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PUBLIC PARTICIPATION IN

RESOURCE ALLOCATION

Presented in partial fulfilment
of the requirements for the Degree
of
Master of Science
in the
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by

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Public participation is a desirable and necessary component of any decision-making process regarding the allocation of resources. In its present form, however, it is not as effective as it could be. The aim of this study is to develop a strategy leading towards effective public participation.

The study focusses primarily on the participants. Criteria are developed for discerning their effective involvement in a decision. The criteria are:

1. the achievement of the individual's or the interest group's objectives; and
2. the influence the participants have on the decision or decision-making process.

These criteria are applied to six interest groups who participated in the recent Rakaia River National Water Conservation Order Hearing. It is concluded from this examination that participants are more likely to be effective in their participation if they have experience in participatory exercises, access to all information, good relations with the media, professional assistance and dedication to the issue.

The need for a clear and effective natural resources policy to guide decisions of resource allocation is also proposed in this study. There is also a need for a greater recognition of the importance of public participation in social and environmental impact assessment procedures.

Effective public participation is a goal often sought but not often achieved. Public awareness, public education and the initiation of independent evaluators for public participation programmes would provide the basis for a strategy of more effective public participation.
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SECTION ONE

PUBLIC PARTICIPATION AND DECISION-MAKING
CHAPTER 1

INTRODUCTION

In 1981 a historic decision relating to water management in New Zealand was made when Parliament passed the Water and Soil Conservation Amendment Act. The object of this Amendment was to recognise and sustain the amenity afforded by waters in their natural state. This Act was the first recognition by Parliament of the value of scenic and recreational attributes and of wildlife and wildlife habitats in New Zealand water management. Implementation of this Act, however, has been fraught with difficulties, not the least of which has been to determine what the public wants and what it is willing to sacrifice in order to get it. Those who promoted the idea of "Wild and Scenic Rivers" appeared to assume that if sufficient opportunity was given to those involved in the use of the water to express their views, a barometer of public support would be provided. Recent experience with respect to the allocation of the Rakaia River water in Canterbury suggests that the problem is much more complicated than this, and that a thorough evaluation of public participation procedures needs to be made before one can be confident that they are both efficient and effective.

The role of the public in planning and decision-making has become a matter of concern in New Zealand in recent years for both philosophical and pragmatic reasons. These are:
1. There has been increasing alienation of the public as more and more decisions affecting the lifestyle and aspirations of the people are made by the government and the bureaucracy.

2. There have also been several miscalculations of public desires in resource management decisions.

3. The existing mechanisms for monitoring public views have been shown to be ineffective, both from the point of view of the decision-maker and of the public at large. This ineffectiveness seems to be especially so when some form of preservation is sought on watersheds for amenity or wildlife preservation.

The aim of this study, therefore, is to develop a strategy leading towards effective participation, focussing primarily on the participants and their role in any resource allocation decision. The study was undertaken with four basic objectives:

1. to review participation and decision-making;
2. to identify the participants of any decision-making process and to develop criteria to determine the effectiveness of the participants;
3. to examine the participants of one resource allocation decision; and
4. to identify areas of the present participation process that require particular attention.

The Rakaia River National Water Conservation Order (NWCO) Hearings provided an opportunity to observe the effectiveness and the efficiency of this method of public participation.
1.1 Methodology

The study consisted of five sequential steps.

1. Literature Review

A literature review to identify the conceptual underpinnings of public participation and decision-making was carried out. This review illuminated the present experiences of public participation in resource allocation both in New Zealand and in other countries.

2. Examination of the Rakaia River NWCO Hearing

A case study approach was used to pursue a more detailed examination of the evidence and participants, with the focus being a description and evaluation of a national water conservation order application regarding the allocation of water from the Rakaia River in Canterbury. The study covers the period from June 1983 through to March 1984, during which time the application for a NWCO for this river was received, heard and a decision announced. Concurrently, the North Canterbury Catchment Board and Regional Water Board (NCCB & RWB) were investigating the resources of the river and catchment, preparing a draft water allocation and management plan.

Information on public participation procedures which was not available through the literature, was gained by attending the Hearing. Observation of the procedure and access to all documentary data (mainly newspaper articles dating back to the beginning of the Rakaia River issue, and the transcripts from the Hearing) provided the link between the theory and the practice of public participation.
3. **Interviewing**

Interviews with selected members of various interest groups from the Rakaia River NWCO Hearing, were undertaken during April and May 1984. Only those members who had an active role in the Hearing, or in the preparation for the Hearing, were interviewed. In order to make comparisons between the interest groups an informal, but structured, format was followed. The questions asked of every group representative were:

(a) General information regarding the group structure and organisation
- when was the group formed?
- how many members are in the group?
- how does the group organise funding?
- what are the general aims and objectives of the group?

(b) Specific information regarding the NWCO Hearing
- what approach was taken for the submission?
- how much time was spent in the preparation of the submission?
- have the members of the group had previous experience in hearings of this type?
- what did the group hope to achieve?
- did they succeed?
- how do they feel about the decision?

(c) Comments on the participation process
- did the group receive a "fair" hearing?
- how did they feel about the decision-making committee?
- does the group intend to continue to be involved with the Rakaia River issue?
4. **Analysis**

The information obtained from the literature, the interviews, documentary data, and from observing the Hearing, was used to analyse the public participation procedures for resource allocation in New Zealand.

5. **Preparation of the report**

1.2 **Study Structure**

This study is divided into three sections. Section One represents a general overview of public participation in decisions concerning resource allocation. Chapter 2 deals specifically with the concept of public participation and highlights the various definitions and perceptions of this concept. The arguments for and against public participation in any decision-making process are then outlined.

The approach taken in Chapter 3 is one which focusses on the participant's perspective, rather than the perspective of the managers of the resource or the implementors of the public participation programme. There are three main reasons for introducing this perspective on public participation. First, the extent of the public's interest in public participation sets the outer limits of attempts to involve the public in decision-making. Second, such a perspective may help those responsible for establishing participation programmes to shape those programmes to best fit the public's attitudes towards participation. The third reason relates to a lack of work so far in this aspect of public participation. Although evaluation of participation programmes has
begun, it is still minimal when the size of the problem is considered. Evaluation of the effectiveness of the participants has not previously been attempted in New Zealand. Chapter 3, therefore, outlines the kinds of participants who become involved in resource allocation issues and provides a classification framework for these individuals and groups. Criteria for evaluating the effectiveness of participants are also developed.

Section Two represents the transformation from the conceptual aspects of public participation to the pragmatic aspects. Chapter 4 describes and explains the participatory process in resource allocation which occurred at the Rakaia River NWCO Hearing. The Rakaia River provided a suitable case study as it was accessible, local and many of the types of conflicts described are apparent in other resource allocation issues. The criteria developed in Chapter 3 were applied to various interest groups.

Section Three is an integration of the other sections, in an attempt to provide some guidelines for effective public participation in resource allocation. Chapter 5 provides an analysis of the case study and makes suggestions for the development of a strategy for public participation. A summary of the main points of this study is presented in Chapter 6.
CHAPTER 2

PUBLIC PARTICIPATION

The concept of public participation is not new. It has existed for centuries in various forms. Voting, holding public office and participation in civic groups are some of the traditional avenues of public involvement. It was not until the early 1970s, however, that the contemporary form of public participation - direct involvement of the people in the process of decision-making - really began to evolve in New Zealand. Despite the fact that the government has accepted the increasing need for public input and has increased efforts to provide opportunities for public participation, it has not become an entrenched part of decision-making, nor has it provided the satisfactory methods and results for achieving dialogue between decision-makers and the public.

This concept stems from the moral assumption that everyone has a responsibility and a "right" to express an opinion about matters which involve them, and to be shown that their views are taken into account. Although many theoretical papers have been written on this topic, a concise and widely-accepted definition does not exist. One reason for this lack of definition is proposed by Wengert (1976):
Those urging citizen participation... perceive it in different ways, depending on such factors as position and status, whether they are in power or out of power, their responsibilities, their constituencies, their overt or covert goals...

Or, restated more simply, the meaning, function and importance of public participation varies from culture to culture, and political system to political system (Sewell & O'Riordan, 1976).

A further difficulty with definitions arises when considering "the public". Because "the public" is such an amorphous and largely intangible concept, there is little possibility of devising a single, universally applicable meaning for participation.

2.1 Perceptions of public participation

Public participation is seen by many as a major objective of government, to ensure that all those who might be affected should have the opportunity to voice their opinions. People's perceptions of participation are, however, numerous. Participation can be viewed as a sound and desirable policy to be implemented in as many ways as possible (Wengert, 1976), at least because those affected by any decision have a "right" to be heard. As a policy, public participation has the potential to allow people a greater role in determining their own future.

Some advocates of participation approach the subject as a matter of strategy, "a manoeuvre to accomplish other stated or unstated objectives" (Wengert, 1976). People with this
Figure 2.1: Arnstein's ladder of citizen participation
perception may talk about "rights" to participate, but their "rights" are often euphemisms for pressure tactics and the manipulations of vociferous minorities for partisan or self-seeking individuals. As Arnstein (1969) states: "citizen participation is a categorical term for citizen power". There is, however, a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process. The fundamental point is that participation without redistribution of power is a frustrating process for the powerless. It allows the powerholders to claim that all sides were considered, but makes it possible for only some of those sides to benefit. Invariably it appeases the people, but maintains the status quo.

Arnstein (1969) has created a ladder of citizen participation showing various levels of citizen power. The ladder ranges from manipulation, a rung which really represents "non-participation", through to citizen power where citizens obtain the majority of decision-making seats or full managerial power (Figure 2.1). Obviously the eight-rung ladder is a simplification, but it helps to illustrate that there are significant gradations of participation with corresponding levels of power.

A further school of thought argues that participation should improve inputs, leading to better and more responsive decisions. This perspective of participation as communication is connected with Palmer's (1983) view of participation as protection. He feels that the involvement of the
community in the planning or decision-making process should offer the best protection against "bad" decisions.

A final perception is that of participation as a therapeutic device to overcome alienation and anomie. This can be an arrogant and dishonest tactic (Arnstein, 1969). Its administrators assume that powerlessness is synonymous with mental illness. On this assumption, under a masquerade of involving citizens is planning, the experts subject the public to clinical group therapy. This tactic is used particularly with underprivileged groups such as racial groups or the poor.

2.2 Arguments for and against participation

Although resource managers usually speak of "a plan for resource allocation", what is really meant is "a plan for the people who use the resource". When planning for people then, the government must avoid the attitude of simply doing good to the public, not only for reasons of political niceties (for example, the ideal of participatory democracy), but also for reasons of social realities. That is, unless a plan is feasible, beneficial, and acceptable to the present population, it may never reach the implementation stage. Many participants at hearings have suffered the cries of the critics of public participation that "the ignorant public" knows nothing of technical matters, that the public cannot begin to see the needs of future generations, and will never agree what is best anyway. Regardless of what the critics say, public participation
in resource allocation can advance the development of a workable resource scheme.

The potential advantages of public participation have been discussed by many authors (see, for example, Gresham & Crothers, 1979; White, 1982; Connor, 1982; and Palmer, 1983). While some of these advantages are based upon pragmatic considerations, others relate to ethics and philosophy. Some of the major points taken from the above papers are:

1. Public participation removes misunderstanding between decision-makers and the public.
   
   Public participation can provide decision-makers with valuable factual information and informed opinion. It may encourage decision-makers to examine their assumptions and preconceptions, and to consider a wider range of alternatives than they might otherwise have done. At the same time, the public begins to understand more adequately the true nature of the problems facing society.

   Participation encourages awareness of democratic processes and allows the public to better understand the constraints decision-makers are subject to. They may also learn how to make more effective demands on the government, or may acquire the resolve to change their situation.

2. Participation has an intrinsic value for participants.

   Participation may lead to the avoidance or minimisation
of feelings of alienation and powerlessness, while ensuring that decisions reflect the interests of the public and not just the prejudices of the decision-makers.

3. Freedom from dependence on professionals.
Participation is seen as a method by which knowledge and skills can be disseminated more widely and thus, break the virtual monopoly of expertise held by professionals. Indigenous knowledge and expertise are usually well adapted to the circumstances in which they develop and, therefore, add a different, and often more appropriate perspective to that of the professionals.

4. Participation as a catalyst for further development.
It is claimed by White (op cit.) that the organisational patterns created for one project and the enthusiasm generated by its success, could provide the means and stimulus for further co-operative work.

There are, however, some arguments against public participation. These include:

1. Participation can support inequality or alienation.
Sewell & O'Riordan (1976) state that participation may fail to reduce political inequality. Often those who do participate already enjoy a certain degree of social and political privilege.
2. Participation is more costly and less efficient than decision-making without it (Arnstein, 1969). Public participation is often viewed by decision-makers as a very time and money consuming exercise. Although the involvement of the public will lengthen any decision-making process, the consequence of not allowing it will be a severely restricted voice. In some situations, ignoring the public in the initial stages of development may turn out to be more expensive. The Motonui development was begun by invoking the National Development Act 1979. This Act allows for major development projects to be declared works of national importance, and provides for a shortened and consolidated procedure for obtaining all appropriate statutory consents (Birch, 1979). Local Maori residents became upset that they were not considered in this decision and appealed to the Waitangi Tribunal for a full examination of the issues. This resulted in a delay of 8 months and a substantial added cost, most of which could have been avoided had the public views been incorporated into the decision-making process. Public involvement in the consideration of any project can be a cost-effective and necessary part of the decision-making process where the objective is to determine what is in the public interest. When the involvement appears too lengthy or unwieldly, the solution is to redesign the process, not to ignore the public views.
3. Participation substitutes for democracy.

As expressed by Sir Desmond Heap, a noted London City solicitor and planning law author (quoted in Palmer, 1983):

One reason why I have always had my doubts about the principle of citizen participation is that it seems to me to strike at the very roots of elective democracy. If we do need to have this new idea, then surely this must indicate a breakdown in the customary system of democratic government representation.

4. Failure of participation to satisfy public requirements.

This is particularly relevant where public demands are in direct competition, and in these situations, participatory methods merely provide the forum for open confrontation.

It can be seen, therefore, that although the evidence for public participation is strong, this process is not without some claims as to disbenefits. Sewell & O'Riordan (1976) note that effective participatory experiments are expensive and time consuming, requiring highly trained people skilled in assisting community and group problem solving. Public participation, in its more contemporary form, is relatively new and untried. Time is needed for experiment, trial and error.

2.3 Public participation - its role in decision-making

Decision-making is the process of choosing from a set of competing alternatives (Mitchell, 1979). In resource allocations, decision-makers have to choose between various allocation patterns for each resource. Studies in decision-
making seek to ascertain how decisions are made - who participates, what forces are involved, how the particular decision was arrived at and why some other alternative was not selected. Some of the more well-known approaches include:

(i) the economic model which assumes that decision-makers seek to optimise in the economic sense (Krutilla & Fisher, 1975); 

(ii) the incremental model which seeks to adapt decision-making strategies to the limited cognitive capacities of decision-makers and to reduce the scope and cost of information collection and computation (Lindblom, 1959); 

(iii) the upward forming consensus model where the public discuss and agree upon common objectives which they in turn entrust their elected representatives to safeguard and promote into policy guidelines (Maass, 1962); and 

(iv) the stress model in which an environmental stress precipitates action by interest groups and subsequent interaction of groups and resource managers (Kasperson, 1969; O'Riordan, 1971).

Moore (1975) has comprehensively reviewed the literature on decision-making in resource management. He concludes that there exists no generally accepted model which explains how decisions are made. Moore considers that any decision consists of five elements: situation, participants, organisation, process and outcome. It is notable, there-
fore, that only the last two of these decision-making models explicitly incorporate any form of public participation. The upward forming consensus model has the elected representatives striving to provide the public with the maximum of information while at the same time protecting political and economic freedom (O'Riordan, 1970). In addition, their job is to translate social goals into policies which serve as the guides by which executive agencies weigh alternatives and make decisions. In the ideal case, the flow of guidance moves inward and upward, from the values and preferences of the public through to the directed actions of the agencies and the planners, as portrayed in Figure 2.2. This model is dependent upon the assumption that the public is aware and wishes to participate.

The stress model visualises a process evolving from a group struggle or conflict (Figure 2.3). Environmental stress, either a resource shortage or deterioration, is perceived by an interest group. This stress may be passed directly to the politician or to a public agency. If the stress is acute, outside consultant advice will be sought before a decision is made. Since this decision will contain implications for the amount and distribution of societal costs and benefits, different groups will respond after the initial decision in an attempt to modify the manager's choice to improve their position (Mitchell, 1970). If the political pressure exerted at this stage is sufficient to create political conflict, the decision-maker may seek to resolve this conflict by requesting his technical advisors to take a second look at the alternatives in question, including
Figure 2.2: The upward-forming consensus model of decision-making.

Figure 2.3: The stress model of decision-making.
the possibility of taking no action at all. This result is Decision 2 on the diagram, and, according to O'Riordan (1971), usually incorporates some degree of public opinion.

As it has been acknowledged that participants do have a role in decision-making processes and the actual decision, it becomes important to determine exactly who participates, and their motivation for doing so.
CHAPTER 3

WHO PARTICIPATES?

Ideally, the process of decision-making should take into account the views of all those people who have a legitimate interest in the matter at issue. Pragmatically, however, this is not always feasible. In fact, it has been noted that the public tends to be apathetic about most issues unless they are clearly and directly affected, and unless they are convinced that their involvement is likely to make some difference (O'Riordan, 1977).

Burch (1976) identified three factors that make public participation in natural resources decisions an activity for the minority. The first is that the supporters of natural resources issues have always been part of the existing system of authority. "They speak to issues favoured by the old wealth notables - aesthetic sensitivity, patriotic nostalgia and good taste" (Burch, 1976). Secondly, this older tradition is joined not by the working class, but by the middle class, salaried workers, most of whom have some tertiary education and are politically articulate. The third factor is that there has been a steady attempt to remove resource and aesthetic issues from the market system. This division has resulted in the creation of new professions.
In New Zealand, a further two factors have become apparent. The participant is invariably European and is most likely to be male. These distinctions have reached such proportions that, in a report on economic and social planning, the New Zealand Planning Council states:

There are certain groups in society whose participation in planning up to now has, for a variety of reasons, been much less significant than is, in our view, desirable in the national interest. That is why we reiterate our recommendation that...the authorities should pay special attention to the contribution which women and members of various ethnic groups can make.

(New Zealand Planning Council, 1976)

Since 1976, more attention has been given to these under-represented groups with the development of a Ministry for Women's Affairs and the use of the Waitangi Tribunal as a forum for traditional Maori considerations.

The importance of these participation trends is not that the non-participants will not become involved, but rather, that those who do, are the most likely to have the knowledge, interest, energy, time and income to invest in environmental issues. For a more detailed examination of the participants and of their motivations, it is convenient to distinguish between participation by individuals and interest groups.

3.1 Individuals

The individual, as a member of the public, may respond towards a decision involving the allocation of resources in one of several ways. O'Riordan (1972a) has categorised these as follows:
1. **The Unaware**
The individual may remain completely unaware or unconcerned. In such cases, either the issue has no impact on his way of life or, if it has, he is not bothered by it.

2. **The Unaffected**
The individual may recognise the existence of an issue or conflict situation but may adjust to it.

3. **The Fatalistic**
This category includes those people who assume that nothing can be done and that their own concern plays little part in the decision-making process. There are two different perceptions of this reaction. The first is the nature-dominant theme, namely, that whatever is done nature will always strike back. The second is the feeling of alienation from the concept of public participation.

4. **The Active**
In some instances the individual initially recognises an issue or conflict situation and responds with some kind of action. It is with these people that participation studies are primarily concerned, as they are most likely to influence a decision. As noted previously, many of these individuals will participate because they are directly affected. Others may hold a more idealistic perspective with visions of a perfect community and a responsive political process. These individuals sacrifice large amounts of time and effort to participate, often for little demonstrable reward. They must, however, feel that the benefits received through participation outweigh the costs. These benefits may be
related to personal ideology, professional advancement, political aspirations or simply genuine public concern.

3.2 Interest Groups

In the context of resource management, three principal groupings can be identified: the politician, the expert resource manager, and the special interest group. Social goals and preferences are identified by the politician who then authoritatively allocates resources in a manner which is perceived to advance social welfare the most (Anderson et al., 1984). This allocation by the politician involves identifying, refining and evaluating the values, choices and outcomes. Kasperson (1969) and O'Riordan (1971, 1972b) highlight the considerable influence of experts on politicians during this process.

Interest groups are "collective organisations with a common goal or interest or activity" (Moore, 1975) whose objective is to protect or enhance their association's goal. They tend to view resource allocation as "a struggle" (Wengert, 1955) and seek access to the decision-making process in order to influence policy, so that the outcome will benefit group members. The recent proliferation of interest groups worldwide has paralleled the increasing interest in environmental and resource issues. It has resulted in a new range of literature. Cigler and Loomis (1983) and Bercovitch (1984) provide background to much of the theory of interest groups and group conflict, relating some North American case studies, while Wilson (1982) highlights the
interest group movement in environmental controversies in New Zealand.

Interest groups are often accused of being the noisy minority. This accusation implies that such groups are not representative of "the public". All interest groups are, however, characterised by the following:

1. they perceive the need to secure decisions in harmony with or, at least, not in opposition to the group position;

2. they view the process as a struggle for the advantage and position rather than a fight against specific adversaries and, therefore, any conflict occurs as a secondary outcome and is not the primary goal;

3. their "weapons" are alliances, alignments and friends able to influence decisions;

4. their participation may involve protection of the status quo; and

5. those groups with access to information and technical knowledge have a greater advantage in the struggle than less informed groups.

(Wengert, 1955 and Fagence, 1977)

Interest groups can be distinguished on the basis of whether they are public interest groups (governmental) or private interest groups (sectoral), although there is some overlap between the groups (Neeson, 1983). Public groups include government and quasi-government agencies and local
authorities, and function at the national, regional and local levels.

Kasperson (1969) found it useful to recognise a typology of private and civic interest groups, based on their respective motivations. Private groups have a personal interest in a decision; the category includes those who perceive a threat to their health or economic welfare, with very little attention being paid to the broader issues. These interest groups can be very effective because their interest is motivated by a fear for their own well-being (O'Riordan, 1976). Civic interests represent those groups or individuals who participate out of a moral or intellectual concern, or those concerned at how resource allocation might affect the local community or region. They see the broader aspects of an issue. Their emphasis is as much on the changing or improvement of the decision-making process as in the actual decision. Consequently, their activities will be more discrete and policy orientated.

Participants become involved in interest groups for a particular reason, and while many believe that they represent the "public interest" (whatever that may be), this is often not the case. Rather, they advance an objective of "self-interest" which may be presented as the regional or national interest. On the other hand, the major barrier to group participation is where "rational" individuals choose not to bear the participation costs (time and membership) because they can enjoy the group benefits, such as favourable legislation, whether or not they join. This
problem has been described as the "free-rider" problem (Olson, 1965). It is especially serious for large groups, because the larger the group the less likely an individual is to perceive his contribution as having any impact on group success.

3.3 Criteria for effective participation

Having identified the participants involved in the decision-making process, it is necessary to examine their role in a decision. One of the primary concerns in New Zealand is that the government and other authorities tend to invite the public to express their views in a participation programme, but do not allow them to express any views about the form the participation should take, or determination of when the participation should start and end. In addition, the public may not be sure about the objective of the participation, and whether its involvement will be of any consequence. Therefore, the only course left for the public is to participate as best they can. As the public are at a disadvantage in participation programmes, it becomes essential that their "best" is also effective. Although there is some literature on the effectiveness and evaluation of participation programmes (see Sewell & O' Riordan, 1976; Teniere-Buchot, 1976; Sewell & Phillips, 1979; Connor, 1982; Smith, 1984), there has been little research of the effectiveness of the participation.

Effectiveness is a value-laden term. The determination of effectiveness is, therefore, permeated by value positions in the form of attitudes, preconceptions, premises and
assumptions. Effectiveness is not completely quantifiable and its assessment may involve a subjective judgement. As efficiency will be perceived differently by different people, it would be useful if there were some discernable criteria which could be used as guidelines by an independent evaluator of a participation programme. The criteria that are proposed below are of a general nature and, as such, are applicable to most cases.

1. **Achievement of interest group objectives**

This is an internal criterion where the evaluator examines what has been achieved in the light of what the interest group initially intended to achieve. Questions the evaluator may ask to determine this effectiveness are:

- What were the aims and objectives of the interest group?
- Have these been satisfied?
- If not, why not?

An analysis of the participatory methods and approach used may result from these questions. An examination of the appropriateness of the interest group arguments to the central issue, may also be required.

2. **Influence on a decision**

The influence a participant or interest group has on the decision or decision-making process is an external criterion. An analysis of this criterion may involve the following:

- Did the decision-makers appear to be listening to the submissions?
- Was the group given a fair hearing with equal time and opportunity to speak?
Did any questioning arise from the submission?

Is there any evidence of either the argument presented or of the organisation in the decision?

If it is decided that the participation has had little or no effect on the decision-makers, it may again pay to analyse the approach taken by each interest group. For example, the content may have already been presented, it may be unconvincing, or the style of presentation may be distracting.

The ability of the members of the interest groups to co-operate with each other and to present a united front, may also be an indicator of effectiveness. Without this internal co-operation, it is unreasonable to expect the institutional frameworks and mechanisms to seriously acknowledge the submission. Co-operation between similarly motivated interest groups is also important. The formation of coalitions, or public statements of support for other groups may result in more attention from the decision-makers.

It is also important that interest is seen to be maintained by the public and the decision-makers, throughout the "action". A display of temporary enthusiasm may detract from the decision-makers perception of the sincerity of the group. It should be noted, however, that it is extremely difficult to maintain such interest.

Reiterating Arnstein's (1969) comment that citizen participation is citizen power, it can be said that, ultimately, the
principal and fundamental source of power is the ability of the participant group to present the issue that is the subject of the participatory exercise, in such a way as to develop, mobilise and sustain outside support. This support may be in the form of increased membership, increased donations and assistance, or media attention. The more powerful a group, the more likely it is to be effective.
SECTION TWO

APPLICATION OF PUBLIC PARTICIPATION
CHAPTER 4

THE NATURE OF PARTICIPATION: A CASE STUDY

In preceding chapters of this study, general features of the processes of public participation and decision-making were described. The people who participated were also examined and criteria were developed to allow evaluation of the effectiveness of participants in decisions to allocate resources. Further elaboration of the issues raised by the study requires a more detailed examination of the participatory processes in resource management, and especially of the role participants have in this process. This examination is undertaken in the context of a case study of public participation in the Rakaia River National Water Conservation Order Hearing.

Public participation is fundamental in resource allocation cases such as the Rakaia River, since the national and regional importance of the resource makes it crucial to determine the opinions and preferences of the affected or interested community, and to involve them in any decisions.

The case study is a descriptive and evaluative approach—it illustrates the problem, identifies the participants and their interests, and judges the effectiveness of their submissions in the decision-making process.
The Rakaia River was chosen for the case study as the debate concerning this water resource was both topical and well-documented. The conflict between resource conservation and development was apparent throughout, and the decision-making process for the reconciliation of this conflict was able to be traced and evaluated. The opportunity to attend the Hearing and to observe the procedure was another factor considered when selecting a case study. Attending the Hearing provided the chance to evaluate the impact the participants were having on the decision-makers, and to establish contacts within the interest groups for later interviews. The majority of the participants lived within the Christchurch area, which was essential given the time and finance available to complete the study.

It should be noted that the value of studies of resource management decisions lies in the necessity for regular reviews of the actual decision-making process and of decisions made. These studies are worthless if they are never seen by the decision-makers, or if the study is ignored. It is the responsibility of the researcher to make criticisms and constructive comments, and to make these available to decision-makers for their use in a review, if the comments are considered relevant. Unfortunately, there is a problem with this review procedure, as the decision-makers tend to rationalise any decisions they make, irrespective of whether the decision was later shown to be optimal or suboptimal.

4.1 The Rakaia River

The Rakaia is the largest river in Canterbury (Figure 4.1).
Figure 4.1: The Rakaia River and Catchment

Source: Bowden et al., 1983a
It is a braided snow river prone to periodic flooding over a two kilometre wide shingle bed (Leathers et al., 1982). Apart from small abstractions for stockwater, several irrigation schemes (mostly private), and two small hydro-electric plants, the Rakaia remains relatively undeveloped.

In addition, the Rakaia is internationally recognised as a salmon fishing river and as a wildlife habitat (NWASCA, 1984). Hughey (1983) states that: "The Rakaia River is famous for its jetboating, utilised by trout and whitebait fishermen, and a geographical and scenic entity in its own right". Mosley (pers. comm., 1984) disputes the view that the Rakaia River is a "scenic entity". In a 1984 survey, 14 groups of people were asked about their preferences for river scenery. Slices of various New Zealand rivers were shown to the groups. The people being surveyed were asked to grade the slide, on a scale of 0 (low) - 9 (high), for the scenic values of the particular site of the river. Scores were then collated and conclusions drawn from them. The results showed that the wide, open bed of the lower Rakaia was considered "unattractive". Some parts of the river, such as the Rakaia Gorge, were regarded as better than average, while other areas such as the wide upper valley were considered less attractive than average. The headwaters were regarded as scenically attractive, but markedly less so than other mountain scenery.

Recently, the Rakaia River has been the focus of a vigorous debate based on a development-conservation conflict, which
is illustrated in Figure 4.2. This diagram illustrates the competing and complementary demands for water from the Rakaia River. There is direct competition between irrigation, which would draw water from the river during the low flow season, and a variety of conservation and recreation uses which depend on the continuation of river flows throughout the year. There is also competition within the irrigation sector between the Lower Rakaia Irrigation Scheme and the Central Plains irrigation scheme. The Rakaia already provides water for various irrigation schemes covering an area of approximately 35,000 hectares. It has been estimated (Williman et al., 1982) that the Rakaia has the potential to irrigate 150,000 hectares. If, however, soil types and the appropriateness of the land for production are considered, a more realistic figure would be that of 96,600 hectares (Harrington, 1983). Figure 4.3 shows the extent of the existing and proposed schemes. Only the Ashburton-Lyndhurst, Fereday, and South Rakaia Irrigation Schemes are in operation.

The demands for water for irrigation and for electricity are to a large extent complementary, as has already been demonstrated by the Rangitata Division Race which provides water for power generation at the Highbanks Power Station in winter (when national demand for power is greatest) and for irrigation in summer. The conflicts that do exist are not so much between irrigation and electricity generation as between irrigation proposals which require decisions now and power generation proposals that are not scheduled before the 1990s (Leathers et al., 1982).
Figure 4.2: Competing and complementary demands for water from the Rakaia River.
Figure 4.3: Existing and proposed irrigation schemes on the Rakaia River.
There is direct competition between the abstraction of water for irrigation and the preservation of river habitats that are essential for wildlife and recreation (Figure 4.2). In addition it is very difficult to prove that abstraction of water will result in a measured quantity of environmental deterioration or a specific reduction in recreational enjoyment.

Conservationists and river users argue that the scenic and recreational values of the river are of such importance that they warrant protection. The National Water and Soil Conservation Organisation (1982), in their draft for a national inventory of wild and scenic rivers, identified recreational and biological/scientific parameters of the Rakaia as being "nationally important". To be considered of national importance for recreation, any river must have "an existing water regime that plays an essential and dominant role in providing an outstanding recreational experience or range of experiences" (NWASCO, op. cit.). The recreations of jetboating, camping, picnicking, rafting, canoeing, swimming and salmon-angling, were some of the activities highlighted by NWASCO under this classification.

The biological/scientific category applies to "river areas containing exceptional examples of natural phenomena, opportunities for scientific study, or highly valued wildlife" (NWASCO, op. cit.). The bird habitats provided by the shingle beds of the river and the salmon fishery, were identified as being "nationally important" within this category.
The Crown is deemed to be the owner of the nation's water resources, but the difficult task of managing and allocating the Rakaia River's water resources lies with the Regional Water Board (RWB). This Board comprises both elected and appointed members. The RWB functions in conjunction with the North Canterbury Catchment Board (NCCB) and, as they have an identical membership, they are really the same organisation, but with different responsibilities. The NCCB operates under the Soil Conservation and Rivers Control Act 1941, while the RWB operates under the Water and Soil Conservation Act 1967. Together they form a multi-functional, political institution representing the population of North Canterbury in water and soil management. This system of management has been selected by the constitutional decision-makers (Parliament) as the best means of generating the maximum social welfare from the use of the regional water resources.

Government legislation (particularly the 1981 Amendments to the Water and Soil Conservation Act 1967) and public discussion of water resources management have increased the pressure for the NCCB and RWB to examine water resource planning and management, rather than simple allocation. To ensure that allocation decisions are made on the basis of the best possible information, it became necessary for major Rakaia River resource investigations to be carried out. A multi-disciplinary team, consisting of specialists in the fields of hydrology, geology, geography, botany, zoology, land use and agriculture, and sociology, with the aid of consultants in coastal processes and freshwater biology,
was responsible for conducting the investigations. The resulting document, after 2 years and costs of around $600,000, was a four volume resource survey, which became the basis for the Draft Management Plan. Following the publication of the resource survey, submissions were invited on issues arising from the survey and of relevance to the Management Plan. These were examined by the study team, and incorporated if considered appropriate.

A brief summary of events on the Rakaia River is listed in Table 4.1.

4.1.1 Background to the Hearing

National water conservation orders were established under the 1981 Amendment to the Water and Soil Conservation Act 1967. The purpose of such an order is to include the protection of wild, scenic and other natural characteristics of a river, stream or lake, and the protection of the recreational, fishery and other instream uses of water.

On June 10 1983, the Minister of Works and Development received an application for a national water conservation order covering all the waters of the Rakaia Catchment.

The application for the Rakaia River NWCO was made jointly by the Ashburton Acclimatisation Society, the North Canterbury Acclimatisation Society, the Council of South Island Acclimatisation Societies and the National Executive of Acclimatisation Societies. After seeking advice in accordance with section 20A of the Water and Soil Conserva-
Table 4.1 - Rakaia River: Summary of Events

1935  Work commenced on Rangitata Diversion Race for irrigation and hydro-electricity generation

1950s Schemes become operative  
Valetta Scheme developed

1972  Report on the Water Resources of the Rakaia River

1973  Government announces revised policy for encouraging the development of community irrigation schemes

Oct 1974  Management Plan for the Rakaia River released  
Altered then approved  
NWASCA lists next community schemes to be undertaken in Canterbury as the Lower Rakaia and Central Plains Schemes


April 1982  Pamphlet from NCCB encouraging public participation on matters which should be investigated and the scope of the resource survey

June 1982  Submissions to the NCCB pamphlet close

March 1983  NCCB release "The Rakaia River and Catchment: A Resource Survey"

April 1983 "An Interim Report on the Groundwater Resources of the Central Plains" released

June 1983  Minister of Works (Friedlander) receives application for a national water conservation order in respect of the Rakaia River and its Tributaries

Aug 1983  NCCB publishes an issues and options paper for the Rakaia River Catchment and adjacent plains

Nov 1983  Draft management plan published

Dec 1983  NWCO Hearing by NWASCA

April 1984  Draft NWCO released by NWASCA

May 1984  Objections to draft NWCO lodged

Oct 1984  Planning Tribunal Hearings
tion Act 1967, the Minister decided that it be considered by the National Water and Soil Conservation Authority (NWASCA) as an application for a national water conservation order (NWASCA, 1984). The Authority gave public notice of the application, inviting written submissions and objections. The Miniser of Works, 59 local authorities or organisations and 186 individuals responded. In order to "obtain further information and to facilitate the exchange of views" (NWASCA, 1984), it was decided to conduct a public hearing. This followed the precedent set by the Motu and Ahuriri Rivers NWCO applications. The Rakaia Hearing was held in Christchurch from December 6-14, 1983, with 88 witnesses giving evidence before the NWASCA Committee.

The Hearing was supposed to be an informal, although structured presentation of all relevant information. Each group was allowed one representative to speak on their behalf. Most of the interest groups lacked experience at hearings and chose to be represented by legal counsel. Questioning of witnesses on points of clarification was permitted, but cross-examination was not. Any questions had to be directed through the chairman of the committee by the representative. This mode of questioning created some problems, particularly with the technical evidence. Although the representative had no difficulty asking a question prepared by an "expert" from within the group, he invariably did not have the knowledge to follow on, and consequently, many opportunities for relevant questioning were lost.
Collection of scientific information concerning the Rakaia River was primarily conducted by the government departments, that is, Ministry of Agriculture and Fisheries (MAF), Ministry of Works and Development (MWD) and the New Zealand Electricity Department (NZED). In addition, the NCCB's resource survey provided a detailed examination of the catchment and adjacent plains. In all cases, the source of funding for the research was the public coffers, derived from departmental allocations from the government.

Interpretation of scientific evidence in a sociopolitical context such as this, is value-laden and, therefore, requires a subjective evaluation. It is generally preferred by decision-makers, however, as there are usually objective facts on which the evidence is based.

Non-governmental interest groups either had to take advantage of the scientific research by placing a subpoena on the individual researchers, or, alternatively, had to fund their own research. Some groups did not present any scientific evidence at all, relying instead on members' opinions, or statements from people with long-standing experience. Opinion is distinguished from a scientific approach since it is an expression of one's thoughts and feelings, rather than the testing of hypotheses. Subjectivity is, therefore, an inherent feature of opinion.

The interpretation of any submission which contains opinion presents problems for the decision-makers. Although subjectivity does not necessarily invalidate a submission it does tend to isolate the activities of the participants,
and cut them off from the decision-makers.

There are two means by which the validity of information presented as opinion can be assessed by the decision-makers. First, the basis of the evidence must be examined. The opinion may be based on long experience or strong feelings. Second, opinion can be validated, and to some extent made objective, by corroboration; that is, where the same or similar opinion is expressed by a number of participants.

4.2 Participation in water and soil legislation

An essential pre-requisite for participation is the existence of the opportunity for the public to participate within the statutes. It is important, therefore, to examine current statutes for their public participation content. Water and soil legislation in New Zealand currently comprises two principal acts, the Soil Conservation and Rivers Control Act 1941 and the Water and Soil Conservation Act 1967. Both Acts have been extensively amended and many of these amendments contain important provisions which have not been incorporated into the original Acts. The opportunities for public involvement in the water-related aspects of these procedures will now be briefly outlined.

Soil Conservation and Rivers Control Act 1941. This Act promotes soil conservation and is to provide control measures for erosion and floods, and for the adoption of "appropriate land use practices" (Conway, 1979). The
main opportunity for public participation is by means of objections to proposed flood control works. Only occupiers or owners of the land involved may object, and the objection must be in the form of a written submission (MWD, 1981).

Water and Soil Conservation Act 1967. The objectives of this Act are best summarised by reference to the long title of the Act, *viz.* "An Act to promote a national policy in respect of natural water and to make better provision for the conservation, allocation, use and quality of natural water, ... and for promoting and controlling multiple uses of natural water...". Under this Act, there are three broad areas which involve direct inputs from the public.

1. General Water Right Administration.
Any person may object to the granting of a water right by a body other than the Crown and may accordingly have standing to appeal against a grant (Sections 24(4), 25). However, although any person may object to the local Water Board against the granting of a water right to the Crown, the right of appeal to the Planning Tribunal is limited to "any Board, public authority, or any person which or who claims to be detrimentally affected by the decision" (Section 23(5)). All applications for water rights are notified in the Public Notices column of local newspapers.

2. Water Classification and Quantity.
Objections to the classification of a body of water may be lodged with NWASCA. (Prior to April 1, 1984, the
responsibility for hearing objections was with the Water Resources Council.) Under Section 14.3(o), the setting of maximum and minimum lake levels and river flows is determined by NWASCA "after consultation with representatives known to the Authority..." There is no provision for formal objections or appeals.

It is a principal function under this Act to "...examine problems concerning, and make plans in respect of -
(i) The allocation and quality of natural water."

(Section 14(3)(a)).
There is, however, no statutory basis for the writing of water allocation plans. Those Catchment Boards that do write these plans usually begin with a preliminary or draft plan which is published and then publicly notified with comments and objections invited.

In the context of the Rakaia case study, the 1981 Amendment to this Act is especially important as it deals specifically with water conservation orders and notices. Although this procedure allows for participation from "any body or person affected by the application" for a NWCO and "any body or person representing some relevant aspect of the public interest" (Sections 20B(2)(d) and (3)), Taylor (1983) finds that "the route to national water conservation orders is proving long, tedious, expensive and very frustrating."
He continues, "the hearings so far held before the NWSASCA are, in my opinion, a sham. The organisation's approach to conducting hearings is disgraceful...."
This comment does suggest that although the opportunity for public involvement is present in this procedure, there is some dissatisfaction amongst the public, regarding the particular methods used. The full procedure established by the Act is shown in Figure 4.4.

4.3 The participants

This section focusses on the participants from the Rakaia River NWCO Hearing and the ways in which they viewed themselves - their motivations, role in the Hearing, interactions with other participants and their overall perceptions about this process for making decisions about the allocation of resources. It must be realised, however, that this Hearing is only one formal action in a long, ongoing social-political process. The case study would perhaps be clarified further by explaining the process as a whole, but time constraints prohibited this. Aspects which would be of particular interest include the interactions both within and between groups, the "power plays" by the various governmental and private interest groups and the attitudes of the decision-makers to the different groups. It would also have been interesting to follow the decision-making process and the inclusion of the public within this process, through to the final decision.

The individuals and groups participating in the Rakaia River debate had varying degrees of interest. They all, however, had a common objective - to ensure that the allocation of the Rakaia water be in the "public interest".
Source: Anon, 1982.

Figure 4.4: The full procedure for national and local conservation orders as established by the 1981 Amendment to the Water and Soil Conservation Act 1967.
It is this perception of the public interest by the various participants which leads to the water allocation conflict.

Although submissions on the NWCO application for the Rakaia River numbered 240 (187 of these coming from individuals, often under the direction of a major public interest group), only those who gave evidence at the Hearing will be discussed here. These people, through their participation at the Hearing, displayed a desire to inform and perhaps influence the decision-makers. The participants have been classified according to the framework developed by Kasperson (1969) and extended by Neeson (1983). Like any classification, subjectivity is apparent in this framework: some overlap exists between the various categories, particularly between the two sectoral groups. The basis for differentiation between these categories was the objectives of each interest group. Those groups with personal interests in the Rakaia River issue were placed in the private interest group category, whereas groups with moral or intellectual concerns were placed in the civic category. For example, recreational users are more motivated towards self-satisfaction than the more civic orientation of, say, the Nature Conservation Council.

4.3.1 Classification and description

The framework outlined in Chapter 3 and extended by Neeson (1983) is applied to the participants of the Rakaia River NWCO Hearing. This framework of participants is shown in Table 4.2. Each grouping will now be discussed in greater detail.
Table 4.2: Participants - Rakaia River NWCO Hearing

* Indicates interest groups interviewed.
1. Individuals

There were nine individuals who gave evidence at the Hearing. Their views covered the whole range presented at the Hearing - from total preservation of the river through to unlimited supply of water for irrigation. With the exception of two of these people, all were safeguarding their own interests in the guise of the "public interest". Of the other two, one argued for the river "as part of the natural inheritance New Zealanders and our children absorbed as they grew" (The Press, 9.12.83), while the other made a mockery of the Hearing and attempted to show that the whole process was farcical.

The evidence tended to be based on opinion rather than scientific results and often played on the social conscience of the NWASCA committee. Issues of social well-being were emphasized. Examples of such statements as:

"Why should this river - the last of its kind - be exploited for the profit of a few?"

"Why should this generation assume that its perceived desires must be satisfied by whittling down the inheritance of those who follow us, whose values and needs may be different?"

"Intensification of farming with the help of irrigation could provide jobs to the Canterbury region".

(Quoted in The Press, 10.12.83)
2. **Governmental**

(a) **National Organisations**

The national organisations again showed a diverse range of objectives, from the resource development orientation of the Ministry of Works and Development and the New Zealand Electricity Department, to the biological concerns of the Wildlife Service. Between these concerns, lies the Commission for the Environment; an organisation which usually presents a relatively neutral submission. The Commission speaks for the unrepresented majority, and makes recommendations for changes or consideration to the promoting organisation. There is no statutory obligation on the department promoting a project, however, to implement the Commission's findings.

It is rare that one government department will oppose a project promoted by another. However, the multifunctional organisation of the Ministry of Agriculture and Fisheries had its component agencies in conflict. For example, Fisheries Research Division was presenting the substantive evidence on the amount of water required for fish survival, while the Advisory Services Division, Animal Research Division and the Agricultural Economics Division developed an irrigation simulation model for the Rakaia area, and postulated the effects lack of the water would have on agriculture.

(b) **Regional Organisations**

Three of the regional bodies who participated were relatively neutral in their stances. The United Councils
both spoke briefly and outlined the benefits, from both preservation and development, to their regions from the River. The North Canterbury Catchment Board participated as a regulatory body, as it has the responsibility for implementing the water allocation decided upon. In addition, the NCCB tabled three reports - the resource survey (Bowden et al., 1983a), the groundwater report (Bowden et al., 1983b) and the draft management plan (Cathcart et al., 1983), which were the result of investigations covering all aspects within the Catchment. The fourth body - the Canterbury Chamber of Commerce - viewed the further development of farming, including horticulture, as essential to the region's growth and as an important provider of employment.

(c) Local Organisations
The Malvern County Council viewed their primary objective as the management of the county for the prosperity and well-being of the predominantly rural community and, therefore, strongly supported irrigation of the plains land. Economic stimulation, increased population and improved services were recognised as indirect economic and social benefits to the country from any irrigation developments. The Ashburton Borough Council emphasised in general terms the importance of the rural hinterland to the social and economic base of the Borough, but had no specific objectives relating to the management of the Rakaia River.
3. **Sectoral**

(a) Private Organisations

This group encompasses those activist organisations which consider themselves to be potentially advantaged or disadvantaged by selected uses of the water. Federated Farmers, the Irrigation Societies and the New Zealand Institute of Agricultural Science presented their submissions together. They supported local and regional economic development through increased agricultural production. The New Zealand Jet Boat Association (NZJBA) and the New Zealand Salmon Anglers Association (NZSAA) presented separate submissions, but both had the common interest of recreation. Their arguments were based on the "quality of life" concept. The New Zealand Salmon Company had similar motivations, although they also had the vitality of their business to defend.

(b) Civic Organisations

This was the largest and most diverse category, incorporating groups with interests at the national, regional and local levels. Four of these groups were government formulated bodies, while the Acclimatisation Societies, the Royal Forest and Bird Protection Society (RF&BPS) and the Environmental Defense Society (EDS) have "professional" actors. The EDS, RF&BPS and the Rakaia River Association (RRA) presented their evidence under one counsel, as did the Councils of NWASCA. The Acclimatisation Societies, being the applicants, had by far the greatest volume of evidence, having subpoenaed experts in the fields of wildlife, fisheries, town planning and district schemes, as well as fishermen.
4.3.2 Effectiveness of participants

Based on the criteria suggested in Chapter 3, that is, the achievement of interest group objective and the influence of the interest group on the decision, it is possible to examine the effectiveness of some participants at the Rakaia River NWCO Hearing. Only selected sectoral organisations were chosen for an examination of their effectiveness, as they are the groups which incorporate the private interests of "the public". The groups to be discussed here are indicated in Table 4.2. Representatives of these groups provided most of the information during interviews as outlined in Chapter 1, although additional information from both observations at the Hearing and documentary data was also used in the analysis.

1. Federated Farmers, Irrigation Societies and the New Zealand Institute of Agricultural Science

The Federated Farmers of New Zealand Incorporated was initially formed in 1899. Since then, provincial branches have formed throughout the country. There are 22 sub-branches within the Canterbury province, with a membership of approximately 1500 farmers. The Branches of Ellesmere, High Country, Lauriston, Mid Canterbury and Pendarves were involved in the Hearing.

There were 12 Canterbury Irrigation Societies represented, in addition to the New Zealand Irrigation Society. These groups were formed as a result of the farmer's perception of the need for irrigation for increased farm productivity. The aims of these groups in relation to the Hearing were
to ensure that water is available to every farmer, and to enlist farmer support for irrigation. They hoped to be allocated enough water to irrigate 100,000 hectares. Although they only received enough water in the decision to fully irrigate 70% of this land, they are hopeful that co-operation with the NZED (viz., regulation of outflows from Lake Coleridge), will release the rest of the water. The farmers of the area seem well informed about the potential gains through irrigation so these organisations have been successful in accomplishing their aims.

The importance of a well-informed and co-operative membership of the Federated Farmers, Irrigation Societies, and the New Zealand Institute of Agricultural Science, will become important as the Rakaia conflict progresses through the Planning Tribunal and possibly onto a High Court Appeal. Such support should ensure continued enthusiasm for the duration of the hearings.

The influence of these three groups on the decision was considerable. Large sections of the transcript from the evidence of one well-known and influential Canterbury farmer were quoted in the Draft Conservation Order. There was also a clear acknowledgement, by the NWASCA Committee, of the importance of irrigation on the Canterbury Plains.

It is possible that these groups were over-represented at the Hearing. By presenting 17 witnesses, with a further 15 witnesses submitting evidence to be considered by the Committee, these groups appeared to be playing the "numbers
game". With the limited time allocation per witness, obviously the more witnesses, the greater the time available to present your case. This illustrates the importance of understanding the rules of the Hearing. The counsel for these organisations was able to take full advantage of the opportunities to express their views.

The evidence submitted to the NWASCA Committee was primarily based on the opinion of members, with farmers relating how the lack of water would affect them. Scientists from the Institute of Agricultural Science provided some scientific credibility to these arguments. One witness for these groups gave evidence on the detrimental effects water abstraction could have on the botanical features of the river bed (Connor, 1983). This appears to have been an attempt to present an unbiased and broad-minded submission to the decision-makers.

The coalition of the three organisations guided by one counsel gave the impression of a unified opposition and the consolidation of funds ensured that the finance was available for a thorough presentation.

Overall, these groups were effective. Not only were they heard, but their concerns were considered and incorporated into the decision. During the interviews, they expressed satisfaction with the decision and saw no need to appeal to the Planning Tribunal, although they did express the desire to be reheard should an appeal be lodged.
2. The New Zealand Jet Boat Association

The NZJBA was formed in 1963 with the primary objective of ensuring the maintenance of at least one navigatable South Island river. There are now over 2,000 members nationally, with the National Executive based in Christchurch. A minimum flow of 125 cumecs was asked for as this would provide a 0.3 metre clearance within the river bed at all times. This objective was not satisfied, with the Draft Conservation Order setting minimum flows of 80 cumecs from June to August, and 90 cumecs from September to May.

The NZJBA was ambivalent about their effectiveness as participants. Although sections of their submission had been directly copied into the decision, they felt they had received an unfair hearing. As the final participants, they were given only ten minutes to present their evidence, none of which had been heard before, and questioning on the issues it raised was minimal. The decision-makers appeared totally uninterested in the submission. After attending eight full days of evidence, the Committee appeared to want to close the Hearing as soon as possible. Even an experienced organisation could not have avoided this occurrence, the timing was simply unfortunate, and the Committee had no desire to extend the Hearing.

The NZJBA is giving financial support to the Rakaia River Association for their appeal, but feel disillusioned with the process, and will not be directly involved. They also expressed concern about validifying the minimum flows required by jet boats for passage upstream.
3. The New Zealand Salmon Angler's Association

The NZSAA is a nationwide organisation, formed in 1972, with the aim of conserving and enhancing salmon fisheries. The group presently has a membership of approximately 1,000, the majority of whom live in Canterbury. The objective for participating in the Rakaia Hearing was to preserve the River in its existing state to maintain "the outstanding value of the fishery" (Hughey, pers. comm., 1984). With the acknowledgement by the NWASCA Committee of irrigation as an important use for some of the water, the NZSAA did not achieve this aim.

The NASAA were viewed as "radicals and extremists" by other organisations and by the decision-makers. Their demand for a minimum flow of 200 cumecs was by far the greatest of all organisations who specified a set level. The President of this group personally felt that the minimum flow was excessive, but, as the representative for the NZSAA, was prepared to arrange and present this submission (Hughey, pers. comm., 1984). One reason for presenting this extremist view was that it made the Applicant's claims for minimum flows seem more reasonable. This flow regime also corresponded with the NZSAA President's view of the instream water requirements for the river.

Although the NZSAA felt they received a fair hearing from the Committee in terms of time and questioning, they appeared to have been unfairly and unnecessarily singled out and criticised in the decision. A typical comment from the Committee is as follows:
It is impossible from the work of Dr Mosley, to see how Mr Hughey could have derived his recommended 200 m³/s minimum flow to guard against water temperature problems. (NWASCA, 1984).

It is recognised that Mr. Hughey obtained his figures from secondary sources rather than primary research. It does seem, however, that there is a need to conform to the decision-maker's approach, and suggests that the decision-makers were more influenced by evidence presented by "scientists" rather than "laypeople".

An appeal was lodged by the New Zealand Salmon Angler's Association and it was hoped that there would be more co-operation with the Acclimatisation Societies. Any form of co-operation with the Rakaia River Association, a group with similar motivations and objectives, was eliminated due to inter-organisational conflict, particularly between the Presidents of these organisations.

This group does not appear to have been effective at the Hearing according to the criteria. They have not satisfied their objectives, and have had little positive effect on the decision. They were responsible, however, for making the public aware of the conflict before the NWCO application. They printed posters and bumper stickers requesting people to "Save the Rakaia", which are still displayed on cars in Christchurch. This suggests that the outside support for the organisation, and for the views it promoted, was widespread. In terms of Arnstein's (1969) comments about citizen power, it must be assumed that the NZSAA increased their power significantly, and may be a stronger force to contend with in the future hearings.
4. The New Zealand Salmon Company

The New Zealand Salmon Company was formed in 1980 as a private firm with the aim of production of salmon in the Rakaia River for both financial and conservation purposes. For the purpose of the Hearing, the Executive Director attempted to place a dollar value on the Rakaia's instream uses, and to emphasise that the "value of the River's water is not only on the paddocks" (Crowe, pers. comm., 1984). A minimum flow of 123 cumecs was requested at the Hearing, but the Company was reasonably happy with the flows set by the NWASCA Committee as they feel these are adequate for the fish to return upstream.

An additional aspect of this organisation's participation is that five jobs and a potential of $5 million in some overseas earnings would be lost if the low flows were to exclude the fish (Crowe, pers. comm., 1984).

The Company presented only one witness, and although the Committee appeared to be paying attention, no questions were asked of the witness. There is no specific mention of the Company in the Draft Conservation Order, as many of the issues that arose from this submission were incorporated in a general section on the Rakaia fishery.

This organisation is different from the other conservation organisations as, like the Federated Farmers, a business is involved. If too much water is abstracted, and the salmon could not return to the hatchery, the Company would
cease to exist. While the participatory approach seemed ineffective, the overall goals of the Company were achieved.

5. The Rakaia River Association
The RRA began in 1979 with 20 members and the sole purpose of preserving the existing flow levels and patterns of the Rakaia River. Since this time, membership has increased to over 300 people. None of the members had previous experience in hearings, although the President of this group had observed in the NWCO Hearing of the Ahuriri River, and had been involved in more radical participation as a university student.

The NWASCA compromise did not suit the RRA. They had hoped to "save the river" (Wyn-Williams, pers. comm., 1984) by maintaining the existing flow patterns.

There was no mention of this group, nor of the evidence they presented in the Draft Conservation Order. This omission could be the result of presenting evidence based mainly on opinion reasoning. The significance of an emotional argument lies in the reception it receives from members of the decision-making body. The decision-makers appeared to prefer scientific evidence as they could treat it objectively.

The RRA did receive considerable media attention, primarily through the actions of its President. This attention resulted in the support from Sir Peter Scott, Director of the World Wildlife Fund. Influential experts and experienced
campaigners such as this, must have an effect on the quality of the submission in the future.

This group also printed bumper stickers, again encouraging the public to "Save the Rakaia", and distributed them throughout Christchurch. This action shows a recognition of the importance of involving the public and of the links between the Committee and the public. It served to include the public and influence them as people as well as the Committee. Having public support will become more important as the Rakaia River debate continues. The more support a group has in terms of both finance and manpower, the more likely they are to maintain enthusiasm and commitment over the duration of the decision-making process.

There was internal conflict within this group, and obvious external conflict with the New Zealand Salmon Angler's Association. A coalition was formed with the Environmental Defense Society and the Royal Forest and Bird Protection Society. This proved to be a good combination, with the EDS dealing with legal matters, the RF&BPS with the wildlife issues, and the Rakaia River Association with the River and its recreational and scenic attributes.

6. Save the Rivers Campaign

The Save the Rivers Campaign is another national organisation which was formed prior to the 1981 election in an attempt to force decision-making authorities to consider the recreational and conservation aspects of water resources. More recently, they have moved into the preservation argument
and are attempting to save remaining rivers. Their role in the Rakaia River Hearing was one of support to other conservation-orientated groups rather than the presentation of information. They were not mentioned in the Draft Conservation Order and were, therefore, not effective in influencing the decision-makers or the decision.

Conclusions on effectiveness of the participants

In terms of the criteria for judging effectiveness, the Federated Farmers and associated organisations were the most effective at the Rakaia River NWCO Hearing. They concentrated on only one issue - the need for irrigation for increased agricultural production. They were directed in their submission by counsel who had previous experience in hearings of this nature. Technically qualified people strengthened their argument.

In contrast, the conservation oriented groups were less effective, both in satisfying their own objectives and in making an impression on the decision-makers. These groups often took a less conventional approach, presenting evidence which was outside the decision-maker's experience. They had little experience in the hearing situation and tried to tackle broad issues.

4.3.3 General comments regarding the Hearing

This section incorporates the more general factors regarding the public participation process of the NWCO Hearing. Some of these were expressed by participants during inter-
views, while the others became apparent during the examination of the process. These factors can be divided into three main categories.

1. Biases
Many of the conservation orientated participants perceived that the Hearing was biased towards the development side of the debate. They considered that the amount of time given to the Crown (primarily MWD, MAF and the NZED) to present their case, far exceeded the time given to the other participants. It should be noted, however, that the Crown was providing much of the scientific evidence and a longer period was therefore required to explain the technical nature of the evidence. The Crown financed all of the research which was presented by their case, while other scientific evidence (for example, the NZJBA survey and the NZSAA survey) was financed purely by the participants.

The NCCB and RWB staff members were involved in discussions with a NWASCA Committee adviser, particularly concerning the future of the Lake Heron area of the Rakaia Catchment. The discussions were, however, only at the staff level and the Board was not involved in the decision-making.

There was a further claim by participants that the process was "elitist" as only certain groups and individuals could afford the time and money to participate. This is not a problem specific to this Hearing, however, as it is a common complaint of most people who become involved in participatory procedures of this nature.
The NWASCA Committee was also the subject of some criticism. Although no-one doubted the integrity and experience of the six members, many found it hard to believe that an impartial judgement could come from a committee consisting predominantly of retired farmers and ex-National Government politicians. The Committee members were mostly over 60 years of age and this was the cause of further concern by participants. One participant commented that the age of the members would at least safeguard them from having to live for long with the consequences of their decision.

The legislative process of a NWCO application, outlined earlier in this chapter, creates a serious conflict of interest in the Rakaia debate. Briefly, the conflict is:

The application for a conservation order is made to the Minister of Works. He then refers the application to NWASCA, of which the Minister is the chairman. The Authority recommends to the Minister whether the application should be treated as an application for a national or local conservation order. The Minister considers the recommendation of the Authority (of which he is chairman), and, in the Rakaia Case, referred it back to the Authority for hearing. The MWD, as well as co-ordinating the Crown case, logically favoured the issue of water rights for the irrigation schemes (which they will be taking over), but which fundamentally conflicts with the conservation order applied for. After the Hearing, a draft order was formalised and submitted as a recommendation to the Minister of Works. The value of this expensive exercise must be questioned when it is realised that the MWD was the main
proponent of the proposed Rakaia irrigation schemes, and that the Minister of that same department makes a decision on the conservation order application.

2. Participation strategies and the decision-making process

Several participants admitted manipulating data and presenting it in a more favourable manner. One paper (Mosley, 1982) which was used as evidence in different ways by five other groups, was later found to contain incorrect segments and unwritten methodology and assumptions (Anderson et al., 1984). Mosley was quoted many times in the Draft Conservation Order, showing that considerable attention was paid to his work and therefore, that his paper was a major source of information for the Committee. It is obvious that the procedure followed at the Hearing does not allow for the justification of evidence and, therefore, permits unreliable data to be presented. A further point of interest is that Mosley undertook the research while working for the MWD and was presenting his submission for the Crown.

These comments relate to other comments made earlier regarding the Committee's preference for scientific, "objective" evidence over opinion, the influence that evidence presented by "scientists" has over evidence presented by "laypeople" and the suggested developmental bias of the NWASCA Committee.

The number of the conservation-orientated participants, although seemingly unimportant in this decision, will have
a definite effect in the long term. The more conservationists that are involved, the longer the involvement with the Rakaia, and, therefore, irrigation developments will be delayed. Following the NWASCA Hearing, appeals were lodged with the Planning Tribunal and these were heard in October 1984. If the Planning Tribunal allows any volume of water to be extracted for irrigation, it is probable that some participants will take this matter to the High Court and appeal on a point of law.

If the High Court allows abstraction of water, any water right application may be forwarded and will be subject to objections to be heard in yet another hearing. Appeals on water rights are heard by the Planning Tribunal and subsequently by the High Court. Thus, the development of the proposed irrigation schemes could be delayed for many years, during which time changes in government priorities could occur. Already, with the advent of the Labour Government in New Zealand, the 1973 policy encouraging the development of large government-subsidised irrigation schemes, and of smaller community schemes, has been succeeded, placing the burden of costs on the farmers (The Press, 18.10.84). Forseeing these progressions, many participants were discouraged by the futility of the NWASCA Hearing.

3. Media

It is clear that the media have an important role both in disseminating information upon which opinion and attitudes may be formed, and in constructively contributing to the
fashioning of those attitudes and opinions. Coverage of the NWASCA Hearing and of the ensuing decision, was thorough. Daily newspaper columns in both the Press and the Christchurch Star reported the happenings of the Hearing regularly, while one national periodical featured the Hearing (Young, 1984). The local television news programme mentioned the Hearing while it was in progress, and discussed the affects of the Draft Conservation Order with various parties once it was announced. Radio coverage followed a similar course.

There was, however, no real chance to use the newspaper as a mediator between the conservation and development sides in an attempt to "air" the views. Both local newspapers refused to publish letters from the public on this issue while the Hearing was in progress. The Rakaia did receive some attention at a later date, when it became a local election issue (The Press, 27.6.84 - 14.7.84).

From the above description of the Rakaia River study in resource allocation, a number of points arise for discussion. The decision-making process, the incorporation of effective public participation and the participants will now be re-examined in the light of lessons learned from this study. This will, in turn, point to any changes which might be required to improve public participation in decision-making.
SECTION THREE

INTEGRATION OF THE THEORY AND PRACTICE

OF PUBLIC PARTICIPATION
CHAPTER 5

TOWARDS A STRATEGY OF PUBLIC PARTICIPATION

The discussion of public participation in resource allocation and the development of criteria to evaluate the effectiveness of participants as described in Section One, provide the conceptual foundations of this study. These concepts were applied to the Rakaia River National Water Conservation Order Hearing in Section Two. It is now necessary to integrate both the concepts and the application in an attempt to formulate a strategy for more effective public participation in resource allocation.

5.1 Decision-making

Two quite different models of decision-making were explained and illustrated in Chapter Two. The upward-forming consensus model shows the flow of guidance moving upward, from the public through the elected representatives to the administrators. This model represents the ideal situation, and was the procedure sought by the decision-makers in the Rakaia River NWCO Hearing. The public had their chance to express their opinions which were given to their representatives to present to the decision-makers.

In the complicated existing system of resource allocation and management, however, the decision-makers become some-
what removed from public opinion and are protected either by layers of bureaucratic insulation and "red tape", or by the ethics of their professions. A sense of technical, scientific superiority also exists, where public interest groups are considered ignorant, emotional or representing minority interests. Thus, it would appear that a more realistic model of flows of decisions in resource management would be the reverse of those described. Directives appear more often to flow downwards to the public who are usually faced with a resource use decision after it is made, and not infrequently after it is implemented, as in the case of the Clutha River Hydro Development in Central Otago. In this example, the preliminary works on the dam site were initiated before water rights were obtained. If people are threatened by a restricted choice such as this, they will respond through protest and action.

In reality, the Rakaia River NWCO Hearing followed a process more along the lines of Kasperson (1969) and O'Riordan's (1971) stress model. Environmental stress was perceived by fishermen and recreationists. These people either approached already formed interest groups, or initiated new groups, and presented the Minister of Works with a NWCO application. Following the NWCO Hearing by a NWASCA Committee, the first decision was announced. Many of the interest groups appealed this decision and another hearing, with the Planning Tribunal as decision-makers, began. Figure 5.1 illustrates the flow of decisions of this model for the Rakaia River.
FIGURE 5.1 FLOW OF DECISIONS FOR WATER ALLOCATION IN THE RAKAIA RIVER

Water resources of the Rakaia River

Environmental stress

Fishermen and recreationists perceive the need to prevent large scale abstraction of water for irrigation

Acclimatisation Societies, NZSAA, RRA, NZJBA etc.

Politician

Consultant agencies e.g. MAF, MWD

Participatory negotiation

NWCO Hearing

NWASCA Decision

More participatory negotiation

Planning Tribunal Decision

NWCO granted

Water right applications

NWCO refused

Appeals

RWB Decision

High Court Decision

stress resolution

FINAL DECISION
Although the stress model does seem an appropriate model of decision-making in resource allocation conflicts such as the Rakaia, it has problems in that it can cause the desires of society to increase continuously. A rising level of social aspirations will result in the perception of more environmental stress and further action. If, for example, the final decision in the Rakaia River issue was to place a NWCO on the catchment, then the environmental stress initially perceived (the loss of recreational and amenity values) by some members of the public would be alleviated. After a short time, these people may also become dissatisfied with the condition of the Waimakariri River (a more "developed" river), and may seek to preserve this. The process would, therefore, begin again. Each time the stress is resolved, the expectations and aspirations of the public become higher. Resources which are seen to be in need of immediate preservation will be "locked away" first, followed by less important resources. A conflict between environmental sustainability and economic sustainability will eventually occur. The reason for this conflict is that all environmental resources, which are usually exploited to maintain economic growth, will be protected.

It can be concluded that neither the upward-forming consensus model, nor the stress model adequately explain decision-making in resource allocation and management. The former model appears to be working in reverse, while the latter will eventually result in further conflict. The consequences are inevitable - any decision announced
is soon followed by public protest and, eventually, some sort of compromise is reached. Not only is the whole process costly, both in dollar terms and in time wasted, but the distribution of these costs and benefits is unequal.

Thus, certainly in the long term, it would seem desirable to switch over to a process based on the upward-forming consensus model. Decision-makers can no longer afford to leave the public out when considering resource allocation issues: it is in their best interest to generate positive public support before policy is formulated and decisions made. To obtain this support, they must open up continuous channels of communication between themselves and the public. For communication to be effective, decision-makers must be prepared to provide the public with more relevant information than is presently available. Costs are also relevant since, ultimately, the public have to pay and, understandably, desire to know the relative sacrifices involved (both in dollar terms and in resource availability) for all alternatives.

5.2 The participants

The Rakaia River study points to a commonly recurring theme, namely that the public want to be involved in decision-making processes and are resentful of the "closed door" philosophy of much decision-making for resource allocation in New Zealand. The expectations of the public interest groups, that involvement will automatically result in the final decision, have,
however, not eventuated. Part of this problem stems from a lack of understanding of the management and allocation processes by the public. Although people know their own needs and problems related to water use, they invariably do not understand how the various uses and management practices might affect one another.

This lack of understanding indicates that there is a need for a clear natural resources policy in New Zealand. In essence, such a policy must:

1. reconcile national, regional and local needs, aspirations and existing policies;
2. integrate technical information about the resources and their possible uses with social, economic and other environmental information; and
3. anticipate the implications of alternative strategies, and incorporate such information in subsequent policy amendments.

It is desirable that those developing the policy believe people are capable of contributing constructively to their own futures and that the decision-makers and implementors initiate a public participation programme to ensure that this does happen.

The participants at the NWCO Hearing were typical of people who were described in Chapter 3 and who participate in natural resource decisions. They were predominantly European, middle class men, or, where membership of interest groups extended to others, leadership was provided by those in the middle class.
Although it was acknowledged in this study that it is neither useful nor possible to consult every individual on every issue that may interest them, the question of representation of the public interest must arise. A wide range of views was covered at the Hearing, but the participants were not representative in the formal sense of the word. They were not elected, and were representing only a specific interest. One solution to the problem of representation would be to recognise that interest groups do not represent the public interest, but it is in the public interest that they should participate. This recognition implies that involvement of interest groups per se is not the problem. Rather, the issue is to ensure that a balance is struck between differing viewpoints. Bias and misrepresentation can be avoided through the involvement of a range of interest groups. Thus, the "public interest" can be gauged by mediating between various interests, and the key to the issue of representativeness becomes the involvement of a complete range of interests on a topic, rather than the nature of the public involved.

There is a need for the formation of a body which would be responsible for ensuring that this complete range of interests are addressed. It is envisaged that this body would have guaranteed funding and a degree of detachment from Ministerial oversight. This detachment would enable the body to remain relatively neutral in orientation and to maintain a guardianship role over the "public interest".
5.3 The hearing as a participatory technique

Public hearings are one of the more common methods of allowing the public to express their opinions used in New Zealand. From the perspective of the participants, the purpose of a hearing, such as the Rakaia River NWCO Hearing, is two-fold: it is one means whereby the public is informed of both the nature of a proposed action and its potential impacts, and it provides an opportunity for the public to express their views and concerns about both the development and its anticipated effects, to the proponent and the decision-makers. Continued reliance on this approach is likely to occur, particularly for issues of national or regional importance, because of its structured and, therefore, controllable nature. There are, however, major limitations inherent in the structure of this process. Hearings have traditionally been examples of representative democracy in that a few have the opportunity to speak for the many, under controlled circumstances (Swanson, 1972). This narrow focus was certainly the case at the NWCO Hearing. Such hearings are likely to be structured, one-way forums of communication in which the public may be adequately represented, and inequitably considered. These limitations are of particular concern when the hearing is the only channel through which the public may exercise concern, dissent or support (Wood, 1977).

Hearings conducted in such a manner are explained by the "downward"-forming consensus model of decision-making, where the initiators of resource management do not appear to be the public, but the administrators. In addition,
hearings usually require elaborate procedures, such as the preparation of briefs. They are expensive in terms of time and money, particularly when legal counsel are involved.

Berger (1979) was responsible for establishing the Canadian precedent of allowing the hearing process to become an improved forum for two-way communication during his enquiry of the MacKenzie Valley Pipeline. By taking his enquiry to the communities which would be affected by the construction, and by providing funds for groups who wished to participate, the hearing process was made more democratic.

Other ways of improving the process for resource allocation hearings are listed below.

The administrators must:
1. define important issues before the hearing;
2. begin the hearing at the earliest possible time after the conflict is identified in the hope of an early resolution;
3. inclusion of women, Maoris and other minority or underrepresented groups in decision-making committees should be considered;
4. ensure that participants have a clear understanding of the procedure and full access to all relevant information;
5. initiate evening or weekend sessions to enable greater equality of access;
6. initiate informal hearings or hearings in different settings (for example, a Marae hearing), for those
individuals or organisations who wish to speak but are intimidated by the process or the amount of time required to participate;

7. ensure that formal statements and written comments made at the hearing are summarised in a language able to be understood by non-scientists, non-engineers and non-lawyers. This is important for safeguarding equality; and

8. make provision for the independent assessment of such factors as the impact of technology on the physical and social environment, and for the impartiality of decision-makers presiding over hearings.

5.4 The role of the judiciary

As mentioned earlier, most of the public interest groups were represented by legal counsel at the NWCO Hearing. Roberts (1976) found that the techniques of advocacy and "the arts of legal combat appropriate to the Court" to be out of place at a hearing where the purpose is to determine how certain practical matters shall be arranged so as to bring the greatest good to the greatest number. Barristers can give informed, articulate and lucid presentations of the facts, but they are, perhaps, more appropriate in a courtroom dealing with matters of law. Town (1979) relates the American experience with lawyers in environmental legislation. He says that "if you have enough lawyers and money to splash around, you can postpone most planning decisions indefinitely". This unenviable situation must be avoided in New Zealand. Judge Turner, a chairman of the Planning Tribunal furthers this argument. He states:
The traditional adversary techniques of the judicial process are not apt when applied to resolving disputes over resource utilisation. A judicial tribunal operates best when the area of dispute or conflict and of the scope of the matters which it is to take into account have both been clearly defined for it in advance. That clear definition does not exist at present. (Turner, 1983).

It appears, then, that the role the judiciary plays in resource allocation has been forced upon them by society, not because of appropriateness but presumably because of the qualities and procedures of the judicial process. Turner (op. cit.) assumes that the advantages of the judicial process sought by society are a full hearing in public of all arguments, a testing of the evidence which is, and is seen to be, fair and dispassionate, a fully reasoned decision, and the prompt correction of any errors of law.

5.5 Legislative changes

The basis of the whole participation process is the legislative framework. Until this is oriented towards a more open approach incorporating the public's views, there is little chance of public participation becoming more effective. The following comments are directed specifically at the water and soil legislation in New Zealand, although some of them are appropriate for other legislation such as the Town and Country Planning Act 1977, the Public Works Act 1981 and the National Development Act 1979.

There are three principle pieces of legislation for the allocation of water - the water allocation (management)
plan, water rights, and national water conservation orders. Matheson (Undated) suggests that this system of allocation is unsatisfactory in that it fails to integrate the three methods. It may have been beneficial, in the Rakaia case, to allow the management plan to provide the broad policy guidelines with emphasis being placed on wide ranging participation. This plan would have then provided a sound resource base for the next round of negotiations. This round could have been the hearing, simultaneously, of the conservation order and the water rights by NWASCA. Such an amendment would certainly eliminate some of the costs of the present procedure.

To be of any real use, the management plan requires some statutory recognition. It seems unusual that the body who investigates the resource, formulates the management plan, and has the responsibility for the regulation of the area, does not have the power to make any decisions regarding the resource. It is suggested in this study, that a phrase giving this power to the Regional Water Boards be incorporated in Section 14 of the Water and Soil Conservation Act 1967.

Instream uses are not considered to be "positive uses" by the 1967 Act. As such, it is not clear whether a water right can be sought for "non-consumptive" water uses. Until this is specified, the only method of protecting the recreational and wildlife activities is by a national or local conservation order.
It is further suggested that the membership of the NWASCA (as one decision-making authority in water conservation orders) be changed and broadened to reflect the changing "public interest". In the long term, reform is also needed to clarify the role of the Minister of Works, and to relocate some of his power to non-partisans.

The participation content of the water and soil legislation should be remodelled along the lines of the Town and Country Planning Act 1977, to allow input from "any body or person representing some relevant aspect of the public interest" for every water right or conservation order application (Section 2(3)(d)).

The final legislative change proposed is the need to provide funding so as to remove the financial and manpower inequality that exists between interest groups and proponents. Recently, the ability of interest groups to become involved in a hearing has depended more and more upon whether funds are available, and the array of public interest groups available to be involved has been narrowed to the semi-government funded organisations such as the Nature Conservation Council, or to the long-established private organisations such as the Royal Forest and Bird Protection Society. Palmer (1983) suggests that one approach would be to amend the Legal Aid Act 1969, to provide for the granting of assistance to non-profit organisations who wish to participate. It is proposed here, however, that a more effective approach would be to administer a fund through the new Ministry for the
Environment which will obviously be closely involved in
the resource allocation process. The creation of such a
fund by Cabinet, on a continued basis, would give evidence
of the government's commitment to effective, participatory
decision-making.

Some of the funds should be allocated to initiate a
programme of evaluation for public participation. This
evaluation should investigate all aspects of the programme,
including the evaluation of the effectiveness of the
participants. Ideally, this evaluation should be under­
taken by independent observers who are trained in assessment
techniques, and who are able to rapidly develop a rapport
with those involved in the public participation programme
(Sewell & Phillips, 1979). They should be given a broad
brief which will enable them to gain access to necessary
information. It is also important that the objectives
of the programme and the criteria for evaluation be
clearly identified. It is desirable that this evaluation
be initiated with the participation programme, and be
ongoing so that any weaknesses revealed through the
evaluation can be modified.

5.6 Effectiveness of participants

The criteria for determining the effectiveness of the
participants in any decision-making process, as proposed
in Chapter 3, and the lessons learned from the study of
the Rakaia River participants, provide some factors which
may enable interest groups and individuals to participate
effectively. Most of the factors are really political tactics for manoeuvering the interest group into a better position with respect to the decision-makers.

1. A conventional approach to participation is most likely to be more successful than a radical approach. Decision-makers are generally more conservative and will, therefore, respond better to participants with a conventional submission.

2. An approach which resembles the processes of those who hold the power is also likely to receive more attention. For example, the use of a counsel for a judicial body is advisable, since the formal legal procedures that the body is accustomed to, will be followed.

3. Forewarned is forearmed: the more a group has access to policy determinations or decisions before these become binding, the better its chances of success. Obviously, friendly contacts in the "right" places can be helpful.

4. Experience plays a vital role in any participation process. It enables the interest groups and individuals to take advantage of all the opportunities provided by a process.

5. The value of prestigious figureheads, professional help, and sound (preferable original) data cannot be emphasised enough, particularly when participants wish to confront technical specialists.
6. The media help to activate public interest and can give the impression of aroused public opinion. The media also understand how to influence people with good timing and the judicious use of phrases. They tend to be sympathetic with the public, particularly in conflicts with the bureaucracy.

7. The final factor is a recommendation to tackle only one issue at a time. If an interest group is able to devote their attentions to just one cause, it is probable that their approach will be more thorough and sincere.

5.7 Effective public participation

There is no clear-cut solution to the problem of the development of an effective public participation programme; in fact, there may be no solution at all. Participation is moulded be case experience. There is no set pattern. What may be suitable for one area and one issue may not be appropriate for another. Even during the evolution of a programme, the participation procedures may have to be changed. It is not possible, therefore, to set out the definitive rules for an effective public participation process. All that is attempted in this study is a series of guidelines which may assist both the participant and the implementor of the process to utilise the participatory opportunity to the fullest.

The key to any effective participation programme is public awareness. The public must be educated at two levels -
the content level and the process level. The content level deals with the resource, for example, the physical processes and surrounds of a river catchment, while the latter deals with the decision-making procedures and the role of the public within these. Marks (1984) outlines the case of the South Sasketchewan River Basin Planning Programme, where this form of education programme was attempted. This programme was aimed at assisting people to question and understand how water management can serve the achievement of various social, environmental and economic goals. Having developed such a systems appreciation and knowing their own needs, the public were then invited to reflect on the policies and objectives, and on their own values and needs, and to provide their considered opinion on which direction water management for this region should take.

Education programmes such as this should be initiated by the government in New Zealand. At present, most New Zealanders have no idea about the state of or the management of the country's resources. Nor do they understand the opportunities afforded to them to express their opinions. This kind of process change will require patience and follow-up. There is a need for the decision-makers and implementors to provide the public with all available information. They must be prepared to take greater care in communication with the public, by making the issues clearer, making less use of jargon and by making full use of the media as an information distributor. Most importantly, decision-makers and implementors must
include public participation from the beginning of all planning and decision-making. Public meetings have been shown to be an effective way of initiating participation (see, for example, Taylor, 1983 and Rees, 1984). There should be more emphasis placed on these meetings as sources of information and informal discussion.

The public will need to be assured that the participation is not merely a public relations exercise in placation (Anderson & Taylor, pers. comm., 1984). The development of evaluation procedures by independent observers should convince the public of the government's sincerity in this respect.

Effective public participation is essential in the procedures of Social Impact Assessment (SIA) and Environmental Impact Assessment (EIA). Public participation, SIA and EIA should be closely co-ordinated. Whereas SIA focusses on what will happen to the people, and EIA on what will happen to the environment, public participation reflects what the people say they want for their society or environment. The information obtained from the public, although not a substitute for either SIA or EIA, is basic to the functioning of the processes. Figure 5.2 illustrates the generalised steps of the two assessment procedures and of the participatory action which corresponds with each step.

The public participation process for increased effectiveness suggested in this study therefore, is one which
FIGURE 5.2 PUBLIC PARTICIPATION AND THE SOCIAL IMPACT ASSESSMENT AND ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURES

- Economic, technical and site selection studies
- Environmental impact assessment
- Social impact assessment

RESOURCE ALLOCATION PROPOSAL

PARTICIPATORY ACTION
- determine public preferences and needs
- determine public response and views
- inform and discuss details with public
- determine public response to implementation
- determine public response to any changes

ASSESSMENT PROCEDURE
- community and environmental studies
- evaluation of alternative allocation proposals
- selection of one alternative
- implementation
- monitoring

Evaluation of, and necessary adjustments to, participatory action
focusses on the public - their education and their effective participation. The comments and suggestions for changes made earlier in this chapter will help to ensure that the present participation procedure is made equitable. It must be realised, however, that regardless of the effectiveness of a public participation programme, there will always be a point beyond which involvement of the people cannot proceed. At this point, consultations and deliberations with the public must stop, and a decision must be made.
CHAPTER 6

SUMMARY

This study is concerned with public participation in resource allocation. It does not attempt to present the definitive answers to the problems of public participation, but rather, attempts to guide the implementors of participation programmes, the decision-makers and the participants towards more effective participation. The participants have been focussed on throughout the study, for without them, there can be no public participation.

The problems of public participation begin with a definition of the concept. The meaning, function and importance of participation are different for different cultures and social groups. The contemporary form of participation is best described as the direct involvement of the people in the process of decision-making. People's perceptions of public participation also vary, ranging from participation as a policy, through participation as a tool for improving communications, to participation as a strategy or as a therapeutic device.

The present interest in increased public participation in resource allocation, however, appears to be as much a characteristic of New Zealand's political system as it is of other western democracies. This pressure for increased
participation is based on both philosophical and pragmatic considerations. There is a general belief that in democratic societies individuals have the right to be informed and consulted, and to express views on matters which affect them personally. More pragmatically, the demand for more participation springs from distrust that the decision-makers have adequately gauged public preferences. There is also a feeling that plans have flaws which those planned for might have pointed out and corrected if they had been given the chance.

Public participation is not, however, without some disbenefits. There are claims by critics of participation, that the process is costly in terms of both time and money, that it can support alienation and that it fails to satisfy public requirements.

Although there are many models which endeavour to describe decision-making, only two of these models explicitly incorporate any form of public participation. The upward-forming consensus model views decision-making as a process in which the public present their opinions to an elected representative, who, in turn, expresses this to the decision-makers to promote into policy guidelines. The stress model, however, emphasises social processes in which decisions are reached as a result of a struggle for power, influence or resources.

Ideally, the process of decision-making should incorporate the views of all those people who will be affected by a
decision. This is, however, not practical. Those who do participate in natural resource decisions tend to be middle class, European men. Each participant becomes involved for a particular reason and, while many believe that they represent the "public interest", this is not the case.

A framework for differentiating between participants was used in this study to help determine the participant's motivations for becoming involved in an issue. This framework separated the sectoral interest groups from the individuals and the governmental organisations. The interest groups were further divided into private groups, which have a personal interest in a decision, or civic groups, which participate out of a moral or intellectual concern.

The role of these participants in a decision was examined, and criteria were developed to enable an independent assessor to determine interest group effectiveness in participatory programmes. The first criterion is an internal one in which the assessor determines whether or not the interest group has achieved its objectives. The influence that an interest group has on the decision or decision-making process is the second criterion. Factors such as co-operation within and between interest groups, the ability to maintain enthusiasm and outside support will contribute towards a group's effectiveness.
A case study of the Rakaia River National Water Conservation Order Hearing was used to illustrate some of the above points and to closely examine the participants of one issue of resource allocation. The Rakaia River presented a good opportunity to observe a decision-making procedure and, as many of the conflicts between resource conservation and development are common to other issues, it was an appropriate study from which to extrapolate some general factors which lead towards more effective participation. The criteria developed earlier were applied to six sectoral interest groups. It was concluded that the following factors may enable interest groups to participate more effectively:

1. experience in participation exercises;
2. access to all relevant information;
3. conventional rather than radical approaches;
4. good relations with the media;
5. prestigious figureheads or professional people within the group; and
6. dedication to the issue.

Further proposals which could allow for more effective participation are:

1. a switch to decision-making based on the upward-forming consensus model;
2. an acknowledgement of the importance of the interest groups' participation to the "public interest";
3. a complete range of issues covered for every topic;
4. the formation of a government-funded, detached organisation to represent the silent majority;
5. a change to a more democratic form of communication between the public and the decision-makers;

6. a move to bar the judiciary from non-legal resource allocation hearings, and a clarification of the scope of the issue for legal hearings; and

7. changes in the soil and water legislation to allow
   - an integration of present methods of water allocation
   - statutory recognition of the management plan
   - a broader base for the decision-making body of NWASCA
   - a wider participation content to allow input from all affected and interested people
   - funds for the public interest groups to enable them to participate more fully
   - funds to initiate public participation evaluation programmes.

The need for a clear natural resources policy and for a greater recognition of the role of public participation in social and environmental impact assessment procedures were also proposed. Consideration of such a policy and of the assessment procedures should become intrinsic features of any decision regarding the allocation of resources.

Effective public participation is, however, an ideal - a goal which is sought but not often achieved. There is no simple procedure which, if followed, will provide the perfect participation programme. Public awareness and the education of the public in both the nature of the resource and in the decision-making process, are seen as the key
factors in the movement towards a strategy for effective public participation. The initiation of independent evaluators of public participation programmes is a further step in the right direction.
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>EDS</td>
<td>Environmental Defense Society</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Fisheries</td>
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<td>MWD</td>
<td>Ministry of Works and Development</td>
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<tr>
<td>NCCB and RWB</td>
<td>North Canterbury Catchment Board and Regional Water Board</td>
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<td>NWASCA</td>
<td>National Water and Soil Conservation Authority</td>
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<td>NWCO</td>
<td>National Water Conservation Order</td>
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<td>NZED</td>
<td>New Zealand Electricity Department</td>
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<td>NZJBA</td>
<td>New Zealand Jet Boat Association</td>
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<td>NZSAA</td>
<td>New Zealand Salmon Angler's Association</td>
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<td>RF &amp; BPS</td>
<td>Royal Forest and Bird Protection Society</td>
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<td>RRA</td>
<td>Rakaia River Association</td>
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<tr>
<td>SIA</td>
<td>Social Impact Assessment</td>
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<td>m³/s; cumecs</td>
<td>cubic metres per second</td>
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