## Managing public conservation lands by the Beneficial Outcomes Approach with emphasis on social outcomes

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#### ABSTRACT

This report discusses the Beneficial Outcomes Approach (BOA), and its suitability for implementation as a process by which the Department of Conservation (DOC) can better identify and prioritise social outcomes of New Zealand conservation management. The BOA emphasises achievement of positive social outcomes and avoidance of negative social outcomes—management of inputs and production of outputs are a means to achieve these ends. It requires clear, outcome-focused objectives and involves stakeholders in defining these objectives. It recognises the relevance of off-site consumers, as well as on-site users because it looks beyond site-specific management to the broad, societal role of public agencies. We present an overview and analysis of the BOA and international examples of its application before discussing how well the BOA fits with DOC management style and direction.

Outcomes-focused initiatives consistent with the BOA exist within DOC. However, analysis and interviews with DOC staff indicate certain factors inconsistent with successful implementation of the BOA. These include: legislative and departmental ambiguity over DOC's role in visitor management; confusion over the lengths to which DOC should go to achieve desired management outcomes; narrow perceptions of DOC's social mandate; and the current emphasis on satisfying site-based users rather than the wider public.

We recommend that DOC adopts the BOA, implementing it incrementally through a number of key pilot-test applications. Criteria for identifying and specifying personal, societal, economic and environmental outcomes are outlined. Further recommendations for successful implemention require DOC to: make explicit its target social outcomes and consider these in its decision-making processes; clarify its role in visitor management via development of recreation policy; broaden recreation planning beyond facility management; increase community/stakeholder involvement; maintain a cadre of well-trained recreational professionals and social analysts; and ensure training in BOA throughout the department.

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### 1. Introduction

#### 1.1 STUDY PURPOSE

The aim of this study is to develop a process by which the Department of Conservation (DOC) and the Auckland Regional Council (ARC) can identify and prioritise positive and negative social outcomes of conservation and recreation management. The purpose of such a process is to optimise the net positive outcomes of actions undertaken by these agencies. The *Beneficial Outcomes Approach* (BOA) has been adapted to provide such a process. It is a systematic approach for:

- Determining which positive outcomes natural resource public agencies should try to create and which negative outcomes they should attempt to prevent.
- Communicating clearly those goals to the communities they serve. The BOA is increasingly being applied in other countries to help meet the type of needs identified by DOC and the ARC.

This report presents an assessment and overview of the application of the BOA to the management of social outcomes within DOC and the ARC. The report is not a detailed implementation guide. It provides a synopsis of the implementation process and critical factors to be considered when adopting this approach.

The work was commissioned by the Science and Research Unit of DOC and supported by the ARC Parks Service. The mandates of both agencies are similar with respect to visitor and conservation management albeit within different areas of jurisdiction and with different legislative requirements. For simplicity, this report focuses upon DOC, however, most of the discussion is directly relevant to the ARC as well as other natural resource management agencies.

The Study Team comprised Lincoln University staff and Dr B.L. Driver who has taken a lead role in developing and implementing the BOA in the United States and Canada, where it is used widely to guide park and recreation resource management.

#### 1.2 STUDY RATIONALE

The study was stimulated by three factors which influence DOC. First, is the global trend that defines citizens' expectations of public agencies which manage natural resources. Public expectations and demands that public agencies be openly accountable, cost-effective, equitable, and responsive to public sentiments and preferences are strong. Furthermore, the public expects active involvement of relevant stakeholders in resource allocation and managerial decisions. Since the early 1990s DOC has initiated positive actions to better serve the public, including the adoption of strategic planning techniques, transparent decision-making processes, a strong line-management style (with direct accountabilities), greater attention to economic efficiency, and fuller commitment to public involvement. However, DOC is seeking better managerial guidelines to help ensure that it can be

responsive, accountable, fair, and cost-effective while sustaining the natural ecosystems for which it is responsible. The BOA helps provide such managerial guidelines.

Second, while the Conservation Act 1987 defines the responsibilities of DOC in a general sense, these roles are open to different interpretations. This was clear to the Study Team from discussions with Department staff in the preparation of this report. In addition, limited contact with members of the public during this study revealed that while there was much support for DOC actions, there was also considerable confusion about why certain DOC positions and actions were being taken. These disagreements stem from several factors, including (1) insufficiently clear articulation by DOC of the social outcomes it intends to produce and why; (2) misinterpretations of that articulation; and/or (3) disagreement with DOC's managerial directions. The BOA can help resolve these problems, because it systematically determines which outcomes should be pursued or avoided, and communicates identified goals to the communities the agency serves.

Third, is a perception (both internal and external to DOC) that the Department needs an empirically supported and systematic process for targeting social outcomes, to act as a companion process to the one being developed to maintain and improve biodiversity known as 'Measuring Conservation Achievement' (MCA) (Stephens 1998; DOC 2001). Informants contacted during the preparation of this report expressed a concern that biophysical outcomes might receive too much emphasis in relation to the social outcomes, if a companion process for the social outcomes was not developed. Section 2 elaborates on this discussion.

#### 1.3 APPROACH AND METHODS

The Department of Conservation has outlined the need for a process to define and select likely positive and negative social outcomes of conservation management. This study has applied the BOA to this problem.

This study used the following three methods:

- Analysis by team members of current and past styles, directions, and expressed
  purposes of DOC management, including review of available relevant
  documents, many of which are discussed in this report. This analysis included
  relevant legislation. Specific sections of Acts are quoted in this report where
  they are a source of confusion or issue among the informants we interviewed.
  A detailed legal assessment was not conducted.
- Extensive and in-depth personal interviews and contact with over 25 DOC managers throughout New Zealand, including selected Head Office and Regional Office policy analysts, Conservators, Area Managers and field-level staff.
- Review of the use of the BOA in other countries, particularly in the United States and Canada. This review was facilitated by Dr. Driver who has participated in the application of the Approach in at least eight countries prior to this study in New Zealand.

## 2. The context for this study

Increasingly, citizens of many western democracies expect and demand that public agencies be more accountable for their actions. In response to those sentiments, their legislative bodies have passed laws which require public agencies to adopt and implement improved performance measures. For example, the United States Congress passed the 1993 Government Performance and Results Act with its stated purpose 'To provide for the establishment of strategic planning and performance measures in the Federal government...' Within New Zealand an example is the Local Government Amendment Act No. 3 1996 which requires councils to evaluate the benefits that will result from planned expenditure of public funds.

Many public agencies have issued policy directives that emphasise use of improved performance measures. For example, the Mission Statement in the United States Forest Service's Strategic Plan (Year 2000 Revision) states: 'The 2000 Revision focuses on outcomes or results to be achieved over a period of time' (USDA Forest Service 2000, p.1). Similarly, the Director General of DOC has stated, 'We will focus on improved planning and decision-making, and improved measurement and reporting of performance and achievement' (DOC 2000, p.1).

The intent of the legislation and agency policy directives to clearly define and adopt improved performance measures is laudable and represents considerable progress toward attaining better accountability within natural resource agencies. However, those laws and directives with which the Study Team is familiar reflect certain deficiencies that contribute to emerging problems:

- First, the legislation and policy directives do not clearly define what is meant by the word 'performance'.
- Second, and more problematic, policies do not clearly distinguish between the
  words 'outputs' and 'outcomes' as performance measures. In Section 3.2.1 we
  define these two concepts and later discuss why the BOA requires that no
  outputs be planned or produced without clear understanding of the outcomes
  that will result from the production of those outputs.
- Third, when outputs and outcomes are not clearly differentiated as measures of performance, managers tend to define their performance only in terms of outputs. As a consequence, they may not consider adequately why the outputs are being produced, and, as a result, not understand fully what they are doing.
- Fourth, the legislation and agency directives that mandate better performance measures almost always define the outcomes in such general or wide-sweeping terms that they do not provide sufficient guidance for managers to select specific outputs to provide those outcomes. For example, the goal of promoting increased understanding of the natural environment is simply too broad for the meaningful development of outputs. For managers to understand why they are producing each separate set of outputs, they must specify the outcomes that will be achieved by each output. By analogy, medical doctors cannot design and recommend useful treatments for particular health problems if they do not have a clear idea of what the specific outcomes of each treatment are likely to be.

• Fifth, the authors of this report consider that in developed countries such as New Zealand, where needs for food, shelter, clothing, sanitation and health services are adequately met for most people, leisure services contribute as much to total social welfare as any other public social service. Also that leisure industries, broadly conceived, constitute the largest economic sector of those developed economies (see Driver (1999) for elaboration). Therefore, it is incumbent on personnel in public agencies which provide recreation services to understand the positive and negative impacts of their management. They are just as responsible for understanding the impacts of their actions, as are health and education professionals. We believe that park and recreation planners and managers would be professionally irresponsible if they did not understand the positive and negative impacts of their actions. They cannot be accountable and responsive unless they do.

Given this, it is imperative that DOC openly and explicitly defines, prioritises, and articulates to the public each type of positive outcome it intends to deliver and negative outcome it intends to prevent. Examples of these outcomes include provision of a wide array of recreation opportunities, maintenance of biodiversity, advancement of environmental understanding, and tourism-generated economic growth and stability. This report focuses upon social outcomes. A large number of these outcomes derive from recreational use, but not exclusively. Positive outcomes from off-site appreciation are significant (substantiated in Section 3.8.2).

# 3. The Beneficial Outcomes Approach (BOA): What is it?

#### 3.1 THE BOA IN A NUTSHELL

The BOA is a management planning process which was developed for natural resource management government agencies in the United States and has now been applied in other countries. Its purpose is to optimise the net benefits of actions undertaken by public agencies and to help make those agencies more accountable and responsive to the consumers they serve. The fundamental question raised by the BOA is why should a particular action be taken by a public agency? The BOA does not accept past actions to be sufficient justification for continuing those actions. Instead, it responds to this question in terms of positive outcomes to be provided and negative outcomes to be avoided, within the context of the agency's legislative mandate and budgetary and resource constraints.

A critical feature of the BOA is that it does not view the management of inputs or the production of outputs as the end result of management. Instead they are viewed as a means to an end—which is the optimisation of desired net benefits or positive outcomes. Therefore, throughout the BOA management planning process, primary attention is focused on outcomes, defined in terms of value added to, or detracted from, individuals or society, including the values humans

attach to sustainable ecosystem management. Under the BOA, no outputs are produced unless it is clearly understood and articulated (either as policy goals or managerial objectives) what beneficial outcomes are intended to result from those outputs. These outcomes may result from the production of outputs or their use. Several proponents of the BOA have described this shift of primary attention away from inputs and outputs to outcomes as a major paradigm shift in park and recreation resource management.

The BOA uses workshops, comprising managers and stakeholders, to identify current and desired outcomes and explicitly define them. This includes specifying the effect of the outcomes—where, when and on whom or what will the effect be felt? Demand studies then help to ascertain which outcomes are most desired and which are to be avoided. These outcomes are prioritised and then translated into outputs (described in terms of management objectives and actions). Through the production and use of these outputs it is intended that the desired outcomes will be attained or the undesirable outcomes prevented. Managers then evaluate the success in achieving the targeted outputs and consequent outcomes.

The BOA is based on sound principles of modern management science and is grounded in considerable reputable research on customer preferences and behaviour. It can be relatively easily implemented, as demonstrated by its wide, and rapidly growing, use in the management of public park and recreation resources by agencies at all levels of government in several countries.

The scope of the BOA is sufficiently broad to cover all conservation management functions. It may be implemented with respect to an area of policy (such as a national hut management programme), a geographical area (an individual park or reserve) or across the whole Department's operations. Thus, it may be used for project management or as an institutional management framework.

In summary, conservation management results in both biophysical and social outcomes. The BOA seeks acknowledgment of the social outcomes that occur and provides a framework to select those social outcomes that warrant targeting. Recreational use benefits are a major component of the array of social outcomes, but other social outcomes also occur, such as appreciative and spiritual benefits.

#### 3.2 DEFINITION OF TERMS

Within this report, technical terms and concepts are used. These include:

#### 3.2.1 Inputs, outputs, outcomes and benefits

This section is adapted from United Way of America (1996).

Inputs are the things that are used to provide a good or service, together with the structure (vegetation, flora, fauna, geology, hydrology, etc.) and ecological process of the facility, site or area that is being managed. The inputs can be managerial rules and regulations, social mores (e.g. whether nude bathing is is acceptable at a particular site), professional skills and knowledge, capital investments, labour, equipment, materials, buildings, vehicles etc. Inputs are

From a management planning perspective:

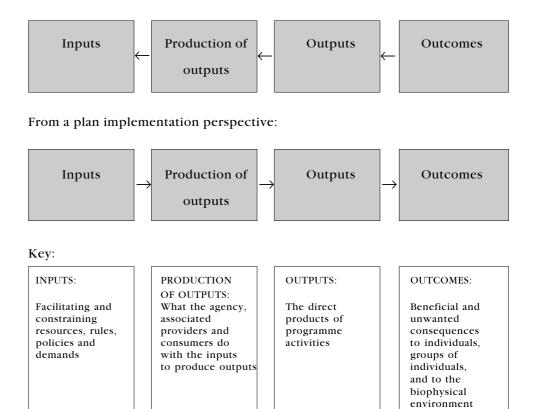


Figure 1. Relationship between inputs, outputs and outcomes.

provided by managers and also by on-site and off-site users. Inputs associated with users include visitor numbers, preferences, education and skill levels, disabilities, things brought to the site (e.g. dogs, radios, motorised vehicles), and on-site behaviour (e.g. vandalism, littering). Stakeholders provide inputs such as concessionaire services, rules and regulations of associated agencies, and preferences of local residents.

Outputs are the direct products or results of actions taken by managers in collaboration with their associated providers. Usually outputs are defined in quantifiable terms, such as kilometres of track built or maintained; number of deer killed; number of visits received etc. Outputs may be measured in economic terms (such as how many volunteers were engaged, or receipts from hut fees or concessionaires), or quantified in terms of service amount, type and quality (such as the specific types of recreation activity opportunities provided). Outputs are means to ends, with the ends being the beneficial outcomes that result from the production and use of the outputs.

Outcomes are the beneficial and detrimental impacts that result from the production and use of the outputs. Outcomes may be defined in terms of value added to, or detracted from, individuals or society, including the values humans attach to sustainable ecosystem management. For example, beneficial outcomes of track maintenance would include increased local income to the maintenance workers and resultant improved physical fitness and/or environmental awareness that resulted from the use of those tracks.

There are two levels of outcomes, *primary* and secondary (or *subsidiary*). The primary outcomes are those for which the public agency is primarily responsible, as specified in statute or policy. Subsidiary outcomes are those that promote the general welfare of the public. They are usually the statutory responsibility of another public agency, but which the recreation or conservation agency nevertheless can help promote. These include, for example, a higher level of mental and physical health within society, improved public environmental understanding and awareness, enhanced environmental stewardship, a positive national identity and civic pride.

The relationship between inputs, outputs and outcomes from a *management planning* and *plan implementation* perspective is shown in Fig. 1. It shows that in management planning (and in policy development) a right-to-left process is used to decide which outcomes will be promoted or avoided and why. Desirable outputs are then determined, and inputs needed to create the targeted outcomes identified. After the management planning process is complete, a manager proceeds from left to right in implementing the plan.

Benefits may take three different forms:

An *improved condition* of an individual, a group of individuals (a family, a community, society at large) or the biophysical environment. Examples of such improved conditions include increased learning about the environment from nature study, improved cardiovascular function from physical exercise; psychophysiological recovery from stress; economic benefits to local communities from tourist expenditure; the maintenance of biodiversity from sustainable ecosystem management.

The *maintenance of a desired condition* and thereby the prevention of an unwanted condition. Examples include maintained friendships, health, community stability; prevention of social problems such as those caused by at-risk youth; and prevention of the adverse impacts of tourism on the biophysical environment.

The *realisation of a specific satisfying psychological experience* (also called psychological outcomes). These types of benefits accrue only to individuals. Examples are successfully testing one's skills; experiencing closeness as a family; being spiritually in awe of nature; and recovering psychologically from mental stress.

Benefits have been categorised into different types, including personal, social/cultural, economic and environmental benefits. See Appendix 1 for a comprehensive list of the benefits from leisure, which comprise a subset of the social outcomes from conservation management.

Benefits are one type of outcome; the other being negative or undesired outcomes. Within this report the terms 'benefits' and 'beneficial outcomes' are used interchangeably.

#### 3.2.2 Consumers, associated providers, and other stakeholders

A fundamental requirement of the BOA is that managers form and maintain collaborative partnerships with all relevant stakeholders to determine what types of positive outcomes can feasibly be targeted for managerial attention and what negative outcomes should be avoided.

Stakeholders include all people or organisations that affect or are affected by a potential or actual resource management decision to an extent determined significant by any member of the management agency. This definition makes the manager(s) involved in a particular site/programme responsible for determining which stakeholders are relevant to the planning and management of that site/programme. Stakeholders may be divided into three groups: Consumers, Associated Providers, and Other Stakeholders.

Consumers are the people who use the resources being managed. This word is preferred to 'user' which refers only to the on-site user or visitor and does not adequately emphasise guest-host relations or a consumer orientation. In Section 3.8.2, we explain why attention must be given to the off-site consumers as well as those who actually visit the facility, site, or area being managed.

Associated providers include any public agency, private enterprise, or other organisation that influences the management of the site, in addition to the primary resource management agency. The resource management agency is seldom, if ever, a sole provider of a good or service, especially recreation opportunities. For example, recreation experiences on DOC-administered lands are strongly influenced by the services provided in local communities (accommodation, food, other services), by tourism organisations, by local map and outdoor equipment shops (including those that sell hunting and fishing licences), and by publishing and mass media enterprises that provide information.

Other stakeholders are those people or organisations who are not really consumers or associated providers but who nevertheless can affect, or are affected by, management of an area. Other stakeholders might include the Minister of Conservation, adjacent private landowners, Conservation Boards, iwi and charitable organisations that wish to provide financial support. The Minister has a unique role in 'purchasing' conservation outputs from the Department on behalf of the government.

#### 3.3 SCIENTIFIC BASIS FOR THE BOA

The BOA is built on a sizeable body of scientific knowledge about the benefits of recreation resource management and use and, in particular, the benefits of leisure. It requires that clearly defined positive and negative outcomes of the management and use of park and recreation resources be identified and defined. The BOA could not be implemented if the knowledge of those outcomes did not exist. This section briefly traces the development of knowledge about the beneficial outcomes of park and recreation resource management and use. Disbenefits are generally more easily identified and understood and are therefore not discussed here even though they must be considered when implementing the BOA.

When considering the state of knowledge about the benefits of park, recreation, and related amenity resource management, it is important to emphasise that there was very little quantitative research undertaken in leisure prior to 1960. However, after publication of reports by the American Outdoor Recreation Resources Review Commission (1962), many descriptive sociological and

economic studies were begun in the United States which were mirrored in New Zealand from the late 1960s. Such studies were accelerated in the 1970s, when leisure scientists began studying the psychological and social-psychological dimensions of leisure behaviour. Similar studies continued during the 1980s and have shown steady expansion to the present. Since the mid-1970s, specialisation has occurred in leisure research with attention now devoted to areas such as gender differences in leisure behaviour and the impacts of leisure participation on special groups, such as the elderly. Sophisticated models and theories have been developed or borrowed from other disciplines and applied within the field of leisure studies.

Serious scientific attention was not directed to the benefits of leisure until the late 1980s. That research was stimulated considerably in the early 1990s by publication of *Benefits of Leisure* (Driver et al. 1991) and by the Ontario (Canada) Park and Recreation Federation's *Benefits of Leisure Catalogue* (1992) which was updated and expanded as the *Benefits Catalogue* (Canadian Parks and Recreation Association 1997). Additional research on benefits has recently been stimulated by promotion of the BOA by the National Recreation and Parks Association (USA) and its recent publication *Setting a Course for Change: The Benefits Movement* (O'Sullivan 1999). That Association funded an earlier national household survey addressing the benefits of leisure (Godbey et al. 1992), as did the Recreation Round Table (1994). The Canadian *Benefits Catalogue* (1997) is particularly useful to practitioners who wish to implement the BOA because it comprehensively identifies all the scientifically documented benefits of leisure and references the research publications that disclosed or supported the existence of these benefits.

In summary, during the past three decades, considerable progress has been made in advancing the state of knowledge about leisure. These advances in knowledge have been accompanied by similar improvements in the state of management practice. There is now considerable objective documentation of the wide scope and magnitude of the many benefits of leisure, and most of those reports present the results by categories of benefit such as psychological, physiological, sociological, economic, and environmental. As such, there is adequate scientific support for implementation of the BOA, and research on benefits continues to grow and broaden.

#### 3.4 EVOLUTION OF THE BOA

Managing public resources for the benefits they provide is not a new concept. Until recently, however, there has been no systematic, integrated and empirically supported management system that focuses attention on beneficial outcomes to ensure that public natural resource agencies are responsive, accountable, fair, and cost-effective while sustaining the biophysical resource. It was owing to this gap that the BOA was developed, articulated and refined through trial applications.

The BOA is an extension of other management approaches. Its application to the management of public park and recreation resources was conceived at a 1991 Benefits Applications Workshop comprised of 35 policy analysts and field-level

managers of various park and recreation agencies in the United States and Canada, and 35 leisure scientists from those two countries. Those participants desired to understand better the positive and negative outcomes of the management and use of park and recreation resources for the following three reasons.

First, at the policy development level, an understanding of the beneficial outcomes of recreation resource management and use was needed to more accurately describe and articulate the nature of these benefits in public policy. Those outcomes needed to be made explicit to enhance the credibility of recreation management to elected officials, responsible for funding the delivery of publicly provided leisure services, to other public agencies, and to the public at large. The misconception developed that recreation provided few benefits to society as a whole and that because the users received most of the benefits, users should pay most of the cost of the public provision of recreation opportunities. This erroneous perception that leisure was relatively trivial within society, created funding crises for recreation resource management. The administrators of park and recreation agencies needed better documentation of the social benefits of leisure to support their requests for additional public funds.

Second, field-level managers reported that conventional impact assessments were too general to direct management actions. These assessments helped guide resource allocation policy but could not be used in a more detailed way. Those managers wanted more explicit guidance for actions to optimise net benefits. In particular, they wanted to predict which types of positive outcomes their actions could most effectively provide and which negative outcomes could be minimised, while sustaining the basic biophysical resource. In addition, the managers realised that their existing output targets were unrelated to the social outcomes produced by those outputs. There was inadequate understanding of why the outputs were being produced, other than for budgetary and performance purposes.

Third, the scientists wanted to better understand the consequences of leisure behaviour, how the net benefits of leisure could be enhanced and how they could work more closely with practitioners to help facilitate better management.

The workshop participants recognised the need to go beyond managing just for recreation activity opportunities or to produce outputs. They recognised that recreation contributed to society in many ways, from improving individuals' physical and mental health to contributing to local, regional, and national economic growth and stability (see Appendix 1 for a comprehensive description of outcomes from leisure). Participants recognised that the positive outcomes of many social services (such as health, sanitation, police protection) are widely understood with consequent public support for these services. In contrast, parks and recreation had no systematically integrated means to:

- Comprehensively identify the benefits of park and recreation resource management and use
- Prioritise types of outcomes that should direct parks and recreation policy and management
- Relate targeted beneficial outcomes to specific outputs which would produce the outcomes
- Deliver targeted high priority positive outcomes and prevent negative outcomes

• Articulate and promote known, but poorly understood, social benefits of leisure.

For these reasons, the BOA¹ was developed. Underpinning its development was the need to help meet the public expectations of officials responsible for the management of public park and recreation resources, in that they should be:

- More accountable for their actions by being able to clearly explain and articulate what they doing with scare tax revenues
- Demonstrably cost-effective/efficient in their use of public funds, especially as fiscal stringency has increased in the public sectors of most countries
- Responsive to public interests, values, demands and needs, enabling stakeholders to be actively involved in a collaborative style of management (which the USDA Forest Service is now calling 'collaborative stewardship' and is the central managerial philosophy of that agency)
- Demonstrably equitable
- Striving to sustain the natural heritage under their jurisdictions.

Although the BOA was initially developed to guide the delivery of leisure services, it has now been extended to other areas of BOA natural resource management, such as the management of nature reserves, designated wilderness areas, and wildlife-viewing programmes.

#### 3.5 EVOLUTION OF THE BENEFITS CONCEPT

Immediately following the refinement of the BOA for parks and recreation management in 1991, several pilot-test implementations of it were initiated. It quickly became apparent that the concept of 'benefit' needed clearer definition. Some confusion was caused by the different way economists use the word 'benefits' in benefit/cost analysis. Understanding the concept of benefit was basic to understanding and successfully implementing the BOA.

#### 3.5.1 Defining 'benefit'

An initial definition of benefit was drawn from dictionaries as simply 'a gain or improved condition of an individual, a group of individuals (i.e. a family, a local community, or society at large), or of the biophysical environment'. 'Beneficial outcomes' was defined simply as a change from one state or condition to a better or improved state.

However, the planners and managers working on pilot-tests of the BOA noted that the 'improved condition' definition was inadequate for two reasons. First, much of the work of parks and recreation managers was directed at providing options for recreationists to maintain desired conditions or at maintaining desired conditions of the biophysical resources being managed, instead of

At first, the approach was called Benefits-Based Management (BBM) but that title is now being abandoned in favour of the BOA for two reasons. First, the word *benefits* did not adequately reflect that the benefits approach considered negative impacts as well as positive impacts. Second, the title Benefits-Based Management was too narrow, because the benefits approach has been used to guide leisure policy development, research and education, as well as management.

improving a particular condition. For example, a recreationist in an excellent state of health or a family with close kinship between its members, might recreate primarily to stay physically fit or to maintain family cohesion, but experience no improvement or change in those states from their participation. However, they would realise an undesirable change in those states if they did not continue to participate. Alternatively, a manager might be maintaining a natural ecosystem in an optimal biophysical state but without such management, that ecosystem might deteriorate in some manner. For these reasons, a second type of benefit was defined as 'the maintenance of a desired condition and thereby the prevention of an unwanted condition'. Unlike the first 'improved condition' definition of benefit, which required a change in condition, this second type of benefit exists when a change in condition (i.e. the unwanted condition) is avoided.

The planners and managers involved with the early pilot-test implementations of the BOA identified that a third definition of benefit was needed. This resulted from their use of the Recreation Opportunity Spectrum (ROS) system (Stanley & Wood 1982) to provide opportunities for the realisation of an array of satisfying psychological experiences. Existing definitions of benefit under the BOA could not be related to the ROS system. Specifically, it was difficult, if not impossible, for those managers to define what type of improved or maintained condition was being created from the realisation of satisfying psychological experiences during recreational engagements. For example, managers did not know what improved or maintained conditions (the two types of defined benefits) were being realised from experiences such as enjoying a tranquil setting, from expressing one's creativity via photography or painting, and from enjoying natural scenery. For this reason, a third type of benefit of recreation was defined as 'the realisation of a satisfying psychological experience' under the logic that if a recreationist enjoys a satisfying psychological experience, he or she is benefiting even though the 'improved or maintained condition' could not always be identified or articulated.

#### 3.5.2 Benefits and disbenefits considered

Some misconception exists that the BOA focuses only on benefits and ignores disbenefits or unwanted outcomes. The BOA incorporates disbenefits in two ways. First, it requires consideration of both positive and negative outcomes in policy development, management planning and plan implementation. Second, one type of benefit is defined as the maintenance of a desired condition and therefore prevention of an unwanted condition or disbenefit. Thus, the BOA explicitly requires consideration of disbenefits in that it has incorporated the avoidance of disbenefits in the definition of beneficial outcome.

#### 3.5.3 Is the 'benefit' socially acceptable?

Managerial and social consensus is required about whether a particular changed condition, maintained condition, or satisfying psychological experience is viewed as positive or beneficial from a social perspective. Fortunately, there is considerable social consensus that things such as learning about natural environments, improved physical and mental health, and greater family cohesion are beneficial. Such social consensus, however, does not exist about whether provision for nude bathing should be promoted, for example. More

problematic is the fact that many types of anti-social behaviour (e.g. painting graffiti on walls) are likely to provide some type of satisfying psychological experiences and thus provide benefit to those so engaged. The definitions of the three types of benefits of leisure are silent with regard to whether a particular type of benefit is one that is socially acceptable or one that should be pursued by management. Therefore, what does or does not constitute a benefit for managerial purposes must be clearly established and articulated by the management planning team. This decision must be reached using professional judgment and close collaboration with the relevant stakeholders.

#### 3.6 DIFFERENT USES OF THE BOA

The BOA is being used to direct park and recreation policy, management, research and education. It is being used in two ways to help guide management or delivery of park and recreation services. First, to help ensure that an array of benefit opportunities is being provided by a particular agency, with different agencies deciding how wide that array should be given their resources and legislative responsibilities. Second, to target a specific benefit or desired outcome. For example, in the United States about 70 percent of the municipal park and recreation departments have programmes addressing at-risk youth. Many of those programmes are guided by the BOA in an attempt to help prevent these youth from becoming greater problems to themselves or to society. In most of these applications of the BOA, the recreation agencies are co-operating closely with justice, education, public welfare, and other relevant public agencies where recreation programming is being used as an intervention strategy to help these youth. Finally, these two uses of the BOA are sometimes combined so that an array of benefit opportunities is targeted, of which a particular subset is emphasised.

#### 3.7 ADVANTAGES OF THE BOA

The advantages of the BOA have been documented elsewhere in detail (Driver & Bruns 1999). Appendix 2 provides a detailed description of these advantages, which are summarised below:

- Promotes greater public understanding and appreciation of the social significance of recreation and protected natural area management
- Helps justify allocations of public funds in the recreation and protected natural areas policy arena
- Helps planners and managers develop clearer management objectives
- Makes the links between inputs, outputs, and outcomes more explicit and emphasises the outcome goals of policy and management rather than outputs and raises managers' awareness of outcomes
- Facilitates social interventions (such as when addressing problems like at-risk youth)
- Facilitates more meaningful recreation demand analyses
- Facilitates a collaborative style of management

- Provides flexibility to managers
- · Better identifies conflicts and substitutes
- Enhances the consumers' choice processes and their consumer sovereignty
- Facilitates marketing (of the recreation opportunities provided)
- Enhances the rationality of recreation fee programmes
- · Advances knowledge
- · Facilitates additional research
- · Promotes better education
- · Increases pride in the profession.

#### 3.8 KEY REQUIREMENTS OF THE BOA

The BOA demands certain prerequisites and requirements. Key requirements are presented in this section.

#### 3.8.1 Clear outcomes-focused management objectives

The BOA requires systematic and clear management specification to achieve desired outcomes. First, targeted outcomes are specified and then explicit management objectives written for each type of targeted outcome. Management objectives should specify what the outcome is, where, when, in what amount, and for whom the outcome will be delivered. Thus, the BOA helps ensure accountability. These management objectives may be focused upon a specific geographical area, such as a nature reserve, or may be national in scope.

Where the BOA is applied to a specific park or reserve, the Approach requires the specification of setting characteristics. This includes the characteristics of the on-site settings, the local communities, and the facilities and other resources of the associated providers, that are necessary for the targeted outcomes to be delivered. These setting prescriptions must be detailed for each management objective.

A set of intended management actions (sometimes called management prescriptions) must be specified to show what will be done to achieve each management objective. These management actions will usually result in the production of outputs, the production and use of which will create the targeted beneficial outcomes. For example, if the management objective targets the outcome of increasing historical/cultural learning about, or appreciation of, history at Waitangi, the management prescriptions might include such things as the creation of interpretative trails, development of information brochures, interpretive talks, and other management actions that are specific to that site and its history.

Objective, preferably quantitative, standards must be developed for each management action to determine, through monitoring, if the management actions are being implemented as intended. For example, a standard for Waitangi might be that the interpreters will make presentations on weekends only, or at times of peak use, or that the interpretive signs will be of a particular type and style (as perhaps required by the DOC sign manual). (In the United States many recreation management standards geared toward protecting the

safety of visitors are related to state and federal sanitation and electrical codes, and during monitoring any violating areas must be closed until the standard is met.)

In summary, the BOA requires:

- Clear statements of desired outcomes.
- Management objectives for each outcome.
- Specification of setting characteristics where the BOA is used to manage a particular conservation area. These may be specified as national standards.
- Management prescriptions which show the actions needed to produce the outputs which in turn are necessary to realise the management objectives.
- Standards to evaluate the degree to which the management actions are being achieved and the degree to which the outcomes will be realised.

The BOA planning process starts with outcomes and proceeds through outputs to inputs (Fig.1). The process is not strictly linear, as knowledge about inputs and assets will help determine which outcomes can be targeted for provision. Nevertheless, the focus remains on outcomes.

The BOA differs considerably from the common approach to planning recreation and park resources. Too often, management objectives are not specified, are too vague when they are specified, and direct management actions toward what has been done in the past.

#### 3.8.2 Involvement of all relevant stakeholders

A critical requirement of the BOA is the close involvement of all relevant stakeholders in all phases of the management planning and plan implementation process. They should be involved to the extent that those stakeholders feel 'ownership' in the managerial decisions that are made. As noted in section 3.2.2, stakeholders must be widely defined and include both on-site and off-site consumers.

The concept of the on-site visitor or user is well established in natural resource management agencies which provide outdoor recreation opportunities, but appropriate recognition is seldom given to the off-site user. The BOA views all on-site and off-site consumers as important stakeholders. Off-site consumers comprise those members of local communities and of the general public who do not actually visit the areas or sites being managed but retain an interest in the management of those areas or sites. Most of these off-site consumers pay taxes to support such management.

The benefits realised by the off-site consumers include the spiritual and religious significance associated with many of these public lands, and knowledge desired about these lands, their geology, hydrology, fauna, flora, weather patterns and so on. Important also are the so-called 'existence values' (i.e. good stewardship benefits) ascribed to the protection and maintenance of these lands. These are related to the economists' concept of 'option demand' which reflects off-site consumers' desire to maintain the land to preserve their options to visit in the future. Several household surveys in different countries have established that the magnitude of off-site users' willingness-to-pay taxes to maintain and protect wild areas is sizeable and exceeds by several orders of magnitude the revenue obtained from on-site users of those lands (e.g. Schulze et al. 1983; Walsh et al. 1984; Loomis 1989).

Basic principles of consumer economics state that if people have such willingness to pay, or expend their scarce personal resources, then they must receive some type of utility or benefit. Given that the number of off-site consumers greatly exceeds the number of on-site consumers, it is reasonable to assume that the total benefits realised by off-site consumers may exceed the total benefits realised by the smaller number of on-site consumers, to whom most managerial attention is usually given. The BOA, in its quest for equity, is explicit that off-site consumers are as much owners of public lands as on-site consumers. They are relevant, albeit too frequently forgotten, stakeholders.

Stakeholder involvement is important because in a representative/democratic form of government, stakeholders are the people best able to identify the positive outcomes they want delivered and the negative outcomes they want minimised. However, the resource manager remains responsible and accountable for all decisions made.

Outcomes agreed with stakeholders must coincide with any annual Departmental performance agreement with the Government, and suggests that this agreement should be reformulated into outcome statements rather than outputs. Careful implementation would be needed to avoid compromising Ministerial and Departmental roles.

#### 3.8.3 Consideration of primary and subsidiary outcomes

The BOA was first applied only to guide the management of park and recreation resources. However, because of its comprehensive consideration of positive and negative outcomes to individuals and groups of individuals (families, local communities, society), it is now widely recognised as a paradigm that promotes understanding of the role of leisure services within society.

The BOA 'looks beyond' the needs for managing conservation areas to the broad societal role of public agencies, especially within recreation and tourism. In this way it incorporates both primary and subsidiary outcomes, transcending legislative and administrative jurisdictions and calling for a comprehensive view of how public agencies can serve the general welfare of society. For example, how do or can the recreation opportunities provided by conservation agencies: promote physical and mental health (and thereby reduce the cost of health care); and reduce anti-social behaviour, such as crime, and the high social costs associated with such behaviour?

This orientation, traditionally beyond a park and recreation agency's normal concerns and endeavours, is now common in many countries. For example, the USDA Forest Service brings at-risk youth to work in natural settings despite the fact that they are not legislatively required to do so.

#### 3.9 IMPLEMENTING THE BOA

It is not the purpose of this report to present a detailed implementation manual for the BOA, of which several are now in preparation. However, since an account of the implementation process has not been published in readily available form, the most critical considerations for successfully implementing the BOA will be outlined. These considerations comprise a setup phase,

preparation of a management plan and plan implementation. As noted earlier, the BOA may be implemented with respect to an area of policy (such as visitor asset management), a geographical area (an individual park or reserve) or across the whole Department's operations.

#### 3.9.1 Set up phase

- Endorse the approach. It is desirable that the BOA be endorsed by all levels of the agency in order for it to be effective. A staff member working in isolation will be likely to encounter difficulty operating alone.
- Involve stakeholders throughout the process. All relevant stakeholders (onand off-site consumers, associated providers, and other stakeholders) should be involved in all phases of the BOA.
- Ensure participants understand the process. All participants must understand the BOA and be committed to it.
- Establish roles and responsibilities of key players. The roles and responsibilities of the agency must be understood clearly so as to establish limits on what can and cannot be done. Similarly, the boundaries within which all stakeholders operate must be understood. These constraints, or boundaries, will help establish what positive and negative outcomes may be targeted/avoided and which outcomes are of highest priority.
- Identify and evaluate opposition to the Approach. Any opposition to using the BOA, internal or external to the agency, must be understood and considered in terms of its effect.
- Identify available resources. The resources available to the agency to implement the BOA must be clearly understood.

#### 3.9.2 Management plan preparation

- Identify current outcomes. Members of the agency's planning team and stakeholders must list the positive and negative outcomes that are currently being created by management. The effect of each of these outcomes should be defined in terms of magnitude, where it occurred, what occurred, and who or what was affected. Such an exercise has proven effective in helping those involved understand the nature and scope of the BOA and in defining the current condition, which is a prerequisite to assessing desired future biophysical and social conditions.
- Identify future desired outcomes. A brainstorming session should start the process of identifying desired future biophysical and social conditions. Stakeholders must be actively involved in this session. The purpose is to: identify positive and negative outcomes to be provided/avoided; begin to crystallise an image of what the desired composition and characteristics of the management site/policy area will be like in the near future; and obtain information that will help guide the demand studies that will be made in the next step. Outcomes must be defined very explicitly and defined in terms of their likely magnitudes, where and when the impacts will likely occur, and on whom or what.

In applications of the BOA it has been found useful to start with a broad list of outcomes and screen each outcome for relevancy and feasibility. This comprehensive listing procedure helps prevent the omission of relevant

- outcomes. Appendix 1 provides a list of leisure outcomes as does the *The Benefits Catalogue* (Canadian Parks & Recreation Association 1997). Non-leisure outcomes must also be considered.
- Conduct demand studies. Demand studies are used to help prioritise the selected positive and negative outcomes. The extent of these studies will vary from one application of the BOA to another and might include systematic representative sampling of households, on-site user surveys, consultation with major user groups, use of focus groups, or special science-based studies of particular types of demands. Use should also be made of available secondary sources of data, such as economic, social, and environmental impact assessments
- Prioritise future desired outcomes. The most important outcomes are selected building on information provided by the previous two steps. Thus, the future vision of desired conditions is crystallised and the feasibility of what can be undertaken addressed more fully. This means that the planning team must develop criteria for prioritising what outcomes are of highest priority. As past experience has shown that there is a 'learning curve' associated with implementing the BOA, it is recommended that initially a few key outcomes are targeted for practice with implementing the approach.
- Identify management actions and outputs. The outputs to achieve the desired outcomes are now specified. This includes the specification of inputs and management actions, in the usual manner of management planning. The likely consequences of each proposed management action should be evaluated.
- Prepare the management plan. The plan must include clear management objectives, setting prescriptions (where required), and implementing actions (i.e. actions addressing management, marketing, and monitoring/evaluation including standards, methods, and schedules). These statements must be written for each outcome that is targeted, or for each set of similar targeted outcomes. Care must be taken to avoid the traditional problem of vague statements (see Section 3.8.1).
- Prepare a marketing programme as part of management plan. A marketing programme's primary purpose is to inform consumers about the types and locations of benefit opportunities being made available, as well as the negative impacts that management is attempting to avoid. It is not intended to promote/extol what the agency is doing.
- Prepare a monitoring programme as part of management plan. Instructions and guidelines for monitoring and evaluating plan implementation should be included within the management plan. During plan implementation, monitoring and evaluation activities should be documented in writing, as should any corrective actions that are taken.
- Review the plan. Once the plan has been written, it should receive wide public review, and be revised as needed, before being accepted as the plan that will be implemented.

#### 3.9.3 Management plan implementation

• Implement plan. Implementation of the plan will include the monitoring programme. Management actions should be corrected as indicated by monitoring results.

# 4. Implementing the BOA within DOC

This section discusses the application of the Beneficial Outcomes Approach to the delivery of social outcomes by the Department of Conservation. Its purpose is to ascertain the suitability of the BOA for the Department and the implications for the Department of adopting this approach.

#### 4.1 RELEVANCE OF THE BOA

The purpose of the BOA is to guide the delivery or management of recreation and park resources in order to optimise the resulting net benefits. It meets the need identified by DOC—to develop a process by which the Department can identify and prioritise positive and negative social outcomes from conservation and recreation management.

Stephens (1998, p.1) has noted that the poor identification, definition and visibility of the outcomes of DOC's management has caused conservation efforts to be 'penalised in trade-offs with other quality of life objectives' in the political arena in New Zealand. Stephens also notes a gap between public perceptions of the nature, scope, magnitude and social significance of these benefits and the actual nature, scope, magnitude, and social significance of those benefits, with public perceptions grossly underestimating these benefits. It is important that this gap is reduced and conservation efforts are more fully recognised. The use of the BOA to better evaluate social outcomes can facilitate this.

The BOA has been successfully applied to many park and recreation agencies in the United States and Canada that are similar to DOC in their operations and responsibilities. Since 1992, the BOA has been applied and refined in over 15 pilot-test applications at all levels of government in the United States, and in Ontario and Alberta in Canada. Since 1995, when the concept was formally adopted and promoted by the 26 000-member National Recreation and Park Association in the United States, it has been applied in literally hundreds of municipalities in that country. More recently, the National Association of Recreation Resource Planners in the United States has endorsed the BOA and is actively promoting its application to outdoor recreation resource managers, including the creation of a Benefits/Outcomes Institute to provide instruction and technical information about the approach.

The park and recreation planners and managers who have applied the BOA have had little difficulty in identifying the types of beneficial outcomes most appropriate for their agencies to provide at their specified level. The stakeholders and other interested members of the general public involved in those efforts have liked the BOA and found it easy to understand.

Sections 4.2 and 4.3 assess the policy and management contexts of the Department to better assess the suitability, and the requirements, for implementing the BOA within the Department.

## 4.2 REVIEW OF DOC PRACTICES CONSISTENT WITH THE BOA

DOC has introduced several management frameworks which are outcome-driven, within both the biophysical and visitor service areas. The commissioning of this report indicates the Department's interest in pursuing this style of management. Attempts by DOC to justify, and account for, its conservation and recreation management decisions include work on cost-utility evaluation of conservation projects (Stephens 1998; DOC 2001); the identification of national priority outcomes for conservation (DOC 1999a) and the *Visitor Asset Management Programme* (VAMP) that provides a transparent rationale for investment in visitor services and facilities on public conservation lands. These three approaches will now be discussed in order to assess their compatibility with the BOA. Appendix 3 provides a review of the legislation and policy which informs this discussion.

#### 4.2.1 Visitor asset management and the site scoring system

During the 1990s, DOC attracted close scrutiny with regard to some of its management practices. In response to both internal and external reviews, the Department adopted a new management framework known as Quality Conservation Management (QCM). The new framework aimed to '...ensure that the work that is undertaken conforms as a minimum to the statutory requirements set out in legislation—and that over time, this work will be undertaken in accordance with the best practices known wherever practicable' (DOC 1996a, p.13).

The first application under QCM was the *Visitor Asset Management Programme* (VAMP). Visitor assets managed within this programme included structures, tracks, huts, information, campgrounds, and service areas (DOC 1998b). Further QCM processes were later developed for other DOC work such as animal pests and weeds, and volunteers.

The rationale behind the development of the VAMP was the perceived need to reconcile the Department's asset size, required maintenance and replacement programmes with its budget. According to DOC (1998b) the VAMP facilitates good asset management through creating systems for recording current assets and their condition, improving decisions about assets, allowing for risk assessments to be made, justifying work programmes, and increasing accountability in the use of public resources.

One dimension of the VAMP is the development of a site scoring system which reflects attributes of specific localities managed by the Department. The site scoring system is an example of how DOC has attempted to allocate resources to visitor services and facilities on a priority basis.

The justice of the ranking system, in terms of costs, benefits and opportunities to members of society, is dependent on the breadth and accuracy of the factors used to calculate the site scores. Of the four criteria used, two are relatively objective (current and anticipated demand) and two are open for interpretation. Assessing the importance of each site for recreation and education; and the potential for visitor appreciation and understanding, are subjective tasks. For instance, there may be other factors which contribute to the 'value' of a conservation site, such as visitor sense of place, or contribution to visitor

identity. However, the criteria used must emerge from a strong stakeholder involvement. Recent attempts to develop this system without adequate stakeholder input have resulted in 'crisis' and burden on Departmental resources in the mop-up process. The Department has shown some positive working relationships with stakeholders in some regions in assessing appropriate site scores.

The outcome-focused strategies encompassed by the BOA do not contradict the adopted practices already operating via the VAMP. On the contrary, the site scoring system is working example of how priority setting can inform decision making. However, as discussed in Section 3.8.2, the identification of priorities must reflect more than perceptions of managers and policy makers.

#### 4.2.2 Measuring conservation achievement (MCA)

Stephens (1998) approaches the problem of resource allocation from a costutility perspective. He claims that, in the absence of accurate information about the status of natural heritage, conservation goals and achievements cannot be measured—and the most cost-effective conservation projects cannot be recognised. Through the development of models for assessing conservation achievements and cost-utility evaluations of conservation projects, Stephens (1998) intends to increase the visibility of returns on society's investment in different courses of conservation action. Stephens' (1988) assessment of the relationship between four 'intrinsic' factors (site value, project efficacy, urgency, and feasibility) and four 'extrinsic' factors (complementarity, budget, new capability, and project cost), succeeded in presenting a framework to evaluate the 'project merit' of specific conservation management actions.

Stephens claims that such a framework will help provide an appreciation of conservation's maximum benefit to society, but focuses solely on biophysical objectives. In this sense the framework is not comprehensive, as it does not consider the social outcomes of conservation projects. An assessment of social outcomes is critical in any evaluative analysis leading to programme selection. The risk of pursuing an approach focused solely on biophysical outcomes is that 'conservation achievement' may be considered only in the narrow perspective of biodiversity. 'Conservation achievements' such as environmental learning, economic benefits, personal mental health etc. are ignored. The BOA addresses these social dimensions of conservation management.

#### 4.2.3 Decision support frameworks

The Conservation Policy Division (CPD) has also considered the problem of priority setting in conservation management (DOC 1999a), in order to ensure that the Department's work reflects the Government's priorities and provides optimal value for society. To achieve this, the CPD adopted an increased focus on outcomes rather than outputs: 'We need to compete for more resources. To do that we have to be able to show that we can use resources to produce valued outcomes' (DOC 1999a, p.3). The difficulty is selecting which outcomes are valued.

The CPD (DOC 1999a) argues for the use of a simple decision-support framework to ensure that the Department's decisions are made in a logical and consistent manner. At various points on the framework, choices need to be made which involve trade-offs between competing outcomes or actions. In

order to help prioritise actions, the CPD has tentatively accepted a model very similar to the Stephens' (1998) model, which is dependent on identifying the relationship between intrinsic and extrinsic features of the action.

Of key relevance to the current study is the CPD's attempt to develop a Statement of Ideal Outcomes. The CPD proposes that such a statement be used in two ways:

- As a basis for deciding whether any proposed outcome fits with the Department's mandate.
- As a way of subdividing and expressing the Department's business, to provide
  a basic framework from which national and place priority outcomes can be
  derived (DOC 1999a, p.17).

A consideration of existing legislation, government policies and decisions, and international conventions to which New Zealand is a party (DOC 1999a, p.17), has identified national priority outcomes. These include natural heritage conservation; historic heritage conservation; people's interaction with and enjoyment of New Zealand's heritage; and other government outcomes.

The CPD has identified and clearly articulates the need to prioritise conservation management actions in the context of society's willingness to pay for all possible ideal outcomes. However, interpretation of the relevant legislation (notably the Conservation Act 1987), as it applies to recreation, is limited and fails to adequately consider the full range of desirable social outcomes associated with the public use of conservation lands for recreation. The current study aims to correct this narrow view and highlights the problem of differing interpretation of the Department's role in recreation/tourism management (see Section 4.3.2).

In addition to the decision support frameworks discussed in this section, the CPD is seeking to develop guidelines to direct DOC's determination of which 'national outcomes' it should pursue and to what extent. As this information was given to us by CPD personnel on a confidential basis, we will not comment on those efforts, other than to say that the application of the BOA is consistent with these aims.

#### 4.2.4 Summary

DOC's efforts to deal with the problems of resource allocation and conservation project prioritisation are ongoing. The current study draws on this previous work and attempts to address a void in the application of these techniques to the human dimensions of conservation management. Through the identification and articulation of desirable social outcomes from recreation and conservation actions on conservation land, there exists the potential for the Department to evaluate its progress against its legislative mandate, and justify its management decisions in a society that is increasingly placing public and private agencies under scrutiny.

## 4.3 REVIEW OF DOC PRACTICES INCONSISTENT WITH THE BOA

In order to implement the BOA, the Study Team has identified three aspects of DOC management that require reassessment. These are now discussed. Supplementary information is provided in Appendix 3.

#### 4.3.1 Relative emphasis upon biophysical and social outcomes

The implementation of the BOA within DOC will require clear definition of the agency's social aims in relation to its biophysical aims. Such a definition, or agreement, was not evident among the DOC managers we interviewed. In particular, there was a concern that in the future DOC will place too little emphasis on social outcomes. We speculate that this stems from two factors. First, DOC's recent and current emphasis on biodiversity, and second, the Department's confusion over its role in visitor management (see Section 4.3.2).

DOC's guiding legislation, including the Conservation Act 1987 and the National Parks Act 1980, identifies the welfare of the biophysical environment as a primary concern for the Department. Although social outcomes and use considerations are mentioned, they are invariably referred to as secondary to intrinsic natural and historical values. For example, section 2 of the *Conservation Act 1987*, on which DOC is founded, interprets the word 'conservation' as:

'The preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.'

There is a strong and over-riding protection theme in the New Zealand conservation legislation. We observe that sustainable ecosystem management has emerged as the fundamental responsibility of all the public (especially federal or national) natural resource management agencies in many countries. This has occurred because it is now widely recognised that if the biophysical resource is not protected, it will be impossible to meet social needs dependent on this resource in the long term. The flip side is that conservation, preservation, and sustainability of those resources are not an end in and of themselves; the end is to meet societal needs and preferences while meeting the sustainability goals. Our anthropocentric view is based on our belief that humans manage natural resources to benefit humans. This includes the benefits that humans realise from being good stewards of the natural environment, believing that no species should be extinguished, and caring about the options available for future generations of humans.

During interviews undertaken for this study the term 'conservation achievement' was sometimes used solely to refer to the positive results of the *NZ Biodiversity Strategy* (DOC & Ministry for the Environment 2000). While our analysis of that strategy conducted for this study did not give this impression, there appears to be a narrow conception of conservation outcomes. There are many social achievements realised from DOC management in addition to the biophysical ones.

These social achievements include the provision of a wide array of recreation opportunities, for the realisation of a wide variety of recreation experiences.

Departmental responsibilities off-site, however, through the Resource Management Act (1991) processes and international obligations, imply the importance of off-site consumers and outcomes that accrue to them. Other mandates and managerial directions considered by the authors to be DOC's responsibilities are to promote local community stability, promote environmental learning/stewardship, work co-operatively with the tourism industries dependent on the resources that DOC manages, and attend to the principles of the Treaty of Waitangi.

Given the premise that all public agencies exist to promote the welfare of society, and following the BOA requirement to consider both primary and subsidiary outcomes, the authors suggest DOC can contribute significantly to the Government's strategic goals. Contributions could include, for example, the improvement of New Zealanders' mental and physical health and advancing the environmental understanding of New Zealanders (e.g. within the school system). It does not appear that the Department currently views its social mandate this widely—the Department's Key Result Areas reveal few social concerns outside the statutorily required and established social responsibilities (see Section 3.3 of Appendix 3).

#### 4.3.2 Ambiguous role in visitor management

Various statutes refer to DOC's role in visitor management. The Conservation Act 1987 describes use outcomes of conservation as 'appreciation and recreational enjoyment' (section 2) and 'benefits to present and future generations' (section 6). Section 4 of the National Parks Act 1980 describes outcomes for users as the 'inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features'. The Reserves Act 1977 refers to the 'benefit and enjoyment of the public'. However, these statutes do not specify how people might gain enjoyment or what 'other benefits' of natural features might be. This creates a situation in which DOC must be mindful of the variety of ways that people appreciate or gain benefit from the lands it manages without compromising conservation values.

The lengths to which DOC should go to fulfil its use-related responsibilities is not always clear either. The Conservation Act 1987 (section 6(e)) defines DOC's recreation and tourism management role as follows:

'To the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism.'

The Act provides no interpretation of the word 'foster', thus leading to a variety of interpretations, ranging from 'facilitating' or 'providing opportunity for' through to 'actively encouraging' use and its associated benefits. The Department's stance in its *Visitor Strategy* (1996) appears to provide for existing visitors, rather than promoting use. In the Strategy the primary means for fostering visits by the public is the provision of recreational opportunities and facilities (DOC 1996b, p.22). Nowhere in the document is it implied that active encouragement will be used to foster visits.

The ambiguous nature of certain sections of the legislation thus allows differing interpretations of what use outcomes DOC should be producing; and the lengths to which they should go to do so. There is no single, explicitly worded piece of legislation on which DOC can base its use provision. Some direction is given by policy and strategy documents, which indicate that DOC currently considers its role as one of providing opportunities for an, as yet, unspecified range of natural resource use benefits.

As a result of this lack of clarity, the use outcomes that DOC aims to provide can be confused and potentially conflicting outcomes may be sought by different members of the Department. The Study Team encountered this problem when discussing social outcomes with study informants. For example, one view, contrary to others, was that recreation within the conservation estate should occur only in recreation reserves. This illustrates the potential for individual interpretations of vague guiding principles in visitor management and possible conflicting actions based on these differing interpretations.

The definition of the Department's role with respect to visitor use outcomes should be a priority task in reviews of current DOC policy. Until clarity and consensus can be achieved, the Department's role and purpose may be misunderstood, both internally and externally. This lack of clarity is significant.

Furthermore, the focus of the Department's recreation management programme over the past five years has been supply oriented. The BOA is demand driven and requires a strong focus on what consumers want. While the Department is moving in this direction, the shift in the work of recreation planners from facility management to demand analysis has yet to occur.

#### 4.3.3 Limited community involvement

The concept that conservation land is the common heritage of all New Zealanders is inherent within much conservation legislation. Public involvement in conservation management is a logical extension of this concept and is one of the principles of the BOA. Given the emphasis upon collaborative partnerships within the Approach, this section addresses community involvement in DOC management.

As noted in Appendix 3, the Department has mechanisms in place to involve the public in conservation management, particularly via citizen bodies (especially the New Zealand Conservation Authority and Conservation Boards) and public participation in planning processes, including the preparation of management plans, policies and specific decision-making processes, such as concession management.

DOC recognises that conservation success depends on community support and involvement (DOC 1998a). To these ends, Departmental objectives for community support and involvement include:

- Supporting community understanding of the importance of conservation to New Zealand
- The public having confidence in the Department and supporting its work
- Supporting landowners who value the natural and historic heritage of their land
- Encouraging informed community participation in conservation decision making

• Ensuring that opportunities for active involvement in conservation work are taken up.

DOC takes an inclusive view of its stakeholders, and emphasises working with local communities in its policy and managerial guidelines (see DOC 2000, Appendix 2). This is consistent with a recurring theme of community involvement in the Biodiversity Strategy (DOC & Ministry for the Environment 2000).

Despite this, during the interviewing phase of this project, it became evident that the Department's work with stakeholders places emphasis on site-based users. The BOA advocates the involvement of a wider community of stakeholders in collaborative partnerships. It appears that off-site consumers do not receive the level of consultation equivalent to the magnitude and significance of this group. Section 3.8.2 discusses the requirement that all relevant stakeholders are involved in planning under the BOA.

The BOA specifies that stakeholder involvement go beyond informing them of DOC's proposed actions and positions, and attempt to inform stakeholders about the constraints under which DOC operates that define the nature of positive outcomes it can deliver. The Department has been doing significant work in this area (identifying the costs of visitor facilities for example) which will place it in a better position to achieve this. The BOA is based on the premise that active collaborative partnerships with stakeholders create a perception of personal 'ownership' in the decisions made. This principle is critical to successful implementation of the BOA.

Moreover, community involvement appears to be viewed by the Department as a prerequisite for achieving conservation goals—'conservation goals cannot be fully achieved without community support' (DOC 1998a, p.29). This view also arises in the *Visitor Strategy*, where it is noted that in DOC's prime role of looking after conservation land 'the assistance and/or complementary role of associates (volunteers, recreational user groups, other information providers, etc) is of vital importance' (DOC 1996b, p.8).

Public participation is thus a means to achieve wise decision-making and public acceptance of these decisions. While this concept has merit, the social outcomes afforded to participants through their participation is also a social outcome provided by the Department. The BOA is based on community involvement with view to promoting stakeholders' sense of ownership in conservation management. Clearly there are additional outcomes which arise from community participation in conservation management, including a sense of empowerment, community satisfaction and integration, and self actualisation.

DOC has specific responsibilities to Maori, under section 4 of the Conservation Act 1987. The principles of the Treaty of Waitangi are, however, open to interpretation, which makes defining DOC's role difficult. Legislation settling Treaty claims also has implications for conservation management, notably to date, the Ngai Tahu Claims Settlement Act 1998. Social outcomes from an effective interpretation and fulfilment of section 4 would mirror to some degree the participation-related outcomes suggested for public involvement above. They would be largely limited to those Maori with direct interest in the natural resource or intellectual property in question. However, all New Zealanders should also gain benefit from the knowledge that New Zealand's indigenous culture is being respected and enhanced by statutory conservation managers.

#### 4.3.4 Definition of outcomes and outputs as used by DOC

The Department has used outcomes to direct its management (see for example, the Biodiversity Strategy and the Strategic Business Plan). This is consistent with the application of the BOA. However, the Study Team has several concerns about how DOC uses the word 'outcomes':

- Outcomes identified for DOC social programmes sometimes are expressed too generally to adequately guide field managers' or policy analysts' determinations of relevant outputs.
- Outputs, not outcomes, then become the primary measure of performance.
- DOC is missing opportunities to contribute to national goals that are important to New Zealand because of the way that Parliament, Treasury, and DOC work together to determine DOC's national goal/outcome assignments and those of other agencies. Thus it is a characteristic of the Governmental system rather than the Departmental system.

Outputs play a central role in DOC's programme planning, budgeting, and performance evaluations. To reiterate a central theme of this report, outputs, in and of themselves, do not explicitly show what types of beneficial and detrimental outcomes can result from the production and use of those outputs.

#### 4.3.5 Summary

DOC is currently operating in ways consistent with the implementation of the BOA. However there are certain areas of management apparent to the Study Team which present risks to the successful implementation of the BOA. Modification of these practices is required for the BOA to be accepted and implemented effectively.

#### 4.4 INITIAL ADOPTION OF THE BOA

If the Department chooses to implement the BOA, the Study Team makes the following suggestions, based on prior experience.

We suggest the BOA first be implemented through a small number of pilot-test applications that focus on a few key and well-known positive outcomes, in order to learn more about the approach. Past experience in implementing the BOA has shown that there is a 'learning curve', so we suggest the initial applications not try to be too comprehensive. This will help 'bed in' the process within the Department. All applications should include an integral monitoring and evaluation process. These studies will then refine the BOA planning process into a format suitable for the New Zealand context.

The Department should also consider amending primary planning documents, such as Conservation Management Strategies, to align them with the BOA. National objectives and standards for recreation outcomes could be developed as part of this revision of plans and strategies.

## 4.5 CRITERIA FOR THE IDENTIFICATION, DEFINITION AND PRIORITY OF SOCIAL OUTCOMES

A critical task in implementing the BOA is to identify, define, and prioritise the positive outcomes to be targeted for delivery, and the negative outcomes to be minimised. In doing so, a decision must be made about what is feasible to provide within the agency's constraints and written definitions of its roles, jurisdiction, and responsibilities. This task of outcome definition will require expert professional judgement, but the following considerations are offered as guidelines to help determine target outcomes.

What are the agency's roles and responsibilities?

- Legislation such as the Conservation Act 1987, National Parks Act 1980, Reserves Act 1977, Building Act 1991, etc.
- Other Government directives, including Treasury requirements and public sector Strategic Priorities.
- DOC policies and directives, such as those found in the Strategic Business Plan, the Visitor Strategy and the New Zealand Biodiversity Strategy.

What are the roles and responsibilities of associated providers?

- DOC's niche in the provision of outcomes in relation to other providers (ARC and other local providers as well as providers in the private sector).
- Local Government Act 1974.
- New Zealand Conservation Authority and Conservation Boards—Conservation Act provisions.
- Recreation user groups such as Federated Mountain Clubs, New Zealand Alpine Club, New Zealand Mountain Bike Association, etc.
- Other government departments and agencies, including Police, Work and Income, Education, Tourism, Health.

What broad social and economic goals are relevant?

- e.g. Contribution to economic growth and stability via tourism.
- e.g. Influence on local community cohesion and stability.
- e.g. Improved community health and decreased national health costs.

What do people want?

• Consider stakeholders' interests, expressed needs and demands.

What is equitable?

• Who benefits, who misses out.

What information is available?

- Scientific demand-based studies and impact studies.
- Budgetary data on provision costs.

What constraints does the agency face (budget, staff, political, etc.)?

• Field level feasibility, considering factors such as available personnel and their professional skills, existing infrastructure, traditional uses, suitability of particular sites and areas for specific outcomes, options to use volunteers and to initiate cost-sharing with interested local groups, etc.

- Policy development feasibility.
- · Assess potential for monitoring.

#### 4.6 OUTCOMES RELEVANT TO DOC

This section suggests social outcomes appropriate for DOC provision. These are outlined in order to facilitate later discussion between managers and stakeholders as part of implementing the approach (see Section 3.9.2). They derive from the Study Team's review of the Department's governing legislation, policies, and related considerations. Outcomes in italics are considered to be core or priority outcomes for the Department.

Many of the outcomes are subsidiary, in that they represent sub-categories of the more general national outcome goals. As we have emphasised throughout this report, statements of more specific outcomes, including some of those listed below, are needed for managers to determine which outputs to produce. (See Appendix 1 and the Canadian *Benefits Catalogue* (Canadian Recreation & Parks Association 1997) for more comprehensive lists of the benefits of parks and recreation, which DOC might want to consider as subsidiary outcomes.)

#### Personal outcomes

- · Improved physical and mental health, leading to reduced health care costs
- Appreciation of special places/place attachment
- Provision of a wide array of recreation opportunity for a wide array of personal benefits, such as:
  - Coping with everyday stress to perform more effectively in all arenas (home, work, etc)
  - Increased learning and understanding (natural ecological processes, other nature learning, culture/history related)
  - Enhanced environmental stewardship and environmentally sound behaviour
  - Renewal of human spirit/spiritual benefits
  - Creativity and aesthetic expression and development
  - Skill development and application
  - Social status and self-affirmation
  - Self identity (self confidence, self esteem, self sufficiency, self efficacy)
  - Value clarification, introspection, and perceived sense of fit
  - Enhanced social identity/bonding
  - Enhanced leadership skills
  - Perceived freedom.

#### Societal outcomes

- Community pride, stability and cobesion
- Group cohesion (family, church, scouts, etc)
- National and regional identity, pride, understanding cultural bistory and commitment to good citizenship
- Improved community involvement
- Increased perceived quality of life

- Reduced antisocial behaviour and social alienation
- Strengthened environmental ethic and more environmentally sound behaviour
- Wider understanding, acceptance and support of DOC programmes
- · Reduced health care costs.

#### Economic outcomes

- National economic development (economic efficiency), contribution to net domestic product/balance of payments (tourism)
- Regional and local economic growth and/or stability (includes local employment and cash flows, enhanced secondary economic impacts)
- · Reduced heath care costs
- Marketing value of conservation, branding for other products and services, e.g. NZ souvenirs, 'green' products.

#### Environmental outcomes

- Sustained natural ecosystems
- $\bullet \quad \textit{Protection of biophysical resources, e.g. prevent forest fire, fence for wildlife} \\$
- Maintained/improved biodiversity
- · Managed exotic species
- Protection of cultural/bistorical sites.

# 5. Conclusions and recommendations

This study has examined the BOA as a planning system by which DOC may acknowledge the social outcomes of conservation management. The report provides an overview of the Approach and a review of the context within which it would apply within DOC, in order to assess its suitability and the requirements for its application.

#### 5.1 ADOPT AND APPLY THE BOA

The major recommendation of this report is that DOC adopts the BOA and implements it incrementally. The BOA has been used successfully by similar agencies internationally and it fits with the shift to outcomes-focused management already evident within the Department.

The Study Team believes the BOA can be implemented by DOC to guide its operations in the social realm of its management just as an outcomes approach is proposed for the biophysical realm in the *Biodiversity Strategy* (DOC & Ministry for the Environment 2000) and by Stephens (1998); DOC (2001). Since the Central Policy Division of DOC is exploring means for DOC to identify and

prioritise the outcomes of its operations (DOC 1999a), the BOA seems a logical extension and suitable facilitator of those efforts.

If the Department decides to adopt the BOA, then we recommend it be implemented incrementally via 'pilot-test' applications. These should focus on a small number of outcomes. All applications should include an integral monitoring and evaluation process. We recommend that DOC refines the outcomes-oriented planning process into a format suitable for the New Zealand context as a result of lessons learned. The Department should also consider amending primary planning documents, such as Conservation Management Strategies, to align them with the BOA. National objectives and standards for recreation outcomes could be developed as part of this review of plans and strategies.

In summary, we recommend that:

- · DOC adopts the BOA
- DOC applies it via a few simple case studies, and monitors and evaluates these
- DOC develops the 'New Zealand version' of the BOA process as a result of the lessons learned from initial applications.

#### 5.2 DEPARTMENTAL APPROACH

This study has suggested several areas that need to be addressed within the Department in order for the BOA to work effectively. These are now translated into recommendations.

#### 5.2.1 Increase emphasis upon social outcomes

The primacy of biophysical outcomes within the Department, as supported by the Department's legislative mandate, should not be divorced from human values and outcomes or viewed in isolation to these social outcomes. It is imperative that the human element is not forgotten and goes beyond strengthening public acceptance of biophysical programmes. There are many social achievements realised from DOC management in addition to the biophysical ones.

DOC should consider its ability to promote subsidiary beneficial outcomes to the people of New Zealand, such as promotion of better mental and physical health and environmental understanding. In so doing, DOC can potentially raise its profile and the perceived significance of its contribution to society, as well as contribute to the government's overarching social goals.

In summary, we recommend that:

- DOC makes explicit its target social outcomes
- DOC considers the social outcomes of conservation management in its decision-making processes
- DOC specifies its social outcomes in terms of both primary and subsidiary outcomes.

#### 5.2.2 Clarify role in visitor management

The Department's role with respect to managing visitors must be clarified and publicly stated. Current policy documents do not achieve this. The Study Team believes that the most useful way to achieve this is through the preparation of a policy statement on recreation.

The shift towards a demand-driven approach to recreation management must be accelerated. The current focus on facility management within the Department is primarily supply-driven. We recommend that:

- DOC prepares a recreation policy
- DOC broadens its recreation planning scope beyond facility management planning.

#### 5.2.3 Enhance community involvement

DOC needs to broaden its concept of 'community involvement' to include all relevant stakeholders, including off-site consumers. It needs to involve these stakeholders more systematically in its planning and management on an ongoing basis. We recommend that:

• DOC gives greater emphasis to involving off-site consumers in conservation management planning and policy development.

#### 5.2.4 Specify outcomes more precisely

While DOC specifies generally its outcome goals, greater specificity is needed about targeted beneficial outcomes to guide managers in producing the types of outputs required to realise these beneficial outcomes. We therefore recommend that:

• DOC clearly specifies targeted social outcomes as well as outputs.

#### 5.3 STAFF NEEDS

#### 5.3.1 Utilise recreation professionals and social analysts

Implementation of the BOA requires a high degree of professionalism and knowledge about recreation management and conservation advocacy. Thus, it is imperative that DOC maintain a cadre of well-trained recreational professionals and social analysts. Their role is to understand the human/social dimensions of management of the conservation estate. This expertise is needed to supplement and complement the considerable expertise within DOC in the biological and physical sciences. Employees are needed beyond those with expertise in park and recreation management, and include professionals with expertise in undertaking social impact assessments, economic analyses, public finance assessments, communication science, education, and conflict management. Our recommendation is that:

 DOC maintains a cadre of well-trained recreational professionals and social analysts.

#### 5.3.2 Implement training

Most agencies that implement the BOA have found they needed considerable inhouse training on the approach. To assist with this, the Study Team can facilitate contact with other agencies that have implemented the BOA and have developed training material. We recommend that if the BOA is adopted:

- · DOC develops a library of material on the BOA
- DOC undertakes in-house training in the BOA at all levels of management.

## 6. Acknowledgments

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### 7. References

- Canadian Parks and Recreation Association 1997: *The Benefits Catalogue*. Canadian Parks and Recreation Association, Gloucester, Ontario. Available via email: cpra@rtm.activeliving.ca
- Department of Conservation 1996a: Quality Conservation Management: Visitor Related Structures Training Programme Information Booklet. Department of Conservation, Wellington.
- Department of Conservation 1996b: Visitor Strategy. Department of Conservation, Wellington.
- Department of Conservation 1997: Kaupapa Atawhai Strategy: Atawhai Ruamano/Conservation 2000. Department of Conservation, Wellington.
- Department of Conservation 1998a: Restoring the Dawn Chorus: Department of Conservation Strategic Business Plan, 1998-2002. Department of Conservation, Wellington.
- Department of Conservation 1998b: Visitor Asset Management Programme Information and Training Manual. Department of Conservation, Wellington.
- Department of Conservation 1999a: *National Outcomes: Results of CPD Project.* Central Policy Division. Department of Conservation, Wellington (unpublished).
- Department of Conservation 1999b: 1999/2000 Chief Executive Performance Agreement between the Minister of Conservation and the Director-General of Conservation for the Year 1 July 1999–30 June 2000. Department of Conservation, Wellington (unpublished).

- Department of Conservation 2000: Strategic Directions: A Guide to Staff Preparing the Annual Conservation Directions and Business Plans. Department of Conservation, Wellington (unpublished).
- Department of Conservation 2001: *Making the Best Choices for Conservation*. Science and Research Unit, Department of Conservation, Wellington.
- Department of Conservation and Ministry for the Environment 2000: *The New Zealand Biodiversity Strategy*. Department of Conservation and Ministry for the Environment, Wellington.
- Driver, B.; Brown, P.; Peterson, G. (eds) 1991: *Benefits of Leisure*. Venture Publishing, State College, Pennsylvania.
- Driver, B. 1994: The recreation production process: The benefits-based approach to amenity resource policy analysis and management. Pp. 12-30 in *Friluftsliv: Effekter og goder, Dn-notat*, 1994-7, Direktoratet for Naturforvaltning, Trondheim, Norway. (Proceedings, Scandinavian Conference on Recreation: Benefits and Other Positive Effects. Norwegian Institute of Nature Studies).
- Driver, B.L. 1999: Management of public outdoor recreation and related amenity resources for the benefits they provide. Pp. 2-5 and 27-29 in Cordell, H.K. (ed) Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends. Sagamore Publishing, Champaign, Illinois.
- Driver, B.; Baltic, T. 1990: Equity in public resource allocations. *Journal of Physical Education, Recreation, and Dance 61 (8)*: 53–56.
- Driver, B.L.; Bruns, D. 1999: Concepts and uses of the benefits approach to leisure. Pp. 349–368 in Jackson, E.L.; Burton, T.L. (eds) *Leisure Studies: Prospects for the Twenty-first Century*. Venture Publishing, State College, Pennsylvania.
- Godbey, G.; Graefe, A.; James, S. 1992: *The Benefits of Local Park and Recreation Services: A Nationwide Study of Perceptions of the American Public*. The Pennsylvania State University School of Hotel, Restaurant, and Recreation Management, State College, Pennsylvania.
- Loomis, J. 1989: Quantifying the economic value of public trust resources using the contingent valuation method: a case study of the Mono Lake decision. *Transactions of 54th North American Wildlife and Natural Resources Conference*, Wildlife Management Institute, Washington D.C. Pp. 213–223.
- Mansfield, B., 1996: Working with Local Government for Conservation. Retrieved 13 January 2000 from DOC website, http://www.doc.govt.nz/commu/general/bmcb.html
- Ministry for the Environment 1995: Environment 2010 Strategy: A statement of the Government's Strategy on the Environment. Ministry for the Environment, Wellington.
- National Parks and Reserves Authority 1983: *General Policy for National Parks*. National Parks Series No. 27. Department of Lands and Survey for the National Parks and Reserves Authority, Wellington.
- New Zealand Government Executive 1999: *Coalition Agreement.* Retrieved 10 January 2000 from the Homepage of the New Zealand Cabinet, http://www.executive.govt.nz/index.html
- O'Sullivan, E. 1999: Setting a Course for Change: The Benefits Movement. National Recreation and Park Association, Ashburn, Virginia.
- Outdoor Recreation Resources Review Commission 1962: Outdoor recreation for America: A report to the President and to the Congress (plus 27 other volumes). Government Printing Office, Washington, D. C.
- Recreation Roundtable 1994: Outdoor Recreation in America: A 1994 Survey for the Recreation Roundtable. Roper Starch Worldwide, Washington D.C.
- Schulze, W.D.; Brookshire, E.; Walther, K.; MacFarland, M.; Thayer, R.; Whitworth, S.; Ben-David, W., Malm, B.; Molenar, J. 1983: The economic benefits of preserving visibility in the national parklands of the Southwest. *Natural Resources Journal 23 (1)*: 149-173.

- Stankey, G.; Wood, J. 1982: The Recreation Opportunity Spectrum: An introduction. *Australian Parks and Recreation 22(2).*
- State Services Commission 2000: Retrieved 10 January 2000 from the State Services Commission website, http://www.ssc.govt.nz/siteset.html.
- Stephens, T. 1998: *Measuring Conservation Achievement*. Department of Conservation, Hamilton (unpublished).
- United States Department of Agriculture Forest Service 2000: *USDA Forest Service Strategic Plan:* 2000 Revision. United States Department of Agriculture, Washington D.C.
- United Way of America 1996: *Measuring Program Outcomes: A Practical Approach.* United Way of America, Alexandria, Virginia.
- Walsh, R.; Loomis, J.; Gillman, R. 1984: Valuing option, existence and bequest demands for wilderness. *Land Economics 60 (1)*: 14–29.

## Appendix 1

## SPECIFIC TYPES AND GENERAL CATEGORIES OF BENEFITS ATTRIBUTED TO LEISURE BY ONE OR MORE SCIENTIFIC STUDIES

#### 1. PERSONAL BENEFITS

#### A. PSYCHOLOGICAL

i. BETTER MENTAL HEALTH AND HEALTH

MAINTENANCE

Holistic sense of wellness

Stress management (prevention, mediation, and

restoration)

Catharsis

Prevention of and reduced depression/anxiety/anger

Positive changes in mood and emotion

ii. PERSONAL DEVELOPMENT AND GROWTH

Self-confidence

Self-reliance

Self-competence

Self-assurance

Value clarification

Improved academic/cognitive performance

Independence/autonomy

Sense of control over one's life

Humility

Leadership

Aesthetic enhancement

Creativity enhancement

Spiritual growth

Adaptability

Cognitive efficiency

Problem solving

Nature learning

Cultural/historic awareness/learning/appreciation

Environmental awareness/understanding

Tolerance

Balanced competitiveness

Balanced living

Prevention of problems to at-risk youth

Acceptance of one's responsibility

iii. PERSONAL APPRECIATION/SATISFACTION

Sense of freedom

Self-actualization

Flow/absorption

Exhilaration

Stimulation

Sense of adventure

Challenge

Nostalgia

Quality of life/life satisfaction

Creative expression

Aesthetic appreciation

Nature appreciation

Spirituality

Positive change in mood/emotion

B. PSYCHO-PHYSIOLOGICAL

Cardiovascular benefits, including prevention of

strokes

Reduced or prevented hypertension

Reduced serum cholesterol and triglycerides

Improved control and prevention of diabetes

Prevention of colon cancer

Reduced spinal problems

Decreased body fat/obesity/weight control

Improved neuropsychological functioning Increased bone mass and strength in children

Increased muscle strength and better connective tissue

Respiratory benefits (increased lung capacity, reduced

effects of asthma)

Reduced incidence of disease

Improved bladder control of the elderly

Increased life expectancy

Management of menstrual cycles

Management of arthritis

Improved functioning of the immune system

Reduced consumption of alcohol and use of tobacco

2. SOCIAL/CULTURAL BENEFITS

Community satisfaction

Pride in community/nation (pride in place/patriotism)

Cultural/historical awareness and appreciation

Reduced social alienation

Community/political involvement

Ethnic identity

Social bonding/cohesion/cooperation

Conflict resolution/harmony

Greater community involvement in environmental

decision making

Social support

Support democratic ideal of freedom

Family Bonding

Reciprocity/sharing

Social mobility

Community integration

Nurturance of others

Understanding and tolerance of others

Environmental awareness, sensitivity

Enhanced world view

Socialization/acculturation

Cultural identity
Cultural continuity

Prevention of social problems by at-risk youth

Developmental benefits of children

#### 3. ECONOMIC BENEFITS

Reduced health costs Increased productivity Less work absenteeism

Reduced on-the-job accidents

Decreased job turn over

International balance of payments (from tourism)

Local and regional economic growth

**Employment opportunities** 

Contributions to net national economic development

#### 4. ENVIRONMENTAL BENEFITS

Maintenance of physical facilities

Stewardship/preservation of options

Husbandry/improved relationships with natural world Understanding of human dependency on the natural

world

Environmental ethic

Public involvement in environmental issues

Environmental protection

Ecosystem sustainability

Species diversity

Maintenance of natural scientific laboratories

Preservation of particular natural sites and areas

Preservation of cultural/heritage/historic sites and

areas

Source: Driver & Bruns (1999, pp.352-353).

## Appendix 2

#### ADVANTAGES OF THE BOA

The following discussion on the advantages of the BOA is adapted from Driver and Bruns (1999, pp.363-366). It has been written to identify the advantages of the BOA's application to recreation management. As noted earlier in the report, the BOA now has been applied more widely within natural resource management. Minor amendments to the original text have been made to fit the context of this report.

## Promotes greater public understanding and appreciation of the social significance of leisure

There is a paradox in that while leisure is one of the most important economic sectors and the most beneficial social service, it is not publicly recognised as such. One reason for this paradox is that professionals in all the sub-disciplines of leisure have not successfully or effectively articulated the social importance of leisure. One of the purposes of the BOA is to provide a framework for promoting more widespread understanding of the important contributions of leisure to improving human welfare. That knowledge helps shift the too frequent perception that leisure is a residual to recognition of the real contributions of leisure to human productivity and happiness. Widespread understanding of the benefits of leisure will increase public support for leisure, and such support is necessary to any profession that delivers a social service that is highly dependent on public funding. In addition, this increased public understanding will facilitate more effective working relationships not only between the public and leisure professionals but also between leisure and other professionals.

## Justifies allocations of public funds to leisure in the policy arena

Policymakers need to compare the benefits and costs of alternative uses of public resources. These comparisons, which include but go beyond economic measures of benefit, have grown in importance as demands on public resources have increased and broadened in the face of increasingly stringent agency budgets. As a consequence, public officials, including those in parks and recreation agencies, are being held more accountable. They must explain more explicitly how the public goods and services they provide relate to specific social needs, why those goods and services are being provided, and articulate clearly the likely desirable and undesirable impacts of production and use of those goods and services. The BOA objectively defines those social needs and orients delivery of leisure services explicitly to them. As such, it makes policy decisions less subjective and public policymakers more responsive and accountable.

## Helps planners and managers develop clearer management objectives

Once public policy decisions have allocated public resources to a particular type of recreational use, information on benefits improves the ability of recreation planners and managers to define clear management objectives and prescriptions and then to establish more explicit standards and guidelines for meeting those objectives. Provision of exercise trails, opportunities for self-testing, quiet places, sites for socialisation of many types (such as enhancing family kinships), and options to be free from specific everyday pressures are examples of discrete management actions that can help assure options to realise specific types of benefits. These clear management objectives are facilitated by a better understanding of the outputs of the leisure service delivery system. The BOA requires such understanding and facilitates it by adding the second stage to the recreation production system (see Driver 1994).

## Facilitates improved measures of performance and achievement

By requiring that all outputs be determined by targeted outcomes, the BOA promotes understanding of why outputs will be produced. It also requires that measures of performance and achievement are reported for outcomes as well as outputs. This approach better links inputs to outputs via outcomes.

#### Facilitates social interventions

Increasingly parks and recreation agencies are being given social mandates to promote particular benefits (e.g. environmental learning, increased physical fitness, or benefits associated with use of leisure programmes such as night basketball to help prevent a specific social problem such as reduction in crime or substance abuse). While the BOA, itself, is silent with regard to such 'social engineering', it provides guidance on how to meet these social agendas.

#### Facilitates more meaningful recreation demand analyses

By focusing on ends rather than means, the BOA makes explicit the ultimate recreation products (i.e. benefit opportunities) demanded by different consumers. Thus, under the BOA, the on- and off-site consumers served are better able to communicate their recreation-related needs to managers than they are when attention is devoted only to demands for activity opportunities.

#### Facilitates a collaborative style of management

More and more public parks and recreation agencies are adopting a collaborative/participatory style of planning and management that actively involves a wide array of partners and stakeholders in the planning and delivery of leisure services. The BOA rejects the common idea that a recreation agency is a sole provider. It requires a collaborative style of decision making that necessitates forming collaborative partnerships with the other providers who affect provision of the recreation opportunities and with all other affecting, affected, or just interested stakeholders. The BOA provides a useful and effective framework for facilitating such a style of management.

#### Provides flexibility to managers

Practitioners appreciate the flexibility the BOA affords them. It can be implemented incrementally, and it can be practised at different degrees of comprehensiveness. For example, one agency and its collaborating partners might decide to focus on only one benefit (e.g. promoting physical fitness) or a selected group of most significant and widespread benefits, while another agency and its partners might decide to look in-depth and more comprehensively at a wider number of benefits (i.e. optimising an array of benefit opportunities).

#### Better identifies conflicts and substitutes

Conflicts among consumers are mostly caused by different individuals and organisations desiring different types of benefits. By definition, the BOA makes conflicting demands more explicit. It also facilitates better identification of complementary, or non-competitive, demands and therefore affords better understanding of which recreation activities and settings are—and are not—substitutes for one other.

## Enhances consumers' choice processes and their consumer sovereignty

The BOA assumes that the individual generally knows best what does and does not improve his/her personal welfare. Much of this knowing is derived from experiential learning by trial and error. Certainly, each individual's personal knowledge is highly subjective and is mediated by social norms, mores, personal values, beliefs, and conditioning. Nevertheless, a considerable amount of each individual's personal knowledge comes from factual sources of information that are outside the individual. Examples include research-derived information on the probable effects on an individual's personal welfare of the use of seat belts, avoidance of excessive low density lipid cholesterol in one's bloodstream, hypertension, overexposure to the sun, substance (including tobacco and alcohol) abuse, failure to manage stress, physical inactivity, and poor nutrition. Similarly, the information on the likely beneficial (and detrimental) consequences of specific leisure activities required by the BOA helps enhance the choices of leisure opportunities by citizens. In this way, human welfare is promoted, and the role of leisure opportunities in doing so is better understood and appreciated.

#### Facilitates marketing

Because the BOA makes the products of parks and recreation management explicit, the managing agencies can use this information to develop more explicit informational packages and recreation opportunity availability guides oriented to the specified types of activity, experience, and other benefit opportunities that are being made available where, when, in what amount, and of what relative quality. The BOA also facilitates promotion of specific benefit opportunities if the agency has the social mandate/consensus to do so.

#### Enhances the rationality of recreation fee programmes

Most, if not all, public recreation agencies are having to consider increasing the entrance and/or use fees they charge. This is an emotion-laden issue in which

the 'two sided sword' of equity cuts in both directions (Driver & Baltic 1990). One side argues against constraining access by fees, and the other maintains it is unfair for the non-user to pay the costs of provision and maintenance of recreation opportunities for users. Some people argue that the users should pay their fair share of these costs, while others expand this reasoning and say the beneficiaries—and not just the users—should pay. Their logic is that since recreation is known to be a 'merit good' that provides 'spin-off' benefits from users to non-users, it is only fair that those who receive these social benefits (e.g. enhanced local physical amenities) should help pay the costs of providing those benefits. The BOA helps implement this 'beneficiaries should pay' rationale because it requires identification—and to the extent possible, quantification—of all benefits to all beneficiaries. Therefore, the BOA helps identify those beneficiaries to whom the costs can be apportioned either as user fees or as tax levies.

#### Advances knowledge

The scientific community is interested in knowledge about benefits, because scientists and educators want to understand better what leisure is and its contributions to human welfare. The BOA helps scientists and educators attain this understanding. That understanding helps advance basic knowledge about recreation and thereby promotes better professional practice.

#### Facilitates additional research

Given that research is a building process, an understanding of the impacts of leisure behaviour nurtures additional hypotheses and research about the benefits of parks and recreation.

#### Promotes better education

Better understanding of the benefits of leisure promotes better formal training of students and on-the-job training of practitioners because of that improved knowledge base.

#### Increases pride in the profession

Lastly, and of subtle but vital importance, the above advantages increase the pride of leisure professionals in their choice of a career. This helps make them less defensive and encourages them to take more pride in their socially important tasks. It also causes more highly talented people to enter the leisure professions, a trend that has clearly been apparent during the past twenty years as the systematic body of knowledge about leisure behaviour has increased.

## Appendix 3

## REVIEW OF THE LEGISLATIVE AND POLICY CONTEXT OF DOC WITH RESPECT TO APPLYING THE BOA

#### 1. Introduction

This appendix presents a review of the legislative and policy context within which DOC operates in order to ascertain the suitability of the BOA for the Department. It supplements and supports the discussion within Section 4 of this report. In doing so, it outlines the roles and responsibilities of the Department and suggests the types of social outcomes relevant to DOC. The section also presents material supporting the contention that key legislation can be interpreted in different ways and emphasises the idea that DOC is committed to providing social outcomes.

Key statutes which establish DOC's functions and guide its actions in conservation management include:

- Conservation Act 1987
- National Parks Act 1980
- Reserves Act 1977
- Marine Reserves Act 1971
- Wildlife Act 1953
- Wild Animal Control Act 1977
- Marine Mammal Protection Act 1978.

Statutes under which the Department contributes to the sustainable management of New Zealand include:

- Resource Management Act 1991
- Crown Pastoral Land Act 1998
- Fisheries Acts of 1983 and 1996
- Biosecurity Act 1993
- Forest and Rural Fires Act 1997.

Other statutes impose performance or legal standards upon the Department, or obligations upon it, including:

- Health Act 1956
- Building Act 1991 (and the Building Code)
- Occupiers Liability Act 1962
- Health and Safety in Employment Act 1992
- Treaty of Waitangi Act 1975
- Public Finance Act 1989.

DOC's interpretation of these statutes is provided in policy documents, strategies and business plans. Several of these documents are relevant to a discussion of the Department's social roles and responsibilities, including:

- Restoring the Dawn Chorus—Strategic Business Plan 1998-2002 (DOC 1998c)
- The Visitor Strategy (DOC 1996b)
- The Kaupapa Atawhai Strategy (DOC 1997)
- The NZ Biodiversity Strategy (DOC & Ministry for the Environment 2000)
- The Environment 2010 Strategy (Ministry for the Environment 1995)
- The 1999/2000 Chief Executive Performance Agreement (DOC 1999b).

The Department operates under a handful of policies (e.g. grazing policy, walkways policy) and the old *General Policy for National Parks* (National Parks and Reserves Authority 1983). Departmental strategies, guidelines and procedures provide guidance, with Standard Operating Procedures providing consistency in operational areas.

Within these documents there is clear evidence of outcomes-focused management within the Department (in particular the *NZ Biodiversity Strategy* and the *Strategic Business Plan*). This application of outcomes-focused management is consistent with the application of the BOA.

Outputs play a central role in DOC's programme planning, budgeting, and performance evaluations. Indeed the Performance Agreement with the Minister of Conservation is based on outputs. To reiterate a central theme of this report, outputs, in and of themselves, do not explicitly show what types of beneficial and detrimental outcomes can result from the production and use of those outputs.

At an international level, DOC is a signatory to several global conservation agreements, including:

- The World Heritage Convention
- The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (The Ramsar Convention)
- The Biodiversity Convention
- The Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- The Convention for the Protection of Natural Resources and Environment of the South Pacific (SPREP).

In the following discussion direct Departmental responsibilities are elucidated, followed by DOC's role as a public agent of government in providing a broad range of social outcomes. In this manner, the discussion attempts to identify the primary and subsidiary outcomes, respectively, for which DOC has responsibility.

#### 2. Primary outcomes from conservation legislation and policy

#### 2.1 A mandate to protect

It is clear from conservation legislation that the Department's first priority is the protection of natural and historic heritage. The use of conservation land for recreation, tourism or other purposes is a second priority. The legislation thus provides clear direction in the 'protection versus use' issue, a direction indicated by DOC in its policy and strategy documents.

The Conservation Act 1987, on which DOC is founded, interprets the word 'conservation' as (section 2):

'The preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.'

This definition is significant in two ways. First, by including human use (either recreation or appreciation, now and in the future) under the banner of conservation, it sets the scene for a co-existence of protection and use; second, it shows the underlying emphasis given to natural and historic heritage protection.

The pattern of listing or referring to intrinsic natural and historical values ahead of social or use considerations is prevalent throughout much legislation and DOC policy. The National Parks Act 1980, for example, states its purpose of preserving areas 'in perpetuity as national parks, for their intrinsic worth and for the benefit, use, and enjoyment of the public' (section 4(1)). Even the Reserves Act 1977, a statute less demanding of a protection emphasis for some types of reserve, lists intrinsic values first. It specifies that DOC provide areas 'for preservation and management for the benefit and enjoyment of the public' (section 3(a)).

A notable source of interpretation of the legislation is the Department's mission statement. The Department's mission is 'to conserve New Zealand's natural and historic heritage for all to enjoy now and in the future' (DOC 1998a, p.9). The natural and historic protection focus established in the legislation is evident in this statement. It is also made explicit in numerous documents, including the Visitor Strategy (DOC 1996b, p.11), which states 'from legislation, it is clear that the department's first concern is the protection of the intrinsic natural and historic values of the areas it manages'.

Some variation exists across the range of statutory protection mechanisms in the way the use-protection intricacy is resolved. Some types of reserves managed under the Reserves Act 1977 are subject to less stringent protection measures with more importance placed on use. For example the Reserves Act 1977, section 17(1) states that the designation of recreation reserve has the purpose of:

'providing areas for the recreation and sporting activities and the physical welfare and enjoyment of the public, and for the protection of the natural environment and beauty of the countryside, with emphasis on the retention of open spaces and on outdoor recreational activities, including recreational tracks in the countryside.'

Different levels of protection can also be found in specified zones within protected areas. For example, amenity areas designated under the National Parks Act 1980 are for 'the development and operation of recreational and public amenities and related services appropriate for the public use and enjoyment of the park' (National Parks Act 1980, section 15(2)). In these areas, the development and operation of amenities may take higher precedence than the protection goal of the park.

Such exceptions aside, the legislation is irrefutable regarding the protection versus use dilemma. Natural and historic heritage protection is DOC's fundamental priority. However DOC still has roles to play in managing use. Questions remain as to what priorities DOC should have in place for managing use and the lengths to which it should go to fulfil use obligations.

#### 2.2 Use-related social outcomes

This section supports and represents some of the discussion in Section 4.3.2. With respect to DOCs role in recreation management, the legislation is less conclusive.

Various statutes refer to DOC's role in visitor management. The Conservation Act 1987 describes use outcomes of conservation as 'appreciation and recreational enjoyment' (section 2) and 'benefits to present and future generations' (section 6). Section 4 of the National Parks Act 1980 describes outcomes on users as the 'inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features'. The Reserves Act 1977 refers to the 'benefit and enjoyment of the public'. However, these statutes do not specify how people might gain enjoyment or what 'other benefits' of natural features might be.

The lengths to which DOC should go to fulfil its use-related responsibilities is not always clear either. The Conservation Act 1987 (section 6(e)) defines DOC's recreation and tourism management role as:

'To the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism.'

The Act provides no interpretation of the words 'foster' or 'allow'. The Department's stance in its *Visitor Strategy* appears to be to provide for existing visitors, rather than promoting use. In the Strategy the primary means for fostering visits by the public is the provision of recreational opportunities and facilities (DOC 1996b, p.22). Nowhere in the document is it implied that active encouragement will be used to foster visits.

The ambiguous nature of certain sections of the legislation allows differing interpretations of what social outcomes DOC should be producing, and the lengths to which it should go to do so. There is no single, explicitly worded piece of legislation on which DOC can base its use provision. Some direction is given by policy and strategy documents, which indicate that DOC currently considers its role as one of providing opportunities for an, as yet, unspecified range of natural resource use benefits.

## **2.3** Community involvement in conservation management Information presented here supports the discussion in Section 4.3.3.

The concept that conservation land is the common heritage of all New Zealanders is inherent within much conservation legislation. Public involvement in conservation management is a logical extension of this concept and is one of the principles of the BOA.

Two primary mechanisms for public involvement in conservation management are evident. First the use of appointed citizen boards. The Conservation Act

1987 requires the establishment of a national Conservation Authority and various regional Conservation Boards. These citizen bodies provide for interaction between the community and the Department and have specific policyrelated roles (e.g. to approve management planning documents). Second, some specific requirements for public participation are outlined with respect to the preparation of policies, Conservation Management Strategies, Conservation Management Plans and specific decision-making processes, such as the allocation of concessions. In addition, specific mechanisms are in place for involvement of some iwi, as a result of Treaty Settlements.

DOC's Strategic Business Plan (DOC 1998a) recognises that conservation success depends on community support and involvement. This entails constructive relationships with the community, which in turn require understanding of the conservation needs and realities of stakeholders. To these ends, Departmental objectives for community support and involvement include:

- Supporting community understanding of the importance of conservation to New Zealand
- Public confidence in the Department and supporting its work
- Supporting landowners who value the natural and historic heritage of their land
- Encouraging informed community participation in conservation decision making
- Ensuring that opportunities for active involvement in conservation work are taken up.

A recurring theme of community involvement is evident in the *NZ Biodiversity Strategy* (DOC & Ministry for the Environment 2000). The Department's *Strategic Directions* document (DOC 2000) takes an inclusive view of its stakeholders, and emphasises working with local communities in developing policy and managerial guidelines.

Community involvement appears to be viewed by the Department as a prerequisite for achieving conservation goals—'conservation goals cannot be fully achieved without community support' (DOC 1998a, p.29). This view also arises in the *Visitor Strategy*, where it is noted that in DOC's prime role of looking after conservation land 'the assistance and/or complementary role of associates (volunteers, recreational user groups, other information providers, etc) is of vital importance' (DOC 1996b, p.8).

The Department is aware of the advantages of involving stakeholders in conservation management and Departmental intent to pursue this goal is evident. However, the primary focus appears to be the successful achievement of conservation goals rather than benefits to the public from their involvement.

Further to DOC's responsibilities to involve the community noted above, DOC has specific responsibilities to Maori, under section 4 of the Conservation Act 1987. The principles of the Treaty of Waitangi are open to interpretation, which makes defining DOC's role difficult. Legislation settling Treaty claims also has implications for involving iwi in conservation management, notably to date, the Ngai Tahu Claims Settlement Act 1998 which establishes various arrangements between Ngai Tahu and DOC.

DOC's *Kaupapa Atawhai Strategy* (DOC 1997) sets out DOC's vision and goals with respect to Maori and the Treaty of Waitangi. The articulated vision is that

'the department, Maori and the community at large are working co-operatively to conserve the natural and historic heritage of New Zealand for present and future generations'. Key concepts in the relationship between DOC and Maori include awareness of the other partner's views, a willingness to accommodate those views, reasonableness, fairness and good faith. The development of partnerships between Maori and DOC for the conservation of biodiversity is also an objective set out in the *NZ Biodiversity Strategy*. Such partnerships should be consistent with the Treaty of Waitangi and include recognition of indigenous Maori knowledge, stewardship and the customary use of indigenous species (DOC & Ministry for the Environment 2000).

Involvement in international conservation agreements means that community involvement must also encompass relationships with international conservation organisations such as the IUCN/World Conservation Union.

Public involvement in conservation management (including iwi and Treaty concerns) is a statutory requirement and also enhances DOC's efforts to achieve its protection goals. To these ends, DOC engages in consultation and participation with stakeholder groups and iwi, yet does not emphasise the resulting social outcomes from this participation as a Departmental goal.

#### 2.4 General environmental directives

As a conservation advocate, the Department has a role off the conservation estate though several legislative responsibilities to assist with identification of relevant social outcomes. These range from conservation in Antarctica to coastal management. Key roles and responsibilities are discussed.

#### 2.4.1 Resource Management Act 1991 (RMA)

The RMA provides DOC with the opportunity to promote the conservation of natural and historic resources outside the conservation estate. This role emerges from DOC's interaction with the local government agencies with primary responsibility for enacting the RMA. DOC has four distinct roles during various stages of regional and local policy and plan preparation, as explained in DOC-Local Government protocol (Mansfield 1996):

- Respond to local authority requests for information on natural and historic resources
- Provide the local authority with professional advice on natural and historic resources and their management
- Act as an interested party in discussions over policy and planning options
- Advocate conservation matters throughout the plan preparation process.

The task of community consultation lies with the local authority. DOC's primary role is advocating the protection of natural and historic heritage beyond areas under their direct management.

Under the RMA, DOC must prepare the *New Zealand Coastal Policy Statement* (section 57). Through this policy, the Department is responsible for upholding the aims of the RMA in the coastal environment. Of relevance to DOC is Part II, sections 5 to 7 of the RMA, which states that, all persons exercising functions and powers under the Act shall recognise and provide for the following matters:

'• The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their

margins, and the protection of them from inappropriate subdivision, use, and development.

- The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development.
- The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.
- The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers.
- The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

[Part II, section 5:]...

- To safeguard the life-supporting capacity of air, water, soil and ecosystems. [and Part II, section 7:]...
- The maintenance and enhancement of amenity values.
- Intrinsic values of ecosystems.
- Recognition and protection of the heritage values of sites, buildings, places, or areas.
- The protection of the habitat of trout and salmon.'

This extensive provision highlights social considerations for the Department. First, in advocating for protection from inappropriate use, subdivision or development, DOC moves into potential conflict with the community. Second, by advocating for public access to waterways and coastal environments, DOC are facilitating public use and enjoyment of such areas and thus contributing to use-related outcomes. Third, requirements regarding amenity values point to a collection of use-outcomes. Section 2 of the RMA interprets 'amenity values' as 'those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes'. As with the conservation legislation, there is no reference to specific benefits from public use of managed areas.

# 2.4.2 The Environment 2010 Strategy and NZ Biodiversity Strategy The Environment 2010 Strategy (Ministry for the Environment 1995) contains some direction for DOC's social responsibilities. It includes the following environmental management goals:

- To integrate environmental, social and economic factors into the mainstream of decision making in all sectors, at all levels.
- To encourage environmentally responsible behaviour and informed participation in decision-making by promoting environmental education throughout the community.
- To ensure that people have the opportunity for effective participation in decision making that affects the environment (Ministry for the Environment 1995).

These point to a strong social component for an environmental management agency such as DOC, including environmental advocacy, education and the facilitation of public participation. A similar direction is suggested for DOC in *The NZ Biodiversity Strategy* (DOC & Ministry for the Environment 2000). As the major natural resource management agency in New Zealand, DOC plays a key role in sustaining biodiversity. *The New Zealand Biodiversity Strategy* 

recognises three general benefits to the community from a sustained biodiversity:

- the clean air and water and biological productivity that healthy ecosystems provide
- the pride and profit obtained from New Zealand's environmental branding
- the enjoyment and sense of identity gained from our natural world.

The Department undoubtedly contributes to all of these, yet the extent of their responsibility in these matters is less definite. Items such as pride, national profit and sense of identity are not statutorily required, however they are mentioned in government objectives and warrant consideration as Departmental outcomes.

In identifying principles for managing New Zealand's biodiversity, the *NZ Biodiversity Strategy* introduces several elements that are key to an understanding of social management priorities. First, it is noted that 'the range of values held by New Zealanders needs to be taken into account' (DOC & Ministry for the Environment 2000, p.22). Treaty considerations, particularly regarding the relationship Maori have with New Zealand's biodiversity, are seen as important, as are individual and community responsibility and co-operation in managing biodiversity.

To ensure that society as a whole can gain maximum net benefit, the full range of economic values from biodiversity must be considered by management. The *NZ Biodiversity Strategy* interprets this as including existence values and values for future generations. This is significant in that it recognises off-site consumers of conservation land.

The Strategy provides clearly stated outcome targets, management objectives overtly related to those outcomes, and management actions needed to meet those objectives. This is a good application of the BOA to the biophysical realm of DOC's management. It is suggested that similar application is needed within DOC's social arena.

DOC has a role in conservation advocacy outside the conservation estate. This advocacy responsibility requires a close relationship with local authorities and various policy statements (e.g. the *NZ Biodiversity Strategy*) suggest DOC must recognise and support off-site community-based outcomes.

#### 2.5 Other roles

This discussion has focused on key legislation and policy. DOC has other roles which suggest the Department provides social outcomes. Two examples are the conservation advocacy role in the High Country tenure review process enacted through the Crown Pastoral Land Act 1998 and DOC's responsibilities under the Forest and Rural Fires Act 1977.

## 3. Subsidiary outcomes from DOC's role as an agent of government

As a department of Government, DOC has a role in contributing to a range of social outcomes beyond those directly aligned with conservation management goals. As noted inSection 3.2.1 of the main report, secondary or subsidiary outcomes may be achieved by a public resource management agency which promotes the general welfare of the public. DOC has a wide range of

responsibilities under law and cabinet directives and these are examined for guidance in this matter.

#### 3.1 Financial accountability

Like all government departments, DOC operates under the auspices of the Public Finance Act 1989. This statute governs the use of public financial resources by allowing scrutiny of the government's management of Crown assets and establishing responsibilities and incentives for the effective and efficient use of public resources. While the Act does not guide DOC's choice of social outcomes, it does require that DOC maintains financial accountability. This means that DOC must consider criteria such as budgetary feasibility and relevance to government outcomes when setting priorities.

#### 3.2 Coalition agreement

The 1998 DOC Strategic Business Plan (DOC 1998a) indicates that the *Coalition Agreement* of the Government at that time provided DOC with strategic direction. The 1999 change in government means there is a new *Coalition Agreement* (New Zealand Government Executive 1999), which has as its first goal:

'the implementation of a policy platform which reduces inequality, is environmentally sustainable, and improves the social and economic wellbeing of all New Zealanders'.

While a general statement only, this introduces both the environment and socioeconomic wellbeing as two likely foci for DOC.

#### 3.3 Meeting government objectives through Key Result Areas

The Government's strategic objectives are currently formulated into Overarching Goals and Strategic Priorities. Overarching Goals are broad statements that outline the government's direction and values. In order to link the Overarching Goals to departmental intentions, the Government expresses a set of Strategic Priorities, which are defined as the medium-term objectives for the State sector that contribute significantly to the longer-term Overarching Goals (State Services Commission 1999). Each Strategic Priority may have an impact on more than one department. The Strategic Priorities shape departmental work plans and budgets and are a key element of accountability to relevant Ministers.

The Government's objectives are complemented by Departmental Key Result Areas (KRAs). These are identified by the Minister of Conservation and DOC Chief Executive as the major contributions that DOC can make to the government's Strategic Priorities and Overarching Goals. Alternatively, they may focus on an important area of organisational capability (State Services Commission 1999). Either way, they represent the selected issues on which the Department is expected to focus for the forthcoming year (State Services Commission 1999). Key Result Areas are closely related to the Minister's interest in DOC as a purchaser of outputs from it.

The recent National Government had seven Overarching Goal statements, with primary importance placed on improving New Zealand's prosperity. Of these statements, DOC (1999b) has identified the following to which they intend to contribute:

- Safeguarding the life-supporting capacity of our natural resources
- Sustaining our biological diversity and spectacular scenery

- Building good relationships between the Crown and Maori
- Celebrating and protecting of our cultural, historical and environmental heritage
- Affirming our New Zealand identity.

The final point, affirmation of identity, represents a direction for DOC that is the least obvious in terms of statutory responsibility. However, it is given low priority and not mentioned in the Department's KRAs (see below).

From the list of Government Strategic Priorities to 2002, the 1999/2000 Chief Executive Performance Agreement stipulates that the Department contribute only to the biodiversity-related Strategic Priority, specifically 'safeguarding indigenous biodiversity by protecting habitats and controlling introduced pests' (DOC 1999b). Other Strategic Priorities relating to broad social outcomes (such as health, strengthening families, prevention of youth offending) do not appear to be considered relevant to the Department.

The agreement gives five headings for the Departmental KRAs (DOC 1999b):

- Indigenous biodiversity and natural heritage conservation
- · Historic heritage conservation
- Recreation
- Community relationships and the Treaty of Waitangi
- · Organisational capacity.

Overall, the social elements of the Department's KRAs and stated contributions to government objectives follow its social roles and responsibilities as outlined earlier in this Appendix. Reference to any 'extra' social responsibilities, such as affirmation of national identity or contribution to the value of New Zealand's environmental branding, is not articulated in the final KRAs and Preformance Agreement.

The Department bases its KRAs on 'the Government's strategic focus in relation to conservation' (DOC 1999b, p.6). Therefore, it is not surprising that the KRAs reveal few social concerns outside the statutorily required and established social responsibilities. DOC is unlikely to take responsibility for national social obligations that lie outside the current Departmental mandate.

#### 3.4 DOC's role in relation to other authorities

The Department intends to work co-operatively with key government agencies, national associates and iwi to ensure that appropriate and ongoing consultation occurs 'on matters of mutual interest' (DOC 1999b). It is clear from the list of organisations identified by DOC that it mainly seeks co-operation with agencies that can contribute to its protection obligations. DOC does not seem to offer its co-operation (and its potential contribution to other social outcomes) to agencies with more explicit social mandates. This reinforces the opinion that DOC views itself with focused responsibilities revolving around environmental protection, use and enjoyment and community/iwi relationships. We suggest that 'mutual interest' could require a relationship with agencies such as Work and Income New Zealand, the Hillary Commission for Sport, Fitness and Leisure, and the New Zealand Police.

#### 3.5 Summary

While DOC is required to align itself with government objectives, its established social mandate (as determined from their strategy and policy documents) excludes the possibility of embracing a range of national social outcomes (including many that accrue to off-site users). For the same reason, DOC does not form working relationships with wider social outcome providers, such as Work and Income New Zealand, since there is currently no 'mutual interest'.