OF SOCIAL CONFLICT

CONFLICTS WITHIN THE GROUP

LOOSE KNIT GROUPS

"Broad Churches", segmentally involved.

which have multiple small conflicts of low intensity which act as ways of relieving tension. Any dissent is contained.

Metaphor: earth tremor

Conflicts are about goals and interests which allow readjustment of norms and power relations, As they benefit the social group, they are FUNCTIONAL.

CLOSE KNIT GROUPS

"Sects", showing a high degree of interaction and personality involvement.

which suppress conflict so that grievances build up until a very intense conflict occurs with traumatic results. Any dissent is expelled.

Metaphor: earthquake

Conflicts are about basic values and assumptions about relationships, i.e., the legitimacy of the social group. They disrupt the group and are DYSFUNCTIONAL.

CONFLICTS BETWEEN GROUPS

FLEXIBLE SOCIAL STRUCTURES

Allow multiple small conflicts so that the social structure adjusts to new claims without a major line of cleavage developing. They provide continuity as norms and the balance of power are adjusted.

Associations and coalitions may form during the conflict which shape the future power structure.

RIGID SOCIAL STRUCTURES

As conflicts are suppressed and no adjustment is possible, there is a risk of catastrophe.

Diversionary "non-realistic" conflicts may be created in an attempt to maintain the structure.

Source: Coser, 1956, 151-157.

Van Doorn (1966) elaborated on Coser's distinction between loose and tight knit groups by describing 'coalitions' centred on (economic) interests, whose heterogeneity neutralises the differences between them but can (particularly in a business setting) form stable organisations by adjusting through internal conflict. His second category - 'sects' - strive to preserve their homogeneity which is ideologically based. As in Coser's description of a close knit group, they are intolerant of dissent and are always in danger of splitting following an internal power struggle.

Beales and Siegal (1966) addressed social conflict from an anthropological perspective and were impatient with the functional approach. They strongly criticised functionalism (and appear to assume that Coser is a "functionalist") on the grounds that it deals with static and not dynamic situations. They considered that it gave undue emphasis to the constructive and beneficial effects of conflict rather than the destructive and detrimental ones. They suggested that "Conflict that is non-disruptive and is regarded as beneficial is perhaps best termed pseudo-conflict" (ibid, 20). More pertinently they suggested that "any given conflict has functional and dysfunctional aspects; nothing is gained by debating whether or not conflict in the abstract is functional" (ibid, 24).

Although Coser's analysis is (in effect) dynamic, his theory may lack predictive power (but that was not its purpose) in that it did not consider the possible outcomes of close or loose knit groups in flexible or rigid social structures. His important insight was that group or social structure determine whether groups or social systems can tolerate internal dissent or cope with external threats and can therefore adjust to change without major disruption.

Nevertheless the influence of Coser's analysis has been considerable. For example, Deutsch (1973) used the terms constructive and destructive processes in the subtitle of his book and recognises the debts to Coser in his detailed analysis. Mack and Snyder (1957) considered the institutionalisation of conflict in some detail, suggesting that it requires a combination of conflict and co-operation to achieve social change. Indeed they suggested that social strategies designed to keep conflict functional and to prevent violent or aggressive conflict ought to be based in part on deliberate attempts to capitalise on natural limits. This may involve giving up notions of "abolishing" conflict, of "final" resolutions, and may direct attention to less obvious control devices (ibid, 83). Thus, they were also arguing that conflict can be made functional or used constructively. Similarly, Pondy (1972), concerned with conflicts within industrial organisations, took a dispassionate managerial approach to the functions or dysfunctions that conflict might serve in relation to organisational efficiency.

Whilst Coser's interpretation of the potentially constructive function of conflict may have been controversial at the time, it now appears common place in a variety of settings. For example, Douglas writing on groupwork practice suggests that:

'Conflict is an essential ingredient of human existence. Frequently this basic fact is overlooked because excessive conflict is seen to create hardship, promote aggressors and produce great hurt.Northen also comments on the fact that conflict within a group can lead to increased understanding and an increase in trust, largely because differences are brought out into the open and cease to be a source of hidden irritation.' (Douglas, 1976, 117).

While some recent writing on conflict resolution in schools asserts that:

'Conflict is destructive when it diverts energy from more important activities/issues, destroys morale, causes stress, reinforces poor self image, polarizes groups, deepens differences in values, produces irresponsible behaviour or violence. Conflict is constructive when it opens up issues of importance, results in encountering real problems and increases the involvement of individuals in problem solving, causes authentic communication to occur, releases pent-up emotion and anxiety, helps recognition of interdependence and builds cohesiveness while helping individuals to grow personally and apply what has been learnt.' (Leimdorfer, 1990,56).

Coser's perspective that conflict might be functional has been widely accepted even amongst those whose main concern is conflict management. However, the limitations of confining analysis to the function of social conflict soon become apparent. There is a need to consider the essentially dynamic nature of conflict, to explore the predictive ability of this approach, and develop a more operational theory. The following sections address these issues.

Interaction and Process: the Contribution of Managerial Theory

Many writers have recognised the dynamic nature of conflict and the limitations of a static analysis. Deutsch viewed conflict from a social psychological perspective in which the participants are influenced by their perceptions, cognitions, expectations and reactions of others within a social environment. He attempted to develop a consensual framework that would enable him to view interpersonal, intergroup and international conflict in the same terms, in which

"Social interaction takes place in a social environment - in a family, a group, a community, a nation, a civilisation - that has developed techniques, symbols, categories, rules and values that are relevant to human interaction. Hence, to understand the events that occur in social interactions, one must comprehend the interplay of these events in the broader social context in which they occur" (Deutsch, 1973, 8).

Mack and Snyder (1957) also recognised that "social conflict is, by definition, an interaction relationship between two or more parties" (ibid, 35). Among those considering the managerial perspective, Baumgartner et al (1978) used game theory to model industrial disputes. They were among those writers who analyse social conflict as a "social interaction process" in

considering:

"The interdependence between, on the one hand, social interaction processes and events, and on the other, the material, social structural, and cultural context in which they occur" (Baumgartner et al, 1978, 105-106).

But they placed particular emphasis on the "institutional order", i.e., the conditions and rules in which interactions take place. They described the institutional order as:

"... the definition of relevant issues and problems, membership or participation in institutional activities, permissable or acceptable activities, relationships of actors or categories of actors to one another and to forms of property or resources, and the distribution of benefits and costs for different actors or categories of actors involved in process-level activities" (Baumgartner et al, 1978, 106).

Interestingly their definition of conflict was taken from Weber's perspective of social action:

"social action where each actor in a conflict relationship attempts to carry out his or her own will over the opposition or resistance of others" (Baumgartner et al, 1978, 109).

This formulation of a 'social-interaction process' avoids the criticisms of the utility of game theory in studying conflicts put forward by Simon (1974). He suggested that game theorists tended to ignore communication between the parties to simplify relationships and their development over time. Simon also argued for a social-interaction approach and by stressing the importance of communication, he assumed that conflicts mainly arise from misunderstandings, which may be true in organisations.

Scimecca (1993) also questioned the general applicability of game theory, with its assumption of perfect information. He criticised its naïvety for assuming that competing parties will invariably end up co-operating and for ignoring many important aspects of conflicts, such as irrational motives, culture, social structure and power.

Another managerial approach, systems analysis, has been criticised on sociological grounds by Rhoos as a theory that can apply to the controlled systems of the engineer but not within the complexities of social systems:

'Although the term "system" can be applied to both space hardware and social problems, the inputs are vastly different, as are the controls and variables. In the engineered system, the components are tangible, the variables controlled and the outputs identifiable. In the social sphere, the crucial elements often defy definition and control and do not behave according to a set of rules.' (Rhoos, 1969, 24).

Phases of Conflict - An Analysis of Pondy's Conceptual Framework

In his analysis of conflict in organisations, Pondy (1972) took the concepts of social interaction one stage further by considering the processes of conflict and how they develop. He noted that alternative conceptual definitions have been suggested which may be based on antecedent conditions, affective states, cognitive states or conflict behaviour, but rather than choose between them he argued that each may be a relevant stage in the development of a conflict episode and that it is more important to clarify the relationships between each component.

"Conflict may be more readily understood if it is considered a dynamic process. A conflict relationship between two or more individuals in an organisation can be analysed as a sequence of conflict episodes. Each episode or encounter leaves an aftermath that affects the course of succeeding episodes. The entire relationship can be characterised by certain stable aspects of conditions, effect, perception and behaviour. It can also be characterised by trends in any of these characteristics" (Pondy, 1972, 359).

The focus of Pondy's analysis was on conflict within industrial organisations in which he identified five phases of a conflict episode. These he labelled aftermath, latent, felt or perceived, manifest (to be followed by aftermath). He set out a scheme (entitled the Dynamics of a Conflict Episode - ibid, 367) in which he attempted to relate antecedent conditions, affective and cognitive states and conflictual behaviour.

Other authors who have recognised phases of conflict include Sandole (1993) who wrote of initiation, escalation, controlled maintenance, abatement, and termination resolution; and Fisher (1990) who recognised antecedents, orientations, processes, and outcomes. Both agree that a conflict passes through phases, however described, but assume that it necessarily follows a linear path. The various phases recognised by different authors and the terms adopted in this study are set out in Figure 3.4

FIGURE 3.4: PHASI	ES OF CONFLICT		
Pondy (1972)	Sandole (1993)	Fisher (1990)	Phases recognised in this study
Aftermath		Antecedents	Aftermath
Latent	Initiation	Orientations	Latent
Felt/Perceived	Escalation		Initiation/ Escalation
Manifest	Control/ Maintenance		Active
	Abatement		
Outcome/Aftermath	Termination/ Resolution	Outcomes	Outcome/ Aftermath

Pondy concluded that a conflict was "... not necessarily bad or good, but must be evaluated in terms of its individual and organisational functions and dysfunctions. In general, conflicts generate pressures to reduce conflict, but chronic conflict persists and is endured under certain conditions, and [is] consciously created and managed by the political astute administrator" (Pondy, 1972, 378-379). He suggested that conflicts are dysfunctional in organisations when they affect their productivity, their stability or their adaptability. He also presented three means of resolving conflicts within organisations:

- "a) a bargaining model, which deals with interest groups in competition for resources;
 "b) a bureaucratic model, which deals with authority relations and the need to control.
- "b) a bureaucratic model, which deals with authority relations and the need to control; and,

It is the first two of these - the bargaining and the bureaucratic models - which are of particular relevance to this study.

Certain of the elements set out in his scheme were not described or analysed in any detail in his text and their exact purpose is therefore unclear. The scheme is helpful in that it recognises the contribution that certain components may make at different stages of the conflict episode, e.g., strategic considerations [not explained in the text but assumed here to include power play between different participants] and that the availability of conflict resolution mechanisms can

[&]quot;c) a systems model, which deals with functional relations and the need to coordinate" (Pondy, 1972, 379).

influence the outcome during the manifest (conflictual behaviour) phase. However, in practice, it may not be particularly easy to recognise a distinct sequence of events particularly in the earlier stages or between the latent and manifest stages. Indeed Mitchell (1993) suggested that international conflicts may pass through as many as ten stages and when negotiations break down the course of the conflict may double back to an earlier stage (see his Figure 6.1, p. 88). Perhaps because the conflicts which Pondy had in mind occur within organisations, he did not recognise a significant external stimulus or trigger which initiated the manifest phase.

Within the remainder of this chapter, the analysis assumes that a conflict is a dynamic process which passes through a series of phases. Each phase is conditioned by the one that proceeds it but particularly by the social institutions that have developed to handle disputes of this kind. The outcome may be a settlement, or stalemate or a continuation of the conflict (resolution, termination and development are the terms used by Baumgartner, Burns and De Ville). The outcome may have positive or negative results for the participants, the regulating social institution or the wider social system.

Thurlings' Dynamic Analysis

A similar approach was summarised by Thurlings (1962) in a study entitled "The Dynamic Function of Conflict". He suggested that:

"Social conflict then emerges as a process of interaction, begun with the purposes of creating a legitimate order. Conflict may then be termed a mechanism of institutionalisation" (ibid, 146).

Thurlings was concerned with attempts by interested parties to create a legitimate order of social institutions. Building on the work of Rex (1961), he focused on the motives of groups rather than individual actors. Like Coser (1956), he suggested that conflict may form a constructive role in society in that groups are motivated to "institute a new order which embodies their aspirations". Using this sociological perspective, behaviour is considered to be controlled by norms - "a social order, of institutionalising social relations". Thurlings drew a distinction between conflictual and deviant behaviour in that organised deviant [criminal] behaviour is concerned with the acquisition of commodities whilst conflict behaviour is aimed at establishing a new order.

Following Vercruijsse (1961), Thurlings used the distinction (made by Parsons) between role and position. Parsons defined *role* as the obligations members of society take upon themselves or have thrust upon them, while *position* (status) is the rights accorded to that role. Vercruijsse argued that these are culturally defined, that *social structures* are the differential distribution of the rights to those commodities among the roles which exist in a culture while *social position* is a specific combination of rights to scarce commodities which are accorded to each role (Thurlings, 1962, 147). There may be competition between cultural groups for these rights and conflicts may be defined in terms of social structures and social position, both of which are conditioned by norms or cultural standards which form part of the existing or proposed new order.

Thurlings identified the *interests* of a cultural group as its rights (i.e., its social position), but he made a further distinction between the ability of the group to use these rights as it so wishes (autonomy) and whether it also has authority, i.e., some say in the process whereby rights are allocated by society. In summary:

the interest or social position of a cultural group is a combination of rights to resource that go with its role, comprising

- autonomy the ability to exercise rights as wished, and
- authority a say in the process of allocating rights.

He argued that the outcome of a conflict will be durable where it is based on consensus and transitory where it is based on the exercise of power. Even though A's power may greatly exceed B's and there may be no conflict in the short-term, their interests are irreconcilable and conflict is inevitable. B may work to counterbalance A's power by establishing the legitimacy of its claim to resources and gaining support from other groups on the grounds of social injustice. Any enlargement of the field of conflict draws in other groups and presents a potential risk to them. In these circumstances, he suggested that organisations or individuals may attempt to mediate these claims.

Thurlings presented a more detailed analysis of the competition for access to resources (which is a common feature of environmental conflicts), how claims for access to resources may be

rejected or substantiated either by the exercise of power or through a legitimating social institution. The relationship of the interested parties will be concerned with factors such as the level and ease of communication but also the balance of power between the respective parties. Power was also identified as an important variable by Pondy and Van Doorn. Thurlings recognises (as do other analyses, e.g., those of Baumgartner, Burns & De Ville) that conflicts may be about the procedures whereby a social system or community allocates scarce resources as well as the issue of how those resources are distributed and who gains access to them.

In Thurling's description of conflicts between interest groups, his old or existing social order is equivalent to Pondy's aftermath of the previous phase of conflict. During the struggle between established and new interest groups their positions may converge to reach consensus and a durable outcome or diverge to perpetuate the conflict. Various logical outcomes are possible ranging from:

- existing groups being able to resist the claims of new groups and thereby maintain the old order;
- existing groups making concessions to new groups resulting in a transitory outcome;
- existing and new groups reaching consensus and a durable outcome; and
- the new order superseding the old.

Triggers of Conflict

Conflicts do not appear to arise spontaneously. Deutsch (1973) suggested that there is a history of events which may include the prior relationships of the parties and which may also condition their relationships in future. Mack and Snyder (1957) argued on similar lines in terms of an "instability which results from the ineffectiveness of previous norms and regulations". But added to any motivation which stems from the previous relationship between the parties, each will have relationships with a wider network and they may see the conflict as a vehicle to attain wider goals. Deutsch (ibid) suggested that the course a conflict takes may be influenced by the strategy and tactics adopted by the opposing parties. Thus the general proposition advanced by these authors was that whether a dispute escalates into a conflict will depend on the standpoints of the interested parties and their relationships, which are in part conditioned by the aftermath of a previous conflict episode. However none of them recognised that a particular tactical action taken by one of the parties or some other external event can escalate a dispute into a conflict.

SYNTHESIS: A DYNAMIC FRAMEWORK OF CONFLICT

It is now possible to synthesise the key elements of previous theories and to relate these to the findings of Chapter 2 in a second framework depicting the phases through which conflicts pass. The key concepts from various authors cited in this review are set out in Figure 3.5. The essential concepts on which this dynamic framework is based are:

- a) that each conflict consists of an *episode* which has an *aftermath* (Pondy), the aftermath conditions the following episode of conflict. This process of aftermath/episode/aftermath continues in a repeating pattern; and
- b) that interest groups attempt to achieve social position which consists of autonomy: the ability to exercise rights; and authority: being able to influence the process of allocation of rights which together form the social structure (Thurlings based on Vercruijsse and Parsons);

Following this line of reasoning, conflicts concerning the access to resources are attempts to redistribute and/or ascribe a social position between interest groups.

- c) in essence conflicts are resolved by the exercise of power or by negotiation (Coser, Pondy, Thurlings and others). Conflicts may or may not be resolved in that the outcome of each episode may be either a durable or transitory one (Thurlings);
- d) to be effective, any decision-making process which attempts to resolve conflicts has to be perceived as *legitimate* by the recipients of that decision (Weber, Coser and Scimecca);
- e) the outcome of any conflict will be influenced (if not dictated) by the balance of power between the competing interest groups (Thurlings, Amy, Scimecca); and
- f) the active phase of conflict is triggered by the arrival of a new interest group with a claim for social position (Thurlings).

The conditions in which such a dynamic framework might apply are likely to be:

- 1. Conflicts concerned with competition for access to resources in which access is broadly defined as not only the ability to exercise socially defined rights in the use of those resources but also a controlling influence on how they are used by others;
- 2. The interested parties are concerned to exercise those rights within a plural society, i.e., they are working within a broad structure of social institutions which are perceived as legitimate by all parties (in Coser's terms "within the system");
- 3. Although conflicts can occur at different levels from the interpersonal to the international, the concern here is with an intermediate level of environmental conflict which may be local and/or site based; and/or may have broader dimensions concerning a number of sites or larger areas. There may be some combination of local, regional and national issues contained within the dispute.
- 4. Although some of the interested parties may be highly organised and bureaucratic agencies may be involved, the framework is unlikely to apply either to disputes within hierarchically organised organisations or to unstructured conflicts in which there is no representative framework within which organisations can operate.

PHASES OF CONFLICT						
PHASE	Coser 1956	Thurlings 1962	Van Doorn 1966	Pondy 1972	Deutsch 1973	Concepts used in this synthesis
Aftermath		Established order [social position]		Aftermath		Established social positions
Latent	Loose/ close knit groups	Role/ obligations of cultural group	Relations within the group [schisms/ coalitions]	Environment/ antecedent conditions	Characteristics of parties. Nature of issue.	Internal relations within the group.
Initiation/ Escalation		Competition for social position Claims for legitimacy	·	Suppression/ attention mechanisms. Values and anxieties. External/ internal Organisation tensions	Interested audience	External relations Claims for legitimacy. Triggers. Proactive tactics. Coalition formation.
Active	Rigid/ flexible social structures	Claims rejected or substantiated by exercise of power or legitimating social institution		Conflict behaviour. Availability of conflict resolution mechanisms. Strategic considerations	Strategy and tactics	Responsive tactics Rigid or responsive decision-making Claims determined by exercise of power or negotiation
Outcome/ Aftermath		Transitory and durable outcomes		Constructive/ destructive outcomes	Probable consequences Constructive/ destructive outcomes	Transitory and durable outcomes

These elements are now set out in the dynamic framework which can be used to analyse the relationships between competing groups and the power balance between them. Any such model has to:

- i) allow for the characteristics and action of interest groups operating in a broader political context. In other words local environmental conflicts frequently have national political dimensions.
- ii) incorporate a succession of phases
- iii) incorporate an analysis of the distribution of power.
- iv) allow for different methods of conflict resolution which may produce alternative outcomes.

The action that groups take may be functional in relation to their own identity and survival. For example, during the latent and subsequent phases messages conveyed to the outside world, such as adherence to principle, may serve a more important function in emphasising the adherence of the group's representative to the ideology of the group than the ostensible purpose of external communication; thus reinforcing group solidarity (Coser, 1956).

A marked feature of the initiation/escalation phase will be the claims made for legitimacy in the eyes of an external interested audience (Coser, 1956; Deutsch, 1973). Interest groups advancing claims for enhanced social position will be proactive and agenda setting and use the media for this purpose. These aggressive tactics will be matched by the defensive ploys of those with an established position. Either side may form coalitions to strengthen their power base.

Phase of Conflict	Concepts used in this synthesis	Factors identified in Chapter 2
Aftermath of previous episode	Established social positions	Aims of interest groups: seeking to gain, share or maintain interest - f 6 Initial balance of power - f 22
Latent phase	Internal relations within the group. Information	Role of ideology - f 8 Type of organisation -f 16 Understanding of impact -f 5
Episode - Initiation/ Escalation phase	Potential triggers. External relations: Proactive tactics /Claims for legitimacy.	Challenge to management aims - f 17 Proposed designation (conservation status of site - f 2) National or local audience Adherence to principle - f 9 Negotiation strategies -f 14 Use made of media -f 15
	Coalition formation.	Coalition formation.
Episode - Active phase	Responsive tactics Rigid or responsive decision-making	Reaction to new claim -f 13 Appropriateness of resource use - f 11 Conservation status of site - f 2 Environmental awareness - f 10 Communication -f 12 Public participation - f 18 Type of decision-making - f 19 Mechanism for adjusting to
	Claims determined by exercise of power or	change -f 20 Authority of decision maker -f 21 Resulting balance of power f 22
Outcome/ Aftermath of episode	Transitory and durable outcomes	[Conflict or co-operation]

Thus a conflict is triggered by a claim to redistribute the social positions of the interest groups. Their behaviour during the manifest phase of the conflict will be in part governed by their internal and external relationships and the adequacy of the resolution mechanism [institutional setting] within which they are operating. The motivations and aspirations of the participating parties will influence how they act strategically and whether they seek to use existing methods of conflict resolution, either in a conciliatory way within the confines of this particular dispute or to meet wider political goals.

In Figure 3.6, the concepts incorporated in this synthesis are ordered into five phases

aftermath>>latent>>initiation/escalation>> active>>outcome/aftermath

At the same time 18 of the 22 factors originally identified in Chapter 2 are reallocated from the earlier classification into the dynamic framework. Certain factors which were not components of the earlier framework are now seen to play an important role, particularly if they are reformulated (e.g., *role* of ideology rather than competing ideologies; and *use* made of media by campaigning organisations rather than *level* of media involvement/interest in a conflict). Some additional factors have been identified which were not explicitly examined in Chapter 2, such as the national and local audiences to which interest groups address their claims for legitimacy; and the formation of coalitions to gain power.

The dynamic aspects of the framework are shown diagrammatically in Figure 3.7 where three possible outcomes of conflict (schemes A and B) and a co-operative negotiation (scheme C) are depicted³. For simplicity of presentation it is assumed that the outcome of power struggles within rigid social structures (as defined by Coser) can only result in the maintenance or transfer of power and not negotiation. Similarly, the only outcome of a power struggle within flexible social structures, that is depicted in the figure, is a concession of power whereas other logical

This scheme has some affinities with the 'eclectic model' formulated by Fisher (1990) which presents the relationships between individuals and groups over time in a systems framework. Although he contrasted the circumstances of high and low intensity 'system states', the context in which these occur and the power relationships between them are not set out.

FIGURE 3.7 ALTERNATIVE OUTCOMES OF CONFLICT

FIGURE 3.7 ALTERNAT AFTERMATH/	INITIATION/	b or com	ACTIVE PHAS	Æ		OUTCOME/
LATENT PHASE	ESCALATION		ACTIVETIE	L		AFTERMATH
(A) CONFLICT						ALIERWATTI
Interest groups with established social position	ı	eact with	s		resultin Exercise of power by established group or	os ·
		Possible coalitio	n forming		Transfer of pow	
	Interest groups ch for social position	ising iallenging				leading to New order in favour of claimant
(B) CONFLICT		-				
Interest groups with	react with		ve responses and			
established social position		Possibl	e coalition formi	•	7	
				struggle within FLEXIBL structure resulting in	E Concession by establishe	.d
Interest groups challenging	using	Proacti	ve tactics and/or	_	leading to	eu groups
for social position		Possibl	e coalition formi	ng		New order but (Transitory outcome)
(C) CO-OPERATION Interest groups with	react with	Concili	atory responses	***************************************		
established social position			Negoti	ation within FLEXIBLE		
			social	structure resulting in	Consensus about	New order
Interest groups challenging for social position	using	Negotia	tive tactics			and (Durable outcome)

possibilities, such as the exercise of superior power, are possible.

The figure attempts to portray the manoeuvring of interest groups as they seek power and legitimacy to maintain or gain social position. Each (coalition of) interest group(s) may be sufficiently powerful to dominate the other. Alternatively they may reach a durable outcome via consensus, a transitory one by concession or one other logical possibility - no outcome at all, i.e. stalemate. The adequacy of conflict resolution mechanisms within the social structure is of particular interest, whether they may be used expediently and effectively when the initial relationships are positive but are inadequate to deal with negative relationships. This is the subject of the next chapter. The final section of this chapter illustrates the utility of the dynamic framework by further examining selected case studies.

ASSESSING THE UTILITY OF THE DYNAMIC FRAMEWORK

The earlier analysis of three of the earlier British case studies is now re-presented to test the utility of the dynamic framework. [The course of events in each of these case studies is set out in the synopsis in Annex 3].

The Designation of the Pentland Hills Regional Park

The dynamic analysis of the designation of the Pentland Hills Regional Park is summarised in Figure 3.8. The analysis demonstrates that the interest groups were united in purpose to defend the status quo, whilst Lothian Regional Council attempted, in effect, to redistribute access to the resource by the designation of the Regional Park. This was opposed in principle by the landowners, whilst the other interests suppressed any differences in principle between them to form a united front. The key players in the power struggle proved to be the landowners and the Regional Council, while the Council's natural allies, the recreation and conservation interests, supported park designation in principle. But the support of these organisations was so qualified, that they were in effect opponents of the scheme. They were highly critical of the Regional Council for not setting out the implications of designation in the form of a master plan.

In this dispute the ideologies of the conflicting interest groups did not appear as a strong factor. The existing pattern of land use was defended by a loose coalition of landowners, conservation and recreation groups and local community associations who did not act in concert. Although

individual interests were affiliated to organisations, the pattern of political activity would be defined, in Coser's terms, as 'loose-knit'. The Regional Council played a dual role, with one department (Leisure Services) acting as proponent of the scheme while the Planning Department acted as arbiter on development control decisions. Latterly, both functions were the responsibility of the Planning Department.

The conflict was triggered by the publication of the designation order and although a consultative committee with representatives from each interest had been formed, this proved to be an ineffective means of communication. Many of the interests were formally represented at the subsequent public inquiry by their membership of organisations, but without a formal coalition or umbrella group to lead the opposition, no individual leader emerged. The Regional Council failed to build a coalition with the recreation and conservation organisations but it did have the support of the Countryside Commission for Scotland. Each side took a confrontational stance and the local press was much used by the conservation interests, who challenged the legitimacy of designation by questioning the appropriateness of recreation development. Meanwhile the Regional Council's authority and management aims were challenged by the landowners. This episode of the conflict was resolved by a public inquiry conducted in the traditional adversarial fashion. Although the Reporter adjudicated in favour of designation, and this was confirmed by the Secretary of State, the unsatisfactory nature of the outcome was recognised. Confirmation of designation was made conditional on the preparation of a management plan during which all interests would be consulted.

The preparation of the plan should have resolved the issue. Indeed, it was hailed by the planning profession as a model of its kind, because of the detailed consultations that took place. This satisfied the recreation and conservation interests, yet by consulting but not fully involving the interest groups, the Regional Council was unable to convince the landowners that their interests had been fully considered and they continued their opposition in principle. Successive attempts to reform the committee structure were seen to be tokenistic as they failed to give the local interests, particularly the landowners, an effective say in the running of the park. The landowners were still opposed to the park in principle and their tactics remained confrontational. There is a latent issue concerning the use of the park by active recreation (e.g., mountain bikes and water sports) whose interests are not effectively organised nor are they indirectly represented, as even

an umbrella body such as the Scottish Sports Council is not a member of the Park Advisory . Committee.

Comparing this course of events with the alternative outcomes contained in Figure 3.7, the Pentlands case conforms in part with type B, the local interest groups being challenging by regional park designation. Because the Regional Council holds power legitimated in general terms by the electorate yet is both protagonist and decision maker, this case illustrates a variant not allowed for in Figure 3.7 The decision-making social structure has elements of rigidity and flexibility. Outwardly there are signs of flexibility in the appointment of advisory committees to aid communication, and in consultation procedures used during plan preparation. But it can be argued that the social structure of decision-making contains considerable rigidity as the Council relinquishes little real power. The conflict occurs 'within the system' as the authority of the ultimate decision maker, the Secretary of State, is unchallenged.

In one sense, designation can be interpreted as a concession by the established landowning groups. But as designation confers few executive powers on the Regional Council, the landowning lobby has continued to fight an effective rearguard action. As the Council had failed to build an effective coalition and incorporate the recreation and conservation organisations into its power base, the situation is basically unstable. The changes in the advisory committee structure, most recently by establishing a farmers' and landowners' panel, plus disagreements over development control decisions suggests that the "solutions" devised so far (i.e., designation, the preparation of a management plan, minor changes to committees) had produced no more than a transitory outcome. Although the informal recreation and nature conservation interests are pacified, the Regional Council still lacks support. The situation has not been helped by the abolition of the Regional Council in the 1996 local government reorganisation. The outcome of this episode may be the establishment of a New Order but it is likely to prove to be a transitory stage before a new episode of conflict occurs.

This analysis, based on the dynamic framework, leads to the prediction that a new episode of conflict is virtually inevitable.

FIGURE 3.8: A DYNAMIC A OF THE PENTLAND HILLS	ANALYSIS OF CONFLICT OV S REGIONAL PARK	VER THE DESIGNATION
PHASE OF CONFLICT	RELEVANT FACTORS	ANALYSIS
AFTERMATH OF PREVIOUS EPISODE - Established social positions	Interest groups: seeking to maintain interest	Land owning, recreation and conservation groups
LATENT PHASE	Communication Initial balance of power	Regional Council develops proposals with consultative committee but failed to establish effective communication with wider interests Diffuse, Council does not depend on rural support
INITIATION/ ESCALATION PHASE - Potential triggers External relations: Proactive tactics of protagonist /Claims for legitimacyInformation	Challenge to established order National or local audience Adherence to principle Negotiation strategies Use made of media Coalition formation.	Regional Council seeking to designate park Regional Council bases its case on national legislation, uses confrontational tactics, fails to form supporting coalition. Lack of information on Council's plans leads to uncertainty
ACTIVE PHASE - Responsive tactics of established interests	Reaction to new claim Appropriateness of resource use Negotiation strategies Use made of media	Established interests united in opposition in principle to park status, Inappropriateness cited to prevent recreational development, Press used to escalate conflict
-Internal relations within the group.	Role of ideology Type of organisation Coalition formation.	Basic differences in ideology suppressed by opponents, but no unifying leadership or organisation.
-Rigid or flexible decision-making Determination of Claim	Public participation Type of decision-making Mechanism for adjusting to change Authority of decision maker	Consultation by Council at late stage leads to formal objections and public inquiry. Authority of Secretary of State as arbiter accepted who exercises
	Resulting balance of power	power to designate but insists on plan to clarify aims thereby gaining support of conservation and recreation groups. Lack of involvement in park management leaves Council with limited political support and vulnerable to landowner pressure.
OUTCOME/ AFTERMATH OF EPISODE	Transitory or durable outcome	Transitory

Motor Sports in England

The second example is that of use of the countryside by motor sports in England and Wales (see Figure 3.9). The conflict is a diffuse one running over several years, conducted at a local level by the opposition of local communities to existing or proposed planning proposals to stage motor sports events, coupled with a national campaign by nature conservation organisations (lead by the Royal Society for Nature Conservation, representing county wildlife trusts) which has culminated in more restrictive planning regulations being imposed by the Department of the Environment. The amenity lobby opposes motor sports taking place in national parks in England and Wales and their efforts led to policy recommendations to further restrict recreational use of motor vehicles in these areas (Edwards, 1991). Subsequent attempts to change the second aim of national parks to "promoting quiet enjoyment" have been rejected by the Government. Given the dispersed nature of the dispute, with many local episodes, this analysis is conducted at a general level.

The interests and power bases of the two respective lobbies are in marked contrast. The conservation interests have a unifying ideology, are well organised and their power base extends through various informal coalitions within the national parks and informal recreation movement; for example, they gain support from recreation organisations committed to quiet use of the countryside, such as the Ramblers' Association and the British Horse Society. The designated status of nature conservation areas, which nevertheless are sometimes used for casual motor sports, is legitimated through the legislation and popular support for conservation. The local impacts of the sport are generally perceived to be severe although their incidence nationally is unknown. This contributes to the adverse public image of motor sports which leads to their participants being considered illegitimate and inappropriate users of the countryside (Elson et al, 1986).

In ideological terms the conservation lobby is 'close-knit' using arguments of appropriateness and principle to advance their claims and the lobby is more highly politically organised. The tactics of this lobby are confrontational using the media effectively to present their case, while motor sports organisations are left to counterattack. In comparison, motor sports are weakly organised into a 'loose-knit' coalition which attempts to defend the present degree of access. The major competitive commercial events are well represented by the Royal Automobile Club

and the Auto-Cycle Union but these organisations give little support to small local events and to recreational motoring in the countryside (e.g., trail riding on motor cycles). The ideological base of motor sports is weak, their umbrella organisation (LARA) being unable to marshal arguments of principle to assert a social position in the countryside. Motor sports are perceived to be environmentally insensitive and there is no established and effective means of communication to address the problem nationally, regionally or locally. Nature conservation interests have in effect annexed the established order, effectively lobbying with some informal recreation organisations and local communities to extend control over motor sports. Motor sports have no effective lobby and the Sports Council proves to be a weak partner as it concentrates on providing for politically more popular activities. There is no effective arena for the negotiation of policy at national level nor for planning at a local level, which might attempt to reconcile the competing interests of motor sports and conservation.

The social systems within which these conflicts occur show more signs of rigidity than flexibility. Although the Department of the Environment (DOE) has consulted motor sports as well as conservation organisations on proposed changes to the planning regulations, it appears to be generally accepted that motor sports in the countryside are a problem to be controlled rather than a genuine recreational need which requires some basic provision, albeit on a limited and appropriate scale. Indeed local planning authorities have paid lip service to requests in DOE planning guidance to make provision for motor sports and have not made effective plans in the face of local political opposition. Thus local community and conservation interests support the decisions of the local planning authorities as legitimate.

In terms of the dynamic framework, the case of motor sports conforms closely to Type B (Figure 3.7). Motor sport organisations are ineffectively defending their tenuous position making successive concessions which further weaken their position overall. Each new order is transitory and short lived. Faced with superior and effectively organised power, and with no forum for strategic planning to broker their needs, the demise of motor sports in the countryside seems inevitable.

The analysis, based on the dynamic framework, predicts the continuing demise of motor sports in the English countryside.

FIGURE 3.9: A DYNAMIC ENGLAND	ANALYSIS OF CONFLICT O	VER MOTOR SPORTS IN
PHASE OF CONFLICT	RELEVANT FACTORS	ANALYSIS
AFTERMATH OF PREVIOUS EPISODE - Established social positions	Interest group seeking to maintain interest Initial balance of power	Motor sports organisations In favour of local communities
LATENT PHASE -Information	Communication Understanding of impact	No formal channel of communication Understanding rests on adverse image of sport rather than specific information on impacts.
INITIATION/ESCALATION PHASE - Potential triggers.	Challenge to established order	Local community and conservation organisations seek to restrict
-Internal relations within the group. - External relations: Proactive tactics /Claims for legitimacy.	Role of ideology Type of organisation National or local audience Adherence to principle Appropriateness of resource use Negotiation strategies Use made of media	existing motor sports activity. Conservation ideology strong, well established network of national contacts. Conservation organisations use conservation status of site as legitimating argument. Inappropriateness and other
- Coalition formation.	Coalition formation.	principles advanced in confrontational campaign making effective use of local press. No formal coalition but network and local contacts used to good effect.
ACTIVE PHASE -Internal relations within the group Responsive tactics	Role of ideology Type of organisation Reaction to new claim Environmental awareness	Motor sports lack unifying ideology and effective organisation Motor sports counterattack but perceived to be insensitive to local communities and environment.
-Rigid or flexible decision-making Determination of claim	Communication Public participation Type of decision-making Mechanism for adjusting to change Authority of decision maker Resulting balance of power	No effective channel of communication. Limited consultation by decision makers. Public inquiries adversarial. No strategic plans to consider sports need. DOE accepted as arbiter and exercises power in favour of more effective lobby. In favour of local communities and conservation organisations
OUTCOME/ AFTERMATH OF EPISODE	Transitory or durable outcome	Each incremental decision is transitory leading to next phase in another location

Moorland Access in the Peak District National Park

The third example analysed in this way is that of moorland access in the Peak District National Park (see Figure 3.10). The present episode of the conflict has its antecedents in earlier disputes between landowners, principally concerned about the use of their moorland for grouse shooting, and rambling organisations from the Yorkshire and Lancashire conurbations. An earlier episode, the Mass Trespass of Kinder Scout in 1932 which led to the imprisonment of some ramblers, is of continuing symbolic importance. It led in effect to the provisions to identify open land and to secure access agreements to private land, using the provisions of the National Parks and Access to the Countryside Act, 1949. This legislation and its instruments provided the first phase of the resolution. Open access to just over half of the moorlands in the national park has been secured by voluntary agreements between the landowners and the national park authority - the Peak Park Joint Planning Board (the Board). The agreements have legitimised the case of the Ramblers' Association as it continues to apply political pressure on the Board to enter into formal access agreements with the owners of the remaining moorland areas.

Meanwhile the preparation and revision at five year intervals of a National Park Plan provides a method for responding to new claims on the moorland as the plan is reviewed. The most recent of these claims has been to give greater consideration to the nature conservation interests of the moors. The present episode of the dispute has been triggered by two events:

- the expiry of the existing access agreements and their renegotiation between the landowners' organisation and the National Park; and
- the designation of the Dark Peak Moorlands as a Special Protection Area under EU Environmental Directives.

Although each interest is pressing to extend its claim, each is also part of an established order resisting the changes demanded by the others. There is in fact a range of conflicts between the ramblers seeking access to privately owned land, nature conservationists seeking to restrict public access and each of these three groups (ramblers, conservationists and landowners) seeking to restrict the activities of active sports. The landowning and nature conservation interests want to maintain the present distribution of open access on the moors (i.e., their social

IGURE 3.10: A DYNAMIC A ACCESS IN THE PEAK DIST	THE TAXABLE FACTORS	ANALYSIS
HASE OF CONFLICT	RELEVANT FACTORS	
FTERMATH OF PREVIOUS PISODE Established social positions	Interest groups seeking to maintain interest Initial balance of power	Landowners resisting further access while access organisations (RA) seek to maintain open access areas. Probably evenly balanced
ATENT PHASE Internal relations within the groups. Information	Role of ideology Type of organisation Understanding of impact	Strong ideological and organisational base to each group. Considerable uncertainty about impact of access on important populations of ground nesting birds.
ESCALATION PHASE - Potential triggers.	Challenge to established order Conservation status of site	RA seeking access to remaining open areas and national legislation. Proposed conservation designation of moorland under European directive.
- External relations: Proactive tactics /Claims for legitimacy.	National or local audience Adherence to principle Negotiation strategies Use made of media	Each party effective in lobbying especially at national level; using confrontational tactics elevating issues to matters of principle and using media.
- Coalition formation	Coalition formation.	Potential coalition between landowners and conservationists.
ACTIVE PHASE - Responsive tactics	Reaction to new claim	Each adversely reacting to claims of others.
	Environmental awareness	RA committed on policy but sceptical in practice.
-Rigid or flexible decision-making	a liveting to chang	yehicle for change but balance of
	Communication	Little direct contact between parties until recent formation of Access Consultative Group (ACC
	Public participation	Consultation replaced by involvement in ACG. Negotiation within ACG
Determination of claims	Type of decision-making Authority of decision maker	Authority of National Park Boar in question. Evenly balanced each party
	Resulting balance of power	holding vetoing sanction. Hitherto transitory, but could m

. . .

position) while the Ramblers' Association, in seeking an extension of public access locally while also pressing for national legislation for public access to 'open country', is attempting to redistribute the social structure of access. Ultimately the three interests are incompatible, particularly when their interests are expressed in ideological terms; as principles of "freedom to roam" (ramblers); "the precautionary principle" (nature conservation); and "privacy and autonomy" (landowners).

Thus the competing interests of nature conservation and rambling have many of the characteristics of ideologically close-knit groups. Although the landowners might be said to form a loose coalition, they have a unifying ideology and hold a considerable degree of power. Certainly these groups use the advancement of principles or arguments for appropriateness to advance their respective claims or use adversarial tactics and respond adversely to new claims, although, depending on the conflict, each group may be seeking to maintain or advance its power base.

Although there are significant differences in the level of organisation between the three interest groups, each is highly organised with well-established contacts at the national level. With the high degree of politicisation of this issue, each party operates both tactically and strategically whereby the national situation influences local action, while local action sets a national precedent. The Ramblers' Association in particular has acted in a confrontational way by including the Peak District in a national campaign of deliberate mass trespass which attracts considerable media coverage. Conservation interests have counter-attacked proposing sanctuary areas to exclude "inappropriate" use of breeding bird territories by walkers (although the principle of inappropriateness is probably used to greater effect by both parties to exclude active sports from the moorland areas).

Until recently there has been little direct communication between the interests and power is evenly balanced between them as each has strong political allies. But each has certain weaknesses in the eyes of the others (élitism on the part of landowners; the uncompromising aims of conservation; and the militancy of ramblers). Nevertheless, the claims of the three interests are legitimated within national park policy and the National Park Plan. The lack of information on the impacts of recreation on wildlife leads to uncertainty which all parties

probably use to their advantage. In this situation the Ramblers' Association can afford to appear environmentally sensitive by accepting conservation policies in principle while requiring proof that recreational disturbance is causing serious damage.

Each interest group is attempting to influence the policies (management aims) of the Board. Although the National Park Plan was prepared using a consultative process and its main provisions have been agreed, the Board's Access Strategy, which forms part of that plan, is under challenge from conservation interests. This highlights the need to get an agreement on both strategy and detailed management plans which would involve the interests directly rather than consult on firm proposals. The National Park Plan is subject to periodic review and can therefore provide a vehicle for responding to change.

With power being evenly distributed between the parties and none willing to make concessions to the other side, the outcome would appear to be one of stalemate. However faced with uncompromising advice on the threat to conservation from English Nature, and the need to renegotiate with landowners while hopefully extending the access agreements, the Board had to take an initiative. It proposed the establishment of an Access Consultative Group (ACG) and engaged a consultant to devise arrangements acceptable to the interested parties (Sidaway, 1993). As the workings of such a group could affect the social positions of each party it was in their interest to be represented to ensure that they were party to the decision (authority) and could influence the outcome - the redistribution of access (autonomy) (Thurlings, 1962). Arguments of principle have been submerged (at least temporarily) in the interests of direct negotiation as each group wants to be seen to be reasonable to its national audience. Lack of communication hitherto has been rectified by the establishment of the ACG and its workings increase direct involvement of the interest groups in the preparation of local access management plans. The manner of decision-making has been changed from adversarial to negotiative and the Group provides a mechanism for brokering change (although it may become institutionalised around the present interests and resist any claim for new recreational uses of the moorland resource). By accepting the Group's advice, the Board can increase the legitimacy of its decisions.

Although it is a more complex case, possible outcomes to the conflict over moorland access in the Peak District can be analysed using the dynamic framework set out in Figure 3.2. In effect, the conflict has run through several iterations in which the early episodes of trespass and the campaigning for national parks can be said to follow the pattern of a Type A power struggle. Legislation and the designation of the Peak District as a national park denoted a transfer of power to a new order from the established order of private landownership. Subsequently, the continual political pressure of the Ramblers' Association has led to further concessions from private landowners in the form of access agreements (Type B). But as nature conservation has built up a stronger power base, legitimised by European directives, a state of political stalemate has been reached; no one lobby is able to amass superior power.

Central to this struggle is the Board, which has certain of the characteristics of a flexible social structure. It has recently increased the degree of communication and public involvement in decision-making by the establishment of the ACG which serves useful local and national political aims. The Ramblers' Association benefits if local agreement is reached as this would set a precedent to be inserted in national legislation. A failure to reach agreement would further demonstrate the need for national legislation to override the local power of private landowners.

Thus this conflict may be moving towards Type C, negotiation and co-operation. If continued working within the Access Consultative Group can maintain trust and establish a precedent for co-operation between the rival interests and, as importantly, the process is seen to be legitimate by other players who are not directly represented at the table, then this initiative may move beyond a transitory outcome⁴.

The tentative prediction from this analysis is that one possible outcome of the conflict over moorland access in the Peak District is the establishment of a new and durable order.

Figure 3.11 summarises each of the three cases studies and their possible outcomes.

At the time of writing (July 1995) the outcome of these negotiations was uncertain. Although preliminary agreement has been reached on a system of access management planning which would mitigate the possibly damaging effects of public access, these negotiations were overshadowed by the failure of the national park authority and the landowners to reach agreement on the levels of compensatory payment to be made to owners for public access on their land.

FIGURE 3.11(a) PREDICTED OUTCOME OF CONFLICT IN THE PENTLAND HILLS REGIONAL PARK ACTIVE PHASE OUTCOME/ INITIATION/ AFTERMATH/ **ESCALATION AFTERMATH** LATENT PHASE TYPE (B) CONFLICT Landowning, conservation Defensive responses but react with do not form formal coalition and recreation interests with established social position Power struggle within FLEXIBLE social structure resulting in a minor Concession by established groups i.e., Designation with limited executive power Lothian Regional Council challenges **Proactive tactics** but fails to leading to using by proposing Regional Park designation build effective political support New order but Transitory Outcome FIGURE 3.11(b) PREDICTED OUTCOME OF CONFLICT OVER MOTOR SPORTS IN ENGLAND OUTCOME/ **INITIATION/ ACTIVE PHASE** AFTERMATH/ **ESCALATION AFTERMATH** LATENT PHASE TYPE (B) CONFLICT Motor sports organisations with react with Defensive responses and/or weak ideological base lack effective coalition weakly established social position Power struggle within FLEXIBLE social structure resulting in additional Concessions by Motor sports organisations leading to

Local community and conservation using Proactive tactics and effective interest groups challenging political organisation New order but Transitory Outcome for social position by proposing

further restrictions on motor sports

	ATION/	ACTIVE PHASE			OUTCOME/
LATENT PHASE ESCAL	LATION				AFTERMATH
(PHASE 1) CONFLICT	•				
Landowners with	react with	Defensive responses			
established social position		Powe	er struggle withi	n	
		RIG	ID social structi	ıre	·
Access groups challenging for social position	using	Proactive tactics	resulting in		power leading to n favour of claimant
•	•			(National Par	rk and access agreements)
(PHASE 2) CONFLICT	1. 3000			······································	
Landowning and Access groups wit established social position	h react with	Defensive responses Power struggle with social structure res			emate because of I distribution of power
Conservation and access groups challenging for social position	using	Proactive tactics		1	
(PHASE 3) POSSIBLE CO-OPER	ATION				
Landowners and access groups with	react with	Conciliatory responses			
established social position		Negotiation within	FLEXIBLE		
		social structure (Ad	ccess Consultativ	/e	
		Group) resulting in	Conse	nsus about	New order
Conservation groups challenging for social position	using	Negotiative tactics			and (Durable outcome)

CONCLUSIONS

This chapter has examined Hypothesis 2:

That it is possible to identify the underlying theoretical concepts and social processes which govern the development of conflicts, and which may be used to predict their outcomes. These relationships may also be expressed within a conceptual framework.

To consider this Hypothesis, the relevant theoretical concepts were identified in a review of the literature on social conflict. This enabled the diagnostic factors identified in Chapter 2 to be organised within a second "dynamic" framework which describes the social processes of conflicts. Selected case studies were then used to illustrate the possible outcomes of a dispute in a given range of circumstances. Thus the first and third parts of the hypothesis were confirmed but there are major limitations on prediction which are discussed below.

The Utility of the Dynamic Framework

Using this framework, it is possible to prepare a more detailed and clearer analysis of each of the three conflicts. Compared to the diagnostic framework developed in chapter 2, the reallocation of the influential factors into phases within the dynamic framework provides a more logical grouping as it demonstrates their inter-relationships during the course of a conflict episode. Certain factors which appear to have no role in diagnosis are now seen to have a place, several have been redefined and others identified. However, the separation of conflict episodes into phases may often be more easily accomplished in a theoretical analysis than in practice as phases may overlap considerably.

This analysis has clarified the nature of this type of dispute and the motives of each interest group. It demonstrates more clearly that these conflicts are intrinsically about attempts to redistribute the social structure of access and to maintain or improve the social position of individual competing parties.

A particular advantage of this analysis comes from the insights that it provides into the understanding of the role of ideology and arguments of principle in emphasising group solidarity and tactics during the course of a dispute. Coser's insight into 'close' and 'loose' knit organisations suggests the importance that ideology plays in motivating interest groups and

maintaining their solidarity. In which case, basic beliefs cannot be negotiable. This was in part demonstrated in the case studies but warrants more detailed investigation in further research.

The close examination of the respective goals of each interest group, whether they are seeking to maintain or improve their social position, enables the tactics of each group to be better understood during the escalation and active phases of a conflict. Tactics are chosen to improve legitimacy in the eyes of interested audiences. Thus the elevation of interests to matters of principle enables competing parties to give legitimacy to their claims. Inappropriateness of the activities of others acts as a mirror image to arguments of principle, which can either be used proactively or defensively to de-legitimise the claims of opposing parties. Thus arguments of principle can also be seen to be about social position.

The distribution of power and how this changes during the course of the dispute is a crucial part of the analysis. It appears to be the dominant factor in determining the outcome of a dispute and whether it will be resolved by the exercise or transfer of power or by negotiation.

The analysis gives some insights into decision-making structures, their rigidity or flexibility in influencing the outcome of a dispute. However, the concepts of rigidity and flexibility were identified by Coser in relation to the total system of decision-making in society. These concepts are not easily related to the limited local scale of many of the disputes studied and therefore proved unsatisfactory operational concepts.

The Dynamic Framework as a Predictive Model

The more extended analysis afforded by the use of this framework has led to tentative predictions on the outcomes of the case studies under analysis. The analysis predicts with some confidence the continuing instability of the situation in the Pentland Hills Regional Park and the hopeless political position of motor sports in the countryside. However, the eventual outcome in the Peak District National Park is less clear.

As has already been noted the analysis highlights distribution of power as the key factor in determining the outcome of a conflict episode. While this appears to offer the possibility of developing a predictive model, it also identifies the main stumbling block to prediction - the

inability to predict changes in the distribution of power. Factors which influence the balance of power, such as ideological motivation, tactics and the political organisation of disputing parties, might improve prediction and this proposition is further analysed in Chapter 5.

The review of social theory has suggested that resolution of conflict, in terms of a stable or durable outcome, may depend on voluntary negotiation rather than political struggle. The characteristics of voluntary negotiation and whether these are influenced by different forms of decision-making are the subject of the next chapter.

CHAPTER 4: THE CONTRIBUTION OF DECISION-MAKING TO CONFLICT RESOLUTION

INTRODUCTION

The previous chapter emphasised the role negotiation and/or the development of consensus can play in the resolution of conflict and in reaching more stable outcomes to episodes of conflict. This chapter reviews methods of decision-making and the arguments for increasing public participation to resolve conflicts by reaching consensus. It focuses on the circumstances in which consensus is reached by negotiation, particularly where a neutral third party intervenes to facilitate agreement between competing interests. This approach to dispute resolution is analysed in some detail to identify criteria which might then be used to evaluate the effectiveness of decision-making and planning in resolving conflicts between nature conservation and outdoor recreation. An evaluative framework, developed in this way, is then used to examine one detailed case study, of successive episodes of planning in the Rhine Delta in the Dutch Province of Zeeland, which is followed by a brief review of the designation procedures for national parks in the Netherlands¹.

A REVIEW OF PARTICIPATION IN DECISION-MAKING

Decision-making to Resolve Disputes

Ury et al (1988) distinguish three major ways to resolve disputes:

- those which reconcile the disputants' underlying interests;
- those which determine who is right;
- those which determine who is more powerful.

They argue that in general the first approach (for example: problem-solving by negotiation) which identifies and recognises the interests of disputing parties is less costly and more rewarding than the determination of rights (such as legal action in the courts), which in turn is less costly and more rewarding than the exercise of power (such as strikes or wars).

An earlier version of this literature review and an analysis of Dutch case studies formed part of a study conducted by the author and Han van der Voet of the Agricultural University of Wageningen for the Dutch government (Sidaway and van der Voet, 1993). This review has been revised and extended for this study.

The range of techniques commonly used for settling disputes can be portrayed as a continuum that extends from informal discussion, through forms of negotiation and the legitimate use of power to extra-legal coercion or violent exchanges (see Figure 4.1). Slaikeu (1989) points out that the extremes of this continuum - avoiding the issue and unilateral power play - offer the greatest loss of control over the outcome and hence the greatest risk to the disputing parties.

FIGURE 4.1: THE RANGE OF DISPUTE RESOLUTION TECHNIQUES						
Decision left to chance	Decision made to disputing parties	•	Decision made by higher authority		Decision by direct action or force	
AVOIDANCE OF THE ISSUE	NEGOTIATION	MEDIATION	ARBITRATION	LITIGATION	UNILATERAL USE OF POWER	
Parties unassis	ted by third party		Third party	decision	Coercion	
			d by neutral third earty			
Based on Moore, 1986 and Slaikeu, 1989.						

Within the central range of this spectrum,

- the disputing parties may negotiate without assistance;
- they may be assisted by a neutral third party in the form of:
 - facilitation (where the third party assists by suggesting procedures to establish and conduct the negotiations),
 - mediation (where the third party takes a more active role in brokering the negotiations) or
 - non-binding arbitration (where the third party suggests a solution);
- the decision may be made by a third party in
 - binding arbitration or
 - a court of law.

It is within the second category (assistance using a neutral third party) that the techniques of Alternative Dispute Resolution (ADR) have been most recently applied to environmental disputes. The term "alternative" has been used to distinguish these methods from more traditional legal and administrative processes, but it should be recognised that even in the USA,

where ADR is currently popular, the vast majority of environmental disputes are resolved by administrative or legal procedures².

In this context, appeals against administrative decisions can be seen as a form of binding arbitration. The outcome of many environmental disputes in Britain is determined by the development control system in this way. If an application for development is refused by the local planning authority, the applicant may appeal against the decision. The outcome of the appeal is determined at a political level by the relevant Secretary of State acting on recommendations made by an independent inspector (or reporter in Scotland) who may have conducted a public inquiry into the case. Disputes within public organisations are typically resolved by appeal procedures. However, processes of arbitration or litigation tend to foster an adversarial approach, which tests evidence and witnesses' credibility, in contrast with the more conciliatory procedures of negotiation or mediation. Slaikeu argues that:

"... when disputes are kicked "upstairs" to superiors, boards of governors, or grievance panels, the cost in administrative time is far greater than if the parties had negotiated the matter themselves or used mediation by a third party.

As a corollary to [this] postulate, the greatest cost savings for organisations will occur in implementation of systems that move the majority of disputes to resolution early in the life of any conflict, with resolutions at the higher authority level used only when absolutely necessary and appropriate..." (Slaikeu, 1989, 397)

The acceptability of any decision-making process to the disputing parties assumes that it is seen to be legitimate and just. For this to be the case, the social institution which administers justice has to be generally accepted by the community at large, usually because it is democratically accountable (albeit indirectly). Alternatively, the parties have to be directly involved in decision-making.

Typically, of approximately 15,000 administrative decisions taken each year by a District Administrator in the US Federal Bureau of Transportation, 60-70 may be determined at a higher level on appeal and one or two of these might become cause celebre [in other words major conflicts] which might be eligible for ADR. (Kussey, 1992, personal, communication). Amy (1987) quotes a civil litigation research project in Wisconsin which found that only ten per cent of disputing parties go to a lawyer, of these half file a suit and 92 per cent of these settle out of court.

The Issues of Legitimacy of Decision-Making and Public Support

Direct representation and openness of decision-making are crucial to ensuring that public policy decisions are accepted as legitimate. There are three arguments in their favour which are based on theory, practice or ideology.

Thurling's (1962) sociological perspective on these issues was presented in chapter 3. He argued that the outcome of a conflict will be durable where it is based on consensus but only transitory where it is based on the exercise of power. He suggested that claims for access to resources may be rejected or substantiated either by the exercise of power or through a legitimating social institution. By distinguishing between the ability of an interest group to exercise its rights in using a resource (autonomy) and it having some say in the process whereby rights are allocated (authority), he further confirms the importance of participation in decision-making. This argument is supported by Creighton:

"In every closely fought election, nearly half the voters "lose" - their candidate isn't elected yet the outcome of the election is accepted because there is a consensus that the decision-making process has been fair and legitimate. In effect, the decision-making procedure or process - the election - makes the outcome legitimate even if someone didn't like the outcome. One of the major functions of public involvement is to create sufficient visibility to the decision-making process so that decisions which result from it are perceived as fair and legitimate. While some of the people most directly impacted by a decision may not be impressed by the equity of the decision, their ability to undermine the credibility of the decision rests on their ability to convince the larger public that the decision was unfairly made. Effective public involvement can establish your credibility with a larger public, so that the claims of the special interests fall on deaf ears."

(Creighton, 1978, quoted in Delli Priscoli, 1980, 9)

At a more practical level, it is argued that environmental regulation, in the form of a nature conservation designation, requires a high degree of public acceptance if it is to be successfully implemented (Sidaway and van der Voet, 1993). The rationale is that policies will only be fully accepted and implemented when interest groups understand and are involved in determining the solution to mutually perceived problems. If regulation is imposed on people, there may be a broad level of compliance in the short-term, but it may not be generally accepted and this could have serious long-term consequences. In other words, the effectiveness of regulations depends upon the strength of political support and if this is lacking the regulations may be unenforceable.

McCool (1986) notes that public consensus in favour of US Forest Service planning is critical to the agency obtaining financial support for and successful implementation of its policies. He further argues that decision-making should be an open process with each stage easily traced and that an informed public can assist the service in reaching high-quality decisions. But participation goes beyond incorporating representatives of interest groups on management boards or commissions to a commitment in principle to open and collaborative decision-making.

The ideological argument for public participation appears especially in the planning literature. During the 1960s and 1970s, considerable attention was paid to increasing public participation in planning. Burton (1976) recognised the following planning philosophies:

- 1. planning of people based on strong ideological principles, legitimating the justification for certain measures;
- 2. planning for people based on the rational planning model and the contribution of scientific research;
- 3. planning with people participatory planning; recognising the normative base of decision-making, the uncertainty principle in future development and the limitations of scientific knowledge.

Variations on planning with people, dating from the same era, are variously described as 'transactive' planning (so-called because of the negotiations which take place between planners and interest groups) and participation through 'public involvement', in which many mediators are currently engaged in the USA.

The Relationship between Planning Methods, the Participants and Phases of Planning

Ter Haar (1979) suggested that the roles of different parties are quite different within different planning philosophies and during the different stages of the planning process. In a recent study, Van Keken, Lengkeek, Sidaway and Van der Voet (1993) used Ter Haar's model and within the different parties they differentiated between:

- democratically chosen representatives on national, provincial and local levels (municipalities and water boards 'waterschappen');
- officials and professionals; and
- inhabitants: the user and interest groups and their representatives.

Within planning methods it is possible to distinguish between the approaches of:

- ad hoc planning: based on political pressure of interest groups;
- standards planning: where quality standards are used;
- investigative planning: using demand/supply models or the capacity approach;
- participatory planning: with and by the interest groups.

While these different planning approaches may not be mutually exclusive, certainly the first will reflect the power base of the powerful, whilst the second and third depend on technical assessment and therefore will tend to put power into the hands of the professionals.

Ter Haar also argues that it is not right to speak of 'the' professional. Complex problems need a multi-disciplinary approach and co-operation between disciplines, in which the choice of disciplines can influence the final result. He notes that the extent of the area and the complexity of the projects are important factors in obtaining participation. Small scale, low profile projects are more likely to encourage participation, while the influence of professionals is extended in large-scale, more complex projects.

Participatory planning aims to empower the relatively powerless and to redistribute power. Very similar discussions occur, both in the conflict resolution and planning literature, about the propriety of professional planners or mediators attempting to redistribute power or whether their role should be strictly neutral, leaving empowerment to political organisers (see for example, Forester, 1987).

Sidaway (1992d) has pointed out that the purposes of most government agencies are to execute one or more aspects of public policy and that as a result few are politically neutral or exist to mediate change. As Delli Priscoli observed

"Agency missions embody values - packages of views on how the world ought to be. Since agencies exist in a public world, that package of "oughts" services some segment of society's values." (Delli Priscoli, 1980, 12)

He further argues that public involvement can affect the way an agency carries out its mission and adapts to changing social values by redefining problems and considering a broader range of alternatives.

The Distinction between Consultation and Public Involvement

Creighton (1978) suggests that public involvement ranges from knowing about, to having an influence on or being party to a decision. But the main distinctions that are being made here revolve around:

- whether the public is an equal party in the planning exercise, i.e., the 'planning for people' (consultation) or 'planning with people' (involvement) distinctions;
- the timing of public participation, i.e. whether the public is being consulted on a draft plan or whether it has been involved from the outset in the definition of problems and the formulation of options.

Thus a key characteristic of public involvement is collective decision-making. Public consultation may be no more than the dissemination of information, good public relations or tokenism which aims at placating the public. The advocates of full-scale public involvement (e.g. Susskind, 1981) argue that traditional consultation does not contribute to conflict resolution. Ter Haar (1979) argued that limiting participation until a late stage of the planning process so that there can be very little real discussion is likely to lead to conflict. He distinguished between the preliminary, discussion and decision phases of planning and advocated public involvement in the preliminary phase when problems are identified and analysed, and when goals and objectives are defined. He accepted that politicians will set the financial constraints of a plan, will balance the representation of interests and attempt to represent the unrepresentable. However, he considered that the public should be involved in the consideration of alternative strategies in the discussion phase of a draft plan.

This highlights one of the most important distinctions between public consultation and public involvement - the point at which discussions begin with interest groups and the public generally (see figure 4.2). Government agencies commonly invite discussion on a draft plan based largely on technical assessment and in which the future options are limited to perhaps one 'preferred solution'. Ter Haar pinpointed the dangers of this approach. Formal consultation procedures tend to polarise the interests and often the only possibility available to aggrieved members of the public is to form action or protest groups to appeal against administrative decisions and delay the process. This contrasts with more democratic systems of planning in which the preliminary phase is open to the public.

IGURE 4.2: PARTICIPAT	TION IN DECISION-MAKIN	G	
Non-participatory	Semi- participatory	Participatory	
issues	issues	issues	
1		>>>>	
		involveme	
		<<<<	
 options	options	options	
		>>>>>	
·		involveme <<<<	
İ	į	1	
proposals	proposals	proposals	
	>>>>	 >>>>>	
	consultation	involveme	
	<<<<<	<<<<<	
policy.	policy	policy	
•			
		>>>> involveme	
į	i	<<<<	
evaluation	evaluation	 evaluation	
	CONSULTATION	PUBLIC INVOLVEMENT	

Public involvement is often criticised as a time-consuming process which reduces the efficiency of decision-making. For example, Brown and Marriott (1993), writing from a legal standpoint, argue that the mediation of complex issues is likely to take a long time and that the complexity of the issues to be addressed means that the resources of the mediators are likely to be substantial and therefore costly. Amy (1987) also challenges the view that ADR techniques are necessarily quicker and cheaper ways to settle disputes.

However, Susskind and Cruikshank (1987) claim that quick decisions often prolong disputes and that consensus building and extensive fact finding are worthwhile investments. Mernitz (1980) suggests that mediation is as speedy as the parties want it to be, while the settlement of disputes through the courts is often delayed because of a backlog of cases. He estimates legal fees to be twice the cost of mediation. Delli Priscoli (1980) compares the timescale of administrative decisions and ADR. He points out that criticism of public involvement may not

be valid if the time taken to implement a decision is taken into account. Without public involvement the initial decision may be taken more rapidly, but if the outcome is unacceptable there may be a prolonged period in which the decision is contested and implementation is delayed. Public involvement may delay the initial decision but if that is acceptable to the interest groups, implementation should be assured and the total process will be shorter than under the original, non-participatory procedure.

Mediation as a Participatory Technique

In essence, mediation and allied techniques involve all the interested parties or interest groups in decision-making on a more or less equal basis and aim to produce a solution which is both more acceptable to all of them and is longer lasting than one imposed by a third party. The advantages over adversarial decision-making are that voluntary co-operation between the parties leads to better understanding of each other's positions and values and that a sense of ownership is gained by being party to a collective decision. Thus the common elements of mediated negotiation and many other forms of participatory decision-making are:

- 1. Disputing parties are brought together to participate in face-to-face negotiations.
- 2. A neutral mediator, facilitator, or go-between works to improve the communication between the disputing parties.
- 3. Parties are encouraged to explore and understand each other's underlying interests, not just their bargaining positions.
- 4. Negotiations are designed to be collaborative rather than adversarial.
- 5. Parties reach some form of voluntary agreement at the end of the process. (Madigan et al, 1990)

The role of the mediator, as an impartial third party, is to convene discussions and to help to design an acceptable negotiating process. As well as providing procedural assistance, mediators can help to improve communication between the parties and help them build a constructive relationship. This is done by facilitating contact, improving mutual respect, developing openness and trust, giving the parties equal status in the discussion, and getting them to work towards common goals (Fisher and Ury, 1981). The choice of mediator will depend on what assistance is required to develop appropriate procedures, whether technical knowledge of the issues or experience of similar previous negotiations is considered essential, and whether the parties can build up rapport and trust in the mediator (Moore, 1991). Typically the cost of the exercise is borne by all the parties to emphasise the mediator's neutrality.

Ozawa and Susskind (1985) consider public policy disputes which revolve around ambiguous or contradictory scientific or technical information. They contrast the willingness of scientists to share new-found knowledge with adversarial approaches to dispute resolution which encourage the withholding of information that is helpful to an adversary's case. Within mediated negotiations, information is shared and attempts to suppress information can destroy a participant's credibility.

The rationale that led to the development of ADR techniques in the USA is the contentiousness and complexity of environmental problems in which large numbers of interests are involved, allied with the growing frustration over the delays and costs of administrative and legal processes of decision-making. Mediation may also be seen as an attractive alternative to confrontational politics which satisfies a yearning [in the USA at least] for peace, co-operation and reconciliation (Amy, 1987). These techniques have been applied to different levels of decision-making in the USA, for example, in the formation of public policy, such as getting agreement on the content of federal legislation or the detailed regulations which implement legislation. Site-based disputes about development or contentious issues such as the disposal of hazardous waste have been settled in this way. The techniques have also been applied to longer-term management of environmental impacts - as in the procedures for assessing and monitoring the 'Limits of Acceptable Change' developed for Wilderness Areas by the US Forest Service (Stankey et al, 1985).

The Limitations of Mediation

The most detailed critique of environmental mediation has been provided by Amy (1987) and many of his criticisms apply to other forms of participatory decision-making. His perspective is that of the political scientist concerned about power, equality and democracy, although he concentrates on power and says relatively little about democratic representation and accountability. His basic point is that power is rarely equally distributed in political institutions and that given the opportunity, the powerful will use mediation or any other participatory process to further their own ends.

The critical issues within Amy's critique relate to:

the nature of the dispute;

97...

- the political context within which it may be resolved; and
- the inherent characteristics of the decision-making process.

These will be considered in turn, taking into account the extent to which mediators attempt to address these issues.

The Nature of the Dispute

Amy (1987) suggests that mediators recognise two types of dispute - those concerning misunderstandings and conflicting interests - and tend to ignore a third - disputes over basic principles which is an element in most environmental conflicts.

Misunderstandings may arise because of the stereotypical perceptions that disputing parties may have of their rivals' positions or because of disagreements over the scientific and technical aspects of the dispute. Direct contact and negotiation may remove the stereotypes or misconceptions each party has of the other and clarify the technical issues.

By working on conflicts of interest, mediators assume that the parties' bargaining positions are negotiable and that their underlying interests can be served by a hitherto unconsidered option or a straightforward compromise between the respective positions. In Amy's view, and he cites various statements from mediators that he interviewed, this type of negotiation cannot and should not compromise non-negotiable principles which are based on deeply held values or beliefs concerning the way society should function. In his view, environmental values are a case in point:

"In any case, there is a real difference between seeing environmental disputes as conflicts of interest or as conflicts of principle. ...more activist organisations, such as Greenpeace, Earth First! and Friends of the Earth, ... tend to see themselves not so much as another interest group, but as part of a movement which is dedicated to creating an environmentally sane society...more like a campaign or crusade to get basic ethical and ecological principles embodied in law." (Amy, 1987, 175, 176)

He considers environmental mediation to be an inappropriate method of settling such disputes:

"It can be argued that issues involving principles are best dealt with in more traditional political institutions like the courts, administrative agencies, and legislatures. After all, it is the purpose of these political institutions to establish and enforce certain societal norms and

principles. But by obscuring the principled nature of environmental disputes, environmental mediation may divert participants from these institutions that may be more suited to their political struggle." (Amy, 1987, 185).

Although Amy accepts that some environmental mediators recognise that they cannot mediate conflicts of principle³, he points out that it is not always easy to distinguish between principle and interest and that "environmental disputes are often multi-faceted, involving a mixture of issues, some negotiable, some not." (Amy, 1987, 190). The limitations of trying to use his three categories of dispute as a diagnostic typology were recognised in Chapter 3.

The Political Context of the Dispute: the issue of power

The success of ADR depends mainly on the willingness of the parties to enter negotiations and this is unlikely to be the case where one party is markedly more powerful than the other⁴. As noted earlier, disputes may be resolved in a variety of ways. Before deciding whether or not to negotiate, the parties will make their own assessment of the risks involved, of the likely outcome if a solution is imposed by politicians or the courts, and of what the effects of such a decision might be on their interests. Amy sees a very limited role for environmental mediation, arguing that it assumes a pluralistic view of politics in which power is evenly distributed between the interested parties or that some at least of the many sources of power are available to the weaker parties. Citing some mediators, again he postulates that mediation is only a viable option when power is evenly distributed, when the parties have reached a political stalemate and a state of mutual firustration. There may also be the added risk of considerable uncertainty over, say, the outcome of legal proceedings. "Only when the politics of power have been exhausted can the politics of co-operation become a viable possibility." (Amy, 1987, 92).

Fisher and Ury (1981) argue that the only reason for negotiating is to obtain better results than can be obtained by other means and that both parties will and should assess the likely outcome of the negotiations against their 'Best Alternative to a Negotiated Agreement' (BATNA). Furthermore, they argue: "...the relative negotiating power of two parties depends primarily

Many mediators do recognise the limits to voluntary negotiation, that beliefs are non-negotiable and that legal safeguards are necessary to protect an individual's rights, e.g., Lesnick, Tyce, 1992, Pers. Comms.

Again a point recognised by many mediators, e.g., Schippers, 1992, Pers. Comm.

upon how attractive to each is the option of not reaching agreement" (Fisher and Ury, 1981, 106). In other words: "the better your BATNA, the greater your power". They argue that the power of the weaker party increases when they have other options to pursue and that, once they realise this, their negotiating position is strengthened.

From a sociological perspective this approach to rectifying imbalances of power would seem a somewhat simplistic view of a fundamental problem. Indeed the major criticisms of ADR arise from structural theories on the distribution of power and ADR's inability to effect change when confronted by the planning, administrative, legal and political systems which depend on the existing power structure of society.

"Policy making processes are rarely politically neutral - procedures for making decisions invariably tend to favour certain kinds of policies and certain kinds of interests" (Amy, 1987, 12).

Scimecca (1993) also challenges ADR from a sociological standpoint and identifies its limitations as:

- a) ADR is based on the concept of individual responsibility. Therefore, dispute resolution concentrates on improving processes of communication and increasing understanding between disputants ("who may understand their opponents only too well").
- b) The atheoretical approach of ADR ignores a main source of conflict, the unequal distribution of power, which is legitimated in established social institutions, such as the planning and legal systems. Thus by backing the status quo, ADR becomes a tool of social control. Scimecca considers it significant that ADR concentrates on inter-personal, organisational, industrial, and environmental disputes which do not challenge the political order⁵.

There are parallels in Britain, as evidenced by the activities within the Mediation UK network which are principally within the inter-personal fields of family, neighbour, community and criminal-victim disputes. There is some interest but little activity in the environmental field.

c) The neutrality of the third-party is likely to favour compromise, existing predominant values and the status quo. Mediators are unable to change the distribution of power or justice which is more properly the role of the political process.

Furthermore it would seem unlikely that those who have gained power through political struggle will voluntarily relinquish it. Amy (1987) had also considered these points, particularly the danger that mediation will be used by powerful business interests or the government to co-opt environmental groups who lack the resources or the organisation to use the political process. Such groups may be disempowered by their lack of technical expertise or financial resources and cannot follow other options, such as litigation. In these circumstances, the powerful may restrict the political agenda and manage conflicts to their advantage.

Inherent Characteristics of the Decision-making Process

Amy (1987) suggested that the informality of mediation (when compared to litigation) may present inherent difficulties for weaker parties if the safeguards of more formal procedures are lacking. However cumbersome, legal procedures are often designed to protect individual rights. Apart from being seduced by the cordial atmosphere, weaker parties' inexperience of negotiation may leave them vulnerable. He also suggests informal procedures place heavy responsibilities on mediators who may set the agenda and reframe issues in possibly manipulative ways that could mislead innocent parties. The impracticalities of negotiation within very large groups may favour reducing the size of the group, with the effect that only the most powerful are included whilst the weak and unorganised are ignored. He concedes that the accountability of the representative to the constituent group is a partial safeguard (Amy, 1987). However, most mediators are conscious of these pitfalls and attempt to address them in "dispute systems design".

Dispute Systems Design: The Issues of Representation and Accountability

As mentioned earlier, Ury et al (1988) advocate problem solving negotiations as a preferable way of resolving disputes and suggest that decision-making procedures should be purpose-built to facilitate negotiation. They set out six basic principles of 'dispute systems design'.

- 1. Concentrate on matters of direct interest to the parties rather than abstract principles.
- 2. Incorporate procedures that encourage disputants to keep negotiating.
- 3. Provide low-cost legal (rights) and industrial action (power) procedures as fall back positions.
- 4. Insist that representatives consult before and report back to their organisations after negotiation.
- 5. Arrange procedures in a low-to-high-cost sequence.
- 6. Provide the motivation, skills and resources necessary to make the procedures work.

In the USA, these design principles have been applied to disputes involving state government, families, schools and the community, within hospitals and between businesses. Murray (1989) writing about schools subject to inter-racial disputes, elaborates on these principles, commenting that there is often little agreement in the community about the nature of the underlying problems. He found that the representatives of interest groups had to be involved in defining the problems; that problems had to be defined broadly so that their scope was correctly determined; that the responsible authorities had to be committed to a process controlled by the participants; that the process had to be linked to existing decision-making, and that all major interests had to be represented. Ertel (1991) suggests the most effective approach is to get agreement from the disputing parties on a desired model of decision-making before analysing their problem (see Figure 4.3).

FIGURE 4.3: ATTRIBUTES OF AN EFFECTIVE CONFLICT RESOLUTION PROCESS

- Clarifies the underlying interests of participants.
- Builds a good working relationship.
- Brings forward a range of options for consideration.
- Is perceived as legitimate.
- Recognises the alternative procedures that are available to the parties.
- Improves communication.
- Leads to wise commitments.

Source: Ertel, 1991.

In practice, this means that any initial discussions have to cover the form the negotiations might take and who should be involved. This stage of negotiating about negotiating is often called 'getting to the table'. The discussions may be assisted by a mediator who makes initial soundings of other organisations on their behalf but questions the likelihood of an eventual agreement. The mediator's initial assessment of the situation considers the relationships and power balances between the interested parties in which it is important to ensure that no powerful interests or stakeholders are isolated and ignored. Proposals are presented on the form negotiations might take, e.g., whether decision-making is to be a joint responsibility and who is to be represented. Thus the issues of recognising and representing interests, the distribution of power between them and ground rules for negotiation, including equal access to information, are considered at the outset (see, for example, Madigan et al, 1990; Sidaway, 1993).

The benefits of using ADR procedures to all parties are summarised in Figure 4.4.

FIGURE 4.4: ARGUMENTS FOR PUBLIC INVOLVEMENT IN DECISION-MAKING AND PLANNING

Advantages to Resource Manager/Government Agency

- 1. Resolves conflicts by building consensus.
- 2. Plan/solution is based on a broad set of values, i.e., is not based on the technical/political values of the ruling elite.
- 3. Decisions are seen to be legitimate.
- 4. Increases credibility of government agency amongst interest groups.
- 5. Decisions are based on a wider range of information, i.e., interest groups may have access to information that was not available to the resource manager.

Advantages to Interest Groups

- 1. Increases the accountability of the resource manager to the interest groups.
- 2. Interest groups feel they have more control over the process of decision-making and may be more willing to accept the risks and trade-offs that result.

Advantages to both Resource Managers and Interest Groups

- 1. Builds trust between the parties.
- 2. Ownership of the decision is shared between the parties.
- 3. Uncertainty is reduced as different perceptions of risk become apparent to the parties who then develop a shared assessment of risk.
- 4. Greater understanding of the interests of the negotiating parties and awareness of their procedural alternatives; bargaining positions are recognised as demands and not final statements of interest; greater understanding of salience of issues is developed.
- 5. Generates a wider range of preferred options.
- 6 Leads to wise commitments.

Sources: Delli Priscoli (1980, 1984, 1990); Susskind (1981); Ertel (1991)

Conclusions of the Review of Participation in Decision-Making

A number of themes have emerged in this review which concern the nature of the dispute, the distinction between conflicts of interest and conflicts of principle, the balance of power between interest groups and the processes and procedures of negotiation.

Although advocates of mediation and other forms of ADR have been accused of following an atheoretical approach and ignoring imbalances in power, for their part they claim to have adopted a series of principles, based partly on negotiation theory (e.g., Raiffa, 1982) and partly on successful practice, which take into account at least some of these issues. They argue that

.. 104

negotiations which involve all interested parties throughout the major phases of decision-making are more likely than other methods to result in agreed policies being implemented successfully. These negotiations enable the respective parties to gain greater benefits than are achievable by alternative forms of decision-making. The negotiations are more likely to be successful if they are assisted by a neutral third party.

The critics of ADR argue that not all conflicts can be resolved by this form of negotiation; that while conflicts of interest and misunderstanding may be amenable to this form of intervention, conflicts over basic principles or values are not. Furthermore, most environmental conflicts contain all three of these elements. It is also argued that the willingness of partners to enter negotiations depends on power being evenly distributed between them or the weaker party holding a power of veto. Where this balance does not exist, weaker parties should not be coerced into negotiating and a neutral mediator is not, or arguably should not be, in a position to re-distribute power without compromising his or her neutrality. It has also been suggested that the combination of events whereby power is evenly distributed and the competing parties are frustrated by a political stalemate is relatively rare, severely limiting the opportunities for environmental mediation.

Nevertheless, it is likely that the adoption of participatory decision-making creates a potential climate for conflict resolution as it facilitates contact between resource controllers, landowners, land users and authorities; the co-ordination of public sector initiatives; the involvement of interested parties; and the implementation of mutually beneficial policies.

The key elements of participatory decision-making are concerned with ensuring that there is a balanced, open process which is seen to be legitimate in the eyes of each of the parties. Public involvement in the planning process may be semi-participatory or participatory. In a closed, non-participatory process there is neither public consultation nor involvement. In a "semi-participatory" process, policy is developed within an organisation without reference to the outside public and it is only when a number of options have been eliminated and a preferred proposal agreed that this is subject to consultation. In a fully open participatory process, interest groups or a wider public are involved at each successive stage of planning. Legitimacy is gained by involving the parties throughout the process, starting in the initial stages of problem

definition and analysis, to include the setting of objectives and the consideration of alternative strategies. This level of involvement does not necessarily delay the final agreement.

In summary, for decision-making to be seen as legitimate, balanced and open:

- the interested parties must participate directly or decision makers must be accountable;
- involvement must be early with all parties having a say in the terms of reference and agenda;
- power must be balanced;
- information must be freely available to all parties.

These key points form the basis of the following evaluative framework (set out in Figure 4.5) in which the principles of participatory decision-making have been re-formulated into a set of preconditions which can be used to evaluate whether the outcome of decisions is likely to be seen as fair and legitimate in the eyes of all interested parties.

FIGURE 4.5: AN EVALUATIVE FRAMEWORK FOR DECISION-MAKING			
CRITERIA	PRECONDITIONS SOURCES		
Terms of reference and agenda	Is the agenda balanced to cover the full range of issues or is it constrained by a pre-emptive policy or proposition made by powerful interests? Susskind (1981), Ter Haar (1979), and Murray (1989).		
Representation	Is the representation of interests balanced at each level of decision-making? Madigan et. al. (1990) and Murray (1989).		
Power in decision- making and accountability	Who holds the power to determine and/or execute decisions, and is power evenly balanced between the parties? How accountable are the representatives to their interest groups? Amy (1987) and Scimecca (1993). Ertel (1991)		
Information	Is information freely available to all interests? How objective is the information, i.e. has it been gathered by independent sources? Is the information coverage of issues evenly balanced? Ozawa and Susa (1985), Delli Pri (1980), Sussking (1981), and Erte (1991)		
Openness of and involvement in decision-making	Are all phases of the process open to all interest groups? What is their degree of involvement in each phase?	Ter Haar (1979), Murray (1989) and Crieghton (1978).	

One method of identifying the degree of participation is to compare representation throughout the various stages of decision-making. In Figure 4.6 this form of analysis is shown as an evaluation matrix. In this, the representation of levels of government and interest groups is shown on one axis while the different phases of planning - from the identification of issues to the establishment of policy and its evaluation - are shown on the other. The entries on each axis of the matrix can be varied to cover representation in more detail or to consider the composition of decision-making bodies instead of the phases in the planning process.

FIGURE 4.6:	FIGURE 4.6: MATRIX OF REPRESENTATION AND INVOLVEMENT				T	
PHASES OF PLANNING	PARTICIPATION: Who is represented at each stage?					
	National or Federal Government	State or Regional Government	Local Government	Non- government organisations	Commercial organisations	
Initiative						
Problem definition						
Setting of Objectives						
Development of options						
Policy Decision						
Monitoring						
Evaluation						

ANALYSIS OF CASE STUDIES

Introduction

In the remainder of this chapter, the evaluative framework and participation matrix are used to analyse a series of Dutch case studies. Planning in the Rhine Delta has been selected to illustrate how changes in decision-making procedures at different phases of the development have contributed to increasing levels of conflict. As different sections of the estuary have been enclosed, so planning has favoured different priorities, initially provision for water recreation on the Veeresemeer (which is not included in this analysis), then a balance between water recreation and nature conservation in the Grevelingen, and latterly nature conservation in the Oosterschelde and the Voordelta. The analysis considers decision-making in the Grevelingen, the Oosterschelde and the Voordelta. The analysis concludes by considering the designation process currently used for national parks in the Netherlands to illustrate how consensus can be reached and how the commitment of landowners is obtained to the multiple purposes of national parks. However this example is not evaluated in a specific locality.

Outline Description of the Rhine Delta Scheme

Following the catastrophic floods in 1953, the Dutch government enacted the Delta Plan to protect communities in Zeeland and Zuid-Holland. This entailed building a series of dams across four of the six tributaries of the Delta, starting with the enclosure of the Veerse Meer which was completed in 1961. The chronological order of dam construction in the Delta and subsequent events is set out in Table 4.7, which concentrates on the latest phase of planning in the Voordelta. Further information on the events in the Oosterschelde can be found in Annex 3.

FIGURE 4.7: SUMARY OF EVENTS IN THE RHINE DELTA 1953-1992

- Disastrous flooding of 150,000 ha. 72,000 people evacuated, 1,835 lost their lives.

 Establishment of Delta Commission to examine feasibility of closing the estuary by dams and/or raising and re-enforcing the sea dikes, which reported in 1955.
- 1958 Delta Act.
- 1961 Enclosure of Veerse Meer by completion of Zandkreek Dam (1960) and Veerse Gat Dam (1961).
- 2 Zeeland Society of Science conference initiated formal opposition to closure of Oosterschelde.
- Enclosure of Grevelingen with completion of Grevelingen Dam (1965) and Brouwers Dam (1971). Enclosure of Haringvliet with completion of Volkerak Dam (1969) and Haringvliet Dam (1971).
- 1976 Agreement to build tidal barrier on the Oosterschelde.
- 1982 Publication of policy plan by the Stuurgroep Oosterschelde (Oosterschelde Steering Group).
- 1986 Completion of Oosterschelde barrier, Philips Dam and Oesterdam.
- Dutch Government announced its intention to develop a policy plan for the Voordelta according to the Fourth Note on Physical Planning.
- Minister of Traffic and Public Works invited interested authorities to participate in the Policy Development Group (BOV) responsible for formulating a policy plan for the Voordelta.

Designation of inter-tidal areas of Oosterschelde as Ramsar reserve. Adoption of the Policy Note Oosterschelde as official extension to the Streekplan (Regional Plan) Zeeland.

Designation of inter-tidal area of Oosterschelde as (State) Nature Reserve based on the Nature Conservation Law. Protest rally by Recreatie Overleg Oosterschelde (Actiongroup of Recreation Interests).

Report on nature development by Bureau Duin en Kust, suggested as a basis for the policy plan for the Voordelta by nature conservation directorate of Ministry of Agriculture, Nature Management and Fisheries (LNV). Recreation inventory and report for the Voordelta prepared by private consultant for the Provisional Outdoor Recreation Advisory Council (VAROR).

- Project Group preparing amendment to Fourth Note on Physical Planning, set out the main policy aims for the Voordelta. BOV initiated formal consultation on the Preliminary Policy Plan. Initial reaction to Preliminary Policy Plan by the Dutch Federation of Sport Fishing Clubs (NVVS) and Delta Fishing Federation agreed with main goals of nature development and the improvement of water quality but argued for maintenance of slipways and access to sailing water and fishing grounds. Reaction from environmental foundation (Stichting Natuur en Milieu) to Preliminary Policy Plan agreed with nature development goals but considered the plan a compromise. Project Group prepared a response to consultations which included new proposals to restrict recreational use of the Voordelta.
- Publication of the draft report Evaluation Policy Plan Oosterschelde (Evaluatie Beleidsplan Oosterschelde) and approval by the Stuurgroep Oosterschelde. Zoning regulations introduced for the Oosterschelde nature reserve.

Representatives of the recreation and tourism sector met the LNV representative on the BOV asking for the reinstatement of the original proposals for the Voordelta and refused to negotiate on amendments. BOV approved the amendments suggested by the Project Group whose report on consultation is then published. NVVS sent an open letter to the Minister of Traffic and Public Works, LNV and to the Standing Committee on Agriculture and Nature Management of the Lower Chamber of Parliament, stressing the importance of sport fishing in the coastal zone and complaining about the procedures followed by BOV.

Informal consultation between Project Group and recreational interest groups. Director of Outdoor Recreation of LNV received an evaluation of the proposals by NVVS. This report criticised the consultation procedures.

BOV decided to accept the amended plan for the Voordelta. NVVS made further representations to the Minister of Traffic and Public Works. The Director General of LNV requested the maintenance of a channel for fisherman from the Brouwersdam slipway along the coast of Goeree and out to the fishing grounds. However, the Executive Commissioner of the Province of Zuid-Holland vetoed LNV's proposal and the BOV ratified the amended plan with minor changes. The municipal council of Westvoorne rejected the plan and withdrew its representatives from BOV. The sports fishing interests continued their lobbying with municipal and provincial councils against the plan and sought the cooperation of other recreation and tourist organisations.

Sources: Ministry of Transport and Public Works (1989); Provincie Zeeland (1988); Stuurgroep Oosterschelde (1992); P. Glasbergen (Ed) (1991); BOW Bulletin, 1992: 2(4); Bosma, 1992; and personal interviews by R. Sidaway and H. van der Voet (1991, 1992)

Evaluation of Planning and Management in the Grevelingen

There have been three phases of planning for the Grevelingen. In the first, in the late-1960s, it was intended that the lake formed by the closure of the estuary would provide a drinking water reservoir, which would be crossed by a railway and connected to the Haringvliet by a canal to the north. Major reclamation and afforestation was also intended, but that intensive recreation provision would be given priority over the creation of relatively small nature reserves.

When in the mid-1970s, it was realised the major industrial needs for the canal, the railway crossing and for drinking water were no longer required, it was decided to concentrate major recreation provision near the two dams at each end of the lake. A small island was created for recreation, leaving other shoals undisturbed. These priorities were revised during the third phase, in the 1980s, when much of the central area was reserved for nature conservation and plans to create further islands solely for recreational use were modified.

Despite an overall change in emphasis from concentrated to dispersed recreation with more areas being set aside for nature conservation in the Grevelingen, the approach has been to review patterns of recreational use and the risks they might pose to wildlife. In effect, risk assessment has been used to decide, for example, whether it is necessary to close areas in the breeding season. There has been a deliberate strategy to create new recreational islands to divert popular activities, such as windsurfing, away from sensitive areas. The boundaries of reserve areas are considered 'permeable' with a degree of tolerance afforded to minor infringements. Restrictions on access are only introduced where they are justified and these core areas are wardened at critical times. Given the extent of recreational access, it is worth noting that the nature reserves within the Grevelingen are approximately the same size as those of the Oostvaar-dersplassen (a major Dutch nature reserve in Flevoland with restricted access), yet the conservation status of the two areas is very similar.

Terms of Reference and Agenda

Thus the terms of reference for management have not been preempted by taking nature conservation as an over-riding objective. This is reflected in the title of the joint management committee - 'Natuur en Recreatieschap', the nature and recreation board. Zoning policies have been used to segregate activities away from sensitive environments, policy making has been

responsive to changing needs and the balance between recreation and conservation adjusted via several revisions of the management plan.

Balance of Representation and Accountability of Interests

As the Grevelingen forms the boundary between two provinces (Zuid-Holland and Zeeland) the need to form a joint management board was recognised from the outset. The Board comprises representatives from national government and the provinces as well as the ten municipalities and the regional water boards, but no non-governmental organisations, either user or other interest groups, are directly represented on the Board or its committees. The executive is supported by a technical group comprising the Director of the Board, advisors from national agencies, together with the representatives from the Provinces of Zeeland and Zuid-Holland. The Regional Director of the Ministry of Agriculture, Nature Management and Fisheries (LNV) for Zeeland represents the outdoor recreation interests as well as with the other interests of the Ministry. Representation of the Board, its executive committee and the technical group is shown in Figure 4.8.

During the early planning phases, technical expertise was also provided by an independent national agency - the Development Authority of the IJsselmeer Polders: Rijksdienst IJsselmeer Polders (RIJP) which had been responsible for the construction work. Its planning staff were able to act as impartial advisors and undertook considerable work on recreation impacts. With the abolition of RIJP, that role has now been performed by the Board's Director and his staff.

PHASES OF	PARTICIPAT	TION: Who is re	epresented at ea	ch stage?	
PLANNING	National Government /Agencies	Provincial Government	Local Government	Non- government organisations	Commercial organisation
Initial Planning	Verker en Waterstaat, Rijksdienst Ijsselmeer Polders (RIJP)				
	MANAGEMENT BOARD (13 members)				
Implement-	LNV	Zuid-holland, Zeeland	10 municipalities		·
Plan review and	EXECUTIVE COMMITTEE (5 members)				
revision	LNV	Zuid-holland, Zeeland	l each from Zuid-holland and Zeeland		
	TECHNICAL GROUP (6 members)				
	Rijkswaterstaat NBLF, SBB, RIJP.	Zuid-holland, Zeeland		,	
Monitoring and Evaluation	RIJP, [Management Board staff]				·

Power of Decision-making

Ultimate power is held by the Management Board and the authorities which provide its financial support, but more significantly, detailed management functions have been delegated to the Director. He is responsible for both recreation and nature conservation management and he has to balance the needs of both interests. The provincial authorities, by their membership of the Board, are also able to exercise some influence on the management of the State Forest Service nature reserves within the area.

Availability, Independence and Coverage of Research and Information

Research and monitoring work was formerly undertaken by a national agency (RIJP) and its findings were freely available to the Board. This information has been regarded as objective as it has been gathered independently and information coverage was balanced as the evaluation programme is determined by the Board. The need to make a long-term commitment to research and monitoring has been recognised and a research plan has been prepared. With the disbanding of RIJP, there may be problems in funding this programme now that the Board has to bear the full costs of evaluation directly (Lodders, 1992, Pers.Comm.).

Openness of and Involvement in Decision-making

The recreation and nature conservation-groups were recognised as having legitimate interests in the Grevelingen from the outset. This has resulted in a more open process of planning with full consultation so that recreation and conservation issues have not attracted the same level of controversy as they have in other parts of the Delta. Although the Board encourages involvement of interest groups by holding regular annual meetings for representatives of organisations and interested individuals, the interest groups are not directly involved in management. They are consulted on the periodic revisions of the management plan and are kept informed on management proposals by annual liaison meetings. In summary, decision-making is semi-participatory and does not follow the full model of public involvement.

The evaluation of each aspect of decision-making in the Grevelingen is summarised in Figure 4.9.

CRITERIA	PRECONDITIONS	ASSESSMENT
Terms of reference and agenda	Is the agenda balanced to cover the full range of issues or is it constrained by a preemptive policy or proposition made by powerful interests?	There has been a conscious attempt to balance the interests of recreation and nature conservation in the planning and management of the Grevelingen, despite a change in emphasis from intensive recreation to nature conservation.
Representation	Is the representation of interests balanced at each level of decision-making?	The Management Board has a broad representation of interests and although non-governmental organisations are not directly represented, a balance has been achieved by taking impartial technical expertise.
Power in decision- making and accountability	Who holds the power to determine and/or execute decisions, and is power evenly balanced between the parties? How accountable are the representatives to their interest groups?	Ultimate power is held by the Management Board and the authorities which provide its financial support, but detailed management functions have been delegated to the Director.
Information	Is information freely available to all interests? How objective is the information, i.e. has it been gathered by independent sources? Is the information coverage of issues evenly balanced?	Research and monitoring work was undertaken independently and the findings were freely available to the Board. This information has been regarded as objective and information coverage has been balanced as the evaluation programme is determined by the Board.
Openness of and involvement in decision-making	Are all phases of the process open to all interest groups? What is their degree of involvement in each phase?	Participation in planning follows a consultation model although the Board encourages some involvement of interest groups by holding regular annual meetings for representatives of organisations and interested individuals.

Evaluation of Planning in the Oosterschelde

In the second half of the 1960s, as concerns about the environment grew, plans to dam the Oosterschelde were opposed by both conservation and commercial fishery interests. Their opposition eventually resulted in the construction of a tidal barrier which allows tidal flows to pass through it so that it is only necessary to close the sluices about two or three times a year to prevent storm damage. Construction started on the barrier in 1980 and was finished in 1986. (For a full account of the Delta scheme, see Ministry of Transport and Public Works, 1989.)

The nature conservation opposition to the building of the dams centred on the potential loss of inter-tidal habitats which are important to marine life and also to the large populations of migratory waders which are dependent on estuaries on the north-western European seaboard, notably in Britain, Denmark and the Netherlands. As a result of various reclamation schemes and the enclosure of other parts of the Delta, there are now relatively few tidal estuaries in the Netherlands. The inter-tidal areas of the Oosterschelde originally covered about 45,000 ha, since the building of the barrier, these have been reduced to about 35,000 ha (van Alphen and Hoozemans, 1991). Nevertheless, in 1988 the Oosterschelde was designated as a wetland of international importance under the terms of the Ramsar Agreement.

In September 1977, the Province of Zeeland established a Steering Group for the Oosterschelde (Stuurgroep Oosterschelde) whose terms of reference were initially very broad - to formulate strategic policy for the development and management of the area. It supervised the preparation of a policy plan which was published in 1982 and which was subsequently given legal status by the national, provincial and local authorities when they signed a declaration of intent and delegated their development control powers to the Steering Group.

In 1990, the inter-tidal areas of the Oosterschelde and the salt marshes outwith the sea dikes were designated as state nature reserves so that permits are required for development, earth removal or reclamation; storage or dumping of materials or other acts which may affect water quality. Although certain forms of recreation are considered 'acceptable' within the nature reserve, a number of restrictions have proved controversial, namely:

1. the definition and level of acceptable recreational development;

- 2. the limitation of the number of marinas, berths and moorings within the Oosterschelde;
- 3. the access regulations to the water area and sandbanks which resulted from the nature designation procedure;
- 4. the access regulations for the marshes and mudflats which limited bait-digging, because of the commercial scale of its operation. and the traditional gathering of sea food by the local inhabitants;
- 5. the location and number of slipways for sport fishing. (A fuller description of the controversy is given in Sidaway and van der Voet, 1993).

The implementation of the Oosterschelde Policy Note has been evaluated and monitored on an annual basis. A more extended evaluation of the policies and revision of the Policy Plan was due to take place at the end of the planning period, originally 1990, but was delayed until 1992 to allow for ecological monitoring.⁶

Terms of Reference and Agenda

The main objective of the Oosterschelde Policy Plan was:

"the conservation and if possible enhancement of the existing natural values (of the area), taking into account the basic conditions for the satisfactory social functioning of the area, in particular in regard to fishing" (Anon., 1989).

The policy plan went on to establish a hierarchy of objectives with nature conservation as the main objective and thus, the agenda has inevitably been constrained with only a limited discussion of recreational issues. The priority given to nature was unchallenged during the evaluation of the plan (Stuurgroep Oosterschelde, 1992).

Meanwhile, the focus has switched to nature 'management", that is the conservation of existing populations of migratory and breeding birds in the Oosterschelde, to protect the international status of the estuary for nature conservation. The plan also aims to develop the wildlife interest, particularly to establish a breeding population of seals on sandbanks in the estuary. The approach has been to eliminate the risk of disturbance by following the philosophy of the

⁶ This was the position when the research was completed in 1992.

'precautionary principle'. Thus the terms of reference are not balanced by evaluating risks in different areas, as in the Grevelingen, and they demonstrate the primacy given to nature conservation.

Balance of Representation and Accountability of Interests

The Steering Group is chaired by an elected deputy of the Provincial Council and consists of representatives of government departments, the provinces of Zeeland and Noord-Brabant, the municipalities surrounding the Oosterschelde and the regional water boards. The membership of the Steering Group and its committees are shown in Figure 4.10. Although the Steering Group, which is responsible for preparing and implementing the policy plan, has twenty-eight members, these are drawn solely from official bodies. Five ministries (LNV; Finance; Housing, Physical Planning and Environment; Traffic and Public Works; Economic Affairs) are represented by eight officials. There are three representatives from the province of Zeeland and one from Noord-Brabant, thirteen representatives from the neighbouring municipalities and three from the regional water boards. The executive committee of the Steering Group has only seven members, two from the province of Zeeland, two officials from the Ministries LNV and Traffic and Public Works, two from the municipalities and one representative from the regional water boards.

However, the Coordinating Committee and Project Group are particularly influential in formulating policy and these bodies are dominated by central government officials (ten out of twelve members and six out of eight members respectively). Non-governmental organisations or interest groups are not represented on these bodies.

Glasbergen's evaluation of several policy plans, including that of the Oosterschelde also draws attention to the lack of representation of non-governmental organisations. He suggested that the rationale given at the time was that such organisations did not have executive or financial responsibilities for large water areas; that representatives would be difficult to select and that their conflicting interests would make policy difficult to formulate. However, he also pointed out that the omission of these groups led to delays in implementing the scheme and that their omission meant that interest groups, local residents and recreational users carried no responsibilities for any decisions made during the planning process (Glasbergen, 1991, 124). He

also noted that some attempt to get over this problem was made by regular consultation with some of the organisations and the holding of evening meetings for users.

	FIGURE 4.10: ANALYSIS OF REPRESENTATION - PLANNING IN THE OOSTERSCHELDE			ТНЕ	
PHASES OF	PARTICIPATION: Who is represented at each stage?				
PLANNING	National Government /Agencies	Provincial Government	Local Government	Non- government organisations	Commercial organisations
Initial Planning	Rijkswaterstaat				
	STEERING GRO	OUP (25 members)			
Plan preparation and Evaluation	LNV, Financien, Verker and Waterstaat (VW), VROM, EZ.	Zeeland (6), Noord Brabant	1 member each from 13 municipalities		,
	EXECUTIVE COMMITTEE (10 members)		आक्रिकार)		
	LNV, VW	Zeeland (5)	3 municipalities		
	COORDINATIN	G COMMITTEE (14 members)		
	LNV (3), Financien, Rijkswaterstaat (3), SBB, RIJP(2).	Zeeland (4)			
	PROJECT GROU	JP (10 members)			
	LNV (2) Rijkswaterstaat (4), RIJP(2).	Zeeland (2)			

In drawing up the nature reserve regulations, there was no attempt to involve interest groups in any formal way, even though the municipalities had advised against the closure of a crucial channel to vessels and the Steering Group was divided on the issue. No separate forum has been established to involve or consult the interest groups. However, it has been suggested that advisory members should be appointed to the Steering Group to represent each of the three sectors: recreational users, fisheries and nature conservation (Stuurgroep Oosterschelde, 1992).

Power of Decision-making

The Regional Director of LNV has limited delegated powers from the Ministry and has to balance the conflicting interests of nature, recreation, fisheries and agriculture that are contained within his own organisation. Glasbergen comments that this official's possibilities for external negotiation, given these terms of reference, are limited (Glasbergen, 1991).

Evidently, the weaknesses of a non-statutory plan were recognised at the outset, because in 1983 the participating government bodies within the Steering Group signed a declaration of intent undertaking that developments which might damage the Oosterschelde would not be implemented without consulting the Steering Group. Generally municipalities resist binding agreements of this kind as they wish to protect their freedom to undertake developments which will benefit their community.

Meanwhile the power of the Steering Group has increased. By incorporating the Oosterschelde policy plan within its Regional Plan, the province of Zeeland has in effect delegated planning powers to the Steering Group which in effect means its executive board (Glasbergen 1991). Following the designation of the State Nature Reserve all development and land use permits have to be decided at the national level by LNV.

Availability, Independence and Coverage of Research and Information

The information coverage of the impacts of various recreational and commercial activities on wildlife does not appear to be evenly balanced. Glasbergen comments that the initial policy plan was dominated by the conflict between recreation and nature conservation (Glasbergen, 1991). When examining the use made of information during the earlier stages of plan preparation, van Amstel et al (1988) commented on the role information played in decision-making. They concluded that decisions were based as much on political considerations as on the objective use of scientific information and that data on impacts were used to legitimate the introduction of regulations.

This emphasis is maintained in the formal evaluation of the original plan. The analysis concentrated on increasing recreational pressures and highlights the potential risks of

recreational disturbance to birds. However, the seriousness of these effects was contested by recreational interests (e.g. Vaessen, 1992, Pers. Comm.) because of the possibly restricting effects on their interests. Rightly or wrongly, they questioned the objectivity of such information because of the close association, in their eyes, between conservation interests and biological scientists, including the most involved Steering Group members and their advisors. However the most recent data (1989/90, unpublished) show that the levels of recreational use have declined, yet these were not included in the evaluation note. Meanwhile, the effects of commercial fishing on food supplies were not evaluated, when it is clearly critical to the argument to evaluate the respective contributions of each of these factors to any changes in the bird populations and not to concentrate solely on the possible effects of recreational disturbance.

Openness of and Involvement in Decision-Making

Glasbergen analyses the preparation of the Oosterschelde policy plan which took place over a period of two years. He suggests that the procedures were characterised by an open approach, attempting to gain public support for the proposals.

The consultation took the following form:

- preliminary report prepared by Steering Group;
- consultation phase;
- analysis of responses;
- publication of a draft consultation report;
- another consultation phase;
- final decision on the plan made by the Provincial Council of Zeeland on the recommendation of the Steering Group following the analysis of the second consultation.

However, using the criteria established for this analysis, the procedures would be judged to be semi-participatory. The consultations in the preparation of the Evaluation Plan have been more limited. The Steering Group approved the Evaluation Note and the revision of the draft plan in a plenary session in June 1992. The report was written by officers of the Rijkswaterstaat, NBLF and the Province of Zeeland.

The access regulations on bait digging on the Oosterschelde have been handled in a different way. Many traditional areas used by bait diggers were to have been closed under the nature reserve regulations. Following an initiative by the sport fishing organisations, a working group was established to advise the LNV on the supply of fishing bait and the access regulations. Both sport fishing organisations and nature conservation officers are represented on the working group, which has devised acceptable arrangements for bait digging.

The evaluation of Policy Planning and its Implementation in the Oosterschelde is summarised in Figure 4.11.

FIGURE 4.11: EVA	LUATION OF DECISION-MAKING - PL	ANNING IN THE OOSTERSCHELDE
CRITERIA	PRECONDITIONS	ASSESSMENT
Terms of reference and agenda	Is the agenda balanced to cover the full range of issues or is it constrained by a preemptive policy or proposition made by powerful interests?	The terms of reference and agenda for policy development in the Oosterschelde have been constrained by the decision to give nature conservation primacy in the area.
Representation	Is the representation of interests balanced at each level of decision-making?	Representation within the Steering Group has been confined to government organisations, to the exclusion of non-governmental and voluntary bodies.
Power in decision- making and accountability	Who holds the power to determine and/or execute decisions, and is power evenly balanced between the parties? How accountable are the representatives to their interest groups?	With increasing power being delegated to the Steering Group, accountability has been reduced.
Information	Is information freely available to all interests? How objective is the information, i.e. has it been gathered by independent sources? Is the information coverage of issues evenly balanced?	Availability of information has been limited by restricted representation. The information on which the recent evaluation has been based has been gathered by scientific experts who have closer links with conservation interests and has not been seen to as objective by recreation interests. Considerable prominence has been given to the conflicts between recreation and nature conservation, far less to considering the impacts of commercial fishing in the estuary.
Openness of and involvement in decision-making	Are all phases of the process open to all interest groups? What is their degree of involvement in each phase?	Public consultation in the policy development process has been limited to the later stages of planning and does not conform to the model of full public involvement.

Evaluation of Planning in the Voordelta

Between 1971 and 1986, three major estuaries in the Rhine Delta were closed as part of the flood protection schemes of the Delta Project. This has transformed an area of about 900 km² of the seabed off the coast of Zeeland and Zuid-Holland as the former tidal channels have silted and inter-tidal shoals, mudflats and marshes have developed. Water conditions range from salty to brackish or fresh in the dunes and associated inland waters, while international measures to improve the water quality of the River Rhine aim to achieve a 30-50 per cent reduction of contaminants and nutrients. Not only is the Voordelta an increasingly important area for wildlife (the populations of eight breeding and overwintering bird species meet the criteria which make the area eligible for designation as a Wetland of International Importance under the Ramsar Convention), its shoals are also important breeding areas for fish (sole, plaice and herring). Offshore fishing has long been an important economic activity for the inhabitants of Zeeland. In 1991 the commercial value of landings was estimated at about 135 million Dfl. per year and the fisheries employed about 700 jobs (van Alphen and Hoozemans, 1991, 7). However, the area has the potential to maintain a stable seal population which disappeared from the Delta because of intensive fishing and water pollution.

As roads were built along the dams, travel times to the Randstad and Ruhr conurbations reduced dramatically. The previously isolated islands and small towns of Zeeland became highly accessible for mass recreation and tourism. The gentle slopes of the dams provide an ideal venue for water sports so that the Brouwersdam, in particular, is extremely popular with swimmers, picnickers and windsurfers who can alternate between the waters of the Voordelta and the Grevelingen, according to the weather. The day visitor catchment for the area extends well beyond the Netherlands, into Belgium and Germany. The tourism industry in Zeeland developed rapidly, particularly at the beach resorts of Schouwen, Noord-Beveland and Walcheren. The ten municipalities in the Delta can accommodate about 150,000 bed-spaces (about 10 million nights per year), compared to an estimated 20 million day trips each year. Recreation and tourism spending were estimated at 920 million Dfl. annually with about 7,600 people employed in the sector (van Alphen and Hoozemans, 1991, 7).

Given the unique morphological development off-shore and the conflicting claims of nature conservation, fisheries, recreation and tourism, the Dutch government initiated an integrated planning project for the Voordelta in 1988. In the following year, the national water agency (Rijkswaterstaat) invited other national government departments, the provincial and municipal authorities to participate in a steering group - Bestuurlijk Overleg Voordelta (BOV). It was charged with the task of drawing up the policy plan for the Delta. The initial stages of the work prepared an information base for the area, and the subsequent stages of this process are listed in Figure 4.7.

While the initial plan was thought to satisfy the conflicting objectives of nature development, commercial fishing and tourism (van Alphen and Hoozemans, 1991), increasing restrictions on access for water sports and sport fishing, justified in the interests of safeguarding larger areas for nature development, have proved to be particularly controversial.

Terms of Reference and Agenda

Initially there was a deliberate attempt to balance the objectives of the plan.

"The objective of the integrated policy analyses (IPA) "Voordelta" is to generate a series of policy measures in a framework of four policy options (Nature, Fisheries, Recreation and Preferred) in order to find an optimal balance in the natural and socio-economic development of the plan area." (van Alphen and Hoozemans, 1991, 3).

The plan had to be set in the context of national policies, such as the 'Ecological Main Structure' and the so-called 'green policy' areas of the Fourth Note on Physical Planning, which seek to give higher priority to conservation at the expense of recreation and commercial uses. Nevertheless the recreation and tourism interests agreed in general with the main thrust of these national policies. It was exactly how these policies were to be implemented that became controversial in the relations between recreation and nature conservation interests.

Planning was undertaken in two main stages. The proposals in the preliminary plan achieved a compromise between the interests of nature, fisheries and recreation. This was the Preferred Policy Option described by van Alphen and Hoozemans (1991) and was based on the following principles:

"It meets the aim of the policy plan, i.e., conservation of the natural development of the Voordelta;

"With these constraints, recreation and fisheries may develop as much as possible by incorporation of non-conflicting stimulating measures in the Preferred Policy Option and by minimising potential conflicts by a zonation scheme;

"Investments are limited as much as possible in order to keep future developments open". (Van Alphen and Hoozemans, 1991, 10).

They went on to describe how the Preferred Policy Option satisfied each of these main aims by the creation of large nature reserves, the protection of new beach and dune developments and protecting the food supplies of and water quality for wildlife. Present levels of tourism would be stabilised and the quality of recreational services would be increased. Some new developments were to be provided where they would not have an adverse impact on nature interests. Similarly the proposals for commercial fisheries aimed to stabilise the resource and limit the number of vessels operating in the area to the present levels. Other policy options, which each gave priority to a particular interest, were also considered at this stage. The alternative options were then evaluated against the Preferred Policy Option with the conclusion that:

"The Preferred Policy Option is able to conserve nature interests while recreation and fisheries activities may be further developed locally. This is achieved by a scheme of zonation in space and time based on our policy analysis" (van Alphen and Hoozemans, 1991, 14).

Thus at this stage, the recreation interests appeared to be reasonably satisfied. The Provisional Advisory Council for Outdoor Recreation (VAROR) had commissioned its own report and compared its results with the official plans. There was little difference between the two at that stage (Vaessen, 1992, Pers. Comm.) and this was confirmed by Van Alphen (1992, Pers. Comm.).

At the next planning stage, the Draft Policy Plan of May 1992, the goals and objectives were unchanged from the Preliminary Policy Plan of August 1991. What had changed were the detailed proposals put forward by the Project Group, with greater restrictions on recreational access and more limited proposals for recreation development. Although Van Alphen had stated that the Preferred Policy Option achieved the nature conservation goals according to the objective criteria set out in a published paper (Van Alphen and Hoozemans, 1991, 12), he subsequently stated that the reason for the changes was that the nature conservation objectives

had not been met (Van Alphen, 1992, Pers. Comm.). One possible conclusion is that during the 'balancing' of interests higher priority was given to national nature policies reflecting the respective power of that lobby (Sidaway and van der Voet, 1993).

Balance of Representation and Accountability of Interests

Policy development in the Voordelta has been undertaken by three groups of officials. The thirty member policy development group (BOV) is chaired by the Director of the North Sea Directorate of Rijkswaterstaat and this department also provides the secretariat and six other members of this group. Three other Ministries are represented, together with two executive deputies of the provinces of South Holland and Zeeland while the remaining members are from the municipalities or local boards (recreatieschappen and waterschappen). Figure 4.12 sets out the membership of the various groups and it is important to note that there are no non-governmental organisations represented. The policy development group is advised by an executive committee (Ambtelijk Overleg Voordelta) of twelve officers drawn from the Ministries and including a staff member from each of the provinces. However, the key role is undertaken by the project group (Projectgroep Voordelta) of nine members, mainly from Rijkswaterstaat who undertake the detailed planning. Although the formal responsibilities for planning have been entrusted to the policy development group, it meets only once a year, with the effective decisions being taken by the executive committee.

Vaessen (1992, Pers. Comm.) described the discussions within the Provincial Bureau of Recreation and the tourist organisations at the provincial level and how the Bureau initiated meetings with the respective officials of the municipalities. In the first stage of the policy development process, the Bureau was very involved. But this involvement ceased when the VAROR took the initiative in preparing a recreation strategy for the Voordelta. Vaessen considered that the VAROR study led to polarisation of interests. For as each sector planned and pursued its own interests, their involvement on integrated planning was reduced to formal consultation on the draft plan.

FIGURE 4.12 VOORDELT		OF REPRESE	NTATION - P	LANNING IN	ГНЕ	
PHASES OF	PARTICIPAT	PARTICIPATION: Who is represented at each stage?				
PLANNING	National Government /Agencies	Provincial Government	Local Government	Non- government organisations	Commercial organisations	
Initial Planning	Verker and Waterstaat (VW)					
	POLICY DEVELOPMENT GROUP (25 members)					
Policy development and approval	VW (2), LNV, VROM, EZ, Rijkswaterstaat (6).	Zuid Holland, Zeeland, Oosterschelde Steering Group.	1 member each from 11 municipalities			
	OFFICERS' COORDINATING GROUP (14 members)					
Coordination	LNV, VROM, EZ. Rijkswaterstaat (9).	Zuid Holland, Zeeland.				
	PROÆCT GRO	JP (11 members)				
Plan preparation	LNV, EZ. Rijkswaterstaat (7).	Zuid Holland, Zeeland.				

Power of Decision-Making

The reaction of the policy development group (BOV) to concerted lobbying provided a measure of the power and influence of the respective lobbies. In December 1991, the Project Group had reformulated their proposals following consultations on the Preliminary Policy Plan. More areas were given over to nature while recreational access was decreased considerably. Despite representations from the recreation and tourism sector, the policy development group decided to publish the report of consultations which included increased restrictions.

The draft plan agreed by the policy development group in November 1992 did not implement all of the restrictions proposed by the project group and the designation of an off-shore nature reserve was delayed. However, the sport fishing organisations were still dissatisfied with the

plan, particularly the proposals to restrict access to the coast of Goeree and in January 1993 were continuing to lobby the municipal and provincial councils. Meanwhile, a policy agreement had been drawn up for signature by the participating authorities which would have made the plan binding upon them.⁷

All in all, the policy development group appeared to have been unaffected by lobbying from recreation and tourism interests and increasingly sympathetic to nature conservation. The preliminary plan had been criticised by Stichting Natuur en Milieu in 1991 as a compromise which gave too much attention to fisheries and recreation and which fragmented the nature area. These arguments appear to have persuaded the Project Group to its viewpoint, although it appears that the Executive Committee was particularly influential in changing the emphasis of the plan (Den Bakker, 1992, Pers.Comm.). Recreational interests felt that the Directorate of Outdoor Recreation within LNV was unable to get the recreational case accepted within the Ministry, particularly by its Provincial Director.

Availability, Independence and Coverage of Research and Information

Separate reports on the Voordelta were prepared for the nature conservation and recreation interests. But while a conservation report, prepared in January 1990 by the Dune Foundation, was used effectively by the Nature Management Directorate of LNV, the influence of a recreation study was very limited as the results only became available when the draft policy plan was being completed. Information on recreational impacts, particularly disturbance to birds and seals, has been the subject of much controversy. The objectivity of research and the interpretation of its findings has constantly been challenged.

Openness of and Involvement in Decision-Making

The decision not to include non-governmental organisations in the policy development group was a deliberate one as it was decided to rely on consultation to obtain their views. Consultation took place, with the publication of the Preliminary Policy Plan, and the assessment of the project team to responses was published in the form of proposed amendments to be incorporated in the draft plan. The proposed amendments were also subject to representations from the various

This was the position when this research was completed in December, 1992.

interest groups. Thus, public participation followed the semi-participatory 'consultation' model rather than the full public involvement with organisations having to rely on intense lobbying rather than direct involvement in the planning process. The process was certainly not seen as an open one by the recreation interests who felt that further discussions should have been held before the project group made significant reductions in recreational access in the face of pressure from nature conservation interests.

The evaluation of planning in the Voordelta is summarised in Figure 4.13.

FIGURE 4.13: EVA	LUATION OF DECISION-MAKING - PL	ANNING IN THE VOORDELTA
CRITERIA	PRECONDITIONS	ASSESSMENT
Terms of reference and agenda	Is the agenda balanced to cover the full range of issues or is it constrained by a preemptive policy or proposition made by powerful interests?	Initially a technical appraisal suggested a Preferred Policy Option which achieved nature conservation, recreation and fisheries goals. But this option was abandoned and the balance has swung heavily in favour of nature development drastically reducing the areas available for water sports and the possibilities for future recreational development.
Representation	Is the representation of interests balanced at each level of decision-making?	The key decision-making groups consist of government officials and non-governmental organisations are not represented.
Power in decision- making and accountability	Who holds the power to determine and/or execute decisions, and is power evenly balanced between the parties? How accountable are the representatives to their interest groups?	The policy development group appeared to have been unaffected by lobbying from recreation and tourism interests and increasingly sympathetic to nature conservation. Recreational interests felt that the directorate of outdoor recreation within LNV was unable to get the recreational case accepted by its Provincial Director.
Information	Is information freely available to all interests? How objective is the information, i.e. has it been gathered by independent sources? Is the information coverage of issues evenly balanced?	Separate reports were prepared for the nature conservation and recreation interests. But the former has been more influential as the results of a recreation study only became available as the draft policy plan was being completed. Information on recreational impacts has been the subject of much controversy. The objectivity of research and the interpretation of its findings has constantly been challenged.
Openness of and involvement in decision-making	Are all phases of the process open to all interest groups? What is their degree of involvement in each phase?	Public participation followed the 'consultation' rather than the 'public involvement' model with organisations having to rely on intense lobbying rather than direct involvement in the planning process.

Evaluation of Decision-Making in the Designation of National Parks in the Netherlands

Outline Description

The former Ministry of Culture, Recreation and Social Welfare was made responsible for designating protected areas and selected 21 areas as potential national parks in 1975. These responsibilities are now held by the Ministry of Agriculture, Nature Management and Fisheries (LNV). In the current programme three national parks have reached the stage of final designation, five are in the preparatory stage and two in the initial advisory stage. The designation of national parks is one of the crucial instruments to implement the national nature development initiative.

Large parts of the areas selected for designation are already protected by other designations or are controlled and managed partially or totally by government authorities, such as the national forest and landscape service (Staatsbosbeheer - SBB), or private nature conservation organisations such as Natuurmonumenten and the provincial conservation organisations (e.g., Provinciale Landschappen).

Terms of Reference and Agenda

The criteria for selecting potential areas for designation as national parks in the Netherlands are that:

- a) the habitats are examples of characteristic ecosystems and will form core areas of the national ecological infrastructure;
- b) the area is largely in state ownership or owned by non-government conservation organisations (although small areas of private landholding can be included); and
- c) there is local political support for the proposal and the local authorities (province and municipalities) will willingly co-operate with the scheme.

The national parks have multiple aims primarily concerned with the conservation of nature, but also including environmental education and informal 'nature-oriented' recreation. Thus national parks in the Netherlands have a range of objectives with a degree of balance between them, although nature conservation is given priority.

Balance of Representation and Accountability of Interests

Designation of national parks is supervised by a standing commission - the Voorlopige Commissie Nationale Parken (VCNP) - which is an independent advisory body reporting to the secretary of state (Staatssecretaris) of LNV. The Commission's advice is not binding on the minister. The members of VCNP are either experts or members of nature conservation organisations or recreational interests drawn from different levels of government. The relevant Ministries are represented by advisory members. The commission has an independent chair and a small secretariat within LNV. Its membership is balanced to include representatives from ministries and agencies of national government, provinces and municipalities, together with nature and recreation non-government organisations (see Figure 4.14).

FIGURE 4.14: A DUTCH NATIO	•	EPRESENTAT	ION: DESIGNA	ATION OF	
PHASES OF	PARTICIPATI	ON: Who is repro	esented at each st	age?	
PLANNING	National Government	Provincial Government	Local Government	Non-government organisations	
	VCNP COMMISS	ION (10 Members p	lus Independent Cha	и)	
Initiative	SBB (3 members and 1 advisor), Advisors from LNV, VROM (2), NBLF.	1 member from provinces	3 members from municipalities	Natuurmonumenten (NM), Stitchting Recreatie, academic ecologist	
	OVERLEGORGA	AN (Local committe	6)		
Preparation of Draft Management plan	LNV, NBLF, SBB.	1 member from province	Members from municipalities, water and recreation boards	NM, other landowners and managers	
Policy Decision	LNV.				
	FORMAL AGREEMENT BINDS ALL PARTICIPATING PARTIES TO POLICIES OF THE PLAN				
Implementation				NM, other landowners and managers	
	WORKING GRO Recreational users	<u> </u>	hed involving interes	t groups, e.g.,	

Once a park has moved to the Preparatory Phase of designation (see Figure 4.15), a local management committee (Overlegorgaan) is formed. This committee has representatives of the province, municipalities and the local or regional recreation and water boards, together with representatives of landowners and managers, such as nature organisations and farmers, as well as representatives of the local community. The national ministries are represented by the regional officer of the National Nature Management Agency (NBLF) and the provincial director of LNV. It is chaired by an independent person. Thus some effort is made to ensure that all the relevant local interests are represented as well as government officials.

Power of Decision-making

The overall responsibilities and autonomy of the participating land managing agencies are unaffected by designation. However, their management is considerably influenced by their participation in the preparation of an integrated management plan, and the formal agreement which they are required to sign to ensure that they comply with the plan. The main advantage to participating landowners is that they are then eligible for additional government finance for recreation management and the provision of education and information services.

The organisational structure of each national park is tailored to meet the local situation. The management committee may decide to establish sub-committees and ad hoc working parties. For example, the Loonse en Drunense Duinen National Park has an executive committee which has set up special working groups on recreation, education and agriculture. In the Biesbosch National Park, a special committee of recreational user groups has been formed.

Availability, Independence and Coverage of Research and Information

A significant feature of the designation process, particularly the early stages, is the extensive public consultation on the suitability of the area for designation and the willingness of the parties to participate in national park management. The consultation process includes the publication of an information bulletin for every household within the potential designated area or living in the immediate neighbourhood. Thus information is freely circulated among interested parties.

Openness of and Involvement in Decision-Making

The extent of the consultation under this open process of decision-making is shown in Figure 4.15. In the initial advisory phase, VCNP sounds local opinion on the acceptability of designation by a process of increasingly formal consultations. As well as local meetings of interested parties, information is circulated to local households in at least two stages of exploratory discussions. The process of decision-making closely follows the open participatory model described above.

Not only is there an attempt to balance the representation of interests of nature conservation and recreation organisations on the committee responsible for designation (VCNP) but there is also a strenuous attempt to involve all the relevant local interests in the local management board and/or its sub-committees and working parties.

The evaluation of decision-making in Dutch national parks is summarised in Figure 4.16

FIGURE 4.15 THE PROCESS OF DESIGNATION FOR DUTCH NATIONAL PARKS

	INITIAL ADVISORY PHASE
PHASE 1	SELECTION OF AREA BY VCNP
Public involvement	Sounding of local opinion Initial Meeting Information Bulletin to local households
PHASE 2	PRELIMINARY DECISION ON DESIGNATION BY VCNP
Public involvement	Consultations Review of advice Consultations Information Bulletin to local households
PHASE 3	DECISION BY STAATSSECRETARIS LNV ON COMPOSITION OF OVERLEGORGAAN AND FEASIBILITY OF DESIGNATION
	PREPARATORY PHASE
PHASE 4	DECISION BY STAATSSECRETARIS LNV ON OBJECTIVES FORMATION OF OVERLEGORGAAN
PHASE 5	PREPARATION OF MANAGEMENT AND DEVELOPMENT PLAN BY OVERLEGORGAAN
	Review of plan by VCNP Advice to STAATSSECRETARIS
Public involvement	Consultation
PHASE 6	FORMAL AGREEMENT, committing landowners and local authorities to plan
PHASE 7	DECISION BY STAATSSECRETARIS LNV ON PLAN AND FINANCIAL PROGRAMME
PHASE 8	FORMAL DESIGNATION
	MANAGEMENT PHASE
PHASE 9	FORMATION OF LOCAL MANAGEMENT COMMITTEE (Overlegorgaan)
Public involvement	Membership drawn from government and local interests

Standing sub-committees or ad-hoc working groups including local or specialist

Public involvement

interests

FIGURE 4.16: EVA	LUATION OF DECISION-MAKING - DE	SIGNATION OF DUTCH NATIONAL PARKS
CRITERIA	PRECONDITIONS	ASSESSMENT
Terms of reference and agenda	Is the agenda balanced to cover the full range of issues or is it constrained by a preemptive policy or proposition made by powerful interests?	The criteria for selecting national parks reflect the multiple aims starting with the conservation of nature but including environmental education and recreation. Thus the range of objectives is balanced, although nature conservation is given priority.
Representation	Is the representation of interests balanced at each level of decision-making?	The advisory board responsible for designation includes all levels of government, and a range of non-government organisations. This broad representation is found in the local management committee for each park.
Power in decision- making and accountability	Who holds the power to determine and/or execute decisions, and is power evenly balanced between the parties? How accountable are the representatives to their interest groups?	The management of participating owners is influenced by the park management plan prepared in consultation with local committees and adhoc working parties. Land managers are required to sign a formal agreement to obtain the full financial benefits from designation.
Information	Is information freely available to all interests? How objective is the information, i.e. has it been gathered by independent sources? Is the information coverage of issues evenly balanced?	During the extensive consultations prior to designation, information is widely circulated among interested parties and local householders.
Openness of and involvement in decision-making	Are all phases of the process open to all interest groups? What is their degree of involvement in each phase?	Extensive consultation begins before a decision in principle is taken about designation and continues at each subsequent stage. There is a strenuous attempt to involve all local interests in the management board and/or its committees and working parties

FIGURE 4.17: SUM	MARY EVALUATION	OF DUTCH CASE ST	rudies		
CRITERIA	IDEAL	GREVELINGEN	OOSTERSCHELDE	VOORDELTA	DESIGNATION OF NATIONAL PARKS
Terms of Reference	Balanced	Balance sought between objectives despite increasing emphasis on nature conservation	Nature conservation given primacy over most other uses	Balanced goals changed in favour of nature development	Multiple aims, with priority given to nature conservation
Representation	Balanced Direct involvement	Range of interests but no non- government representatives	Representation restricted to officials	Representation restricted to officials	Broad representation and direct involvement at all levels
Power	Dispersed	Held by Management Board	Held by Executive of Steering Group	Held by Executive of Steering Group	Dispersed between local management board and landowners
Information	Freely available Objective Balanced coverage	Available to Board Independently obtained Balanced	Restricted Objectivity challenged Undue emphasis on recreation impacts	Restricted Objectivity challenged Balance sought by separate research	Widely circulated (not measured) (not measured)
Openness	Participatory with early involvement of interests	Consultation and annual liaison meeting	Consultation at late stage	Consultation at late stage	Frequent consultation from early stages

CONCLUSIONS

This Chapter has examined Hypothesis 3:

That the factors which lead to the resolution of conflicts between conservation and recreation by negotiation may be identified and used to assess the likelihood of resolution being achieved by consensus.

The Hypothesis was considered by reviewing the literature of participation in decision-making and alternative dispute resolution and identifying a set of factors that were likely to lead to conflict resolution by negotiation. These factors were set out in the form of an "evaluative framework of decision-making". A series of Dutch Case studies were then evaluated to assess the likelihood of achieving stable decisions by the development of consensus.

The summary evaluations of the four case studies have been brought together in Figure 4.17. This demonstrates that decision-making in the Grevelingen and in the designation of Dutch national parks had many of the characteristics of the 'ideal type' represented by the evaluative framework. In both of these examples there was a deliberate attempt to balance objectives so that while nature conservation was given priority this was not at the expense of all other social needs. Representation of interests was broad, although non-government organisations and local interests were not directly represented in the Management Board of the Grevelingen. Nevertheless, there was some sharing of power, all interested parties were given access to information, which had been objectively gathered and was balanced in its coverage.

The Dutch National Parks in particular have given great emphasis to interest group involvement in the early stages of decision-making. Successive rounds of consultation explain and clarify the implications of national park designation and are designed to secure the commitment of interest groups to national park objectives. But public participation also informs local households as well as the relevant interest groups, and the latter are subsequently involved in park management by their membership of specialist working parties. However the fact that consensus and balance have been maintained in the Grevelingen, where public involvement has not been so systematically developed, suggests that the RIJP initially (and the Board's staff latterly) have played a crucial, neutral facilitating role.

Decision-making in the Oosterschelde and the Voordelta showed a marked contrast to that in the Grevelingen. The goals of nature conservation and nature development goals have been given primacy at the expense of other interests. During the period of study, power was concentrated in the hands of relatively few national government officials. By excluding non-governmental and voluntary organisations from key decision-making bodies, their influence could only be felt by effective lobbying. Information was gathered selectively and may not be publicly available. But it was the consultation procedures that were most open to question, public participation being delayed into the late stages of planning and then largely ignored. Thus while there is general support for the broad aims of conservation, the detailed proposals for implementation attracted public criticism and controversy. This analysis has demonstrated that relatively subtle changes in decision-making during different phases of the Delta scheme, albeit aimed at implementing national policy, have led to increasing conflict as the goal of balancing rival claims between recreation and conservation was abandoned.

Thus Hypothesis 3 is confirmed, in that it has proved possible to identify the factors which lead to conflict prevention (via planning) and resolution. The Evaluative Framework also adds an important dimension to the analysis of decision-making and should provide a useful analytical tool. The case study analyses suggest that participation in balanced open processes is likely to lead to consensus, stability and resolution, but they also suggest that balanced processes may be disrupted by changes in the balance of power. However, the creation of the conditions required to achieve consensus appears to rely on the presence of a benevolent political or institutional context, as occurred in the Grevelingen and the Dutch National Parks. The processes which condition the distribution of power were described in Chapter 3. It now remains to be seen if the two analyses can be combined to provide a fuller explanation of the institutions of conflict and conflict resolution. That is the subject of the next chapter.

CHAPTER 5: A REVIEW OF SOCIAL CONFLICT AND DECISION-MAKING

The previous chapter contrasted participatory and non-participatory decision-making and the extent to which the former leads to consensus. This chapter considers whether this more detailed examination of decision-making can be used to extend the analysis of the dynamic processes of conflict, developed in chapter 3, and more particularly to predict the outcome of a conflict episode. More formally stated the Chapter considers:

Hypothesis 4

That a combined analysis of the processes of social conflict and participative decisionmaking increases the likelihood of predicting the outcomes of conflicts between conservation and recreation.

THE PROBLEMS OF PREDICTION - THE PARADOX OF POWER AND THE INFLUENCE OF DECISION-MAKING

In Chapter 3, a dynamic framework was used to set out in schematic form the inter-relationships between the competing parties. This helped to explain why groups acted and responded as they did to the action of others during a conflict episode. The analysis clarified the nature of the conflicts under consideration which is intrinsically about attempts to control the social structure of access and to maintain or improve the social position of individual competing parties. The tactics of the competing parties, the balance of power between them and the form of decision-making was seen to influence the outcome of the episode.

Identifying and measuring changes in the balance of power between the parties appears to be the key to prediction and herein lies what Coser (1956) calls the 'paradox of power'. He examines the proposition that conflict establishes and maintains the balance of power.

"The paradox derives from the fact that conflicts, as distinct from other forms of interaction, always involve power and that it is difficult to appraise the relative power of the contenders before a conflict has settled the issue."

"However, it would seem that without actual exercise [of power], only some types of power can be measured with any degree of accuracy." (Coser, 1956, 134-5)

He gives, as an example, financial power which may be measurable in terms of money, but concludes by reformulating the proposition in the following way:

"Conflict consists in a test of power between antagonistic parties. Accommodation between them is possible only if each is aware of the relative strength of both parties. However, paradoxical as it may seem, such knowledge can most frequently be attained only through conflict, since other mechanisms for testing the respective strength of antagonists may be unavailable." (Coser, 1956, 135).

The analysis in Chapter 3 suggested that ideology may be used to advance arguments of principle and thus to improve the legitimacy and social standing of interest groups, since legitimacy is the key to increased power. Political organisation and lobbying in the corridors of power are of critical importance to interest groups in their attempts to influence the balance of power in their favour. Thus ideology is not sufficient in itself, it is the combination of ideological cohesiveness within a 'close knit' group (in Coser's terms) and the group's political organisation that makes a highly politicised and politically effective force. To further increase their power, such groups may build coalitions with other interest groups or may seek national affiliations.

This suggests the possibility that politicisation and group cohesion might be used as proxy measures for power in an attempt to predict the outcome of a conflict episode.

Coser's (1956) theories of the social function of conflict also suggest how social institutions develop to deal with change, once again legitimacy is a key concept of this theory. If conflicts are to be contained within the system rather than directed at its overthrow, the decisions these institutions make are only accepted within society when they are seen to be legitimate. His analysis also suggested that it is the 'rigidity' or 'flexibility' of decision-making structures which influences the outcome of a dispute. That is:

- within a *rigid* social structure, established groups exercise power to maintain the status quo. Power is only transferred to a challenging group after a 'power struggle'.
- within a *flexible* social structure, the outcome of a power struggle might be a concession by established groups following negotiations which could also produce a new order based

on consensus - a degree of power sharing.

But as 'rigidity' and 'flexibility' were identified by Coser in relation to the total system of decision-making in society, these concepts are not easily related to the type of decision-making institutions under consideration, and there is a need to re-examine them in the light of the more detailed discussion of decision-making in Chapter 4.

In Chapter 4, it was suggested that criteria taken from theories about participatory decision-making can be used to evaluate the social institutions of decision-making and the conditions in which legitimacy is gained. The criteria of balance and openness in decision-making, as set out in that chapter, were used to contrast participation and non-participation at various stages of planning in the Rhine Delta. This revealed that changes in the form of decision-making lead to changes in outcome and/or both of these followed from a re-distribution in the balance of power within government agencies.

Amy's (1987) critique of environmental mediation (and implicitly participatory decision-making) suggests that competing interest groups will only negotiate willingly when power is evenly balanced between them. Yet ironically, this may only occur when the groups are politicised and demonstrating their strength. Thus political struggle might be a response to an adversarial system of decision-making.

With these factors in mind the principal case studies¹ are now re-examined to see what they reveal about:

- politicisation and group cohesion as measured by the role of ideology in maintaining close knit groups and their relationship to the balance of power; and
- flexible and rigid decision-making reinterpreted as participatory and non-participatory decision-making procedures and the extent to which balance and openness are deliberately sought.

There was insufficient information on politicisation and decision-making within the North West Montana and Northern Woods, Maine case studies to include them in this analysis.

A REVIEW OF THE CASE STUDIES

The Pentland Hills Regional Park

In terms of the characteristics set out in the consensus building model of Chapter 4, the institutional decision-making of the Regional Council has followed a "semi-participatory" form. The Regional Council focused the agenda with pre-emptive policies, representation of interests was unbalanced (for example active recreation organisations have been excluded in the recent phases), and there has been uncertainty about policy implementation, with limited information and an incomplete coverage of topics. The successive phases of determining proposals and then seeking consultation (but nevertheless proceeding with those proposals) has failed to build trust with the scheme's opponents, particularly the farmers.

In terms of political organisation, the initial proposals were opposed by landowners, farmers, conservationists, ramblers and local community associations alike, but there was no formal coalition between them. No individual leaders emerged during the course of the dispute and each party acted individually, although many of them were represented on the consultative committee. Although some of the component interest groups have a strong ideological base (e.g., ramblers, landowners) ideology *per se* was not a major element in the dispute. The Leisure Services Department, which initiated the proposals for designation, failed to establish any supporting political lobby and its plans for major recreational developments were shelved by the Planning Department in the face of local opposition. The exact balance of power at each stage was unclear and it has been assumed, in the subsequent analysis, that there is broad parity.

In summary, the weak politicisation of the interests has failed to build up a powerful enough lobby to determine the outcome of the political process. Instead, changes in the power structure of the local authorities and the reluctance of the bureaucracy to incorporate interests or to build consensus are more significant factors in failing to build local support for the Park. On local government reorganisation, the issues within the Park are likely to be regarded as politically marginal and with the abolition in 1996 of the common enemy, Lothian Region Planning Department, any major controversy is likely to be replaced by a series of smaller disputes, for example, between the ramblers and farmers over access to hills and between nature conservationists and water recreation interests over the management of reservoirs by a new

Motor Sports in England

The conflict over motor sports in England has consisted of successive local episodes and an occasional national one. The aftermath of each episode favours local communities and national conservation organisations, as permission for new sports venues is refused or, more frequently, existing sites used for competitive events are lost. As episodes are geographically scattered and sporadic, there is no formal channel of communication between the various interests apart from the confrontation during each episode, when there is a strong emotional, if not ideological element to the principled opposition to motor sports.

Although nature conservation interests and local communities form only loose local coalitions, they are politically well organised and therefore relatively powerful. In comparison, the large number of motor sports organisations are uncoordinated (despite the formation of an umbrella body), lack a unifying ideology and are relatively powerless. This resulting imbalance of power means that the strongest groups can influence a form of institutional decision-making that is sensitive to lobbying. The policies put forward by the Department of Environment or local authorities are pre-emptive, i.e., they make little allowance for provision for motor sports; and there is no forum in which strong lobbying might be balanced through equal representation of interests. There is no open process of information gathering, indeed there is a lack of information about the extent or severity of alleged impacts of motor sports either on the environment or on local communities. The decision-making process is semi-participatory with limited opportunities for the motor sports organisations to make representations on either site-specific or national policy proposals. Thus, decisions follow the exercise of official power according to political pressure from the nature conservation and local amenity lobbies.

Moorland Access in the Peak District National Park

In the earlier episodes of the dispute over access within the Peak District National Park between landowners and the access lobby of rambling and climbing organisations, the tactics followed by each proponent were highly confrontational. For example, ramblers staged mass trespass events to try and force landowners to concede access. With each interest being well organised and power evenly balanced between them, the conflict reached stalemate with additional

landowners being unwilling to enter into access agreements with the national park authority.

Another dimension was added to the dispute by conservation organisations trying to limit access to protect breeding populations of ground nesting birds from disturbance. Whether disturbance has or is significantly affecting these populations is uncertain and contentious. Moves to designate the open moorlands under the European Birds Directive triggered the current episode of the conflict which has been as confrontational as before.

Hitherto, the terms of reference of the National Park Authority have been to balance the opposing interests with the result that the aims of moorland management are the subject of a power struggle between interests. Representation has hitherto taken the form of lobbying but was more deliberately balanced by the inclusion of representatives of all the main interests in a recently created working party, the Access Consultative Group (ACG). Similarly access to information, particularly on nature conservation, was limited, information coverage was incomplete and, as it was obtained on behalf of the conservation organisations, its objectivity was disputed. Decision-making has hitherto followed the semi-participatory form, but the direct involvement of interest groups as members of the ACG made this a more open process.

The significant features of this case are the even balance of power between highly politicised interest groups, the political stalemate and the (potential) change in the type of decision-making. The establishment of the ACG using a more open process of involvement may enable the national organisations to fulfill long-standing ambitions and any resulting negotiated agreement could provide a durable outcome².

The Designation of the Skomer Marine Nature Reserve

Prior to the designation of the Skomer Marine Nature Reserve, the balance of power was equally distributed within the management committee of the voluntary nature reserve on which both nature conservation and diving organisations were represented. This power balance, combined with a participative form of decision-making, should have led to a development of consensus and negotiated settlement over the management of a reserve. However, a potentially

See footnote on p. 82.

sound process was affected by the decision of the Nature Conservancy Council (NCC) to designate a statutory reserve. This would have allowed the Council to control underwater access by legally enforceable bylaws, in direct challenge to the national policy agenda of the British Sub-Aqua Club (BSAC), which had successfully resisted national legislation to restrict access to military wrecks. Thus the evenly balanced situation in the local committee was disrupted by national pressure (from NCC) but later restored (by the response from BSAC).

Both of the contending parties, the nature conservationists and the divers, proved to be wellorganised and their tactics during the course of the dispute were confrontational. Information
became a major element of the dispute. Its coverage was uneven, giving more attention to the
disputed effects of disturbance to cliff-nesting birds than the possible impacts of diving within
the marine reserve. The objectivity of information put forward by conservation organisations
was challenged. By changing the decision-making process to a formal one of consultation on
unilateral proposals, the situation became more polarised rather than less. In this dispute, the
politicisation of the recreational interests and the resulting power they could exercise at a
national level proved crucial. As a result the initial proposals by the Nature Conservancy Council
were significantly modified by the Secretary of State before designation could be confirmed.

Planning in the Rhine Delta

During successive episodes - phases of the Rhine Delta scheme - the priorities given to water recreation and nature conservation have changed. In the earliest schemes, such as the Veerse Meer, recreation provision was given priority. Later phases led to a more balanced development with zoning to segregate recreation and conservation. Priorities changed within the initial emphasis on recreation in the Grevelingen being balanced by the creation of nature reserves within that scheme. More recently higher priority has been given to nature conservation and nature development, as is reflected in the designation of the inter-tidal areas of the Oosterschelde as a state nature reserve. Thus at the beginning of the planning of the Voordelta there was an imbalance favouring nature conservation interests.

This power balance reflects the extent to which the respective nature conservation and water sports lobbies have become more politicised. The conservationists have long been well-organised with a strong unifying ideological base, while local interests maintained good lines of

. . . 147 .

communication with their national counterpart organisations. Water sports interests have lacked this degree of organisation, had little local presence and their diffuse national organisation has been unskilled in political activity.

The uneven distribution of power was also reflected within the institutional decision-making of the national agency charged with the responsibility of developing a policy plan. Although the agenda was balanced in the earlier stages, with RIJP playing a crucial facilitating role (see Chapter 4). This has altered in the face of strong lobbying from nature conservation organisations which was not countered within the decision-making committees. Representation was limited to official governmental bodies, the key groups being dominated by national agencies, whose policies increasingly reflected the conservation imperative of national policy. Information on recreational impacts was not freely available, its coverage was incomplete and its objectivity challenged. Decision-making followed the semi-participatory form seen in the other case studies. Centralised planning has reflected current priorities of national policy as power and influence has been concentrated in key planning teams of officials from central government. The lack of a broadly based network within the management structure means that change is not mediated at the local level.

Although this analysis (based on Chapter 4) treats each development as an episode in a continuing conflict, arguably they are not. A succession of negotiated settlements in the Grevelingen have produced a stable situation - in the Grevelingen. Elsewhere it is the external political context which has produced significant pressures. The growth of tourism in Zeeland led to an initially defensive response from nature conservation interests which resulted in the designation of the Oosterschelde as a nature reserve. Subsequently, their adversarial campaign developed into an ambitious programme of nature development in the Voordelta.

Case Studies of Co-operation

In contrast, four cases of co-operation demonstrate how decision-making can be more balanced and open. In each of these cases: cliff climbing at South Stack, Anglesey; water sports on the Rutland Water in Leicestershire; and the management of the Bob Marshall Wilderness Area, Montana, and in the designation procedures for Dutch National Parks, most of the criteria of the consensus-building model are met. Although the terms of reference and agenda may be

constrained by conservation considerations, representation in decision-making is balanced, the representatives are accountable to their interests, power is evenly balanced, information is freely available, objectively gathered over a full coverage of topics and the process of decision-making is open and participatory, fully involving the relevant organisations. While individual groups have coherent ideologies, these are not evident features of any discussion suggesting that any differences in ideology have been suppressed in the interests of gaining agreement. South Stack is a case in point.

Summary of the Case Studies

The first five case studies are summarised, in Figures 5.1 to 5.5, in a simplified form of the dynamic framework of Chapter 3, which has been modified to incorporate the evaluation of decision-making developed in chapter 4. Each phase of a conflict episode is represented across the figure and the key elements of politicisation and decision-making are summarised in the bottom left hand corner of each diagram. In four of the cases (Motor sports, Peak, Skomer and the Rhine Delta) it can be seen that any change in the balance of power is closely related to the degree of politicisation, power being gained by the most ideologically committed and organised party. In the other case (Pentland Hills) ideology is not a strong element of the dispute and there was no unifying leadership or organisation among the opponents of the proposal to designate the area as a regional park.

Consideration was given to making a further analysis of group cohesiveness, but this was not pursued as there are no clear cut distinctions between conflicts and cases of co-operation on the basis of whether only close knit or loose knit groups are present.

FIGURE 5.1: INTEGRATE	D ANALYSIS OF CONFLIC	CT AND DECISION-MAKE	NG - THE PENTLAND HILI	LS REGIONAL PARK
AFTERMATH OF PREVIOUS EPISODE	LATENT PHASE	ACTIVE PHASE	INSTITUTIONAL DECISION- MAKING	AFTERMATH OF EPISODE
BALANCE OF POWER: Diffuse, Lothian Regional Council (LRC) does not depend on rural support.	ROLE OF IDEOLOGY: Basic differences in ideology suppressed by defendants, No unifying leadership or organisation.	TRIGGER: LRC seeking to designate park.	AGENDA: Focused agenda based on pre- emptive policies of LRC.	BALANCE OF POWER: Uncertain.
COMMUNICATION: LRC develops proposals with consultative committee but fails to establish effective communication with wider interests.	UNDERSTANDING OF ISSUE (Information): Lack of information on LRC's plans leads to uncertainty.	TACTICS OF CLAIMANT: LRC bases its case on national legislation, uses confrontational tactics, fails to form supporting coalition.	REPRESENTATION: Unbalanced advisory committee, sports lack representation.	ANALYSIS: Issue changes from i) threat to traditional access by LRC Leisure Services based on assumption of public need; to ii) Park management and relations
		RESPONSE OF DEFENDANT: Established interests united in opposition in principle to park status, Press used to escalate conflict.	INVOLVEMENT: Lack of involvement in park management leaves Council with limited political support and vulnerable to landowner pressure.	between Planning Department and farmers. The outcome of each episode has been transitory. Without a commitment to building consensus or full involvement by LRC, further conflict
DEGREE OF POLITICISATION: Weakly politicised: Ideology not a strong element of the dispute; No coherent political organisation. DECISION-MAKING: LRC decision-making is semi-participatory rather than participatory.			OPENNESS: Consultation at late stage leads to formal objections and public inquiry.	episodes are inevitable.

FIGURE 5.2: INTEGRATE	ED ANALYSIS OF CONFLIC	CT AND DECISION-MAKIN	NG - MOTOR SPORTS IN E	NGLAND	
AFTERMATH OF PREVIOUS EPISODE	LATENT PHASE	ACTIVE PHASE	INSTITUTIONAL DECISION-MAKING	AFTERMATH OF EPISODE	
BALANCE OF POWER: In favour of local communities.	ROLE OF IDEOLOGY: Conservation ideology strong, Motor sports lack unifying ideology and effective organisation.	TRIGGER: Local community and conservation organisations seek to restrict existing motor sports activity.	AGENDA: Focused agenda based on pre- emptive conservation policies and NIMBY.	BALANCE OF POWER: In favour of local communities and conservation organisations	
COMMUNICATION: No formal channel of communication.	UNDERSTANDING OF ISSUE (Information): Understanding rests on adverse image of sport rather than specific information.	TACTICS OF CLAIMANT: Conservation organisations use conservation status of sites as legitimation in confrontational campaign.	REPRESENTATION: No forum in which motor sports can gain representation.	ANALYSIS: Marked imbalance of power within a decision-making system that exercises official power (whether at local or national level) according to political pressure. Each incremental decision is transitory leading to next phase in another location and the inevitable demise of motor	
		RESPONSE OF DEFENDANT: Motor sports counterattack but perceived to be insensitive to local communities and environment.	INVOLVEMENT: Public inquiries adversarial. No strategic plans to consider sports need.		
coalition but well established netv Sports weakly politicised.	: Conservation highly politicised: St work of national contacts and local contents are local contents. Expenses the political lobby.	ontacts used to good effect. Motor	OPENNESS: Limited consultation by decision makers.	sports in the countryside.	

AFTERMATH OF PREVIOUS EPISODE	LATENT PHASE	ACTIVE PHASE	INSTITUTIONAL DECISION- MAKING	AFTERMATH OF EPISODE
BALANCE OF POWER: Probably evenly balanced between landowners resisting and access organisations (RA) seeking further open access areas.	ROLE OF IDEOLOGY: Strong ideological and organisational base to each group.	TRIGGER: RA seeking access to remaining open areas and national legislation. Proposed conservation designation of moorland under European Directives.	AGENDA: National Park Plan provides vehicle for change but balance of policies is in contention. This mirrors the national debate in which Peak District sets a precedent.	BALANCE OF POWER: Evenly balanced, each party holding a vetoing sanction.
COMMUNICATION: Little direct contact between parties until recent formation of Access Consultative Group (ACG).	UNDERSTANDING OF ISSUE (Information): Considerable uncertainty about impact of access on important populations of ground nesting birds. Coverage of issues uneven.	TACTICS OF CLAIMANT: Each party effective in lobbying especially at national level; using confrontational tactics and elevating issues to matters of principle.	REPRESENTATION: No direct representation until establishment of ACG.	ANALYSIS: Changing balance of power with effective lobbying by all groups may have led to local stalemate. Negotiation may suit national organisations making it possible to move from transitory
		RESPONSE OF DEFENDANT: Each adversely reacting to claims of others.	INVOLVEMENT: Currently: negotiation within ACG.	outcomes to a durable negotiated settlement.
Decision-making: National Park I	Each interest group has strong ide Board strives to achieve balance but as been semi-participatory but may	is seen to be partisan by interest	OPENNESS: Consultation replaced by involvement in ACG.	

AFTERMATH OF PREVIOUS EPISODE	LATENT PHASE	ACTIVE PHASE	INSTITUTIONAL DECISION- MAKING	AFTERMATH OF EPISODE	
BALANCE OF POWER: Equally distributed within the voluntary reserve management committee.	ROLE OF IDEOLOGY: suppressed within the committee, but differences brought out in later phases.	TRIGGER: NCC designation as a Marine Nature Reserve with statutory powers.	AGENDA: Focused agenda based on pre- emptive policy of NCC.	BALANCE OF POWER: Equally distributed with assertion of power by national BSAC.	
COMMUNICATION: well established within the voluntary reserve committee.	UNDERSTANDING OF ISSUE (Information): Data on bird disturbance disputed, No data on marine impacts.	TACTICS OF CLAIMANT: NCC bases its case on national legislation.	REPRESENTATION: Committee membership balanced but diving representative not accountable to BSAC.	ANALYSIS: A potentially sound decision- making process using negotiation within local committee is disrupted by	
		RESPONSE OF DEFENDANT: Confrontational response by BSAC advancing principle of freedom of seas.	INVOLVEMENT: Voluntary committee involved interests.	NCC's move for statutory designation. Political pressure exerted by BSAC at national level led to eventual agreement of modified proposal.	
DEGREE OF POLITICISATION DECISION-MAKING: Open par response. Welsh Office arbitrates	ticipative process is disrupted by N		OPENNESS: Consultation led to formal objections.		

FIGURE 5.5: INTEGRATE (VOORDELTA EPISODE)		CT AND DECISION-MAKIN	NG - PLANNING IN THE R	HINE DELTA	
AFTERMATH OF PREVIOUS EPISODE	LATENT PHASE	ACTIVE PHASE	INSTITUTIONAL DECISION-MAKING	AFTERMATH OF EPISODE	
BALANCE OF POWER: Evenly balanced during earlier developments (Grevelingen) but subsequently favoured conservation.	ROLE OF IDEOLOGY: Strong unifying element within conservation but lacking in recreation.	TRIGGER: Preparation of policy plan	AGENDA: Initially balanced by project group but higher priority given to conservation after lobbying.	BALANCE OF POWER: Unbalanced in favour of strong conservation lobby.	
COMMUNICATION: Little direct contact. Formal communication restricted to steering group.	UNDERSTANDING OF ISSUE (Information): Impacts little researched, uncertain and contentious. Coverage incomplete.	TACTICS OF CLAIMANT: Confrontational claim to control area and reduce recreation.	REPRESENTATION: Limited to official bodies.	ANALYSIS: Centralised planning has reflected current priorities of national policy as power and influence has been concentrated	
RESPONSE OF DEFENDANT: Equally confrontational but amenable to limited change.			INVOLVEMENT: Limited to formal consultation stages.	in key planning teams of officials from central government. A New Order has been established but the outcome is transitory and likely	
DEGREE OF POLITICISATION: Unequal lobbies: conservation with strong ideology and well established organisation and network; Water sports lack unifying ideology and organisation. DECISION-MAKING: Previous impartiality of decision-making in Delta Schemes has gradually changed in face of political pressure.			OPENNESS: Limited to formal consultation.	to change if recreation becomes organised.	

POLITICISATION AND DECISION-MAKING

Changes in the balance on power from the beginning to the end of these conflict episodes appear to reflect the degree of politicisation of the disputing parties rather then their tactics, which are invariably confrontational within a semi-participatory form of decision-making. While the balance of power may be difficult to measure directly, differences in political organisation and the role of ideology are recognisable and these are consistent with the final balance of power and its outcome.

In other words, what the case studies have demonstrated is that in most cases of conflict there were clear distinctions between the competing interests in the importance of ideology to them and their degree of politicisation. Some marked disparities in this respect were very evident. For example, nature conservation interests characteristically demonstrate a strong ideological commitment to a conservation ethic and are highly politically organised. In contrast, outdoor recreation groups are weaker in these respects and this is demonstrated in recent episodes in the Rhine Delta. The Ramblers' Association were a notable exception among recreation groups with the result that in the Peak District there is parity in power. However, as was noted earlier, most of the interested parties in the case studies of co-operation have some degree of ideological commitment, which may be suppressed in the desire to co-operate with others. The reasons for this are examined later.

Meanwhile, a relatively clear distinction can be made between participatory and semiparticipatory decision-making in the case studies using the criteria of openness and balance.

The occurrence of these two key elements is summarised in Figure 5.6 which lists all of the cases according to disparities in the degree of politicisation in the first column and whether the form of decision-making sought to achieve balance in the second.

DEGREE OF POLITICISATION of interest groups		I	DECISION-MAKING as measured by the balance sought in participation		
Disparities in Politicisation One party being stronger in ideological motivation and organisation than the other(s)	Oosterschelde, Motor Sports, Voordelta.	Semi-participatory Unbalanced remit which favours adversarial tactics and lobbying	Peak (previous phase), Skomer (Marine Nature Reserve), Voordelta, Oosterschelde, Motor Sports, Pentland.		
Parities in Politicisation The parties being equally strong or weak in ideological motivation and organisation	Bob Marshall Wilderness Area, Dutch National Parks, Grevelingen³, Rutland Water, Peak, Pentland⁴, South Stack, Skomer.	Participatory Balanced remit and representation which favours negotiation	Peak (recent phase ACG), Skomer (Voluntary Reserve), Bob Marshall Wilderness Area, Grevelingen ⁵ , Dutch National Parks, Rutland Water, South Stack.		

³ The distribution of power in unclear in this case.

⁴ Ditto.

⁵ Decision-making has many of the attributes of a participatory system in this case.

Synthesis: Decision-Making and Disparities in Power

The preceding analysis suggests that two key factors

- parities or disparities in ideological commitment and political organisation between the parties in a dispute, as a proxy measure for the distribution of power; and
- participatory or semi-participatory decision-making, as a proxy measure for legitimacy and acceptance of decisions

can be used to classify cases of conflict and co-operation, as these factors have a marked influence on the outcome of a (potential) dispute.

By treating disparities in power (using the proxy measure) and decision-making as independent dimensions, it is possible to represent the outcomes of (potential) disputes in one diagram (Figure 5.7). This scheme appears to apply irrespective of whether conflict is motivated by ideology or interest, thereby removing the complication that most of the conflicts studied have been seen to contain a combination of motives.

FIGURE 5.7: TYPOLOGY OF CONFLICT AND CO-OPERATION ACCORDING TO OUTCOME AND ILLUSTRATED BY THE CASE STUDIES

TYPE A Conflict with Minimum change		Decision-making Semi-participatory Remit lacks balance and favours adversarial tactics		TYPE B Conflict with Maximum change	
PARITY IN	RESOLVED Concession of pover the status quo: UNRESOLVED Abatement: Stalemate:	Wer to maintain SKOMER PENTLANDS PEAK (Phase 2)	!	STERSCHELDE VOORDELTA MOTOR SPORTS PEAK (Phase 1)	DISPARITY
POWER	PEAK (Participatory plan Bo RU Local agreement:	FIONAL PARKS present episode?)	Compromise in fa powerful. (no examp	vour of the le within the case studies)	IN POWER
TYPE C Voluntary Co- operation ("Just" change)		Decision Partici (op Balanced ren negot	patory en) nit favouring		TYPE D Involuntary change ("Unjust" change)

Note that all outcomes on the left-hand side of the diagram are stable as long as the parity of power between the parties is maintained, while outcomes on the right-hand side of the diagram are potentially unstable, at least in the long term, even where the disparities of power are great.

Conflicts where no change occurs because power is evenly balanced between the parties are to be found in the NW quadrant of the diagram. Three examples occur within the case studies:

- both parties exercise their power but are evenly matched with the result that the status quo is maintained in the case of Skomer, although there are *concessions* on each side (designation of the statutory marine nature reserve proceeds but without strict controls on divers' access);
- no party is sufficiently well organised or politically committed for a clear outcome (abatement) in the case of the Pentlands; and
- none of the parties is strong enough to overcome the others (stalemate) in the case of the moorland access in the Peak District during the 1980s.

Conflicts which are likely to result in major change, which entirely favours the powerful are to be found in the NE quadrant of the diagram. Three examples occur within the case studies:

- transfers of power away from the status quo (existing recreational access) and in favour of conservation groups in the Oosterschelde and Voordelta; and
- in favour of conservation groups and local community interests in the case of Motor Sports.

No example occurs in the case studies of a *compromise* favouring the more powerful interests (SE quadrant). As was suggested in Chapter 4, one of Amy's (1987) criticisms of environmental mediation was that it might be used to advantage by powerful economic interests in this way.

Change is voluntarily negotiated to produce just and durable outcomes (forms of co-operation) in the cases depicted in the SW quadrant. These cases include:

- the participatory plans prepared for the management of the Bob Marshall Wilderness Area, the Grevelingen and Rutland Water;

- -- the local agreement over climbing at South Stack, and
- negotiations based on consensus to designate Dutch National Parks and with the establishment of the Access Consultative Group to plan the management of moorland access in the Peak District (assuming this reaches a successful outcome).

It should be noted that in cases of co-operation (for example, where plans are prepared for new water bodies) there is no established order to be challenged and that ideological differences have been suppressed in the interests of obtaining access. Why this occurs is considered below.

INSTITUTIONAL POWER WITHIN THE STATE

Two questions arise from the preceding analysis:

- why are ideological differences suppressed is it because there is a participatory system of decision-making in place or is there another reason?
- what does the analysis of disparities of power add to the analysis of conflict resolution that is not explained by the analysis of participatory decision-making?

One reason for posing the second question is that (as was seen in Chapter 4) the critics of environmental mediation (e.g., Amy, 1987 and Scimecca, 1993) suggest that theories of participatory decision-making ignore the distribution of power within a conflict. Their critique suggests that mediators are naïve to assume that imbalances of power can be rectified by procedural changes which initiate discussion. To attempt to answer both questions, it is necessary to consider the role of one important source of power - the institutions of the state - and of government agencies in particular.⁶

At various stages of the analysis, when considering the case studies, reference has been made to the active part played by government agencies as interested parties in a dispute. As was noted

It should be noted that the following analysis draws on the case studies to refine the study frameworks and does not attempt to review formal theories from political science on the role of the state.

at the end of Chapter 2, a conflict episode may be triggered by the action of a government agency, for example, in its proposals to designate parks, wilderness areas or nature reserves.

That a conflict should be triggered by government action is hardly surprising. Executive agencies are established and mandated by government to implement government policy. Public policies are likely to be controversial when they directly affect established local interests. Often their remits pursue a sectoral interest and they act partially to further those interests, whether these are in the environmental field (e.g., the nature conservation councils) or in recreation (e.g., the Sports Council).

However the government and its agencies may play a second role - that of arbiter - seeking to balance the claims of competing interests. Resource managing agencies may have a primary purpose which is tempered by the need to balance this with other interests, such as conservation. The interpretation of these obligations -where the balance lies - may be controversial, for example, the management of national forests in the USA may be the subject of conflict (e.g., designation of Wilderness Areas) whilst that of the US national parks is not. It is a simpler task to follow a single remit - to conserve - than a dual one - to produce and conserve.

In theory at least, the arbitrating role of the legal system of the state should be clear. This system adjudicates according to rights enshrined in legislation, while the planning system allocates land uses and adjudicates on what is an appropriate use according to a set of (commonly held) values. Common to the legal and planning systems is the principle that aggrieved parties may use processes of appeal to higher levels of decision-making (arguably a form of neutral arbitration) which may have the effect of redressing imbalances of power.

Within the case studies, both roles can be observed, indeed one arm of government may attempt to initiate change by developing and implementing government policy and acting as an interested party while another arm acts as an arbiter. Because of the power of government, the interventions its agencies make within disputes can markedly affect the balance of power. Such

There are notable exceptions where the management of the National Park Service has been heavily criticised, such as wildfire control in Yellowstone National Park (see Chase, 1987).

partial policy interventions may trigger conflicts by creating disparities in the distribution of power, or may even redress imbalances of power. In other cases, planning systems may attempt to act impartially to create a balance between policies or between interests but even when acting as an arbiter (via the appeals system) intervention may be partial - to secure the implementation of a policy or by responding to political pressure.

In this analysis, interventions have been classified as *partial* when they are made in pursuit of a particular public policy (e.g., a government agency acting as interested party or an appeal decision determining whether a public policy should be implemented in a particular case). They are considered *impartial* when balance is sought between a range of interests (e.g., planning new provision or facilitating negotiations between disputing parties).

These forms of intervention are set out schematically in figure 5.8 to assess how they influence the distribution of power and the outcome of the dispute using examples from the case studies. It should be born in mind that not all logical combinations of power and intervention are represented in the case studies and the scheme is illustrative rather than representative. However in some case studies, several interventions occur and this allows their effects on the outcome to be traced.

FIGURE 5.8: INTERVENTIONS OF GOVERNMENT AGENCIES OR THE STATE WHICH EFFECT THE DISTRIBUTION OF POWER BETWEEN THE PARTIES AND THE OUTCOMES OF DISPUTES

INITIAL	INTERVENTIONS AS IN	TERESTED PARTY	INTERVENTION AS ARBITER	
DISTRIBUTION OF POWER	which create a DISPARITY in the balance of power	which achieve or strengthen a BALANCE of power	IMPARTIAL as facilitator	PARTIAL to achieve policy
PARITY	SKOMER -designation proposal by NCC.	SKOMER - representations by SCW.		SKOMER - Appeal to Welsh Office confirmed suitability as reserve but upheld access for divers.
	PENTLAND - designation proposal by LRC/CCS.			PENTLAND - Public inquiry into designation confirmed suitability of hills as Regional Park.
	OOSTERSCHELDE and VOORDELTA - designation proposals by LNV/NBLF.			OOSTERSCHELDE and VOORDELTA - Executive power used to implement policy.
		PEAK - Multiple interventions over time which may give temporary advantage but result in stalemate.	PEAK - Park Authority employed neutral facilitator for Access Consultative Group.	

FIGURE 5.8 (continued): INTERVENTIONS OF GOVERNMENT AGENCIES OR THE STATE WHICH EFFECT THE DISTRIBUTION OF POWER BETWEEN THE PARTIES AND THE OUTCOMES OF DISPUTES

EFFECTS OF INTERVENTIONS	Interventions TRIGGER conflict episode	Countervailing interventions achieve BALANCE	Interventions achieve BALANCE	Interventions terminate episode but may not resolve conflict
DISPARITY	·			MOTOR SPORTS - Appeals to DOE reinforced the disparity of power in absence of a clear policy favouring some provision for the sport.
INITIAL BALANCE UNCLEAR		Agency representation [GREVELINGEN] RUTLAND WATER, BOB MARSHALL WILDERNESS AREA, DUTCH NATIONAL PARKS.	Participative planning GREVELINGEN, RUTLAND WATER, BOB MARSHALL WILDERNESS AREA, DUTCH NATIONAL PARKS.	
DISTRIBUTION OF POWER	which create a DISPARITY in the balance of power	which achieve or strengthen a BALANCE of power	IMPARTIAL as facilitator	PARTIAL to achieve policy
INITIAL	INTERVENTIONS AS INTERESTED PARTY		INTERVENTION AS ARBITER	

SITUATIONS ILLUSTRATED BY THE CASE STUDIES

The case studies set out in Figure 5.8 illustrate the following combinations of interventions and outcome.

Interventions by Government Agencies As Interested Parties Which May Effect the Balance of Power.

These interventions may create parity or disparity in the balance of power between the disputing parties.

As has been noted earlier, parity of interest group representation is sought in the cases of co-operation and the presence of government agencies may be an important balancing factor as in the case of Rutland Water, when a number of such agencies were fully involved in the planning stages including the Countryside Commission, the Nature Conservancy Council and the Sports Council. This also occurred in the management of the Bob Marshall Wilderness Area and in the designation procedures for Dutch National Parks.

Partial interventions by a government agency with a sectoral interest are very likely to disrupt the balance of power when there is no countervailing force. Proposals to designate areas as parks or reserves may have the effect or creating a *disparity* in power and triggering conflict as happened in the Pentland Hills, the Oosterschelde and the Voordelta.

This also occurred at Skomer but a second intervention from both governmental (the Sports Council for Wales) and non-governmental national organisations (the British Sub Aqua Club) redressed the balance. In the Peak District, continuing interventions from various national organisations are temporarily disruptive, each sustaining the conflict but the overall effect is one of *balance*, albeit stalemate.

Interventions as Arbiter

These interventions may be partial or impartial and their effects will vary depending on whether there is parity or disparity in the balance of power between the contending parties.

Examples of impartial interventions where there was parity between the parties are:

- the Bob Marshall Wilderness Area where the US Forest Service acted as a facilitator using in the Limits of Acceptable Change approach to managing the impacts of recreation;
- the designation procedure for Dutch National Parks which uses participatory planning to achieve consensus;
- in the Grevelingen, the Polder Authority (RIJP) acted as a technical planning agency to achieve balanced provision for a range of interests; and also
- during the creation of Rutland Water, the Anglian Water Authority secured a balance between recreation and nature conservation provision.
- in the Peak District National Park, the Park Authority employed a neutral facilitator to conduct negotiations between the disputing parties within the Access Consultative Group.

Examples of partial interventions where there was parity between the parties occurred during the designation of the Skomer Marine Nature Reserve and of the Pentland Hills as a Regional Park.

- In the case of Skomer, the Secretary of State for Wales arbitrated by confirming the designation order but allowed continued underwater access for divers off the island and in so doing recognised the respective power of the opposing parties; and
- The terms of reference of the Reporter considering objections to the designation of the Pentland Hills as a regional park were whether the criteria for designation were met, not whether the policy was locally acceptable. This phase of conflict was "resolved" by the exercise of official power in favour of public policy. As the affected parties were not compensated, this added to their sense of injustice.

No examples of an *impartial* intervention where there was *disparity* between the parties occurs in the case studies. Thus it can neither be confirmed that conflict resolution techniques, such as mediation, can be used in these circumstances, nor that Amy's (1987) view that this form of negotiation only proceeds when there is parity between the parties.

Examples of partial interventions where there was disparity between the parties are:

Non-participatory systems of decision-making which favour consultation and not involvement are, in effect, partial interventions by government.

- For example, the Dutch government's decision to give primacy to nature conservation policies in the Oosterschelde and the Voordelta, instead of striving for balance as had happened earlier in the Rhine Delta scheme (i.e., the Grevelingen).

Arbitration and appeals systems may have the same effect.

- For example, the series of appeal decisions on local provision for Motor Sports dealt with each case on its merits without any policy framework on where provision for the sports might be made so that the overall effect of government intervention has been partial.⁸

Overall the outcomes of these cases suggest that decisions, whether taken under partial or impartial regimes, reflect the distribution of power, following any intervention on the part of government agencies. A 'just' outcome, that is one that recognises the interests of all parties, is more likely to occur where there is parity of power, irrespective of the 'partiality' of the decision-making system. Where there is a marked disparity in power, the stronger party is likely to prevail when a partial decision-making system is in operation. These conclusions help to answer the first of the questions posed earlier in this chapter. This was:

This injustice has recently been recognised by the House of Commons Environment Committee (1995) which wishes to ensure that some provision is made for motorsports.

- why are ideological differences suppressed - is it because there is a participatory system of decision-making in place or is there another reason?

The evidence from this set of case studies suggests that interventions by the government agencies are likely to have a marked affect on the distribution of power within a dispute. Moreover, where parity is achieved as a result, the necessary conditions for negotiation from strength are fulfilled. In these circumstances, ideological differences are likely to be suppressed in the interests of reaching agreement. In other words, parity in power is more likely to be the determining factor than participatory decision-making, despite the claims made by its exponents that this factor on its own can influence the outcome of a dispute. However, it should be remembered that no examples were studied of the combination of marked disparities in power and impartiality in decision-making.

REFINING THE DYNAMIC FRAMEWORK

In Chapter 3 the alternative outcomes that could be predicted using the dynamic framework were depicted in Figure 3.2. This considered situations of conflict and co-operation and power struggles within rigid and flexible social structures. But the conditions of 'rigidity' and 'flexibility' were not easily applied in the context of the case studies. Following the combined theoretical analysis in this Chapter, this framework can now be modified to recognise:

- the importance of analysing disparities of power between the disputing parties;
- forms of intervention by national organisations which affect the distribution of power and;
- the non-participatory and participatory nature of decision-making.

The framework set out in Figure 5.9 provides a diagnostic tool which helps to predict the outcome of a dispute. It may not form a fully predictive model, in that the distribution of power on which the prediction depends may not be evident and the action interested parties may take cannot always be foreseen. However, it does focus the analysis onto a limited number of factors and types of outcome.

To use the framework, an initial analysis of the distribution of power would be followed by assessments of the likelihood of politicised challenges which might affect the power balance.

As well as interventions by national government or non-government agencies, there might be changes in the type of decision-making, although these are likely to be rare. The presence of diagnostic symptoms of conflict and co-operation, regarding access to information, communication and tactics, would assist that assessment. Once the eventual distribution of power has been assessed, in terms of parity or disparity, and the type of decision-making is known, whether it is participatory or semi-participatory, then the likely outcome can be classified into one of the four categories that were identified in Figure 5.7. Parity in power is more likely to produce stable outcomes while marked disparities suggest that while the likelihood of imminent conflict may be low in the short term, it is inevitable in the longer term.

AFTERMATH OF PREVIOUS EPISODE/LATENT PHASE	ACTIVE PHASE		TYPE OF DECISION- MAKING	TYPE OF OUTCOME	STABILITY OF OUTCOME
What is existing distribution of power (degree of politicisation)?	INTERVENTIONS BY INTERESTED PARTIES	What is resulting distribution of power likely to be?	Are criteria of balance and openness met?		What is likelihood of new episode?
PARITY weak/weak strong/strong	Are interventions likely which will change the balance of power?	PARITY	PARTICIPATORY balanced - agenda - representation - involvement	CO-OPERATION Negatiation based on consensus	Low as long as parity is maintained.
	Is a highly politicised challenge likely?	DISPARITY		COMPROMISE In favour of powerful	High risk because of disparity of power.
	Are policy mandated agencies likely to intervene? Are there Diagnostic Symptoms of conflict (leading to escalation) or co-operation (when ideological differences are suppressed)? i.e., Lack of/easy access to information Poor/good communication Adversarial/conciliatory tactics		·		***
DISPARITY weak/strong		PARITY	SEMI- PARTICIPATORY partial - agenda - representation - consultation	CONFLICT Minimum change - stalemate - abstement - concession to maintain status que	Low as long as parity is maintained
		DISPARITY		CONFLICT Transfer of power	High risk because of disparity of power and inequity of decision-making.

CONCLUSIONS

This chapter has examined Hypothesis 4:

That a combined analysis of the processes of social conflict and participatory decisionmaking increases the likelihood of predicting the outcomes of conflicts between conservation and recreation.

Two aspects of the hypothesis are considered in turn:

- what does the analysis of disparities of power add to the analysis of conflict resolution that is not explained by the analysis of participatory decision-making alone? (The second question posed earlier in the chapter); and
- the issues of measurement and prediction.

The Value of an Analysis which Combines Decision-Making and the Processes of Conflict
The combined analysis of intervention and power provides a complementary and fuller picture
of a conflict than that of participatory decision-making on its own. In particular, it demonstrated
that two forms of intervention occur, partial interventions by government agencies or other
national organisations mandated to pursue sectoral policies and partial or impartial interventions
by the state as arbiter in disputes about public policy. The analysis showed the various effects
of intervention on the processes of conflict. The former may disrupt the existing balance of
power and trigger conflict unless they redress disparities in the distribution of power and provide
balance. The latter may be partial if their primary purpose is to determine whether policies
should be implemented and not to secure equity for all parties. Alternatively they may be
impartial when they establish balanced ground rules for an open, participative process of
planning.

The conditions required to obtain one type of outcome - co-operation, i.e. conflict resolution by negotiation - are demonstrated by the cases of participatory planning. Although these may appear to start with a clean slate, they may well represent a response to previous episodes of political struggle (conflict) elsewhere. Examples, such as Rutland Water, illustrate this with the national agencies providing the necessary initial balance for the negotiation of interests to

proceed. Similarly, local interests recognise this factor when they seek to exploit any potential national dimension of a dispute knowing that this will help to increase their bargaining power.

Conclusion

By combining the analysis of the distribution of power with an analysis of participation in decision-making, it has proved possible to undertake a more detailed analysis of conflicts between outdoor recreation and nature conservation. It provides a means of assessing the partiality of public intervention, its effects on the distribution of power and the potential contribution of methods of conflict resolution.

Issues of Measurement and Prediction

Recognising the 'paradox of power' it was suggested that ideological commitment and the extent of politicisation might be used as proxy measures of the distribution of power within a conflict. This might allow the distribution of power and the outcome of the conflict to be predicted, thus circumventing the paradox. In most cases, an assessment of the distribution of power between the disputing parties could be made. Certainly these distinctions were clear in those cases where there was a marked disparity in power but uncertain where the balance was marginal, i.e., disparities may be more easily identified than parities. While in any future research, the method could be improved by focusing more clearly on this aspect of the case study, together with factors like group cohesiveness, it has to be recognised that any such analysis is retrospective. Thus the paradox still holds and remains a barrier to prediction. Many of the twists and turns of political struggle, the timing of interventions and the duration of a conflict, are likely to remain unpredictable.

Although it appears that the combined analysis of chapter 5 provides only marginal improvements over the framework used in Chapter 3, it has enabled two important aspects of conflict to be more clearly identified - the distribution of power and the legitimacy of the system of decision-making. These factors provided the basis of a typology of conflicts (presented as Figure 5.7), which clarified the range of possible outcomes and the circumstances in which they occur, and also permitted the dynamic framework to be refined into a practical diagnostic tool (which is presented as Figure 5.9).

These two factors also underlie assessments of the likelihood of a new episode of conflict, presented in the final column of Figure 5.9. A new round of political struggle could be stimulated by inequalities in the distribution of power or in the inequity of a partial system of decision-making. This is shown in simplified form in Figure 5.10.

FIGURE 5.10: SUMMARY OF THE DISTRIBUTION OF POWER AND DECISION-MAKING						
DISTRIBUTION OF POWER between the disputing parties	PARTIAL (Semi-participatory decision-making)	IMPARTIAL (Participatory decision-making)				
PARITY	A Stable outcome as long as parity is maintained. The system of decision-making contributes to long-term instability.	A Stable outcome as change can be renegotiated within the system.				
DISPARITY	An Unstable outcome because of two causes of injustice - the inequitable distribution of resources and the partial system of decision-making.	Probably an <i>Unstable</i> outcome because of disparity of power (but no example in the case studies).				

Where there is parity in power and a partial system of decision-making, the outcome of a conflict episode is likely to prove stable, as long as parity of power is maintained. However the partial system of decision-making presents a long-term risk of instability. Skomer provides an example of the first situation, the Pentlands Regional Park the second, the risk in the latter case seems particularly high as the power balance is uncertain.

Where there is parity in power but an impartial system of decision-making, the outcome of a conflict episode is likely to prove stable, as change can be renegotiated within the system. The Dutch National Parks, the Bob Marshall Wilderness Area and Rutland Water provide examples of this situation.

Where there is disparity in power and a partial system of decision-making, the outcome of a conflict episode is likely to prove unstable and further conflict episodes seem likely because of two potential causes of injustice - the inequitable distribution of resources and the system of

decision-making. The Oosterschelde, the Voordelta and Motorsports provide examples of this situation.

No case study illustrated conditions of a participatory system of decision-making being introduced in conditions of marked disparity between the disputing parties, which may be significant in itself, but does not enable conclusions to be drawn on the potential of methods of conflict resolution, such as mediation, in these circumstances. This would seem to be a topic worthy of further research.

Conclusions.

The combined analysis identifies two major components which are likely to lead to future conflict - changes in the distribution of power and the perceived inequity of a partial decision-making system. These provide a method of risk assessment but the risks cannot be quantified. This element of the analysis clarifies but does not solve the problems of prediction.

The combined analysis presented in this Chapter suggests that the two analyses - of disparities of power and of systems of decision-making - are complementary and necessary to a fuller understanding of conflicts and conflict resolution.

CHAPTER 6: EVALUATION AND CONCLUSIONS

INTRODUCTION

This chapter presents a concluding analysis of the four frameworks and the theories on which they are based to assess the strengths and weaknesses of each of the frameworks and their potential utility. It concludes by reviewing the issues raised by the study, relating to:

- the nature and causes of environmental conflict;
- environmental decision-making and conflict resolution;
- theory and prediction; and
- future research.

SUMMARY AND ASSESSMENT OF THE FRAMEWORKS

Four frameworks were presented in the earlier chapters:

- A Diagnostic Framework presented in Chapter 2 which highlighted the contrasting conditions to be found in cases of conflict and co-operation;
- A Dynamic Framework presented in Chapter 3 which enabled the course of a conflict to be explained and provided a basis for attempting to predict the outcome of the episode under examination;
- An Evaluative Framework of Decision-making- presented in Chapter 4 comprising a set of criteria which could be used to judge whether the process of decision-making was considered legitimate and whether its outcome would be considered just by the participants.
- An Integrated Framework of Conflict and Co-operation presented in Chapter 5 which combined elements of the Dynamic and Decision-making Frameworks.

The Diagnostic Framework of Conflict and Co-operation

The empirical analysis in Chapter 2 categorised the factors which discriminated between situations of conflict or co-operation in four groups, namely: biological impacts, conflicting

interests, inter-relationships and social institutions. The comparison of case studies of conflict and co-operation, using this framework, suggests that it is not the ostensible cause - the issue around which the dispute revolves - that determines whether conflict or co-operation occurs; but that the motivation of the interest groups, their relationship and the institutional setting in which they attempt to broker a reallocation of resources can all be contributory factors. However, none of these groups of factors appears to act alone, suggesting that multiple rather than single causality is more likely to be the norm.

Indeed the value of this framework may be in what it reveals about co-operation rather than conflict. Examination of the co-operation cases suggests that co-operation is largely about suppressing ideological differences because of agreement over aims, about understanding and good communication and about the interest groups being sufficiently organised to represent themselves effectively. The form of decision-making in these cases is negotiative rather than adversarial and this is supported by the institutions involved.

Thus these factors could be used as evaluative criteria to establish whether the basis for cooperation exists, but it is a static analysis which correlates factors and explains little if anything
about the processes of conflict or how conflict arises. Its weaknesses are demonstrated when
external change occurs. For example, the pattern of co-operation established within the
Advisory Committee of the voluntary marine reserve at Skomer probably suggested to the
Nature Conservancy Council that designation of a statutory reserve would be uncontroversial.
An analysis using this framework would have supported that view and it could not have been
used to predict how external factors - such as the intervention of national organisations (the
Council and the British Sub-Aqua Club) - would trigger the events that led to conflict. Thus
the framework has limited analytical value and this is restricted to demonstrating a presence
of co-operation. It cannot be used to predict the intensity, duration or outcome of a conflict
and these possibilities need to be pursued by other means.

The Dynamic Framework of Conflict

The dynamic framework was based on the concept of phasing of successive episodes of a conflict over access to resources which is fought out on a political stage. Such conflicts may or may not be resolved depending on whether the outcome is reached by the exercise of power

or by negotiation.

Compared to the diagnostic framework, the re-allocation of factors into phases within the dynamic framework provides a more logical grouping as it demonstrates their interrelationships during the course of a conflict episode. However, the separation of conflict episodes into phases may often be more easily accomplished in a theoretical analysis than in practice as phases may overlap considerably.

A particular advantage of this analysis comes from the insights that it provides into the role that ideology and arguments of principle play in emphasising group solidarity during the course of a dispute and why basic beliefs are not negotiable. The close examination of the respective goals of each interest group, whether they are seeking to maintain or improve social position, enables the tactics of each group to be better understood during the phases of a conflict.

The distribution of power and how this changes during the course of the dispute is a crucial part of the analysis. It appears to be the dominant factor in determining whether the outcome of a dispute will be achieved by the exercise or transfer of power or by negotiation. Political organisation appears to be an important factor in the quest for power.

The analysis gives some insights into decision-making structures and their rigidity or flexibility in influencing the outcome of a dispute. However, the concepts of rigidity and flexibility proved to be unsatisfactory in this analysis as some decision-making systems had elements of both rigidity and flexibility. Neither concept allows for the confusion of roles that may occur if a local authority or government agency act as both protagonist and adjudicator, thereby affecting the legitimacy of that organisation as a neutral and impartial decision maker.

The more extended analysis afforded by the use of this framework led to tentative predictions on the outcomes of the case studies under analysis. While the analysis suggests with some confidence the instability of certain situations or the hopeless political position of others, not all the eventual outcomes were as clear. The framework has limited predictive ability depending on whether the likely balance of power between the competing parties can be ascertained.

The Evaluative Framework of Decision-Making

The evaluative framework presented in Chapter 4 did not attempt to explain how conflicts arise but only how they may be resolved when certain circumstances apply. The analysis of case studies using this framework contrasted two forms of decision-making, namely:

- a balanced, open participatory process, in which all parties were involved at an early stage and which resulted in a mutually beneficial negotiation; and
- a biased, partial, semi-open process, in which many of the parties were not consulted until a late stage. Lack of information led to uncertainty and controversy and the outcome was determined by the exercise of power. This latter form of semi-participatory decision-making can, in itself, contribute to the escalation of conflict.

Power is again identified as an important factor but mediators tend to concentrate on procedural issues which are amenable to modification and shed little light on the questions of how power can either be measured or redistributed.

This framework could be used by practitioners to identify the necessary conditions for fair, open and principled negotiations in which all interests are represented and uncertainty is reduced. It also provides a theoretical means of assessing administrative decision-making and planning systems in terms of their ability to prevent conflicts.

The Integrated Framework of Conflict and Co-operation

In Chapter 5, elements of the dynamic framework were combined with the evaluative framework to consider whether it is possible to develop an integrated predictive model. The analysis suggests that the predictive power of the dynamic framework can be increased by integrating into it the analysis of participatory decision-making. By setting out on one dimension the disparities of power between competing groups against semi-participatory and participatory nature of decision-making on another, it is possible to categorise the full range of possible outcomes to political struggle or negotiation into a simple typology (see Figure 5.7).

The dynamic framework was further modified by considering the effects of different types of public intervention on the distribution of power and the resulting analysis is more focused than that presented in Chapter 3. Interventions might take the form of politicised challenges by organised groups or government agencies, or of constraints imposed by the type of decision-making. The presence of diagnostic symptoms of conflict and co-operation, regarding access to information, communication and tactics (identified in Chapter 2) assist this analysis. The value of this integrated framework lies in its use as a diagnostic tool to follow the course of a dispute.

The predictive power of the integrated framework depends upon the assessment of a limited range of factors, namely:

- whether there has been a previous episode to the dispute;
- the motives of the disputing parties their ideological commitment and political organisation as proxy measures for disparities of power between them;
- whether the social institutions of decision-making are semi-participatory or participatory in nature (using the evaluative criteria identified in Chapter 4).
- -the likelihood, nature and timing of interventions, including those by government agencies, and their effect on the distribution of power.
- the identification of the major components of risk of future conflict
 - for those seeking justice: inequalities in the distribution of power and an inequitable system of decision-making; and
 - for those seeking to reduce access of other parties to resources: opportunities to increase their power.

As the integrated framework is an adaption of the dynamic framework, it shares the same limitations as a predictive model, namely:

- that the detailed course or duration of a power struggle cannot always be predicted because the likelihood, nature and timing of interventions, particularly by government agencies, cannot be foretold. These can have considerable effects on the distribution of power and changes in the distribution of power are not easily measured- the paradox of power.

The strengths and weaknesses of each framework are summarised in Figure 6.1

FIGURE 6.1: STRENGTH	S AND WEAKNESSES OF	THE FRAMEWORKS		
	DIAGNOSTIC	DYNAMIC	DECISION-MAKING	INTEGRATED
EXPLANATION OF CONFLICT ANALYSIS	Suggests multiple causation but rarely due to ostensible issue. Relationship of parties more crucial than impacts.	Depicts processes of conflict escalation and political struggle and how they are perpetuated.	Contrasts participatory (open) and non-participatory (closed) decision-making.	Analyses interventions by the state and their effects on the distribution of power.
EXPLANATION OF CONFLICT RESOLUTION	Identifies conditions of co- operation.	Indicates whether durable/transitory outcomes are likely to be achieved.	Predicts whether outcome will be fair (stable).	Indicates whether outcomes are likely to be durable/transitory; fair/unjust and the extent of change according to the distribution of power and the type of decision-making.
STRENGTHS	Provides initial diagnosis of conflict/co-operation.	Explains why conflicts take a particular course.	Evaluates ability of decision- making to reduce conflict and provide durable solutions.	Predicts a range of outcomes on a limited number of variables. Identifies the major components of risk of conflict.
WEAKNESSES	Provides no explanation of relationships, especially power. Cannot predict effects of change.	Prediction based on power struggle which is itself unpredictable.	Cannot predict effects of change.	As not all elements of a power struggle are predictable, the detailed course and duration of conflict cannot be predicted.

DISCUSSION OF ISSUES RAISED BY THE STUDY

The Nature and Causes of Local Environmental Conflict

The analysis of social theory in Chapter 3 suggested that local environmental conflicts have to be seen within a broader perspective of social change. From this perspective, the nature and causes of environmental conflict are partly explained by understanding the role of conflict in mediating change and partly by seeing it as a dynamic process.

The analysis of social and managerial theories identified a series of organising concepts that are helpful in this analysis. For example, conflicts pass through phases, that is, each conflict consists of an *episode* which has an *aftermath*, which in turn conditions the episode of conflict that follows, as suggested by Pondy (1972) amongst others. This acknowledges a process of aftermath/episode/aftermath which continues in a repeating pattern and sets the current episode in an historical perspective.

The control of resources, i.e., their distribution between the competing interests who gained access to them on whose terms, was central to the case studies under consideration. In this analysis Thurling's (1962) conceptualisation of social position is helpful in that it distinguishes between *autonomy*, the ability to exercise a right, and *authority*, a say in the process of allocation. It illustrates that conflicts do not exist in a social vacuum and that the allocation process is important because it confers power.

The recreation versus conservation debate is partly a local conflict over access to resources and partly symptomatic of a wider process of social change, whereby the old order is gradually challenged and replaced by a new one. It contains an inherent contradiction between two sets of rising public expectations: of increased access to the countryside and of higher environmental standards. Local conflicts provide a means of redressing the balance between these expectations and testing the strength of their support. It is no coincidence that the individual conflicts studied here are both place-specific and also incidents in a broader campaign of local and national change.

To take two examples, the conflict over moorland access in the Peak District National Park is the centre piece in a national debate about public access to private land and its possible environmental impacts. Local resolution would set national precedents, hence the hesitancy about reaching agreement. The motor sports controversy comprises many local conflicts but the national dimension of institutional structures is lacking. One side (the nature conservation and amenity lobbies) can take advantage of this policy vacuum.

Coser (1957) distinguished between conflicts "within the system" - concerned with goals and interests - and conflicts "of the system" which were seeking changes to the social structure on the basis of beliefs and ideology. Indeed in every case studied, at least one group was advancing or defending its cause from a position of principle. Amy (1987) suggests that conflicts of interest and misunderstanding may be negotiable whereas conflicts over beliefs are not. Thus it may be reasonable to infer that beliefs and ideology are concerned with how the system should be and any group which is primarily based around beliefs and ideology is concerned with changes of the system. As far as the group is concerned, these issues are not negotiable and attempts to change the system inevitably result in political struggle of one form or another. Meanwhile, groups that are primarily acting to protect or expand their interests are concerned with the distribution of resources within the system and are prepared to negotiate accordingly.

Conservation groups appear to be arguing for both changes of and within the system. At the macro level they are seeking radical change within the social structure so that environmental values predominate. At the same time, they are seeking to control the access of others to "natural" resources.

Thus there remains the issue of what degree of environmental change (or loss of environmental quality) a society will allow while accommodating a certain degree of social change (or gains in human enjoyment). Yet almost as important as the issue itself is the question of whether existing social institutions are adequate to the task of mediating change on this level. This is the topic of the next section.

Environmental Decision-Making and Conflict Resolution

In practice, the agents of change may be competing government agencies, each mandated to develop and implement public policy, although they have to maintain legitimacy in the eyes of an affected and often critical public. But the role of government may be obscured by its dual function as interested party and arbiter, particularly when the role of arbiter is not impartial to seek balance or justice - but partial to ensure policy is being applied appropriately.

Thus there are particular problems for (recreational) minorities seeking (to maintain) rights of access when confronted by:

- agencies attempting to execute an environmental brief which seeks to redistribute resources in favour of the environment, i.e., representing conservation values and seeking environmental justice, and
- legal institutions which protect existing rights but do not redistribute rights of access.

Participation in decision-making may confer some power but it does not automatically redress any imbalance and, as has been evident throughout this study, it is the distribution of power that determines the outcome of a dispute. Participatory planning can promote co-operation and perform a useful role in preventing rather than resolving conflict, but only if power is balanced.

The case studies illustrated that environmental disputes are no exception to these rules. Where environmental groups are fighting development interests and are relatively powerless, the stronger interest will prevail. But where conservation groups are pitted against less powerful recreation interests they act like any other powerful group, particularly where they have powerful allies within the agencies of the state. Justice may be done in the name of the environment but it should not be confused with social justice.

These problems are compounded when there is no forum which considers minority claims for social justice. In these circumstances, minorities have no option but to use the political process and thereby initiate conflict.

Almost without exception, the public institutions operated semi-participatory decision-making systems and were not politically neutral. Indeed the case studies demonstrated that they were susceptible to political strength, either in seeking to produce an equitable distribution of resources between equally powerful lobbies or an inequitable one in favour of the politically organised and powerful. These institutions reflected the current balance of power and what they did not (and arguably were not constituted to) do was empower the weak and secure equitable treatment for minority groups.

Civil law legitimates the status quo and any resolution of disputes by litigation operates within the existing distribution of rights. Certain quasi-arbitration processes, in which there is an element of political discretion (such as the appeal system on development control) may be accepted as a legitimate use of power. But the greater political discretion, the more likely it is that minority groups will sense injustice and question the legitimacy of this form of decision-making.

This highlights an institutional inadequacy, the absence of an effective conflict resolution mechanism in British rural planning which can steer a dispute towards a just negotiation and secure a redistribution of rights of access. Its absence is likely to delay resolution of access issues or result in a continuing cycle of conflict episodes. Certainly few existing rural planning agencies would qualify as independent arbiters, on the grounds that they are not policy neutral. Agencies with multiple policy aims, such as national park authorities, have difficulty in achieving an appropriate balance in the eyes of competing stakeholders and even then are not perceived as neutral (Sidaway, 1993). While the remit of project officers in, for example, countryside management schemes may be balanced, they are relatively powerless. Any informal negotiation they initiate are outwith the conventional ambit of official decision-making. To become legitimated, they would need to protect the rights of minorities and to operate within a legal structure (see Brown and Marriott, 1993 and Hodge, 1993).

Whether such mechanisms can be put in place is an open question. To be perceived as legitimate and to achieve consensus, they would need to contain the critical elements identified in this study, such as effective communication, negotiative decision-making, plans or policy statements which can be revised to allow for change, and a decision-making body which is

prepared to involve the interest groups directly rather than consult them on proposals prepared away from public scrutiny. An extension of this analysis in further research may provide the basis for suggestions to rectify this institutional inadequacy.

Theory and Prediction

Theories operate within prevailing paradigms. Early theories of social conflict operated within the metaphor of the diseased body in which conflict was seen as a 'dysfunction' to be cured or eradicated. Later theorists used the metaphor of earth movement and the adjustment of tectonic plates. Within this paradigm conflict performs a functional role. Given the prevailing interest in conflict resolution, with its emphasis on management to 'solve the problem' of conflict, the broader perspective of social change has been neglected. This may be in part a semantic issue, as initiatives to 'build consensus' use the same techniques as mediation but move the emphasis towards seeking co-operation and away from crisis management. Nevertheless, the perspective of social change, with its emphasis on the inevitability of power struggles to test the support for public policies, may help to define the limits of mediation.

This study has attempted to utilise and develop theory to practical ends. If the search for theory and method that provide better means of prediction has proved to be something of a mythical quest, at least this focus has proved a means of sharpening the analysis of conflicts. What the more rigorous theoretical analysis provides is clearer insight into which factors come into play at which stages of the dynamic process of conflict; a more realistic assessment of how decision-making can influence but not determine the outcomes of disputes; and the crucial contribution of power as an impetus to secure and control access to resources. These insights have been obtained by reviewing a range of theories, making an eclectic selection and identifying their complementary elements. This has also demonstrated that conflicts can be subject to formal analysis based on theory and that the construction of frameworks enables contributory factors to be organised to provide increased understanding of both conflict and co-operation.

In the final analysis, the result (in terms of prediction) may be much the same as the assessment prepared by a mediator or negotiator who intuitively assesses the 'ripeness' of a dispute for negotiation, who considers the parties' willingness to negotiate and their 'best alternatives to a negotiated agreement'. Neither the experienced practitioner not the theoretical analyst can predict the outcome with certainty. But their skills are complementary and each can learn from the other.

Issues for Future Research

The analyses in this study have identified a number of issues that may warrant further investigation.

a) Environmental Decision-making and the Basis for Public Intervention - Intervention in the public interest by national organisations with limited sectoral remits was a common feature of many of the case studies. These agencies are mandated to achieve certain policy goals and are not prepared, initially at least, to negotiate. Such agencies are powerful players in a political struggle and when they act unilaterally and neglect to involve the public, their decision-making is no longer seen as legitimate.

The earlier analysis identified an institutional inadequacy: the absence of an effective conflict resolution mechanism in British rural planning which can steer a dispute towards a just negotiation and secure a redistribution of rights of access. The analysis developed in this study could be usefully replicated to cover a wider range of environmental conflicts and extended to explore the extent of "institutional inadequacy", i.e., whether the arbitration offered within designation procedures or within the planning system perform benign roles of ensuring social and environmental justice, whether there is a need to reform systems of environmental decision-making and how such a system might operate.

b) The Potential Contribution of Environmental Mediation - This study has demonstrated the difficulties of applying a classification approach to assess whether certain types of conflict are more amenable to resolution by negotiation. It has shed some light on the distinctions between beliefs, interests and principles and how these may be depicted during the active phases of a conflict. Further investigation might explore these relationships further to identify the limits of mediation in this respect. Given the critique of environmental mediation, which suggests that it may be used by the powerful as a method of social control, research on decision-making might also assess the potential contribution of 'Alternative

Dispute Resolution' techniques as supplements to the administrative, legal and political processes of environmental decision-making.

- c) Theory and Modelling This study has demonstrated the advantage of using both social and negotiation theory in developing conceptual frameworks. This eclectic approach to theory might be extended to investigate the development of predictive models. Further consideration might be given to the role that beliefs and principles play in defining and maintaining group cohesiveness. Organisational theory might be examined to provide insights into the extent to which internal organisational issues influence the action of key players (e.g., government agencies) in complex multi-party environmental conflicts. Political science theory might be utilised to extend the limited analysis in this study of the role of the state and functions of its institutions in environmental decision-making.
- d) Research Method Methodological issues have not been examined in this study. The emphasis on examining the dynamic processes of environmental conflicts over time presents a classic dilemma. If conflict is only understood by following processes over a period of time via longitudinal research, can the findings from intensive case studies be generalised to obtain reliable results which validate theory? This topic is worthy of detailed consideration.

CONCLUSIONS ON HYPOTHESES

In relation to the Hypotheses it can be concluded that

Hypothesis 1

1. It is possible to identify a series of characteristic factors which distinguish between conflicts and co-operation concerning conservation and recreation irrespective of their institutional, cultural and geographical settings.

With the caveat that these conclusions are particular to conflicts between conservation and recreation, they may well apply to other environmental conflicts but are unlikely to be capable of wider generalisation.

Hypothesis 2

2. It is possible to identify the underlying theoretical concepts and social processes which govern the development of conflicts and which may be used to predict their outcomes

Hypothesis 3

3. The factors which lead to the resolution of conflicts between conservation and recreation by negotiation may be identified and used to assess the likelihood of resolution being achieved by consensus.

These objectives were met by developing a series of conceptual frameworks.

Hypothesis 4

4 A combined analysis of the processes of social conflict and participative decisionmaking increases the likelihood of predicting the outcomes of conflicts between conservation and recreation.

The combination of theory proved valuable in providing complementary elements in a more detailed analysis but the improvement in prediction was marginal, given the inherent difficulty of measuring the distribution of power.

REFERENCES

Alliance for the Northern Rockies (1989) Publicity leaflet, Missoula, Montana, The Alliance.

van Alphen, J.S.L.J. and Hoozemans, F.M.J. (1991) Coastal Zone Management in Changing Morphological Environment: A Case Study from the Netherlands, in Magch O.T. et al (Eds), Coastal Zones 91, Proceedings of the 7th Symposium on Coastal and Ocean Management, American Society of Civil Engineers, New York, pp. 2720-2733.

van Amstel, A.R., Hemgreen, G.F.W., Meyer, C.S., Schoorl-Groen, E.F. and van de Veen, H.E. (1988) Vijf visies op natuurbehoud en natuurontwikkeling; knelpunten en perspectieven van deze visies in het licht van de huidige maatschappelijke ontwikkelingen, <u>Publicatie RMNO</u>, No. 30, Rijswijk.

Amy, D. (1987) The Politics of Environmental Mediation, New York, Columbia University Press.

Anderson, P. (1990) Moorland Recreation and Wildlife in the Peak District: Summary, Bakewell, Peak Park Joint Planning Board.

Anon. (1989) Explanatory Text to Ramsar Designation Oosterschelde.

Appleton, T.P. (1982) Rutland Water Nature Reserve from conception to operation, Hydrobiologia 88.

Ashor, J.L. (1986) Criteria and guidelines for using the transactive planning approach in wilderness management planning, in <u>Proceedings - National Wilderness Research Conference</u>: <u>current research</u>, USDA Forest Service, Ogden, Utah, Intermountain Research Station General Technical report INT-212, 550-552.

Austin, P. (1990) Mistakes led to the cutting of Maine's vanishing old growth, <u>Maine Times</u>, 7.9.90.

Baumgartner, T., Burns, T.R. and De Ville, P. (1978) Conflict Resolution and Conflict Development: The Theory of Game Transformation with an Application to the Lip Factory Conflict, in Kriesberg, L. (Ed), Research in Social Movements, Conflicts and Change, Vol. 1, pp. 105-142.

Beals, A.R. and Siegal, B.J. (1966) <u>Devisiveness and Social Conflict: An Anthropological Approach</u>, Stanford, California, Stanford University Press.

Blalock, H.M. (1989) <u>Power and Conflict: Toward a General Theory</u>, London, Sage Publications.

Bosma, N.J. (1992) We bouwen geen communicatiebruggen; Storm in de Voordelta: conflict tussen recreatie en natuur, <u>Recreatie & Toerisme</u>, 2 (1992) 5, pp. 16-17.

Bottomore, T. (ca. 1969) Sociological Theory and the Study of Social Conflict, Chapter 5, pp137-153, [source unknown].

Boucher, N. (1989) Whose woods these are: the task of saving the last of the northern New England's wildlands is a puzzle of possibilities, contention and promise. Wilderness, Fall 1989, Volume 53, Number 186, 19-41.

BOW-Bulletin (1992) Ontwikkelingen rond de Voordelta; chronologisch overzicht, Bulletin Nr.4.

Brown, H.J. and Marriott, A.L. (1993) ADR Principles and Practice, London, Sweet and Maxwell.

Burton, J. (1990) Conflict: Resolution and Provention, New York, St. Martin's Press.

Burton, T.L. (1976) Making Man's Environment: Leisure, Toronto.

Capone, L. (1990) Northern Forest Lands Study - Final report issued: Environmentalists expect legislation for 1990, <u>Appalachia Bulletin</u>, July/August 1990, 16-18.

Carlyle, E., Checker, M., Daunt, F., Field, A., Holden, P., Tabor, P. and Wilkinson, M. (1993) Involving People in the Future of the Pentland Hills Regional Park, Edinburgh, Institute of Ecology and Resource Management.

Centre for Leisure Research (1986) Access to the Countryside for Recreation and Sport, Report CCP 217, Cheltenham, Countryside Commission and Sports Council.

Chase, A. (1987) Playing God in Yellowstone, Orlando, Harcourt, Brace Jovanovich.

Clark, G., Darrall, J., Grove-White, R., Mcnaughten, P. and Urry, J. (1994) <u>Leisure Landscapes</u> - <u>Leisure, Culture and the English Countryside: Challenges and Conflicts</u>, Lancaster, Centre for the Study of Environmental Change, Lancaster University.

Coser, L.A. (1967) Continuities in the Study of Social Conflict, New York, The Free Press.

Coser, S. (1956) The Function of Social Conflict, New York, The Free Press.

Countryside Council for Wales (1993) <u>Skomer Marine Nature Reserve: agreed management policy</u>, Aberystwyth, Dyfed and Mid Wales Region, Countryside Council for Wales.

Creighton, J.L. (1978) "Why conduct public involvement programs for regulatory functions?" in Creighton, J.L., Delli Priscoli, J. and Ballentine, T. (Eds), <u>Public Involvement in Corps Regulatory Programs: Training Manual</u>, Institute for Water Resources, Washington DC.

Dahrendorf, R. (1959) <u>Class and Class Conflict in Industrial Society</u>, Stanford, California, Stanford University Press.

Delli Priscoli, J. (1980) <u>Developing Public Involvement Evaluations: A Federal Agency Perspective</u>, Unpublished paper given at Washington DC, 4th February, 1980.

Delli Priscoli, J. (1984) Public Involvement in Risk Assessment, Paper delivered at the Workshop: "Perception and Communication in Risk Management", University of Southern California, Los Angeles.

Delli Priscoli, J. (1990) Public Involvement; Conflict Management and Dispute Resolution in Water Resources and Environmental Decision-making, US Army Corps of Engineers, Alternative Dispute Resolution Series, Working Paper No. 2.

Department of the Environment (1991) Sir George Young announces additional safeguards for Sites of Special Scientific Interest, <u>Department of the Environment News Release 556</u>, London DOE.

Deutsch, M. (1973) The Resolution of Conflict: Constructive and Destructive Processes, Newhaven and London, Yale University Press.

van Doorn, J.A.A. (1966) Conflict in Formal Organisations, in de Reuck, A. and Knight, J. (Eds), Conflict in Society, London, Churchill.

Douglas, T. (1976) Groupwork Practice, London, Tavistock Publications Ltd.

Druckman, D. (1993) An Analytical Research Agenda for Conflict Resolution, in Sandole, D.J.D. and van der Merwe, H. (Eds), <u>Conflict Resolution Theory and Practice: Integration and Application</u>, Manchester and New York, Manchester University Press, pp.25-42.

Edwards, R. (1991) Fit for the Future, Reports of the National Parks Review Panel, Cheltenham, Countryside Commission, CCP 334.

Elson, M.J., Buller, H. and Stanley, P. (1986) <u>Providing for Motorsports: from image to reality</u>, Sports Council Study 28, London, The Council.

Emmet, I. (1975) The Social Filter in the Leisure Field, <u>Recreation News Supplement</u>, Cheltenham, Countryside Commission.

Ertel, D. (1991) How to design a conflict management procedure that fits your dispute, <u>Sloan Management Review</u>, Summer 1991, vol. 32, No. 4.

Fisher, R.J. (1990) Needs Theory, Social Identity and an Eclectic Model of Conflict, in Burton, J. (Ed) Conflict; Human Needs Theory, New York, St. Martin's Press, pp.89-112

Fisher, R. and Ury, W. (1981) Getting to Yes: Negotiating agreement without giving in, London, Hutchinson Business Books.

Forester, J. (1987) Planning in the Face of Conflict: Negotiation and Mediation Strategies in Local Land Use Regulation, <u>Journal of the American Planning Association</u>, 53 (1987), 3, pp. 303-314.

Friedmann, J. (1987) <u>Planning in the Public Domain: From Knowledge to Action</u>, Princeton, New Jersey, Princeton University Press.

Glasbergen, P. (Ed) (1991) <u>Integrale beleidsplanning voor de grote wateren</u>, SDU Uit geverij, 's-Gravenhage.

Governor's Task Force (1990) The Northern Forest Lands: a strategy for their future, Report to the Governors of New York, New Hampshire, Vermont and Maine.

ter Haar, E. (1979) Het beslissingproces (The Decision-making Process) in, van der Perk, J.C. and van der Voet, J.L.M., <u>Stedelijke Recreatie</u> (Urban Recreation), WIRO-rapport 7, Lelystad.

Harrison, C. (1991) <u>Countryside Recreation in a Changing Society</u>, London, The TMS Partnership Ltd.

Hodge, I. (1993) Commentary on The Future - Exclusion or Control (paper given by R. Sidaway) in <u>Public Access and Conservation</u>, Proceedings of a Symposium organised by the Byways and Bridleways Trust at Church House, Westminster on 7 April 1993, pp.77-78.

House of Commons Environment Committee (1995) The Environmental Impact of Leisure Activities, London, H.M.S.O.

Keehn, J. (1989) In the great north woods Maine wilderness groups challenge local paper companies, Fairpress, 28.9.89.

van Keken, G.J., Lengkeek, J., Sidaway, R. and van der Voet, J.L.M. (1993), Kop tegen kei; onderzoek naar de voorwaarden voor maatschappelijk aanvaardbare grindwinning in Limburg, Advies en onderzoeksgroep Beke, Werkgroep Recreatie Landbourwuniversiteit, Rapport nr. 22 van de Werkgroep Recreatie, Arnhem/Wageningen.

Kellert, M.J. (1989) A New Maine Woods Reserve: Options for Protecting Maine's Northern Wildlands, A Report by the Wilderness Society, Boston, Mass., The Society.

Knights, E.A. (1982) Rutland Water from conception to operation, Hydrobiologia 88, 7-17.

Kukka, C. (1990) Saving the North Woods - a New York commission shows the way, <u>Maine Times</u>, 25.5.90.

Land Access and Recreation Association (1991) <u>Planning Controls over Sites of Special Scientific Interest: a Response to the Department of Environment Consultation paper of 13 March 1991</u>.

Land Access and Recreation Association (1993) <u>Planning for Motor Sport and Recreation in an Increasingly Sensitive Environment</u>, Papers presented to a LARA Symposium for planners, organisers and providers, Leamington Spa, 21.4.93., Newcastle upon Tyne, LARA.

Land Access and Recreation Association (1994a) Ridgeway News at last - TRO rejected, <u>LARA News</u>, Number 7, January 1994.

Land Access and Recreation Association (1994b) The Boys are Back, <u>LARA News</u>, Number 8, March 1994.

Land and Water Resources Center (1987) Natural Resource Highlights: The Forests of Maine - yesterday, today, tomorrow, Information Digest, Orono, University of Maine.

Leimdorfer, T. (1990) Teaching Creative Responses to Conflict, New Era in Education, Vol.71, No.2, pp.54-57.

Lipset, S.M. (1985) Consensus and Conflict: essays in political sociology, New Brunswick and Oxford, Transaction Press.

Lowe, P. and Goyder, J. (1983) Environmental Groups in Politics, London, George Allen and Unwin.

McCool, S.F. (1986) Experiencing Management for Quality: implementing the Limits of Acceptable Change, Paper presented at conference on Science in the National Parks, July 13-19, 1986, Fort Collins, Colorado.

McCool, S.F. (1989) <u>Pulbic Involvement and the Limits of Acceptable Change</u>, Note of a presentation made at the USDA Forest Service - University of Montana workshop on the Limits of Acceptable Change, Missoula, Montana, November 13-17, 1989.

Mack, R.W. and Snyder, R.C. (1957) The Analysis of Social Conflict - Towards an Overview and Synthesis, <u>Journal of Conflict Resolution</u>, Vol. 1, pp. 212-248.

Madigan, D., McMahon, G., Susskind, L. and Rolley, S. (1990) New Approaches to Resolving Local Public Disputes, National Institute for Dispute Resolution, Washington DC.

Marx, K. (1964) <u>Selected Writings in Sociology and Social Philosophy</u>, T.B. Bottomore (trans), New York, McGraw-Hill.

Mernitz, S. (1980) Mediation of Environmental Disputes: a sourcebook, New York, Praeger.

Miller, G.R. (1974) Epilogue in Miller, G.R. and Simons, H.W. <u>Perspectives on Communication in Social Conflict</u>, Englewood Cliffs, pp. 206-220.

Ministry of Transport and Public Works (1989) The Delta Project: preserving the environment and securing Zeeland against flooding, Den Haag, The Ministry.

Mitchell, C.R. (1993) Problem-Solving Exercises and Theories of Conflict Resolution, in Sandole, D.J.D. and van der Merwe, H. (Eds), <u>Conflict Resolution Theory and Practice:</u> <u>Integration and Application</u>, Manchester, Manchester University Press, pp. 78-94.

Montana Wilderness Association (1990a) Wild Montana the clearcut crisis, Special Publication of the MWA, Winter 1990, Helena, MWA.

Montana Wilderness Association (1990b) Letter Be Wild: the 1990 Wilderness Bills, where's the balance?, (newletter of the MWA) April, 1990. Helena, M WA.

Montana Wilderness Association (1990c) <u>Letter Be Wild: historic agreement</u>, (newletter of the MWA) June, 1990. Helena, MWA.

Montana Wildland Coalition (undated) The Bob Marshall Country: the unfinished work, promotional leaflet, Helena, the Coalition.

Moore, C.W. (1986) <u>The Mediation Process: Practical Strategies for Resolving Conflict</u>, San Francisco, Jossey-Bass Inc.

Moore, C. (1991) Mediation, Fort Belvoir, Virginia, US Army Corps of Engineers, <u>Alternative Dispute Resolution Series</u>, Pamphlet 3.

Moore, C. and Delli Priscoli, J. (1989) <u>The Executive Seminar on Alternative Dispute Procedures</u>, US Army Corps of Engineers.

Motorsports Facilities Unit (1993) <u>Survey of Motorsports Facilities Loss</u>, Rugby, Auto-Cycle Union.

Murray, J.S. (1989) Designing a Disputing System for Central city and its Schools, in Goldberg, S.B., Brett, J.M. and Ury, W.M. (Eds), <u>Dispute Systems Design: A Special Section of Negotiation Journal</u>, October 1989, pp. 365-372.

National Park Policies Review Committee (1974), Report of the National Park Policies Review Committee, Department of the Environment, London, H.M.S.O.

Nature Conservancy (1990) The Nature Conservancy and State sign 40,000 acres Purchase Agreement, Maine Legacy, June 1990, 1-5.

Nature Conservancy Council (1986) <u>Skomer Proposed Marine Nature Reserve: consultative paper</u>, Peterborough, NCC.

Nature Conservancy Council (1987) <u>Skomer Proposed Marine Nature Reserve</u>: <u>liaison officer's report for the period 5 May - 20 September 1987</u>, Aberystwyth, Dyfed-Powys Region, NCC.

New Society (1984) War and Conflict, New Society, Society Today, New Society's Social Science Brief, 25th October 1984.

North Maine Woods (1989) "Premier Issue", Summer Newsletter, Ashland, Maine, NMW.

North Maine Woods (1990) Fall Visitors Guide, Volume 2, Issue 2, Ashland, Maine, NMW.

Ozawa, C.P. and Susskind, L. (1985) Mediating Science-Intensive Policy Disputes, <u>Journal of Policy Analysis and Management</u>, Vol.5, No.1, pp.23-39.

Peak Park Joint Planning Board (undated) <u>Strategy for access to open country: a balanced approach</u>. Bakewell, the Board.

Pentland Hills Technical Group (1972) <u>Pentland Hills: conservation and recreation</u>, Report and draft recommendations of the Group to the Secretary of State for Scotland.

Platt, D. P. (1989) Ambassador for the Endangered, <u>Habitat</u>, Journal of the Maine Audobon Society, Volume 6, Number 5, 30-32.

Pondy, L.R. (1972) Organisational Conflict: Concepts and Models, in Thomas, J.M. and Bennis, W.G. (Eds), The Management of Conflict and Change, London, Penguin Books.

Power, M. (1989) Wilderness, timber supply and the economy of western Montana, Wild Montana, a special publication of the Montana Wilderness Association, Missoula, MWA.

Provincie Zeeland (1988) Zeeland in Facts and Figures, Middelburg.

Raiffa, H. (1982) The Art and Science of Negotiation, Cambridge, Mass., Harvard University Press.

Rex, J. (1961) Key Problems of Sociological Theory, London, Routledge and Kegan Paul.

Rhoos, I. (1969) Systems Analysis in Social Policy, London, Institute of Economic Affairs.

Royal Society for Nature Conservation (1987), <u>Damage to Wildlife Sites by Off-road Vehicles</u>, Lincoln, RSNC.

Sandole, D.J.D. (1993) Paradigms, Theories and Methaphors in Conflict Resolution: Coherence or Confusion? in Sandole, D.J.D. and van der Merwe, H. (Eds), Conflict Resolution Theory and Practice: Integration and Application, Manchester, Manchester University Press, pp. 3-24.

Scimecca, J.A. (1993) Theory and Alternative Dispute Resolution: A Contradiction in Terms? in Sandole, D.J.D. and van der Merwe, H. (Eds), <u>Conflict Resolution Theory and Practice:</u> <u>Integration and Application</u>, Manchester and New York, Manchester University Press, pp. 211-221.

Sidaway, R. (1988) Sport, Recreation and Nature Conservation, London, Sports Council Study 32.

Sidaway, R. (1991a) Good Conservation Practice for Sport and Recreation, Sports Council Study No. 37, London, Sports Council.

Sidaway, R. (1991b) Attitudes to the Designation of the Pentland Hills Regional Park, Unpublished report to Countryside Commission for Scotland.

Sidaway, R. (1992a) Outdoor Recreation and Conservation: conflicts and their resolution, unpublished report prepared under ESRC Research grant No. R000 23 1792.

Sidaway, R. (1992b) Outdoor Recreation and Conservation: conflicts and their resolution - Oosterschelde case study, unpublished draft prepared under ESRC Research grant No. R000 23 1792.

Sidaway, R. (1992c) <u>Management of the Pentland Hills Regional Park: an analysis of local opinion</u>, an unpublished report prepared for the Lothian Regional Council, managing authority for the Pentland Hills Regional Park.

Sidaway, R. (1992d) <u>Outdoor Recreation and Conservation in Britain</u>, <u>USA and the Netherlands</u>, Presentation at Fourth Symposium on Society and Natural Resources, Madison, Wisconsin.

Sidaway, R. (1993) The Establishment of an Access Consultative Group in the Peak District National Park: an initial appraisal for the Peak Park Planning Board, Edinburgh, (unpublished)

Sidaway, R. (1994a) The Limits of Acceptable Change; an assessment of the technique and its potential relevance to the management of public access on open land, A report prepared for the Countryside Commission, Cheltenham, CC.

Sidaway, R. (1994b) <u>Recreation and the Natural Heritage: A Research Review</u>, Review No. 25, Perth, Scottish Natural Heritage.

Sidaway, R. and van der Voet, H. (1993) Getting on Speaking Terms: Resolving Conflicts between Recreation and Nature in Coastal Zone Areas of the Netherlands, Literature Study and Case Study Analysis, Woerkgroep Recreatie, Report No. 26, Wageningen, Landbouwuniversiteit.

Simons, H.W. (1974) Prologue, in Miller, G.R. and Simons, H.W. (Eds), <u>Perspectives on Communication in Social Conflict</u>, Englewood Cliffs, pp. 1-15.

Slaikeu, K.A. (1989) Systems in the Health Care Industry, in Goldberg, S.B., Brett, J.M. and Ury, W.M. (Eds), <u>Dispute Systems Design: A Special Section of Negotiation Journal</u>, October, 1989, pp. 395-400.

Stankey, G.H., Cole, D.N., Lucas, R.C., Peterson, M.E. and Frissell, S.J. (1985) <u>The limits of acceptable change (LAC) of wilderness planning</u>, Forest Service General Technical Report, Int.-176, USDA.

Stead, J. (1978) 'To ban trail riders would maintain the Ridgeway for the rich and privileged', Guardian, 26.7.78.

Stegner, P. (1990) Fate of the Northeast Kingdom: Corporate Raiders and Speculators stake out the New England woods, <u>National Parks</u>, Volume 64, Number 1-2, January/February 1990, 24-29.

Stevens, T.(1988) Mastiles Lane: aggravation or agriculture?, (cyclostyled paper distributed by the author).

Stevens, T. (1995) Evidence given on behalf of Motoring Organisations Land and Recreation Association to House of Commons Environment Committee, 29.3.95.

Stoakes, G.L. (1987) <u>Involving the Public in Wilderness Management Decision Making: the Bob Marshall Wilderness Complex - a case study</u>, a paper presented at the Society of American Foresters convention held at Minneapolis, Minnesota on October 20, 1987.

Stoakes, G.L. (1990) The Evolution of Wilderness Management: the Bob Marshall Wilderness Complex, Journal of Forestry, 15-20.

Stuurgroep Oosterschelde (1992) Evaluatie Beleidsplan Oosterschelde, Middelburg.

Susskind, L. (1981) Citizen Participation and Consensus Building in Land Use Planning: A Case Study, in De Neufvile, J. (Ed), <u>The Land Use Policy Debate in the United States</u>, Plenum Press, New York.

Susskind, L. and Cruikshank, J. (1987) <u>Breaking the Impasse</u>: <u>Consensual Approaches to Resolving Public Disputes</u>, Basic Books.

Taylor, G. (1993) Conservation and Motorised Recreation: striking the balance in designated areas, in <u>Planning for Motor Sport and Recreation in an Increasingly Sensitive Environment</u>, Papers presented to a LARA Symposium for planners, organisers and providers, Leamington Spa, 21.4.93., Newcastle upon Tyne, Land Access and Recreation Association.

Thurlings, J.M.G. (1962) The Dynamic Function of Conflict, Lecture delivered before the Netherlands Sociological Society on 26th April, 1962.

Ury, W.L., Brett, J.M. and Goldberg, S.B. (1988) <u>Getting Disputes Resolved: Designing Systems to Cut the Costs of Conflict</u>, Jossey-Bass, San Francisco.

USDA Forest Service (1987) The Bob Marshall, Great Bear and Scapegoat Wildernesses: Recreation Management Direction Amendments to the Flathead, Helena, Lewis and Clark and Lolo Forest Plans.

USDA Forest Service and Governor's Task Force (1990) Northern Forest Lands Study, A report to the Congress of the United States on the recent changes in landownership and land use in the Northern Forest of Maine, New Hampshire, New York and Vermont, Rutland Vermont, USFS.

Vercruijsse, E.V.W. (1961) <u>De Sociologie Als Wetenschap der Maatschappelijke Verdeling</u> (Sociology as the Science of Social Distribution), Arnhem [publisher unknown].

Watson, A. (1991) <u>Critique of Report, "Moorland Recreation and Wildlife in the Peak District"</u> by Penny Anderson, London, Ramblers' Association.

Weber, M. (1948) <u>The Theory of Social and Economic Organisation</u>, The Free Press, Glencoe, Illinois.

Yalden, D.W. and Yalden, P.E., (1989) The Sensitivity of Breeding Golden Plovers, Pluvialis apricaria, to Human Intruders, <u>Bird Study</u>, 36, 49-55.

ANNEX 1: EXAMPLES OF CONFLICT DEFINITIONS

To a large extent the concepts that are used to describe conflicts are themselves a product of the author's perspective. Rex (1961) recognises "that social relations and activities can be judged necessary or unnecessary, functional or dysfunctional, according to which of a number of conflicting standpoints they are looked at" (ibid, 120). He points out that Weber implies that "the conceptual scheme of the sociologist might be affected by the particular value-standpoint which he himself adopts" (ibid, 121). Added to that is the problem of identifying cause and effect in a sequence of events. The range of definitions which have been identified in this review certainly illustrate a varying range of perspectives. These definitions were analysed to see how far they focus on the causes of conflict, its effects, or the process which relates them.

Coser (1956) emphasises cause and process by including motives (competition for scarce resources, etc.) and struggle:

"... the struggle over values and claims to scarce status, power and resources in which the aims of the opponents are to neutralise, injure or eliminate their rivals. This working definition serves only as a point of departure" (Coser, 1956, 8).

Deutsch (1973) is alone in emphasising the effects of conflict by basing his definition on the effects that incompatibilities are likely to have on the opposing parties:

"A conflict exists whenever incompatibilities occur... An action that is incompatible with another action prevents, obstructs, interferes, injures or in some way makes the latter less likely or less effective" [He suggests competition can produce conflict] "Competition implies an opposition of goals of the independent parties such that the probability of goal attainment for one decreases as the probability for the other increases". [But he also suggests that conflict may occur in a cooperative situation where goals are compatible] (Deutsch, 1973, 10).

Blalock (1989) is concerned about the process of conflict and its outcome in writing about "an exchange" which leads to "negative sanctions or punitive behaviours":

"[Social conflict is the] international mutual exchange of negative sanctions or punitive behaviours by two or more parties which may be individuals, corporate actors or more closely knit quasi-groups" (Blalock, 1989).

Two definitions are concerned with the process alone, Weber (quoted in Baumgartner et al, 1978) and Beals and Siegal (1966) where the emphasis is on power relationships or an "exchange of opposition" (i.e., adversarial struggle):

"Social conflict is social interaction where each actor in a conflict relationships attempts to carry out his or her own will over the opposition or resistance of others" (attributed to Weber in Baumgartner et al. 1978, 109).

"... Conflict should be described in terms of breaches of normally expected behaviour that lead to dialogue recognised as exchange of oppositions" (Beals and Siegal, 1966, 26). [They strongly contest the view that conflict is invariably over scarce resources].

The initial description of conflict in Baumgartner et al focuses on the incompatibilities of the actors (cause) but they subsequently discuss both the process and effect (the attempt to realise incompatible goals etc, in the face of opposition):

"Conflict arises when actors engaged in a situation have incompatible viewpoints, beliefs, goals or preferences with respect to conditions in that situation" (Baumgartner et al, 1978, 107).

"...Such conflict occurs when actors involved in a concrete setting try to implement or realise incompatible goals or preferences with respect to particular conditions, interaction patterns or outcomes in the face of one another's opposition" (Baumgartner et al, 1974, 110).

Miller (1974) deals with cause and effect by emphasising value differences and competition for scarce resources as well as the threat to the interests of others (potential effect):

"By social conflict I mean that state of a social relationship in which incompatible interests between two or more persons give rise to a struggle between them. The notion of a clash of interests presupposes something more than what is typically implied by such terms as "disagreement", "difference of opinion" or "controversy". The conflict may involve value differences or personal animosities or competition for scarce resources [author's italics] or some combination, but in any case, the personal interests of one or more parties must appear to be threatened" (Miller, 1974, 177-8).

If the reason why the different emphases given in these definitions is not immediately clear, Pondy (1967) neatly circumvents the issue. His immediate concern is to recognise the dynamic nature of conflicts which he sees as a process of episode and aftermath which in turn sets the stage for the next episode. This seems to be a necessary prerequisite for any successful attempt at definition which should attempt to describe cause (relative to the situation in which the conflict occurs), the relationship or process during the course of the conflict and its potential effect so that in this way the event is distinguished from a routine disagreement or decision:

"The term 'conflict' has been used at one time or another in the literature to describe: a) antecedent conditions (for example, scarcity of resources, policy differences) of conflict behaviour); b) affective states (e.g., stress, tension, hostility, anxiety, etc.) of the individuals involved; c) cognitive states of individuals, i.e., their perception or awareness of conflict situations, and d) conflict behaviour, ranging from passive resistance to overt aggression. Attempts to decide which of these classes - conditions, attitude, cognition or behaviour - is really conflict is likely to result in an empty controversy. The problem is not to choose among these alternative conceptual definitions since each may be a relevant stage in the development of a conflict episode, but to try to clarify their relationships.

"Conflict may more readily be understood if it is considered a dynamic process" (Pondy, 1972, 395).

Within this thesis a working definition of conflict has been adopted which contains the following elements:

- competing actors;
- motives: claim on resource;
- controversy: more than disagreement;
- power: to gain access to or to control the access of others.

Conflict is therefore defined as "... an unresolved dispute between competing interest groups which has reached the public arena, is controversial and may have political consequences. Typically one group is attempting to control the action of another or their access to a semi-natural resource" (Sidaway, 1991, 1).

APPENDIX 2: DEFINITION OF FACTORS USED IN THE EMPIRICAL ANALYSIS IN CHAPTER 2

Group 1: NATURE OF BIOLOGICAL IMPACT

Factor 1: Type of recreational activity

Categorisation based on activity/habitat type, eg. watersports on inland water, access to remoter areas, motor sports, innovative sports.

Factor 2: Nature conservation status of site

Categorised by protected designations or notifications such as: Site of Special Scientific Interest (SSSI); Special Protection Areas (SPA) for breeding birds EC Directive 79/409; internationally important Ramsar wetland sites or by impacts on a Charismatic Species ie: Endangered/threatened or large species (US "charismatic megafauna") eg bears, moose, raptors. or Schedule 1 Wildlife and Countryside Act 1981 (UK) species.

Factor 3: Type and incidence of impact

Quantified as extent, timing and/or frequency of damage to vegetation, e.g., area affected; it may be possible to quantify disturbance: e.g., per cent breeding population affected, or nos. disturbed per nesting season in a given area.

Factor 4: Level of visitor pressure

Quantified as levels of visitor use within impact area.

Factor 5: Understanding of impact

Level of knowledge of impact including information on critical periods eg. breeding/resting seasons. Classified as understood or uncertain.

Group 2: CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests

To cover the range of interests concerned with the resource

Categories: Material - commercial; proprietorial; Altruistic - public access; resource conservation; Managerial or professional; Self-interest - recreation.

Factor 7: Number of Interests

Number of interest groups or stakeholders in the dispute.

Factor 8: Conflicting ideologies

Categories: Opposed or shared by interest groups

Factor 9: Advancement of principles

Whether motive of interest group is presented either as a principle (a broad altruistic aim such as freedom to roam or protection of the countryside) which should be applied generally but advanced within the dispute; or the advancement of an interest or material benefit to an interested party.

Factor 10: Environmental Awareness of Interest Groups

Relates to knowledge of interest groups and their perception of and response to their biological impact on the resource. Categorised according to their perception and response - sensitive or insensitive

Group 3: INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use

Whether recreation activites are considered to be an appropriate or inappropriate use of the resource, as defined by existing resource users and/or managers, and whether this has become an issue in the dispute. Appropriatness not/disputed

Factor 12: Communication networks

Whether formal and/or informal communication networks are established and/or used. Categorised as well established, poorly established; effective or ineffective.

Additional information: Whether interest groups are prepared to establish a common pool of information (qv. conflict mediation).

Factor 13: Reaction to new claim on resource

Perceived impacts of one interest group on another, particularly on part of established interest group/users when status quo is challenged. Categories: adverse or tolerant.

Factor 14: Negotiating Strategies of interest groups

Method of negotiation categorised as: Confrontational, i.e., conducting campaigns to present a sectional view (only one side of argument), acting provocatively or taking pre-emptive actions; or Conciliatory, i.e., prepared to compromise to reach agreement, responsive to others' interests.

Factor 15: Involvement of media

Level of involvement categorised as high or low

Group 4: INSTITUTIONAL SETTING

Factor 16: Level of political organisation

Level of organisation as indicated by: *Unorganised*; i.e., unable to operate politically, individuals attempting to represent interest, inept at using media; *Organised*, i.e., volunteer officers and committee structure, limited contacts with other organisations of similar interest; or *Highly organised*: i.e., professionally represented, affiliated to wider political network, effective in using media.

Factor 17: Acceptance of management aims

Whether aims set out in management plan are clearly articulated and leave scope for ambiguity and therefore may be challenged. Categorised as accepted or challenged.

Factor 18: Public involvement in decision-making

Categoried as:no public involvement, limited involvement, i.e., limited to immediate stakeholders; or wide involvement, i.e., deliberate attempt made to canvass a wide range of public views.

Factor 19: Type of decision-making

Categories: adversarial, i.e., the extent to which specialist or legal representation of interests forces people or groups into role-play, e.g. at public inquiries or hearings. Planning may be reductionist in its approach itemising interests and therefore polarising them; or negotiative, i.e., interests are drawn into a discussion to establish common interests and a collaborative approach to problem solving.

Factor 20: Mechanisms to deal with change

Whether there is decision-making structure that is responsive to changing situations e.g., habitat degredation; species decline or colonisation or the advent of new sport. Categorised as: Exists or absent.

Factor 21: Authority of decision maker

Whether authority of (final) decision maker is accepted because decison-making process is perceived as open and decision maker is accountable to wider constituency including interest groups (Justice is seen to be done). Decisions may be appealed to higher authority to whom decision maker is accountable. Conversely decisions may be seen to be arbitrary, undemocratic and unjust. Categories: Accepted or challenged.

Factor 22: Distribution of power

Whether the access to resources is equally or unequally distributed. May be assessed at national regional (provincial) or local levels. Categories: balance between them is equal or unequal.

APPENDIX 3: SYNOPSES OF CASE STUDIES ANALYSED IN CHAPTER 2

a) CASES OF CO-OPERATION

RECREATIONAL USE OF THE BOB MARSHALL WILDERNESS COMPLEX, MONTANA

NB: Based on descriptions of Limits of Acceptable Change planning approach introduced in a controversial situation but no information obtained on previous history of conflict

	HISTORICAL SUMMARY
1921	Aldo Leopold suggests wilderness areas are set aside within national forests.
1930s	Concept of wilderness areas promoted by Bob Marshall, US Forest Service (USFS)
	Chief of Recreation, who founds the Wilderness Society.
1940	Following Marshall's untimely death, a 950,000 acre wilderness area is set aside in
-	his memory.
1960s	Oil companies refused entry into the area.
1964	Conservationists defeat proposals to dam the Sun River and flood the wilderness.
1964	Passage of Wilderness Act by US Congress.
	Bob Marshall Wilderness Area of 1,009,356 acres classified.
1972	USFS publishes management plan for Bob Marshall Wilderness Area which aroused
	public opposition and was never implemented
	Scapegoat Wilderness Area of 239,296 acres classified.
1976	National Forest Management Act requires USFS to make regulations for wilderness
	areas which "limit and distribute" recreational use.
1978	Great Bear Wilderness Area of 286,700 acres classified completing the Bob
	Marshall Wilderness Complex (BMWC) to be managed as a single unit.
1981	Draft of "Limits of Acceptable Change" (LAC), developed in Maroon Bells-
	Snowmass Wilderness Area, Colorado and circulated within USFS for comment.
1982	Proposals for oil and gas exploration in BMWC rejected for the second time.
	LAC Task Force for BMWC appointed by USFS.
1982/5	Publication of background research on:
	recreational use patterns and solitude preferences (Lucas), campsite conditions
	(Cole) and LAC methodology (Stankey et al.).
1986	Formal Public Review process considers LAC exercise for BMWC as an amendment
	to forest plans.
1987	Completion of Task Force exercise.
	Amendments to management area directions to Flathead, Helena, Lewis and Clarke,
	and Lolo Forest Plans accepted without appeals by individuals or organisations.
1988-	Monitoring of LAC with occasional Task Force involvement.

Sources: McCool (1989), Stoakes (1990), USFS (1987).

NATURE OF BIOLOGICAL IMPACT

Factor 1: Types of recreational activity Backpacking, horse trails, hunting, overnight camping, river rafting, overflying by light aircraft (Reference 1).

Factor 2: Nature conservation status of site Designated Wilderness Area; protected habitat for charismatic Endangered Species: Grizzly Bear. Designated.

Factor 3: Type and incidence of impact Vegetation damage can be severe but localised around campsites, horses used by outfitters compete for grazing with local species, congestion at popular campsites effects enjoyment of backpackers, noise from aircraft disturbs other users (References 1 and 2). Extent and frequency of damage and disturbance known from surveys (Reference 3).

Factor 4: <u>Level of visitor pressure</u> Estimate of total use was 250,000 visitor days per year in mid-Eighties (Reference 1).

Factor 5: <u>Understanding of impact</u> Information on certain impacts (vegetation damage and number of encounters between visitors using trails) was obtained from surveys and used to manage zones. Not an issue of contention. (References 1 and 2) *Understood*.

CHARACTERISTICS OF INTERESTS

Factor 6: <u>Nature of interests</u> i) Proprietorial: USFS; ii) Commercial; Outfitters, pilots iii) Altruistic/self-interest: Wilderness lobby [recreation and conservation organisations]; iv) Professional: USFS, academic researchers (Reference 4).

Factor 7: <u>Number of Interests</u> Four groupings represented by 35 individuals in the Task Force (Reference 4).

Factor 8: Conflicting ideologies Despite previous differences between backpackers and riders; outfitters and independent parties; pilots, other users and wilderness managers; outfitters and wilderness managers, the environmental community and the USFS (Reference 3), there is a general commitment to keep the area pristine with no development (Reference 2). Even a consistent critic of the LAC approach agreed there was a common purpose within the prowilderness coalition (Reference 5), i.e., differences in ideology were respected but ignored. Shared.

Factor 9: Advancement of principles Issues not elevated to a matter of principle, the LAC discussion were thought to have reduced tension and antipathy among users (Reference 4).

Factor 10: Environmental awareness of interest groups Need for restrictions was generally understood and respected. Many of the users were as sensitive to impacts as the USFS officers and added to the knowledge of management issues (Reference 2). Horsemen regularly undertook maintenance for the USFS although there was some dispute about the seriousness of impacts of horses (Reference 5). Sensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use Permitted (appropriate) activities within Wilderness Areas are prescribed by the enabling legislation, while intensities of use are defined by zones as part of the LAC exercise so that this is not an issue (Reference 3). Appropriateness not disputed Factor 12: Communication networks Direct contact between the users and the USFS was established by the formation of the LAC Task Force (Reference 3), while certain user groups have regular liaison meetings on management issues with local USFS staff (Reference 5). Well established

Factor 13: Reaction to new claim on resource Any new claims have been resisted, whether from recreation users (e.g., mountain bikes) or development (e.g., oil and gas exploration) (Reference 4). Adverse.

Factor 14: Negotiating strategies of interest groups Compared to the 'usual' approach of protesting at USFS decisions, appeal and then sue, discussions within the LAC Task Force were conciliatory. User provided solutions to problems (Reference 2). Conciliatory

Factor 15: Involvement of media Not known

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Users represented on LAC Task Force by organisations. Organised

Factor 17: Acceptance of management aims Broad agreement on management aims and detailed LAC measures as set out in agreed plan (some disagreement on detailed prescriptions by horsemen (References 2 and 5). Accepted.

Factor 18: Public involvement in decision-making LAC based on transactive planning theory of public involvement throughout the planning process. Detailed involvement of users groups in the Task Force followed by public hearings to check whether there was wider acceptance within the community (References 1, 2, 3, 4 and 6). Wide Involvement

Factor 19: <u>Type of decision-making</u> LAC approach encourages negotiation within the Task force (Reference 2). *Negotiative*.

Factor 20: Mechanisms to deal with change Concept of LAC (being based on change) should allow for adaptation but this is bound to be within the constraints of the composition of the Task Force and the Wilderness Act. However new impacts have been accommodated in the monitoring programme (Reference 7). Exists

Factor 21: Authority of decision maker The use of the Task Force has legitimated USFS management decisions so that they have been accepted without challenge. In marked contrast to USFS experience elsewhere, the amended plan was not subject to any appeals (Reference 4). Accepted.

Factor 22: <u>Distribution of power</u> The composition of the Task Force was deliberately constructed to provide an even balance (Reference 4). *Evenly balanced*.

REFERENCES

- 1. McCool (1986), 2. Personal interview on 22.8.90. with Arnie Bolle, Chair of LAC Task Force,
- 3. Stoakes (1990), 4. Stoakes (1987), 5. Personal interview on 12.8.90. with Roland Cheek, Back Country Horsemen of Montana, 6. Ashor (1986). 7. Sidaway (1994).

NATURE CONSERVATION AND WATER RECREATION ON RUTLAND WATER

HISTORICAL SUMMARY

- 1960s Planning began to select reservoir site from 64 alternatives.
- 1965 Water Resources Act created Welland and Nene River Authority.
- Welland and Nene (Empingham and Mid-Northamptonshire Bill considered by Select committees of both Houses of Parliament, Act received Royal Assent. Empingham Reservoir Committee of river authority officers formed to supervise scheme. Local consultations began, including site meetings with farmers and landowners who received initial payments of compensation. Traffic Management Committee formed to monitor construction traffic. Nature Reserve Advisory Committee formed to coordinate development of nature reserve. Reservoir Working Party of engineering staff, landscape consultants, highway authorities, planning Officers, Nature Conservancy Council and Leicestershire and Rutland Trust for Nature Conservation formed to oversee production of land use, recreation and landscape plans.
- 1971 Empingham Reservoir Research Committee established to record and research archaeological and environmental changes. Technical staff appointed including nature reserve warden.
- 1972 Empingham Reservoir Nature Reserve Committee appointed and contract to design and manage reserve awarded to Leicestershire and Rutland Trust for Nature Conservation.
- 1972-6 Landscape and amenity works constructed.
- 1974 Reorganisation of water industry creates Anglian Water Authority
- 1976 Name of reservoir changed to Rutland Water.
- 1977 First record of wildfowl breeding on site.
- 1979 Top water level achieved for the first time. Official opening of nature reserve. Consultative Users Panel formed.
- 1981 Part of area notified as Site of Special Scientific Interest (extended in 1983 and 1987). 211 bird species recorded.
- 1987 World Fly Fishing Championships held at Rutland Water.

Sources: Appleton, 1982; Knights, 1982.

NATURE OF BIOLOGICAL IMPACT

Factor 1: Types of recreational activity Game fishing (trout), dinghy and board sailing, canoeing, sub-aqua, informal recreation, pleasure boat cruises (Reference 2).

Factor 2: Nature conservation status of site 142 hectare nature reserve planned as an integral part of the reservoir scheme, which has since become a Grade 1 SSSI, later scheduled as a Special Protection Area for birds, a Ramsar site, and is rated as one of the most important inland wildfowl and wader sanctuaries in Britain (Reference 1). Designated.

Factor 3: Type and incidence of impact Disturbance to birds. The large scale of the reservoir (1254 hectares) allows any potentially harmful impacts to be mitigated by segregating activities into separate zones. Water sports are excluded from the nature reserve and there are seasonal restrictions to protect overwintering wildfowl (Reference 2).

Factor 4: Level of visitor pressure Annual levels of use estimated at half million day visitors, and

50,000 anglers in 1990 (Reference 1).

Factor 5: <u>Understanding of impact</u> Need for restrictions on water sports considered from the outset. Regular monitoring of bird populations and water sports activities are undertaken to ensure impacts are minimal, need for zones is accepted by water sports. *Understood*

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests

i) Proprietorial, commercial, professional: water engineers and recreation managers; ii) Altruistic: conservation; iii) Altruistic/self: recreation.

Factor 7: Number of Interests Three groupings.

Factor 8: <u>Conflicting ideologies</u> Differences in conservation and recreation ideologies remained but are largely ignored although suspicions remain (Reference 2). *Opposed but suppressed*.

Factor 9: Advancement of principles Issues not elevated to a matter of principle, (Reference 2).

Factor 10: Environmental awareness of interest groups Need for restrictions understood and generally respected by water sports, although there were moves to extend the fishing and sailing seasons which might affect the wintering populations of wildfowl (Reference 2). Sensitive.

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: <u>Appropriateness of resource use</u> Zones allocated to different uses, not an issue. Appropriateness not disputed

Factor 12: <u>Communication networks</u> Contacts were formed during the planning consultations. Conservationists, farmers and recreation users have been represented in the Consultative Users Panel which was established in 1979 (Reference 3). *Well established*.

Factor 13: Reaction to new claim on resource Occasional claims for tourist development around the reservoir (Reference 2). Adverse.

Factor 14: Negotiating strategies of interest groups Co-operation within the Consultative Users Panel. Conciliatory.

Factor 15: Involvement of media: No information.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Conservation and recreation interests organised but no campaigning issues. (Reference 1). *Organised*.

Factor 17: Acceptance of management aims Management aims accepted within the framework of an agreed plan. Accepted.

Factor 18: <u>Public involvement in decision-making</u> A broad range of interests was considered during the consideration of the enabling legislation. Extensive local consultation during the planning phase and continued during reservoir construction. Regular liaison via the Consultative Users Panel (Reference 3). *Wide Involvement*.

Factor 19: Type of decision-making Negotiative.

Factor 20: Mechanism to deal with change Review of management plan allows for change but only within the scope of existing provision, i.e., motorised water sports were excluded from the outset. Exists.

Factor 21: <u>Authority of decision maker</u> Authority of water company accepted, given that it operates within the enabling legislation. *Accepted*.

Factor 22: <u>Distribution of power Not evident but considered to be balanced</u>. Evenly balanced. REFERENCES

1. Sidaway, (1991a); 2. Sidaway, (1988); 3. Knights, (1982).

CLIFF CLIMBING AT SOUTH STACK, ANGELSEY

NATURE OF BIOLOGICAL IMPACT

Factor 1: Types of recreational activity: Climbing bird watching, and sea canoeing (Reference 1).

Factor 2: Nature conservation status of site: Nature reserve managed by Royal Society for the Protection of Birds (RSPB (Reference 1). Undesignated but protected species.

Factor 3: Type and incidence of impact: Any potential disturbance to cliff nesting reserves is reduced to negligible levels by a voluntary seasonal restriction which bans climbing during the nesting season. This has been agreed by RSPB and British Mountaineering Council (BMC) and the site is wardened by RSPB (Reference 1).

Factor 4: Level of visitor pressure: Incidence of climbing not recorded.

Factor 5: <u>Understanding of impact</u>: Potentially damaging consequences of climbing near colonies of auks and other protected species is accepted by climbers and BMC. *Understood*.

CHARACTERISTICS OF INTERESTS

Factor 6: <u>Nature of interests</u>: Proprietorial/altruistic: RSPB; Altruistic/self: BMC; Professional: both organisations.

Factor 7: Number of Interests: Two

Factor 8: <u>Conflicting ideologies</u>: Both climbing and nature conservation have strong ideologies but there is also a strong commitment to conservation by BMC in its policy documents. (Reference 2). *Shared*

Factor 9: <u>Advancement of principles</u>: Any differences are respected and ignored by both parties in negotiating the voluntary restriction (Reference 2, pages 13-17).

Factor 10: Environmental Awareness of interest groups: The need for restrictions is understood and respected by BMC who have well developed conservation policies (Reference 2) Sensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use: Not an issue, seasonal restriction is used as a precautionary measure. Appropriateness not disputed

Factor 12: <u>Communication networks</u>: The need for the restriction is renewed annually and there is frequent local liaison between the two organisations (Reference 1). Well established

Factor 13: Reaction to new claim on resource: None has arisen or is likely.

Factor 14: Negotiating strategies of interest groups: Both organisations favour negotiation, i.e., BMC policy is to favour voluntary access agreements where necessary, whilst RSPB prefer voluntary restrictions where the responsibility for enforcement is placed on the user (Reference 1). Conciliatory

Factor 15: Involvement of media: None recorded.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u>: Both RSPB are BMC are highly organised, BMC employing a professional Access and Conservation Officer (Reference 2). *Highly organised* Factor 17: <u>Acceptance of management aims</u>: BMC accept RSPB's aims in managing the reserve.

Accepted.

Factor 18: <u>Public involvement in decision-making</u>: The local agreement is also part of a national agreement between the two organisations which is negotiated directly between them with the knowledge of their members. There is no public involvement.

Factor 19: Type of decision-making: Direct negotiation. Negotiative.

- Factor 20: Mechanisms to deal with change: The annual review and frequent liaison about the restrictions allow for adjustment to change. Exists.
- Factor 21: <u>Authority of decision maker</u>: There is shared responsibility for the decisions concerning restriction.
- Factor 22: <u>Distribution of power</u>: Both parties are in a strong position to negotiate as equal partners. *Evenly balanced*.

REFERENCES

1. Sidaway, (1991a); 2. Sidaway, 1988.

b) CASES OF CONFLICT

WATER RECREATION AND THE DESIGNATION OF THE OOSTERSCHELDE NATURE RESERVE

	HISTORICAL SUMMARY
1953	Disastrous flooding of 150,000 ha. 72,000 people evacuated, 1,835 lost their lives. Establishment of Delta Commission to examine feasibility of closing the estuary by dams and/or raising and re-enforcing the sea dikes.
1955	Final report of the Commission.
1958	Delta Act.
1961	Enclosure of Veerse Meer by completion of Zandkreek Dam (1960) and Veerse Gat Dam (1961).
1967 1971	Zeeland Society of Science conference initiates formal opposition to closure of Oosterschelde. Enclosure of Grevelingen with completion of Grevelingen Dam (1965) and Brouwers Dam (1971). Enclosure of Haringvliet with completion of Volkerak Dam (1969) and Haringvliet Dam (1971).
1973	Klaasesz Commission examines feasibility of tidal barrier.
1975	Sea dikes raised around the Oosterschelde.
1976	Agreement to build tidal barrier.
1982	Publication of Policy Plan by the Stuurgroep Oosterschelde (Oosterschelde Steering Group).
1983 1986	Participants in the Stuurgroep Oosterschelde signed the 'declaration of intent' based on the Policy Plan. Completion of Oosterschelde barrier, Philips Dam and Oesterdam.
1989	Designation of inter-tidal areas of Oosterschelde as Ramsar reserve.
1707	Adoption of the Policy Note Oosterschelde as official extension to the Streekplan (Regional Plan) for Zeeland.
1990	Designation of inter-tidal area of Oosterschelde as (State) Nature Reserve based on the Nature Conservation Law.
	Protest rally by Recreatie Overleg Oosterschelde (Action group of Recreation Interests).
1992	Publication of the draft report Evaluation Policy Plan Oosterschelde (Evaluatie Beleidsplan Oosterschelde) and approval by the Stuurgroep Oosterschelde. Zoning regulations introduced for the Oosterschelde nature reserve.
Source	s: Ministry of Transport and Public Works (1989); Zeeland Information Department (1983); Stuurgroep Oosterschelde (1992); personal interviews by R. Sidaway (1991)

NATURE OF BIOLOGICAL IMPACT

Factor 1: <u>Types of recreational activity</u> Wide range of water sports including bait digging, canoeing, charter boats, cruising, jet skiing, sailing, sport fishing (by boat), sub-aqua diving, windsurfing (Reference 1).

Factor 2: Nature conservation status of site The entire estuary is designated as a wetland site of international importance, under the Ramsar convention, on account of its breeding and overwintering bird populations. It regularly attracts significant proportions of European populations of wildfowl and waders (Reference 1). Designated

Factor 3: Type and incidence of impact Disturbance to birds and seals. Not directly assessed, general correlations between recreational use and apparent changes in population are cited by conservation bodies as justifying restrictions (Reference 1).

Factor 4: <u>Level of visitor pressure</u> Recreational use of the water bodies and intertidal areas were not assessed, nor was the survey data collected by conservation bodies publically available (Reference 1).

Factor 5: <u>Understanding of impact</u> Potential recreational impacts, such as disturbance to birds or seals have not been researched locally but inferences made from research elsewhere, some of which are contradictory. Impacts of restrictions on pleasure boats and their effects on the local economy were not assessed (Reference 1, p. 12-13). *Uncertain and contentious*.

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests i) Commercial: shell fishing and tourism; ii) Altruistic: conservation; iii) Altruistic/self: recreation; iv) Professional: government planners.

Factor 7: <u>Number of Interests</u> Three main groups, the professionals being replicated at three levels of government.

Factor 8: Conflicting ideologies Sailors and fishermen are keen to assert their rights of freedom to navigate the high seas, whilst nature conservationists are enthusiastically defending nature development. "There are two different worlds and there is no way to bring them together." (Reference 1). Opposed.

Factor 9: <u>Advancement of principles</u> Issues have been elevated to a matter of principle, e.g., conservation officials have insisted on the principle of blanket restriction instead of introducing zoning to separate competing activities (Reference 1).

Factor 10: Environmental awareness of interest groups The lack of convincing local data on the effects of recreation on wildlife engendered suspicion among sailors who required proof of damage (Reference 1). Insensitive.

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use The designation order for the nature reserve excluded motorised water sports from the estuary as an inappropriate use and curtailed access to sandbanks. Appropriateness disputed

Factor 12: <u>Communication networks</u> There was little effective communication between the interests which were not directly represented on the Steering Group, which in turn was considered remote (Reference 1). *Poorly established*.

Factor 13: Reaction to new claim on resource The attitudes of nature conservation organisations reflects their adverse reactions to previous recreational use and tourism pressure in Zeeland. Local communities and recreational groups may support designation in principle but resist conservation measures being put into effect (Reference 1). Adverse.

Factor 14: <u>Negotiating strategies of interest groups</u> Conservation organisations have chosen to impose regulations and confront other interests rather then negotiate with them (Reference 1). *Confrontational*.

Factor 15: Involvement of media Little direct evidence obtained, but there appears to have been high (albeit temporary) press interest in the protest rally by sailing boats, while conservation

organisations maintained close contacts with the provincial press (Reference 1). High.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Nature conservation interests were highly organised, the Zeeuwse Milieufederatie (ZMF) membership includes 30-35 local organisation and about 1800 individual members. It had a professional staff and maintains close contacts with members and officials in the provincial government and a range of national contacts. In comparison, the recreation sector was weakly organised latterly forming a federation - Recreatie Overleg Oosterschelde - in an attempt to counter ZMF's activity (Reference 1). *Marked disparity between recreation - Organised - and conservation - Highly organised*.

Factor 17: Acceptance of management aims Although the nature reserve was unchallenged in principle, the detailed regulations were bitterly opposed by water sports organisations (Reference 1). Challenged.

Factor 18: <u>Public involvement in decision-making</u> Public hearings were held during the formal stages of planning consultation but there was no wider forum to broker views resulting in a lack of local consent (Reference 1, pp.7,19). *Limited Involvement*.

Factor 19: <u>Type of decision-making</u> Autocratic - in that the restrictions were imposed- and adversarial - in that ZMF successfully appealed to the courts to secure the closure of Schelphoek as a recreational harbour (Reference 1). *Adversarial*.

Factor 20: Mechanisms to deal with change Lack of a management board or project team which might mediate change and a strategic plan for tourism and recreation in the Delta which might balance uses over a wider scale (Reference 1). Absent.

Factor 21: <u>Authority of decision maker</u> The authority of national government and its agencies is accepted. *Accepted*.

Factor 22: <u>Distribution of power</u> Uneven, the greater strength of the conservation lobby is shown to be the way in which conservation officials in the Hague hold power (Reference 1). *Unequal*.

REFERENCES

1. Sidaway (1992b).

DESIGNATION OF SKOMER MARINE NATURE RESERVE

HISTORICAL SUMMARY	
Early 1	1900s initial interest shown in island by ornithologists
1944	Detailed biological survey by West Wales Field Society
1954	Island notified as SSSI by Nature Conservancy
1959	Island acquired as National Nature Reserve (NNR) by Nature Conservancy and West Wales Naturalists' Trust.
1971	Local proposal for marine reserve.
1974	Steering committee for marine reserve established.
1976	Management plan for marine reserve prepared and Management Committee formed.
1981	Wildlife and Countryside Act provided powers to designate Marine Nature Reserves (MNR).
1982	Skomer designated as a Special Protection Area for wild birds.
1986	Nature Conservancy Council (NCC) circulated proposals for MNR in draft consultation document.
1987	Appointment of liaison officer for MNR, first collation of dat on diving and potential disturbance.
	Secretary of State for Wales requires NCC to undertake further consultations after representations from British Sub-Aqua Club and Sports Council for Wales on proposed bylaws.
1989	Revised consultation document accepted by Secretary of State.
1990	Designation of MNR confirmed by Secretary of State.
1991	First meeting of Advisory committee to MNR. Marine Conservation Officer for MNR appointed.
1993	Agreed Management Policy issued by Countryside Council for Wales.
Source	s: Countryside Council for Wales, 1993, NCC, 1986, 1987; Sidaway, 1988.

NATURE OF BIOLOGICAL IMPACT

- Factor 1: Types of recreational activity Sub-aqua; canoeing, fishing (Reference 1).
- Factor 2: Nature conservation status of site Skomer island was notified as a SSSI in 1954, designated as a NNR when it was purchased by conservation bodies. Designation of the MNR was proposed in 1986 and confirmed in 1993. (References 1 and 2). Designated.
- Factor 3: Type and incidence of impact Disturbance data on cliff nesting sites and seal calving areas sporadic and disputed. Data on damage to marine wildlife by divers not known (Reference 1).
- Factor 4: <u>Level of visitor pressure</u> Estimates of divers using reserve waters of 450 in 1973, 1560 in 1985 (Reference 3) and 1433 in 1987 (Reference 4). Diving is concentrated on wrecks away from breeding sites (Reference 4).
- Factor 5: <u>Understanding of impact</u> Value of records on disturbance events collected by NCC was challenged by divers and Sports Council for Wales. Potential damage to marine wildlife by divers not assessed (Reference 1). *Uncertain and contentious*.

CHARACTERISTICS OF INTERESTS

- Factor 6: Nature of interests i) Proprietorial/Altruistic/Professional: NCC/conservation; ii) Altruistic/self: divers
- Factor 7: Number of Interests Two
- Factor 8: Conflicting ideologies Both divers (espousing the right to dive anywhere in British territorial waters) and nature conservationists (wanting to protect birds and marine wildlife) have a strong ideological commitment (Reference 1). Opposed.
- Factor 9: Advancement of principles Underwater access became elevated to a matter of principle to the divers who had successfully campaigned against marine wreck legislation (Reference 1).
- Factor 10: Environmental awareness of interest groups Diving organisation require proof of

damage although many are also active members of the Marine Conservation Society (Reference 1). Insensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: <u>Appropriateness of resource use</u> Bylaws proposed during consultation would exclude inappropriate use from most sensitive areas of potential reserve (Reference 1). *Appropriateness disputed*

Factor 12: <u>Communication networks</u> Although there was regular contact between the conservation and diving organisations within the local management committee of the voluntary reserve, it appears that the diving representatives failed to report back to their national organisation (Reference 1). Well established but ineffective.

Factor 13: Reaction to new claim on resource Divers not opposed to MNR in principle but resisted the voluntary code of practice becoming legally enforceable bylaws (Reference 1). Adverse.

Factor 14: Negotiating strategies of interest groups Local discussions became confrontational when national secretary of British Sub-Aqua Club (BSAC) took legalistic approach (Reference 1). Confrontational.

Factor 15: Involvement of media Probably high locally. Not measured.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Conservation "coalition" of NCC and local wildlife trust was well organised as were the divers nationally (Reference 1). *Highly organised*.

Factor 17: Acceptance of management aims Although the principle of the marine reserve was accepted by the divers, the proposed bylaws were challenged vigorously (Reference 1). Challenged.

Factor 18: <u>Public involvement in decision-making</u> There was direct involvement of most interests on the management committee of the voluntary reserve. Formal consultations were made on the designation order and there is now even wider representation on the advisory committee of the MNR (References 1 and 2). *Limited to wide Involvement*

Factor 19: Type of decision-making Once the legal process of formal consultation with rights of appeal was instituted, decision-making became adversarial (Reference 1). Adversarial.

Factor 20: Mechanisms to deal with change Management plan provides mechanism to consider change. Exists.

Factor 21: <u>Authority of decision maker</u> Whilst the exercise of NCC's statutory powers was challenged, the ultimate authority of the Secretary of State for Wales was accepted. *Accepted*. Factor 22: <u>Distribution of power</u> NCC's statutory power was matched by BSAC legal expertise. *Strong and evenly balanced*.

REFERENCES

1. Sidaway, (1988); 2. Countryside Council for Wales, (1993); 3. NCC, (1986); 4. NCC, 1987.

COUNTRYSIDE ACCESS FOR MOTOR SPORTS IN ENGLAND AND WALES

NB: A generalised case covering many localities.

HISTORICAL SUMMARY	
1907	World's first purpose-built motor racing circuit established at Brooklands, Surrey.
	First Tourist Trophy motorcycle race on Isle of Man
1920s	Off road motor cycling begins as a specialist activity.
1950s	Off road events become a spectator sport.
1960s	Off road rallies become popular.
1970s	Decline of British motorcycle industry and emergence of Japanese manufacturers. Replacement of tw stroke with four stroke engines. Membership of ACU clubs at peak, decline in adult competition, growth of youth motor cycling. Introduction of specific trail motorcycles.
1974	National Park Policies Review Committee considers noisy pursuits to be out of place in national parks
1976	Public inquiry into Traffic Regulation Order on the Ridgeway long distance route finds that trail riders should not be excluded from its use.
1986	Motor sports organisations found the Land Access and Recreation Association to represent their countryside interests.
1987	A survey by the Royal Society for Nature Conservation instances damage or disturbance in 68 SSSIs and 44 County Wildlife Trust reserves.
1991	Department of Environment (DOE) removes the limited exemptions from planning permission for motor sports within SSSIs.
	National Parks Review Panel recommends that the second purpose of national parks be redefined as "promoting quiet enjoyment" and that permitted development rights for motorcycle scrambling should be reduced from 14 to 7 days.
1992	Second public inquiry into Traffic Regulation Order on the Ridgeway confirms that trail riders should not be excluded from its use
1995	House of Commons Environment Committee recommends regional planning strategies to identify site for noisy and obtrusive activities and that national park and highway authorities initiate collaborative negotiations to manage green lanes. Government rejects House of Lords amendment to Environment Bill promoting quiet enjoyment in national parks.

Committee (1995).

NATURE OF BIOLOGICAL IMPACT

Factor 1: Types of recreational activity 19 different types of motor sport recognised by motor sports organisations (Reference 1).

Factor 2: Nature conservation status of site Varies, motor sports events are not permitted in SSSIs but informal local use occurs (Reference 2). There is strong opposition to motor sports events in national parks (Reference 3) although events have taken place there long before the parks were designated. Designated and undesignated.

Factor 3: Type and incidence of impact Impacts of competitive events include: noise, smoke, fumes, traffic generation, large numbers of people, site erosion and general disturbance to local residents and wildlife (Reference 1). A survey by the Royal Society for Nature Conservation (RSNC) instanced damage or disturbance in 68 SSSIs and 44 County Wildlife trusts reserves (Reference 2). The impacts within national parks were said to be "...environmentally intrusive noisy, ugly and damaging to wildlife and vegetation." although the extent of the impacts was not quantified in this report (Reference 3). Local data exists, e.g., the locations used by informal motor sports were identified in an earlier survey by the Dartmoor National Park (Reference 1).

Factor 4: <u>Level of visitor pressure</u> Formal participation in events via motor sports clubs estimated at 2000,000; informal participation (local casual use) not known; trail riders (off road motor cycling on 'green lanes') estimated at 5000 (Reference 1). Motor cycle sales declined over the period 1990-1995 while sales of four wheel drive vehicles (but not necessarily their recreational use in the countryside) increased (Reference 4).

Factor 5: <u>Understanding of impact</u> Damage to ground conditions at competitive events undoubtedly occurs but the extent of environmental disturbance is controversial (Reference 1). For, example, damage on rights of way from agricultural use may be attributed to recreational vehicles (References 1, 4 and 5) and survey data in the Yorkshire Dales National Park has been challenged for this reason (Reference 6). *Uncertain and contentious*.

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests i) Proprietorial/self: landowners who may benefit financially; ii) Altruistic: nature conservation organisations; iii) Altruistic/self: motorsports participants and organisations; iv) Self-interest: local residents particularly recent incomers (Reference 1).

Factor 7: Number of Interests Four groupings

Factor 8: Conflicting ideologies Nature conservationists are strongly committed to resource protection (Reference 2); newcomer residents are strongly committed to "peace and quiet" in the countryside and this is echoed within the national parks movement (References 1 and 3); while organised trail riders may be seeking the same exhilaration of moving through attractive countryside as walkers or horse riders and this gives rise to a conflict of interest between different sets of rural values (Reference 1). Opposed.

Factor 9: Advancement of principles Differences have become elevated to a matter of principle - "A true country lover would no more wish to ride a motorcycle across the fields and moors than a true cathedral lover would wish to ride up and down the aisles" (quoted in Reference 1). Trail riders research public rights of way records for evidence of ancient vehicular use and '..regard it as a duty of life to keep open the ancient pre-Roman "green roads." (Reference 7).

Factor 10: Environmental awareness of interest groups There is considerable variation. Examples of sensitivity include official events being highly regulated, clubs negotiating local access, codes of practice and access guides being issued by motoring organisations and manufacturers of off road vehicles and clubs undertaking repairs to rights of way. Nevertheless informal users may remain unsympathetic to environmental concerns or the interests of others (References 1 and 8). Both sensitive and Insensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use Opposition to the appropriateness of motor sports in the countryside is focused on the national parks. For example, "..noisy pursuits will nearly always be out of place in national parks." (Reference 10); "We recognise the intrusion caused by several noisy sports....While we do not support their total prohibition in national parks, they should only take place on those rare sites where they do not cause undue annoyance to other park users or damage to the fabric of the park themselves. In most cases, there may be more appropriate sites outside the parks and recreation provision of this kind should be determined on a regional scale." (Reference 3). Appropriateness disputed

Factor 12: <u>Communication networks</u> In an adversarial debate there seems to be little direct contact between the parties. *Poorly established*.

Factor 13: Reaction to new claim on resource Conservation organisations (notably SRNC and the Council for National Parks) continue to press for further regulations and succeeded in

removing the limited exemptions from planning permission for local motor sports events within SSSIs (Reference 11). Local opposition has generally been successful in closing existing venues for events, refusing planning permission for new venues and obtaining Traffic Regulation Orders to restrict vehicular use when ancient rights have been legally established (References 1, 8 and 11). Adverse.

Factor 14: Negotiating strategies of interest groups Walker organisations are universally opposed to motorised use of rights of way (References 1 and 13) although the motoring organisations have attempted to negotiate, in some cases successfully and in others not. A local highway authority has even refused to hold a public inquiry to hear evidence against the downgrading of a right of way to exclude vehicles (References 1, 4 and 8). However the motoring organisations have also taken an aggressive approach and answered in kind (References 12 and 13). Confrontational. Factor 15: Involvement of media Erratic and tending to misrepresent the motor sports case (Reference 1). Locally High.

INSTITUTIONAL SETTING

Factor 16: Level of political organisation Motor club network not federated with the national motoring organisations - the Royal Automobile Club Motor Sports Association and the Auto-Cycle Union - which are reluctant to get involved in "political" action. Indeed there are conflicts between sports, and the need to provide a national forum and provide an effective lobby has been recognised (Reference 1). To some extent the Motoring Organisations' Land Access and Recreation Organisation (LARA) is filling that gap (Reference 4). In comparison, the nature conservation organisations and local communities are highly effective lobbies. Marked disparity between recreation - Organised and conservation - Highly organised:

Factor 17: <u>Acceptance of management aims</u> The current aims of national park policy have been challenged by conservation organisations in seeking a legislative change towards "quiet enjoyment" (References 3 and 8). *Challenged*.

Factor 18: <u>Public involvement in decision-making</u> While there is consultation on national planning issues and on a proposed noise code to be issued by DOE, the motoring organisations feel disadvantaged by this process, as they do over local planning decisions or traffic regulation hearings (References 1, 9 and 14). *Limited Involvement*.

Factor 19: <u>Type of decision-making</u> Clubs have negotiated with landowners and LARA has changed its stance now seeking co-operation but most decisions are taken in the adversarial setting of a court or public inquiry (References 1 and 8). *Adversarial*.

Factor 20: Mechanisms to deal with change Change within the sport is continual, social attitudes are changing against the sports and access is being lost. Motor sports organisations tend to be excluded from any fora or feel these are biased and tending to formalise opposition against them. Planning is supposed to balance and mediate change but fails to secure access for motor sports (Reference 1). Absent.

Factor 21: <u>Authority of decision maker</u> The opposing parties are working within the system and accept its jurisdiction. *Accepted*.

Factor 22: <u>Distribution of power</u> Nature conservation organisations have proved to have considerable influence on this issue at a national level, while local residents have also been successful in advancing their interests. In comparison the motoring organisations have "lacked clout" (Reference 1). *Unequal distribution of power*.

REFERENCES

1. Elson et al (1986), 2. RSNC (1987), 3. Edwards (1991), 4. Stevens (1995), 5. Taylor (1993),

6. Stevens (1988), 7. Stead (1978), 8. LARA (1993), 9. National Park Policies Review Committee (1974), 10. DOE (1991), 11. Motorsports Facilities Unit (1993), 12. LARA (1994a), 13. LARA (1994b), 14. LARA (1991).

WILDERNESS DESIGNATION IN NORTH WEST MONTANA

HISTORICAL SUMMARY	
1921	Aldo Leopold suggests wilderness areas are set aside within national forests.
1930s	Concept of wilderness areas promoted by Bob Marshall, US Forest Service (USFS) Chief of
	Recreation, who founds the Wilderness Society.
1940	Following Marshall's untimely death, a 950,000 acre wilderness area is set aside in his memory.
1954	USFS announces plans to log the Northern Swan range and the Middle Fork of the Flathead drainage (catchment).
1960-	Oil companies refused entry into the Bob Marshall wilderness.
1964	Conservationists defeat proposals to dam the Sun River and flood the wilderness.
1964	Passage of Wilderness Act by US Congress.
	Bob Marshall Wilderness Area of 1,009,356 acres classified.
1972	Scapegoat Wilderness Area of 239,296 acres classified. Bunker Creek in the Northern Swan logged despite public protest.
1976	Federal Land Protection and Management Act authorises Bureau of Land Management to begin wilderness studies.
1978	Great Bear Wilderness Area of 286,700 acres classified completing the Bob Marshall Wilderness
	Complex (BMWC) to be managed as a single unit. Flathead river designated a Wild and Scenic River.
	Montana Wilderness Study Act passed providing temporary protection for 900,000 acres of national forest wildlands.
1982	Oil and gas exploration refused in the BMWC for the second time.
1984	Congressional Bill to protect Monture Creek and Southern Swan but release Northern Swan and Rocky Mountain Front for logging is defeated.
1988	Montana Wilderness Bill passed by Congress but vetoed by President Reagan.
1990	National Recreational Trails Fund Bill is promoted by the Blue Ribbon Coalition to construct backcountry trails for off road vehicles.
	Conservation groups propose Bob Marshall National Forest to be managed to protect wildlife and [appropriate forms of] recreation.
	Alliance for the Northern Rockies proposes 6.4 million acres of wilderness in Montana and no further forest land released for logging.
	Rival bills put before Congress propose 0.62 million acres of wilderness and 5.78 million acres of forest land released for logging (promoter: Senator Burns, Rep.), 2.08 million acres of wilderness and
	3.55 million acres of forest land released for logging (promoter: Representative Bauchus, Dem.); and 3.3 million acres of wilderness and 3.1 million acres of forest land released for logging (promoter:
	Montana Wilderness Association). Representative Pat Williams (Dem.) submits Badger-Two Medicin Act to designate 93,000 acres on Rocky Mountain Front as wilderness area supported by petition with
	6,000 signatories.
	Kootenai-Lolo Accord is locally negotiated and signed by conservationist, hunting, fishing organisations, sawmill and logging trade unions and timber companies. It would secure the designation of 680,000 acres as wilderness and release 616,000 acres for logging.

•

NATURE OF BIOLOGICAL IMPACT

Sources: Montana Wilderness Association, 1990b; Montana Wildland Coalitions, undated.

Factor 1: Types of recreational activity The following recreational activities are permitted in designated wilderness areas: backpacking, horse trails, hunting, overnight camping; fishing, cross country skiing, climbing, river rafting; while motorised use by off-road vehicles (ORVs) is not

permitted (Reference 1).

Factor 2: Nature conservation status of site The conservation status of 6 million acres of roadless National Forest is in dispute with a range of claims being made as to the areas that should be set aside as Wilderness Areas (see historical summary). These areas include habitats of Endangered Species such as grizzly bear, bald eagle and grey wolf.

Factor 3: Type and incidence of impact Within the potential wilderness areas recreation impacts are not quantified (see synopsis of Bob Marshall Wilderness Area). Landowners were concerned about trespass by ORVs, poaching, illegal grazing in Badger-Two Medicine (References 2 and 3).

Factor 4: <u>Level of visitor pressure</u> Not assessed but not considered an issue compared to, say, the effects of logging. USFS does not collect figures on trail use and many registration stations have been abandoned (Reference 4).

Factor 5: <u>Understanding of impact</u> Local impacts of logging understood, but there is controversy over its effects on endangered species and the socio-economic effects of a cessation of logging on local communities (References 5 and 6). *Understood but contended*

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests i) Proprietorial; Blackfoot Indians; Proprietorial/Altruistic/Professional: USFS; ii) Commercial: Lumber companies sawmillers and employees; iii) Altruistic/self: Wilderness lobby - outdoor recreation and resource conservation; iv): Altruistic/self: Blue ribbon Coalition (ORV users backed by lumber companies). (References 2, 3 and 4).

Factor 7: Number of Interests Two main lobbies which are coalitions of multiple parties.

Factor 8: Conflicting ideologies Strongly opposed views on "wilderness preservation" vs " economic development" with some divergence on tactics within the wilderness movement between the hard line Alliance for the Northern Rockies and those prepared to back local negotiations, such as the Kootenai-Lolo Accord (Reference 3). Opposed.

Factor 9: Advancement of principles Although the main protagonists are motivated by furthering their interests, they espouse symbolic arguments of principle such as Wilderness values and "crusading for Badger-Two Medicine" (MWA); "quality of life and freedom from control" (Blue Ribbon Coalition); "Horses and the culture of the West, akin to God and Motherhood" (Back Country Horsemen of Montana) (References 2, 3 and 7)

Factor 10: Environmental awareness of interest groups Wilderness users are sensitive but developers are unsympathetic to environmental concerns (References 2, 3 and 7). Insensitive.

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: <u>Appropriateness of resource use</u> Appropriateness of development (roads, oil and gas exploration and logging) and motorised access is at the heart of the debate. (Reference 4) *Appropriateness disputed*

Factor 12: <u>Communication networks</u> Little direct contact between the two sides who communicate mainly via the media (except in the case of Kootenai-Lolo) *Poorly established*.

Factor 13: Reaction to new claim on resource Adverse reactions to claims and counter claims whether for wilderness designation or road construction and logging proposals (References 2, 3 and 4). Adverse.

Factor 14: Negotiating strategies of interest groups The main debate is highly confrontational lobbying for the rival Congressional bills, e.g. References 1, 5 and 8, although the Kootenai-Lolo Accord is a local negotiation aimed at breaking the deadlock (Reference 9). Confrontational.

Factor 15: <u>Involvement of media</u> High, and used by both sides. N.B. The press were excluded from the Kootenai-Lolo discussions (Reference 4). *High*.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Both lobbies highly organised with broad coalitions (References 3 and 10). *Highly organised*.

Factor 17: Acceptance of management aims Management aims of the USFS are at the core of the dispute. Challenged.

Factor 18: Public involvement in decision-making The formal consultation procedures that the USFS is bound to follow are set out in legislation but there is intensive lobbying over the content of legislation which would "resolve" the dispute by designating certain areas (the range of options being canvassed in 1990 is given in the historical summary. The Kootenai-Lolo discussions between local wilderness groups and trade unions was an exceptional example of direct involvement and significantly did not involve the USFS (Reference 9). Limited Involvement.

Factor 19: <u>Type of decision-making</u> Political lobbying to obtain state-wide legislation polarises any discussion in a highly charged adversarial atmosphere (again the Kootenai-Lolo Accord is the exceptional example of negotiation) (Reference 5). *Adversarial*.

Factor 20: Mechanisms to deal with change Adjustment to change is difficult as USFS plans and rival legislation are highly contested. Exists in theory but largely Absent in practice.

Factor 21: <u>Authority of decision maker</u> USFS decisions are likely to be challenged by appeals to higher authority all the way to the Supreme Court. *Challenged*.

Factor 22: <u>Distribution of power</u> Difficult to assess. While the environmental lobby is seen to be locally well organised compared to local ORV groups (Reference 2), the combined strength of business interests and its Congressional lobbies is probably greater (Reference 11). Montana's elected representatives in Congress and the Senate have considerable influence. "Under the clubby rules of congress, especially the Senate, such matters as one small timber sale on one small forest with as few votes as Montana has is commonly decided by that state's delegation. It only took [Senator] Burns and [Representative] Baucus to cut the deal on the Yaak [forest land]" (Reference 5). Strong but Unequal.

REFERENCES

1. Montana Wilderness Association (undated), 2. Personal interview on 22.8.90. with Arnie Bolle, University of Montana, 3. Personal interview on 19-20.8.90. with Lou Bruno, President of Montana Wilderness Association, 4. Personal interview on 20.8.90. with John Gatchell, Director of Montana Wilderness Association, 5. Montana Wilderness Association (1990a), 6. Power (1989), 7. Personal interview on 12.8.90. with Roland Cheek, Back Country Horsemen of Montana, 8. Montana Wilderness Association (1990b), 9. Montana Wilderness Association (1990c), 10. Alliance for the Northern Rockies, (1989), 11. Amy (1987).

RECREATIONAL ACCESS TO THE NORTHERN WOODS, MAINE

	HISTORICAL SUMMARY
1783	State lands in Maine first offered at auction
1820	State of Maine separated from Massachusetts, by which time 10 million acres (half state) in private ownership.
1854	Maine buys from Massachusetts the remaining rights to forest land in state.
1895	Industrial Journal of Bangor proposes 576,000 acre state park around Mount Katahdin.
1908	Maine State Federation of Women's Clubs propose commission to investigate purchase of Mt. Katahdin.
1910	Congressman Guernsey introduces resolution in US House of Representatives for federal purchase of forest reserve around Mt. Katahdin.
1919	Representative Percival Baxter introduces bill for the creation of state parks and forest reserves in Maine.
1931	Governor Baxter buys 200,000 acres including Mt Katahdin and gives them to the state which become the Baxter State Park.
1937	Moves to create a national park which would include Mt. Katahdin.
1960s	Forest land owners begin to collect recreational user fees.
1971	North Maine Woods (NMW) association formed to operate perimeter checkpoints.
1978	Bald eagle declared an endangered species in Maine
1980	NMW becomes non-profit organisation covering 3 million acres.
1982	James Goldsmith acquires Diamond International Corporation, sells most of its assets but holds 1.7 million acres of forest land in the northern New England States
1987	Nature Conservancy (NC) acquire 3,800 acre Big Reed Forest Reserve.
	French water utility General Occidentale buys Goldsmith's holdings
1988	Claude Rancourt (developer) buys 90,000 acres in Vermont and New Hampshire from Diamond Occidental Forests Inc.
	Congress directs USFS to work with the Governor's Task Force on the Northern Forest Lands Study (NFLS) covering the forest areas of upper New York State, Vermont, New Hampshire and Maine. James River Corporation buy 560,000 acres from Diamond Occidental
	Rate of development increases with 17,000 acres subdivided into 331 lots, compared to 23,000 acres subdivided into 590 lots in previous three years.
1989	NMW produces 5 year recreational management plan.
	NC acquire 1013 acre extension to the Big Reed Forest Reserve but negotiations for a further 1700 acres collapse in summer 1990.
	Wilderness Society proposes Maine Woods Reserve of 2.7 million acres around Baxter State Park. Draft NFLS released for consultation.
	Great Northern Nekoska Corporation taken over by Georgia-Pacific Corporation who thereby acquire 2.1 million acres of forest land and two pulp and paper mills in Maine.
1990	NC and Land for Maine's Future Board acquire 40,000 acres from Diamond Occidental.
	Final version of NFLS suggests 27 strategies but makes no recommendations
	Governor's Task Force produce an action plan including the creation of a Northern Forest Lands
	Council to continue its work with Federal funding for land acquisition, easements, research and land
	conservation programmes.

Sources: Austin, 1990; Kellert, 1989; Nature Conservancy, June 1990; Maine Audobon Society, October 1989; North Maine Woods, 1989a; Stegner, 1990; USFS and Governor's Task Force (1990), Governor's Task Force (1990).

NATURE OF BIOLOGICAL IMPACT

Factor 1: <u>Types of recreational activity</u> Backpacking, hunting, bird watching, fishing, camping, canoeing, cross country and downhill skiing, snowmobiling, off-road and all-terrain vehicle riding (Reference 1).

- Factor 2: Nature conservation status of site Contains habitats of Endangered Species, e.g., bald eagle (Reference 2). Proposed Maine Woods Reserve provides habitat for black bear, moose, deer, beaver, otter, fisher, pine marten, great blue heron, broad-wing hawk, loon, bald eagle, osprey, peregrine and golden eagle (Reference 3).
- Factor 3: Type and incidence of impact Present recreational use is not an issue, public concern focuses on silvicultural practice, e.g., the effects of large scale clear felling and the subdivision of forest land, particularly on lakesides for holiday home development with the loss of traditional open access, decline in water quality, replacement of native vegetation and the disruption of wildlife migration routes (Reference 1).
- Factor 4: <u>Level of visitor pressure</u> Visitors to 3 million acres operated by North Maine Woods (NMW) increased from 43,000 in 1976 to 82,000 in 1988 (References 4 and 5). In 1985, NMW attracted 73,000 visitors, 425,000 hunting and fishing licences were issued in the State in 1985, while there were 73,000 visitors to Baxter State Park, 44,500 river rafters in northern Maine and 11,600 canoeists on the Allagash River (Reference 6). Visits to Great Northern Paper Company lands exceed 155,000 in 1988 (Reference 3).
- Factor 5: <u>Understanding of impact</u> Surroundings of bald eagle nesting sites protected by legal and voluntary agreements (Reference 2). Effects of logging and residential or cabin development known (Reference 1). *Understood*.

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests i) Proprietorial: Recreational land purchasers, developers, industrial landowners (timber companies); ii) Altruistic: Conservation organisations e.g., Wilderness Society, Maine Audobon Society, Maine Natural Resources Council, Nature Conservancy); iii) Altruistic/self: recreational users, Appalachian Mountain Club; iv) Professional: State agencies, USFS (Reference 1).

- Factor 7: Number of Interests A large number of organisation forming two lobbies.
- Factor 8: <u>Conflicting ideologies</u> Recreational users: "open access to the woods" and Nature conservationists: "protection of resources" vs Landowners: property and development rights. *Opposed*.
- Factor 9: Advancement of principles Issues elevated to a matter of principle, "Preserving northern New England's forests is a righteous cause... The effects of conservation are so far reaching that they amount to a moral imperative." (Reference 3).
- Factor 10: Environmental awareness of interest groups Sensitivity of recreational users not an issues with codes of practice for their use of private forests. New legislation to control silvicultural practice has been introduced to curtail insensitive logging. Developers remain insensitive. Insensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

- Factor 11: <u>Appropriateness of resource use</u> Forest fragmentation, reduced public access and loss of wildlife habitat seen as threats to the traditional values of the Maine Woods (Reference 3). *Appropriateness disputed*
- Factor 12: <u>Communication networks</u> Little direct contact, largely through the media. *Poorly established*.
- Factor 13: Reaction to new claim on resource Conservation groups opposed to potential development plans of new landowners Existing users adverse to change of ownership/ potential loss of access; Owners adverse to potential wilderness designation, State adverse to Federal involvement (Reference 7). Adverse.

Factor 14: Negotiating strategies of interest groups "I am vehemently against what the Wilderness Society has proposed. They would shut down northern Maine" (Woodland manager), [Professional foresters are] "itinerant professional vandals" (former logger, Friends of Maine Woods) (Reference 8). Confrontational

Factor 15: Involvement of media High, and used by all parties. High

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Both lobbies highly organised with good political contacts. *Highly organised*:

Factor 17: Acceptance of management aims Timber company's plans and silvicultural practices challenged by wilderness groups and former employees (References 8 and 9). Challenged.

Factor 18: <u>Public involvement in decision-making</u> Limited consultation, each side producing counter proposals. NFLS published two newsletters, circulated to 4,000 and 5,000 people in the two states and held two rounds of 21 public meetings attended by 1,000 people, as well as circulating its draft report to 1,200 individuals and organisations (8,000 copies of a summary) in the four states. It received 870 responses from 42 states (Reference 1). *Limited Involvement*.

Factor 19: <u>Type of decision-making</u> Unclear. Publically adversarial but possible negotiations behind the scenes. *Unclear*.

Factor 20: Mechanisms to deal with change No clear mechanism with many counter proposals and initiatives. Absent.

Factor 21: <u>Authority of decision maker</u> Unclear, as there is multiple jurisdiction "It's just a fact of political life that no governor, no state legislative body is going to willy-nilly assign part of their sovereignty to some sort of regional of federal agency..... It's easier to identify the threat than it is to identify those areas where a town or unincorporated place or state has to look to higher authority. It remains to be seen what Congress will do. It could well be that the money that comes down from congress has strings attached to it." (Reference 10). "They [the Maine delegation] wanted to keep the decision-making very much in Maine (Reference 7). *Challenged*. Factor 22: <u>Distribution of power</u> Both sides hold certain veto powers but the situation is complicated by potential Federal intervention (Reference 10). *Difficult to assess*.

REFERENCES

- 1. USFS and Governor's Task Force (1990), 2. Maine Audobon Society (1989), 3. Kellert (1989),
- 4. North Maine Woods (1989), 5. North Maine Woods (1990), 6. Land and Water Resources Center (1987), 7. Kukka, (1990), 8. Boucher, (1989); 9. Keehn (1989), 10. Capone, (1990).

MOORLAND ACCESS IN THE PEAK DISTRICT NATIONAL PARK

	HISTORICAL SUMMARY	
1826	Society for the Preservation of Ancient Footpaths founded in Manchester.	
1880	Manchester YMCA Rambling Club founded.	
1900	Sheffield Clarion Ramblers founded.	
1931	National Council of Ramblers' Federations founded.	
	First Winnats Pass rally campaigns for access in the Peak District.	
1932	Mass Trespass of Kinder Scout, five ramblers imprisoned.	
1935	National Council of Ramblers' Federations becomes the Ramblers' Association (RA).	
1939	Access to Mountains Act allows local authorities to apply for access orders but also made trespass a criminal offence (repealed by 1949 Act).	
1947	Special Committee on Footpaths and Access to the Countryside (Hobhouse) recommended need for access orders to all suitable land in national parks but not where this would seriously conflict with other users.	
1949	National Parks and Access to the Countryside Act gives powers to local authorities to enter into formal access agreements and to prepare maps of open country. Where access with landowners could not be agreed application could be made for compulsory access orders.	
1951	Peak District National Park designated.	
1952	Peak Park Joint Planning Board (PPJPB) publishes open country map.	
1953-7	0 - 19 access agreements made within the Peak District covering 76 square miles.	
1970s	First concerns by naturalists and moorland owners that 'wander-at -will' access might harm wildlife.	
1978	National Park Plan (NPP) suggests that access might be limited in areas of high conservation value.	
1981	PPJPB acquires Roaches Estate.	
1984	PPJPB acquires Eastern Moors. Peak Park Wildlife Advisory Group prepared report on access and wildlife.	
1985	PPJPB and RA identifies six moorland areas for new agreements.	
1989	Review of NPP promotes concept of access corridors and research on effects of access on wildlife.	
1990	Anderson's report for PPJPB suggests evidence of wildlife disturbance from access. RA responds by publishing harsh critique by Watson. Chatsworth Estate enters into access agreement with PPJPB which contains access corridors and sanctuary areas.	
1991	Review of National Parks (Edwards) promotes access management. RA stages mass trespass campaign.	
1992	Government response to Edwards reaffirms voluntary access agreements. PPJPB circulates draft Access Strategy advocating 'limits of acceptable change'.	
1993	Dark Peak SSSI renotified, consultation on Special Protection Area for wild birds. Renegotiations on terms for renewal of existing access agreements begins. Access consultative group established which recommends collaborative procedure for preparing access management plans.	
Source	s: Peak Park Joint Planning Board (undated); Evidence submitted by the Peak Park Joint Planning Board	

NATURE OF BIOLOGICAL IMPACT

to the House of Commons Environment Committee (1995). Stephenson, 1989.

Factor 1: Types of recreational activity Climbing, hang gliding, mountain biking and walking (Reference 1).

Factor 2: Nature conservation status of site National Park (designated 1951), Dark Peak SSSI (31,852 hectares, notified 1951, renotified 1993) and Special Protection Area for the conservation of wild birds EC Directive 79/409 (Reference 2). Designated.

Factor 3: Type and incidence of impact i) Path Erosion: common on peat hags, gritstone edges, popular routes, one tenth of the 3253 km. of public paths and rights of way considered to be in an unacceptable condition at the end of 1993/4 (Reference 3). ii) Disturbance to birds: Any serious disturbance is likely to be concentrated along the most popular routes but this is

unmeasured. "Even in the Peak District, with some of the most heavily used moorland areas in the country, there is limited firm evidence to link recreational use to wildlife decline." (Reference 3).

Factor 4: <u>Level of visitor pressure</u> 22 million visitor days to the national park (Reference 3).

Factor 5: <u>Understanding of impact</u> Evidence on path erosion is clear but "The degree of disturbance caused by visitors to wildlife has been the subject of much conjecture." (Reference 3). Research suggesting there is prime facie evidence for disturbance to certain ground nesting birds, such as curlew and golden plover has been challenged on methodological grounds. (References 3, 4, 5, 6). *Uncertain and contentious*.

CHARACTERISTICS OF INTERESTS

Factor 6: Nature of interests Proprietorial and commercial: landowners; Altruistic: nature conservation organisations; Altruistic/self: access and active recreation users; Professional: national park authority staff.

Factor 7: Number of Interests 4 groupings

Factor 8: Conflicting ideologies Each interested party has a strong ideological commitment. Ramblers' Association (RA) and Open Spaces Society are committed to introducing national legislation to allow "Freedom to roam" over uncultivated land. BMC share these views but also have a strong conservation ethic. Nature Conservation organisations have been pressing for sanctuary areas for birds justified by the "precautionary principle". Landowners: stress property rights and the need to control access (Reference 1). Opposed

Factor 9: <u>Advancement of principles</u> The issues have become elevated to a matter of principle, exemplified by the Ramblers' Association campaign for legislation for public right of access to uncultivated land (Reference 7).

Factor 10: Environmental awareness of interest groups Although the RA have adopted conservation policies which include the precautionary principle they require proof of damage before they will accept constraints on access (Reference 1 and 6). Insensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

Factor 11: Appropriateness of resource use Wildlife sanctuary areas advocated by English Nature would exclude "inappropriate" access, (Reference 1). Appropriateness disputed

Factor 12: <u>Communication networks</u> There has been little direct contact between the interested parties, rather they have communicated with the Board in bilateral meetings or via the media. The Access Consultative Group (ACG), convened in 1993-4, was the first attempt to promote round table discussion between the principle parties. *Poorly established*.

Factor 13: Reaction to new claim on resource Consistently adverse as each interest is affected by a new claim, e.g., landowners objecting to public access and ramblers objecting to possible restrictions on access in the interests of wildlife (Reference 1). Adverse.

Factor 14: Negotiating strategies of interest groups Generally confrontational, e.g. Anderson's claims about the harmful effects of access which provokes Watson's critique of her work, while all parties are critical of the Board (Reference 1). Confrontational.

Factor 15: <u>Involvement of media</u> High and deliberately used by RA in their mass trespass campaigns. *High*.

INSTITUTIONAL SETTING

Factor 16: <u>Level of political organisation</u> Each sector is well organised and represented by professional organisations, local networks and national links are well used. *Highly organised*.

- Factor 17: Acceptance of management aims RA are keen to change land management to extend public access. The Board's Access Strategy which seeks a middle way has been challenged by conservationists (Reference 1). Challenged.
- Factor 18: <u>Public involvement in decision-making</u> Decision-making has been semi-participatory with the Board preparing plans and consulting the interested parties quite widely. There was no direct involvement on planning until the ACG was established. *Limited Involvement*.
- Factor 19: Type of decision-making The Board has conducted bilateral negotiations with the different parties, which have been "difficult" at times (Reference 1). The more general tenor of the public debate have been adversarial. Adversarial.
- Factor 20: Mechanisms to deal with change The Board is charged with balancing the interests of conservation, recreation and the local economy. It brokers change via the National Park Plan. Exists.
- Factor 21: <u>Authority of decision maker</u> Park Board challenged by each interest in turn. Challenged.
- Factor 22: <u>Distribution of power</u> Evenly balanced as each party holds veto power, as in theory at least, the landowners could deny access, English Nature could use its statutory powers to restrict new access, the ramblers could trespass into new areas. Each local organisation is linked into a national network and tests the others' strength by tactical manoeuvres. *Strong and evenly Balanced*.

REFERENCES

1. Peak Park Joint Planning Board (undated). 2. Papers provided to Access Consultative Group by English Nature, 20.9.93. 3. Evidence submitted by the Peak Park Joint Planning Board to the House of Commons Environment Committee. 4. Sidaway, (1988). 5. Anderson, (1990). 6. Watson, (1991). 7. Stephenson, (1989).

THE DESIGNATION OF THE PENTLAND HILLS REGIONAL PARK

HISTORICAL SUMMARY	
1967	Countryside (Scotland) Act confers powers on local authorities to conserve the countryside and to
	make recreation provision.
1968	Local amenity groups concerned about threat of encroachment onto the Pentland Hills by residential
	development on the outskirts of Edinburgh.
1969	The Army decided to modernise their ranges at Castlelaw and Dreghorn amidst public objection.
1970	Establishment of Pentland Hills Technical Group by local authorities and CCS to consider countryside recreational needs.
1972	Publication of the report of the Technical Group: Pentland Hills, Conservation and Recreation (the "Blue Book").
1973	Establishment of consultative committee with wide-ranging membership to discuss the "Blue Book".
1974	Publication of Park System for Scotland by CCS.
1975	Creation of Lothian Regional Council's (LRC) Leisure and Recreation Department. Director-designate
	appointed to co- ordinate the project and supervise the ranger service.
	Formation of Advisory Committee with local authority and local organisation membership to
	implement the "Blue Book" and to prepare a series of "locality schemes" over the next three years.
1978	Advisory committee replaced by smaller Rural Land Management Group to offer advice to planning
	team from owners, farmers and other land users.
1981	Countryside (Scotland) Act confers powers on Regional Councils to designate Regional Parks and to
	manage land under the control of the council as a single administrative unit.
	Initial recreation developments at Flotterstone.
1982	LRC's Leisure and Recreation Department dissolved.
	Discussions between the three Regional Councils culminates in the exclusion of areas in Borders and
	Strathclyde from the proposed park.
1983	Publication of A Policy for Regional Parks by CCS. Meeting with Scottish Landowners' Federation
1004	(SLF) results in one third of the area being removed from the proposals.
1984	Consultation on LRC's proposals, including public hearing followed by decision by LRC to designate,
	which confirms the principles of "Blue Book" and other safeguards for land uses, the making of the
1985	designation order.
1986	Public inquiry considers objections to designation order. Confirmation of order by Secretary of State with recommendation that Subject Local Plan be prepared
1987	Appointment of Consultative Committee.
1988	Draft Plan issued for consultation.
1989	Appointment of Regional Park Manager and Advisory Committee.
1702	Adoption of Pentland Hills Regional Park Plan.
	Withdrawal of MOD proposal to extend training areas.
	First management agreements and farm plans under new authority.
1990	Park authority publishes Farming and the Regional Park -Cultivating a Partnership.
1993	National Farmers Union sends letter of complaint to Chairman of the Advisory Committee.
	Farmers Sub-group to Advisory Committee formed.
	Evening News Article writes of "open war" between farmers and Park Authority.
1996	Abolition of Lothian Regional Council.

designation order, First Annual Report of Pentland Hills Regional Park, Carlyle et al (1993).

The following analysis is based on the first phase of conflict between 1972 and 1986.

NATURE OF BIOLOGICAL IMPACT

Factor 1: Types of recreational activity Hill walking, mountain biking, horse riding, grouse shooting, angling [water sports would like access to compensation reservoirs] (Reference 1).

- Factor 2: Nature conservation status of site Limited areas within the hills have been notified as SSSI but this is not an issue within the conflict.
- Factor 3: Type and incidence of impact Erosion of hill paths is locally severe but this has not been quantified (Reference 2).
- Factor 4: <u>Level of visitor pressure</u> Relatively high levels of recreational use all year round but not quantified (Reference 2).
- Factor 5: <u>Understanding of impact</u> Lack of information on potential social impacts i.e. "commercial" recreation on peace and quiet, farm income and private property (Reference 1). *Uncertain*

CHARACTERISTICS OF INTERESTS

- Factor 6: <u>Nature of interests</u> i) Proprietorial, commercial; Private landowners, public water supply; ii) Altruistic: conservation; iii) Altruistic/self: recreation, local community groups; and iv) Professional: planners and park managers. (Reference 1).
- Factor 7: Number of Interests Four main groups.
- Factor 8: <u>Conflicting ideologies</u> The proposal to designate the park and increase recreation, including the creation of a country park was based on the ideology of public welfare provision. This was opposed by the landowners on the basis of the effects on their property rights, and conservation interests who wished the hills to be undisturbed. There is latent conflict between the ramblers who advocate "freedom to roam" in the hills and the landowners (Reference 1). *Opposed*.
- Factor 9: <u>Advancement of principles</u> Opposition to designation was elevated to a matter of principle particularly by those whose opposed the use of the term "park" The proponents of designation (the Regional Council and the Countryside Commission for Scotland) were keen to see their legislative powers implemented (Reference 1).
- Factor 10: Environmental awareness of interest groups The exponents of the park were insensitive to the established interests of the landowners and the local community (Reference 1). Insensitive

INTEREST GROUP INTERACTIONS DURING DISPUTE

- Factor 11: <u>Appropriateness of resource use</u> Early plans recommended that a limited range of appropriate recreation activities should be permitted in the area, this was a principal reason for objection by local communities and the Ramblers' Association and this limitation on recreation was ratified by the Subject Local Plan (References 1 and 3). *Appropriateness disputed*
- Factor 12: <u>Communication networks</u> Although various advisory committees were established there was little direct contact between the Regional Council staff, local inhabitants and recreational users (Reference 2). *Poorly established*.
- Factor 13: Reaction to new claim on resource Landowners and local community interests were opposed to designation, while the support in principle for the park from nature conservation and recreation was so muted by the detailed criticisms of the proposal that they were in effect opponents of the scheme (Reference 1). Adverse.
- Factor 14: Negotiating strategies of interest groups Debate became increasingly confrontational particularly after a public meeting at Currie High School in September 1984 (Reference 1). Confrontational.
- Factor 15: <u>Involvement of media</u> The controversy gained considerable coverage in the local press which was influential in turning public opinion against the proposal (Reference 1). *High*.

INSTITUTIONAL SETTING

- Factor 16: <u>Level of political organisation</u> All interests were represented by organisations but there was no formal coalition nor any clear leadership (Reference 1). *Organised*:
- Factor 17: Acceptance of management aims Designation challenged by all interests Challenged.
- Factor 18: <u>Public involvement in decision-making</u> Proposals were developed by Regional council officers prior to consultation while any involvement of the advisory committees was purely tokenistic (Reference 2). *Limited Involvement*.
- Factor 19: Type of decision-making As opposition to the designation order was formally considered within a public inquiry there was no attempt to negotiate on the proposals (Reference 1). Adversarial.
- Factor 20: <u>Mechanisms to deal with change</u> The lack of clear proposals in the form of a management plan created uncertainty and was a major feature of opposition by the conservation interests. [This is now accommodated by the Subject Local Plan.] (Reference 1). Absent
- Factor 21: <u>Authority of decision maker</u> The Regional Council has been constantly challenged but the Secretary of State's decision following the due process of a public inquiry was generally accepted.
- Factor 22: <u>Distribution of power</u> Difficult to assess but probably evenly balanced. Weak and evenly balanced.

REFERENCES

1. Sidaway (1991b), 2. Sidaway (1992a), 3. Pentland Hills Technical Group (1972).