Applying the Beneficial Outcomes Approach (BOA) to protected area management planning on Stewart Island/Rakiura, New Zealand

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Kay Booth

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Cover: Cook Arm, Port Pegasus/Pikihatiti, 2008, looking west. The peaks in the distance are Gog and Magog.

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# CONTENTS

Abs	tract		5
1.	Intro	oduction	6
	1.1	What is the Beneficial Outcomes Approach?	6
	1.2	Background to this study	7
	1.3	Study purpose and objectives	7
	1.4	Study scope and approach	7
	1.5	Collaboration between management planning and research	9
	1.6	Report structure	10
2.	BOA	literature review	11
	2.1	Background	11
	2.2	Literature review scope and approach	13
	2.3	Application of the BOA: an overview	14
	2.4	Identifying benefits	16
	2.5	Applying the BOA in management planning	16
	2.6	Public participation processes	22
	2.7	Outcome indicators	25
	2.8	Conclusions	27
3.	Context for the trial BOA application		
	3.1	DOC policy and planning approach	28
	3.2	Stewart Island/Rakiura planning process	33
	3.3	Stewart Island/Rakiura: the place and its people	34
4.	Adapting the BOA model for application by DOC		
	4.1	Application in the USA	36
	4.2	Adaptation for the Stewart Island/Rakiura case study	39
5.	BOA	workshop arrangements	43
	5.1	Pre-workshop papers	43
	5.2	Workshop locations	44
	5.3	Workshop timing	46
	5.4	Facilitation	46
	5.5	Workshop participants	47
6.	BOA workshop process		
	6.1	Outline of the workshop structure	49
	6.2	Activities	50
	6.3	Places	50
	6.4	Experiences	52

	6.5	Outcomes	53
	6.6	Settings	56
	6.7	Connection between parts of the workshop process	57
	6.8	Refinement of the BOA process	58
	6.9	An issue-based application	58
7.	Eval	nating the efficacy of the BOA for DOC management planning	60
	7.1	Fit with DOC policy and planning direction	60
	7.2	Style of public participation	60
	7.3	Community 'buy in'	62
	7.4	Workshop structure	63
	7.5	Contribution to management plan development	63
	7.6	Application elsewhere in New Zealand	64
8.	Meas	suring outcomes	65
9.	Con	clusions	67
	9.1	Utility of the BOA for DOC management planning	67
	9.2	Strengths and weaknesses of the BOA for DOC planning	
	-	purposes	68
	9.3	Study objectives	68
	9.4	Recommendations	70
10.	Ackı	nowledgements	70
11.	Refe	rences	72
12.	Glos	sary	76
Арр	endix	1	
	Bene	efits typology	77
Арр	endix	2	
	Sum Raki Raki	mary of the combined process for reviewing the Stewart Island/ ura Conservation Management Strategy and preparing the ura National Park Management Plan	79
App	endix	3	
	Pre-v	workshop documents for Ulva Island and Port Pegasus/Pikihatiti	81
App	endix	4	
	Port	Pegasus/Pikihatiti Workshop Plan	93
App	endix	5	
_	Ulva abou	Island pre-circulated outcome statement, and comments It it generated in workshops	99

# Applying the Beneficial Outcomes Approach (BOA) to protected area management planning on Stewart Island/Rakiura, New Zealand

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# ABSTRACT

This study critiqued the Beneficial Outcomes Approach (BOA) for application in management planning for New Zealand public conservation lands. It particularly focused upon the community consultation parts of the process. A BOA community workshop process was derived and applied to the Department of Conservation's (DOC'S) Stewart Island/Rakiura management planning process. Using an action research approach, the workshop model was tested and refined via application at six workshops held to elicit community views about specific places on Stewart Island/Rakiura and at two workshops about hunting. The study also identified potential social benefits/outcomes and principles for measuring the achievement of outcomes. The BOA process has merit; its utility lies in its positive fit with DOC's strategic planning direction ('outcomes at places') and its flexibility across place- and issue-based applications. More specifically, the BOA workshop process developed in this study proved to be a good method for identifying participants' values for places.

Keywords: Beneficial outcomes approach, outcomes, benefits, public participation, national park, management planning, Stewart Island/Rakiura, New Zealand

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# 1. Introduction

# 1.1 WHAT IS THE BENEFICIAL OUTCOMES APPROACH?

The Beneficial Outcomes Approach (BOA) is a management planning process developed in the USA for government and public agencies managing natural resources. The BOA framework is structured around identifying the outcomes for which areas are to be managed, and which direct management objectives and policies. It asks the question: 'why should a particular action be taken by a public agency?' and responds in terms of positive outcomes to be provided and negative outcomes to be avoided (within the context of the agency's legislative mandate and resource constraints). By focusing upon the 'end-points' (outcomes), the BOA process helps make public agencies more accountable and responsive to the community.

Natural resource management results in both biophysical and social outcomes. Not unexpectedly, management has tended to focus on biophysical outcomes. The BOA seeks to acknowledge that social outcomes are also important, and provides a framework to select those that warrant targeting. Recreational use benefits are a major component of the array of social outcomes commonly identified, but other social outcomes—such as economic, appreciative and spiritual benefits—are also important. The BOA process does not exclude biophysical outcomes. Rather, it allows all types of outcomes to be incorporated into management systems.

Throughout the BOA management planning process, attention is focused on *outcomes*, defined in terms of value added to, or detracted from, individuals or society, including the values humans attach to ecosystem protection and 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 (such as employment opportunities from track maintenance) or the use of outputs (such as health benefits from recreational use of tracks). Thus, the BOA shifts attention in protected area and recreation resource management beyond inputs and outputs to also encompass outcomes.

The BOA emphasises community involvement in defining current and desired outcomes, and outcomes to be avoided. These outcomes are prioritised and translated into outputs (described in terms of management objectives and actions), as appropriate within the legislative and policy context for the protected area. 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.

# 1.2 BACKGROUND TO THIS STUDY

This report responds to the Department of Conservation's (DOC's) interest in determining how useful the Beneficial Outcomes Approach (BOA) would be for management planning for the public conservation lands it administers. DOC wished to 'test' the BOA model by applying it to a 'real' DOC management planning situation. However, the long timeframe of the management planning process in comparison with the relatively short period allocated for this study, confined the study to implementation of the community consultation steps of the BOA process. In addition, the study addressed outcome monitoring and outlined the range of outcomes that derive from public conservation lands and their management.

This report builds on a previous review of the BOA prepared for DOC by Booth et al. (2002). The earlier report discussed principles of the BOA, its implementation process and critical factors associated with its adoption. Booth et al. (2002) recommended, amongst other things, that DOC:

- 1. Adopt the BOA
- 2. Apply it via a few simple case studies, and monitor and evaluate these
- 3. Develop the 'New Zealand version' of the BOA as a result of the lessons learned from case studies

The current report partly responds to these three recommendations. It helps to fill a gap within the international literature for published work detailing applications of the BOA.

# 1.3 STUDY PURPOSE AND OBJECTIVES

The study purpose was to test an application of the BOA within an existing DOC statutory management planning process, in order to evaluate its suitability for DOC management planning. The study had four objectives:

- 1. Identify the social benefits/outcomes derived from public conservation lands and their management.
- 2. Develop participatory processes so that community-defined expressions of beneficial outcomes can be obtained.
- 3. Apply the participatory processes to a specific case study.
- 4. Define principles for outcome specification and measurement.

# 1.4 STUDY SCOPE AND APPROACH

As a planning process, the BOA follows steps common to most similar planning processes: establish a planning team, gather information (including community values) and interpret these data, develop a plan and associated management strategies, and implement the plan with appropriate monitoring and refinement as necessary. This study focused upon one part of the BOA process—gathering information about community values.

The scope of the study was:

- To comprehensively list the social outcomes that derive from the provision and management of public conservation lands (study objective 1)
- To adapt and apply the BOA within New Zealand's statutory planning framework, with emphasis upon the community consultation aspects of the planning framework (study objective 2)
- To test the community consultation aspects of the BOA by applying it to a 'live' management planning process (study objective 3)
- To outline the principles for defining indicators to allow measurement of outcomes (study objective 4)

As well as its emphasis upon community consultation, this report comments upon other aspects of the BOA process. Although not tested directly, information gathered from consultation with DOC management planners was used to critique other parts of the process and identify likely implications for DOC management planning.

This study used a three-phase approach (Fig. 1).

#### 1.4.1 Phase 1: design of approach

Phase 1 adapted the BOA model for New Zealand conditions. A review of the international literature was carried out, and from this, it was apparent that little formal documentation existed about *how* to implement the BOA. Rather, the literature reflects the early stage of development of the BOA-it tends toward the generic and justification of why the approach should be adopted. Given this gap, direct communication with North American practitioners and researchers was pursued (in particular, Don Bruns<sup>1</sup>; Bev Driver<sup>2</sup>; Steve McCool<sup>3</sup>).



US Bureau of Land Management: BOA developer and practitioner.

2 Primary BOA developer, retired US Forest Service scientist.

3 Retired professor, University of Montana, USA.

#### Figure 1. Study approach.

## **1.4.2** Phase 2: case study applications

Phase 2 was the application of the approach as part of a 'live' DOC management planning process. The joint planning process underway for the Rakiura National Park Management Plan (RNPMP) and Stewart Island/Rakiura Conservation Management Strategy<sup>4</sup> (SIRCMS) was chosen for this. The Stewart Island/Rakiura process was selected (in consultation with DOC National Office management planners) because it was at an early stage in the planning process, the local planners were willing to be involved, and Stewart Island/Rakiura provided case study sites which would test the BOA under differing circumstances.

DOC structures its management plans around 'outcomes at place'; that is, the plans express outcomes (and objectives and policies) for identified geographical places which comprise those parts of the conservation area which require more specific management direction—they are those areas to which the plan will give special attention. Three 'places' identified within the RNPMP/SIRCMS process were treated as case studies for the BOA application. These were: Ulva Island, Mason Bay and Port Pegasus/Pikihatiti. More detail on the Stewart Island/Rakiura context for the study is provided in sections 3.2 and 3.3. In addition, the BOA was used for hunting workshops facilitated by the DOC management planner. Although this issue-based application was not part of the formal research project, it is discussed in this report, as it provides information about use of the BOA for issues other than those just relating to 'place'.

As a result of this study, the public participation process used for these three case study areas (and hunting) was structured around the BOA process. Material gathered from this study was used in the preparation of the management planning documents (RNPMP and SIRCMS) for public conservation land on Stewart Island/ Rakiura.

## 1.4.3 Phase 3: evaluation

Phase 3 comprised evaluation of the adapted BOA approach in terms of its applicability and utility for DOC management planning. Evaluation was undertaken concurrently with Phases 1 and 2. In particular, debriefing sessions held following each public workshop (Phase 2) proved very fruitful for identifying the advantages and disadvantages of the approach with respect to public participation.

# 1.5 COLLABORATION BETWEEN MANAGEMENT PLANNING AND RESEARCH

This research project is an example of 'action research'; that is, it represents a collaborative enquiry between researchers and management planners, to understand the utility of the BOA (a *research* outcome) while seeking to produce an *action* (the development of management plans). While the study did not follow a step-by-step action research methodology, it utilised the principle of 'learning by doing' in an experiential and reflexive manner to examine the research proposition (the utility of the BOA) (see Heron 1996). A principle of action research is to focus upon improving a situation (in this case,

<sup>&</sup>lt;sup>4</sup> A Conservation Management Strategy (CMS) is a plan for all public conservation lands within a defined (large) area.

management planning in DOC) and to add to public knowledge (for this study, the understanding of the BOA). In addition, action research may create learning opportunities for self-help (this occurred with respect to local management planners being exposed to new ways to undertake public participation) (see, for example: <u>http://learningforsustainability.net/research/action\_research.php</u>, viewed 30 November 2007).

The research team was the researcher (KB) and the DOC Southland conservancy management planners who were running the Stewart Island/Rakiura planning process, since the research was integrated fully into the planning process. A positive working relationship was established between the researcher and the planners, which was critical for the successful implementation of this project. All aspects of the public participation process were discussed between the planners and researcher. In particular, the researcher provided comment on drafts of publicly-circulated documents and the structure of each public workshop was developed jointly.

Inevitably, a tension was inherent in this work between the desire to test a process, and the need to engage with the community and produce two planning documents<sup>5</sup>. For this reason, some decisions were taken that were not driven by the research agenda (e.g. the circulation of a paper prior to each workshop). However, such concessions were relatively minor and their effects were far outweighed by the positive contributions gained from being able to use a 'live' planning process.

The researcher established contact with DOC National Office management planners, and maintained this throughout the research process to ensure that the approach being taken stayed aligned with the rapidly changing direction of DOC management planning. The researcher kept up with developments via several meetings (in person and by telephone) and through attendance at the South Island DOC planners' workshop held on 8 November 2007. This helped ensure an appropriate context for the BOA application in DOC and facilitated feedback on the relevancy and 'fit' of the BOA for DOC.

# 1.6 REPORT STRUCTURE

Section 2 is the literature review while section 3 provides the study context with respect to DOC management planning and Stewart Island/Rakiura. Sections 4-6 describe and critique the application of the BOA in this study. This includes the design of the BOA for the New Zealand context and its case study applications. Section 7 evaluates the BOA against selected criteria. The development of monitoring indicators is discussed in section 8, and section 9 presents study conclusions and recommendations.

<sup>&</sup>lt;sup>5</sup> Two separate planning documents are required: the Rakiura National Park Management Plan (RNPMP) and the Stewart Island/Rakiura Conservation Management Strategy (SIRCMS). At the time of writing, it was uncertain whether they would be published jointly in one volume.

# 2.1 BACKGROUND

In recent years, the Beneficial Outcomes Approach to management has been promoted as a holistic management framework through which both recreation and the protection of natural areas can be managed more effectively. The BOA extends earlier recreation management frameworks that were either activitybased or experience-based applications, the Recreation Opportunity Spectrum (ROS) being an example of the latter. The Benefits Approach to Leisure (BAL) has featured since the early 1990s and conceptualises recreation outcomes into three types: activity opportunities, experience opportunities and benefit (or outcome) opportunities (McCool et al. 2007). It shifts managers' focus from inputs (such as facilities) to the outcomes or results from outputs (such as increased environmental understanding).

In a management capacity, the concept has been called Benefits Based Management (BBM), whilst in a planning capacity it has been referred to as Benefits Based Planning (BBP). In response to claims that 'benefits' was too narrow a term, the name was changed to the Net Benefits of Leisure (NBAL), and more recently has appeared as the Beneficial Outcomes Approach (BOA), Outcomes Focused Management (OFM) and the Beneficial Outcomes Approach to Leisure (BOAL) (Moore & Driver 2005). A distinguishing factor is that the BOA is focused upon recreation-related outcomes, while OFM also encompasses other related amenities (Driver 2009a). This report uses the BOA terminology and considers BOA to have the same meaning as OFM (after Driver 2009b).

Much has been written about the benefits approach. As the BOA was conceived within the recreation literature (and remains largely housed within it), it is not surprising that the benefits from recreation participation are well-documented and supported by research (see, for example, Sefton & Mummery 1995; Roggenbuck & Driver 2000). Extensive benefit lists have been compiled, with benefits generally grouped into categories that reflect personal, social/cultural, economic and environmental domains. A comprehensive list of specific types and general categories of benefits attributed to leisure is shown in Appendix 1. More pertinent to this study, is a recent benefits list highlighting the wide range of benefits from protected areas in Australia and New Zealand, compiled by the IUCN World Commission on Protected Areas (Table 1). The IUCN typology places emphasis upon economic and environmental values, while Moore & Driver (2005) place comparatively more stress upon personal and social-cultural benefits. Benefit categories are not mutually exclusive; for example, many economic benefits are also community benefits. The two lists provided in Appendix 1 and Table 1 typify (and provide an up-to-date synthesis of) the various benefit typologies that appear in the literature.

# TABLE 1. BENEFITS FROM PARKS AND PROTECTED AREAS IN AUSTRALIA ANDNEW ZEALAND.

(Provided by Penelope Figgis, IUCN World Commission on Protected Areas, 2006).

#### 1. ECONOMIC VALUES

- Enhancing property values for those neighbouring parkland
- Commercial marketing/promotion based on parkland provision/lifestyle by the land development industry
- · Providing the most vital resources of the Australian and New Zealand tourism industries
- · Promotional use of images for tourism attraction purposes
- Providing the key resource which sustains the outdoor recreation/adventure/dive equipment retail industry
- Stimulating local/regional economies, etc.
- Supporting sustainable commercial and recreational fisheries
- · Supporting sustainable utilisation of wildlife resources by indigenous communities
- Providing valuable community services (e.g. free recreational and meeting spaces)
- Commercial promotional 'use' of the value of the environment by green power and other businesses
- Willingness to pay (evidence of community's willingness to pay park rates, travel costs associated with visit, etc.)
- Providing settings for films and photography—value of pictorial coffee table books, field guides, tourism publications, etc.
- Lowering health costs through providing settings for preventative and therapeutic health
   interventions

#### 2. ENVIRONMENTAL VALUES

#### Biodiversity

- · Protecting the evolutionary richness of millennia
- Maintaining ecological balance
- Minimising habitat and species loss; including opportunities for species to respond to global climate change (the need for places to move to)
- Providing opportunities for education
- Providing opportunities for bio-prospecting (an economic value as well)
- · Providing opportunities for science/research

#### Sustainability

- Sustaining vegetation cover for carbon dioxide absorption; water recycling/treatment; avoidance of pollution, siltation (again, should be an economic value as well)
- Sustaining fisheries (economic, ecosystem services or sustainability?)
- Supporting sustainable utilisation of wildlife resources by indigenous communities

#### **Ecosystem services**

- Water quality/water quantity
- Slope and soil stability
- · Carbon credits
- · Air cleansing
- Protection against natural disaster-flood, storm, wind
- Sources of pharmaceutical research
- · Habitat for agriculturally useful predators and pollinators

#### 3. PERSONAL OR INDIVIDUAL VALUES

#### **Providing:**

- · Joy-aesthetic and spiritual uplift from experience of wild nature
- Health—physical and mental, preventative and restorative, childhood development
- Fun, camaraderie, enjoyment
- · Awareness, learning, understanding
- Preserving 'place'; 'escape'; solitude; places to commune with nature
- Sights, sounds and smells-stimulation and contrasts to an urban world
- Family quality experiences—memories
- Sense of awe

#### 4. COMMUNITY OR SOCIO-CULTURAL VALUES

#### Providing:

- · Images which define a nation
- A sense of connectedness; civic pride; sense of community
- Equitable opportunities for varying demographic communities (e.g. ageing; young families, etc.)
- Opportunities to address anti-social behaviour problem (link between the quality of parks and user behaviour)
- Life enhancement opportunities through volunteering (helping people achieve their maximum potential)
- · Opportunities for environmental education
- Equitable opportunities across socio-economic status communities
- Equitable opportunities across socio-health status communities
- Parks as the great democratiser

#### 4. CULTURAL VALUES

#### Proving for protection of and inspirational qualities of:

- Cultural/heritage sites (Indigenous and European)
- Spiritual places
- · Settings and opportunities for multi-cultural and ethnic needs
- Indigenous cultural landscapes
- · On-going indigenous knowledge and land management
- Art-paintings and sculpture
- Moral ethical values such as inter-generational equity
- Respect for the intrinsic rights of other species
- Religious concepts of honouring creation

## 2.2 LITERATURE REVIEW SCOPE AND APPROACH

In line with the objectives of this research project, this review considers literature that addresses applications of the benefits approach, rather than the identification of benefits per se. The following topics within the benefits literature are of particular interest and relevance to this project:

- 1. Identification of social benefits/outcomes
- 2. Applications of the BOA in specific place contexts
- 3. Development of participatory processes to identify community-defined expressions of beneficial outcomes
- 4. The development of indicators of outcome measurement

Material for the literature review was sourced in three ways:

- 1. Electronic database searches and use of Google/Google scholar search engines
- 2. Targeted searching using authors' names and referenced material identified from the core body of literature
- 3. Direct contact with practitioners in North America

Some issues arose during the search phase. First, the use of the terms 'benefit' and 'benefits based management' within various academic and business fields made it laborious to locate material specific to protected areas. The changes in terminology employed within the benefits movement (already noted) also presented challenges when searching for material. Second, some governmental agency reports were not freely available. Similarly, much of the benefits literature is housed within conference papers, only some of which are published as proceedings. This second problem reflects the 'cutting edge' nature of this area of work.

# 2.3 APPLICATION OF THE BOA: AN OVERVIEW

A considerable body of literature has addressed the *identification* of the benefits/ outcomes of leisure and protected areas. Considerably less attention has been paid to the *applications* of the BOA, in a practical sense, to management planning and actions. One conclusion of this literature review is the lack of assistance the published literature provides for practical applications of the approach. McCool et al. (2007) suggested that the lack of an easy-to-implement and definitive set of steps or processes is a key factor limiting the uptake of the BOA, together with its complexity and greater information requirements. McCool et al. (2007: 104) concluded that the BOA 'is more a conceptual approach to how one may think about the purpose and objectives of provision of recreation opportunities on public lands than a practical decision-making framework'.

Some authors have reviewed planning frameworks used in natural areas. The absence of mention of Benefits Based Management (BBM) is a notable feature of many of these reviews (e.g. Nilsen & Taylor 1997; Newsome et al. 2002; Moore et al. 2003). In part, this may be because benefits-based planning and management frameworks have been a recent development in natural resource planning. The benefits approach builds on both activity-based and experience-based frameworks. The commonly used Limits of Acceptable Change (LAC), Visitor Experience and Resource Protection (VERP) and Visitor Impact Management (VIM frameworks are transitional systems between these two approaches, whereas the Recreation Opportunity Spectrum (ROS) represents an experience-based system (Moore & Driver 2005). Newsome et al. (2002), however, pointed out that it is unusual to find management documents with any of these planning frameworks as their central focus. While the principles of ROS and LAC, for example, implicitly appear in many management plans, no management plans explicitly describe the frameworks or how they have been applied in producing the plans. Reviewers have noted that ongoing stakeholder support is not likely to be engendered by such a lack of transparency (e.g. Newsome et al. 2002).

Newsome et al. (2002) noted that despite considerable research associated with the various benefit-based planning frameworks (such as LAC, ROS or BOA), their uptake has been surprisingly limited. They suggested a number of reasons for this. The specific requirements of these planning frameworks are often difficult to accommodate within management plans that must cover broad resource management concerns. Also, there may be confusion surrounding the exact purpose of each framework. Newsome et al. (2002) argued that lack of resources has restricted the degree to which these planning frameworks have been adopted, especially as many are reliant on the collection of extensive biophysical and social data, require the (often difficult) selection of indicators and involve considerable ongoing monitoring. The additional requirement within benefits-based approaches for public involvement throughout all planning stages presents even greater challenges to managers. Sutton (2004: 411), in a review of planning frameworks in New Zealand (which did include the benefits approach), noted that the BOA 'encourages managers to look at the greater social influences of protected areas on people and their communities and vice-versa'. The problem remains as to how to do this, especially as it can, in some cases, be difficult to establish a direct cause and effect link between management actions and societal benefits and support (Sutton 2004).

Knopf et al. (2004, cited in McCool et al. 2007) suggested six factors required for successful application of the BOA:

- A paradigm shift for public land agencies, from being providers of facilities to producing 'value-added' changes for individuals and communities
- Explicit management objectives oriented towards identifying specific benefits
- Objectives linked with specific management prescriptions
- Marketing programmes designed to accomplish objectives
- Monitoring programmes designed to inform planners and managers about how well objectives are being achieved
- Engagement of all key 'service provider' partners (public land recreation providers, private sector business and host communities)

A number of papers have outlined specific planning steps involved in the implementation of the benefits approach (see, for example, Allen 1996; O'Sullivan 1999; Booth et al. 2002). These planning steps are based on traditional planning frameworks: needs assessment  $\rightarrow$  identification of goals and objectives  $\rightarrow$  programme construction  $\rightarrow$  implementation  $\rightarrow$  evaluation (O'Sullivan 1999). Looking at recreation opportunities, Allen (1996) noted that benefit and opportunity identification is the first and most critical stage of implementing a benefits process. This stage requires that managers and stakeholders work together to identify which core benefits are to be targeted, and to select specific recreation activities and settings that address the target benefits. This requires a structural analysis of each recreation opportunity being offered (Allen 1996). Driver & Bruns (2009) suggested that the application of ROS may be useful in this respect. O'Sullivan (1999) also noted that if an agency is changing to a benefits approach, they need to ask the following questions: what ongoing activities can be modified? How can services be changed to deliver important benefits? In what ways can existing administrative practices integrate benefits management?

According to Allen (1996), the duration of the implementation phase is dependent on two factors: the extent of modifications to existing settings and practices that are necessary in order to address targeted benefits, and the thoroughness of the monitoring and evaluation component. The benefits approach is iterative and a final evaluation and documentation phase is important as a means of documenting and disseminating information learned throughout the planning process. It is important to keep stakeholders 'in the loop' throughout these final stages of the process (Allen 1996). Sutton (2004) identified three useful process steps that increase the scope of generic planning models to incorporate benefits approaches (see Table 2).

GENERIC PROCESS STEP	BOA EQUIVALENT
Identify area issues and concerns	List positive and negative outcomes currently created by management
Define and describe resource classes, public consultation	Involve stakeholders to explicitly define desired outcomes and prioritise them
Implement management options	Prepare a marketing programme, inform customers about types and locations of benefit opportunities

TABLE 2.TRADITIONAL MANAGEMENT PLANNING FRAMEWORKS AND BOAEQUIVALENTS (FROM SUTTON 2004: 413).

# 2.4 IDENTIFYING BENEFITS

In recent years, considerable effort has been put into the identification of social benefits that accrue from natural areas, particularly those related to recreation. Early benefit lists primarily focused on the benefits accruing to individual recreationists. In more recent literature, a broader purview has been taken to consider the benefits accruing to society in general as well as to non-users, including local communities. Within user group studies, attention has focused on the identification and measurement of benefits for different types of users, on the relationship between benefits, activities and settings, and the relationship between on-site experiences and off-site benefits. Some studies have also addressed the social benefits generated by individual actions (see, for example, Eckhart & Allen 1998). Use of the BOA has also extended beyond management of protected areas (see, for example, Borrie & Roggenbuck 1994).

Compared with the extensive research into how individuals benefit from public lands, recreation opportunities etc., considerably less attention has been paid to identifying and testing the benefits to the wider community (Anderson et al. 2000). According to Stein et al. (1999), a valid and reliable set of benefits has not been articulated for communities. In part, this is because many community benefits are more abstract than those associated with participation by individuals. Stein et al. (1999) identified economic values as the most studied type of community benefits.

# 2.5 APPLYING THE BOA IN MANAGEMENT PLANNING

The management implications identified from a range of benefit studies are described in this section. These studies address both individual and community benefits. While many authors note the implications of their findings with respect to management actions, few set out explicitly how practical application of the BOA might be achieved. As a result, the information gleaned from these studies is somewhat 'piecemeal' and does not lead to a cohesive set of recommendations on how to apply the BOA.

# 2.5.1 Individual benefits

Studies of the benefits experienced by certain types of people, or those involved in various types of recreational activities, have been examined. Eckhart & Allen (1998), for example, reported on the application of a benefits-based planning (BBP) model to a pre-existing senior adult walking programme. They found that the implementation of BBP principles strengthened the programme by helping both staff and participants realise the benefits of participating in the programme. Philipp (1997) examined the relationship between race, gender and leisure benefits based on a Benefits Approach to Leisure (BOAL) framework in a metropolitan area in the American south. Results suggested that the 'desired conditions' of leisure were not universal (applicable across all groups of people); nor did 'all people have the same degree of need for similar desired conditions' (Philipp 1997: 204).

A useful review of studies on personal benefits of recreation in the wilderness was presented by Roggenbuck & Driver (2000). They examined the benefits of non-facilitated use of wilderness areas (users who visit alone or in small groups and who do not follow an imposed programme) and found complex linkages between environment, experiences and benefits. The environmental parameters within which experiences and benefits are constituted were found to vary considerably. The experiences and benefits realised by participants were also found to evolve over time. The preferred, expected, and lived experiences associated with leisure activities, and their relationship with subsequent improved or maintained personal conditions (such as physical fitness), could be described at varying levels of specificity. These variations in experience have implications with respect to the appropriate levels of analysis for management, planning and research decisions. The authors questioned the extent to which the 'diversity of values, meanings, preferences, reflections and behaviours disclosed can be integrated usefully into the management of recreation, park and other amenity resources' (Roggenbuck & Driver 2000: 47).

Stein & Lee (1995) surveyed users in a Colorado recreation area in order to investigate the relationship between the benefits desired by recreationists and the activity and setting characteristics that facilitated the realisation of those benefits. According to Stein & Lee (1995), understanding the role of the provider (or recreation manager) in facilitating benefit opportunities is a critical element in the application of BBM. They found some benefits to be setting-specific while others could be realised in a variety of settings. The link between benefits and particular activities was not as strong, with similar benefits able to be realised across multiple activities.

In a similar survey of users in a Korean national park, Shin et al. (2001) identified 12 domains of desired benefits. These were:

- Relationship with nature/scenery
- Escaping pressure
- Learning about nature
- Family togetherness
- Introspection
- Exploration
- Autonomy/achievement
- Being with friends
- Leading others
- Skills/learning
- · Risk taking
- Meeting/observing new people

These benefit domains were then linked to setting characteristics. Two strong correlations were found—between the domains of 'relationship with nature/ scenery' and the setting attributes 'forest/water', 'attractive nature' and 'facility/maintenance', and between the domain of 'escaping pressure' and setting attributes 'attractive nature' and 'social'. The authors argued that these relationships support BBM planning approaches. Park planners could, for example, develop criteria on how park resources contribute to visitor benefits through a combination of an inventory of physical features, knowledge of social factors and consideration of management decisions (Shin et al. 2001).

Pierskalla et al. (2004) collected data from nine benefits-based management studies to examine the relationship between recreation opportunities, activities and settings. They found that not all outcomes require certain types of settings, and noted that outdoor recreation providers may need to manage benefit opportunities differently because settings were more important for some outcomes, activities more important for others (Pierskalla et al. 2004). Six benefits were strongly affected by activity type. These were:

- Keep/get physically fit
- Feel healthier
- Improve skills and abilities
- Feel more self confident
- Gain a greater sense of independence
- Feel stronger spiritually

In comparison, setting type only significantly affected the attainment of one benefit: 'to learn about natural history'. This review highlighted that some benefits were more difficult to quantify. Benefits associated with 'learning more about nature', the 'release/reduction of tension' and 'maintenance of a sense of self-pride' presented challenges in this regard (Pierskalla et al. 2004).

Walker et al. (1998) provided one of the few benefit studies to directly investigate the relationship between on-site experiences and off-site benefits to individuals. One finding of their study was that the quantity of benefits recollected by individuals varied according to how long after on-site visits they were recalled.

A benefits-based activity planning model for youth in at-risk environments was proposed by Allen et al. (1996). These authors noted that recreation experiences have the potential for addressing significant social issues. Their model did not assume that recreation experiences were inherently beneficial or positive for the individuals involved. Other authors have suggested that it may be premature to equate an improved condition in an individual with a benefit for society (Dustin & Goodale 1997). Other critiques of the benefits approach have raised the issue of social equality with respect to beneficial outcomes (More 2002). More (2002) pointed out that while some groups benefit directly through visitation or participation in recreation activities in natural areas, others benefit only indirectly as a result of existence value (i.e. the value of knowing that something exists irrespective of current or likely future use), which results in unequal apportioning of benefits.

The benefits and effects of participation by different types of organised groups in wilderness areas have been studied (Ewert & McAvoy 2000). These authors have suggested that management objectives need to address questions of priority. For example, should one group be favoured over another? How much influence does the wilderness (setting) component have? What takes preference—beneficial participant outcomes or resource protection?

Some more recent benefit studies have extended beyond the generation of benefit lists and have asked 'what benefits are most important in any given setting?' This is partly because of a growing awareness that not all benefits can be realised or provided for (e.g. Pierskalla et al. 2004; Stein & Lee 1995). With respect to the needs of management, O'Sullivan (1999) asked 'what criteria can be used for selecting benefits—do you optimise benefit opportunities or capture a specific benefit?' A similar distinction was made by Driver (1998). This raises

questions relating to who is involved in the identification of benefits, and how the participation processes work. More (2002) suggested that the opportunity costs of benefits are not always considered.

The findings of this section of the Literature Review are summarised in Table 3.

TABLE 3. SUMMARY OF FINDINGS FROM THE LITERATURE SURVEY—INDIVIDUAL BENEFITS.

GENERAL FEATURES OF INDIVIDUAL Benefits	IMPLICATIONS FOR MANAGEMENT AND APPLICATION OF THE BOA	
• The interaction between benefits	Benefits need to be prioritised	
Benefits are often setting-specific	<ul> <li>It is not possible to provide all possible benefits</li> </ul>	
• Benefits associated with activities are the easiest to quantify	<ul> <li>Individual benefits are often place- and/or user-specific</li> </ul>	
• Visitors may use a variety of settings	• Benefits have social equity issues—	
• Some benefits are difficult to quantify	how can they be apportioned fairly?	
• Correlating on-site and off-site benefits is difficult	• In most situations it is possible to provide a range of activity opportunities	
<ul> <li>Some people benefit through direct participation, others gain benefits more indirectly</li> </ul>		

## 2.5.2 Community benefits

Fewer studies have addressed community benefits. Stein et al. (1999) looked at how two state parks in Northern Minnesota benefited rural communities. Mailback questionnaires were used to identify stakeholders' perceived important community benefits, the degree the parks contributed to those benefits and management techniques that can better provide for benefits. Stakeholders were closely involved with questionnaire development. Two groups of stakeholders (one for each park) were selected from park staff and citizen advisory committees who lived in the local communities, because of their expert knowledge of the parks and park/community relationships. A list of 24 community benefits attained from state parks was generated from the stakeholder meetings and then presented in the questionnaire to survey respondents, who were asked to identify the 'top seven'. The research found that while six of the seven most important benefits were the same for both parks, their order of importance varied (see Table 4).

The same study made an attempt to link benefits to management actions. Stein et al. (1999) found that the type of interaction with park staff desired by stakeholders varied depending on the relationship the community had with the park. While the benefits identified in each park were similar, the communities differed in the ways they thought park managers should provide for the benefit opportunities. An important benefit identified by both communities, for example, was the feeling that their community was a special place to live. The stakeholders from one community thought park managers could provide for that benefit through environmental education opportunities, whereas stakeholders from the other community equated the realisation of this benefit with greater community access to the park. There was also a call to balance visitor benefit opportunities and community benefit opportunities (Stein et al. 1999).

COMMUNITY BENEFIT	IMPORTANCE (PARK 1)	IMPORTANCE (PARK 2)
A chance to attract tourism dollars to the community	1	5
A place to preserve/conserve various natural and unique ecosystem	ms 2	2
A chance to experience unique outdoor recreation opportunities	5 3	1
A natural setting in which your community takes great pride	4	7
A greater understanding of your natural environment	5	*
A feeling that your community is a special place to live	6	6
A sense of security that the natural environment will not be lost	7	3
A chance for local people to maintain an outdoor-orientated lifesty	vle *	4

# TABLE 4.BENEFIT RANKINGS IDENTIFIED FOR TWO STATE PARKS IN MINNESOTA(FROM STEIN et al. 1999).

\* Benefit not in top seven

Although stakeholders in both communities thought that park managers were doing an adequate job providing opportunities for benefits, they also indicated that parks could contribute more to those benefits. There were variations in how those surveyed thought this should be done. Stakeholders who had previously worked with park staff, for example, thought that community members should initiate greater interaction with park staff, whereas stakeholders who had no previous interaction with park staff thought the initiative to involve community members lay with park staff. Stein et al. (1999) noted that while qualitative methods can provide data on the benefits desired and the relationships between communities and parks, more studies of a quantitative nature are needed in order to understand the magnitude of those benefits.

In a study of a lake watershed in Minnesota (Stein & Anderson 2002), benefitsbased management was combined with ecosystem management for landscape planning. Group meetings with stakeholders and community leaders (local politicians, chamber of commerce presidents), along with some individual interviews, were employed to generate baseline data on the rural community residents' values for a natural landscape. Then, questionnaires were used to quantitatively examine stakeholders' perceptions of the natural landscape in relation to community services. Stakeholders' valued ecological features, benefits and desired management actions were also examined. For the 17 management actions suggested, greatest agreement was evident for resource professionals to focus upon means to deal with the growing population and to improve communication between local government, land management agencies and residents. Stein & Anderson (2002) pointed out that planning frameworks need to be holistic and take account of the more abstract values residents have with respect to landscapes and the natural environment. For example, the stakeholders in this study were found to value experiential, abstract qualities of their landscape which might be difficult to capture in community and landscape plans (Stein & Anderson 2002).

Similar problems have been identified in other research. Marriott (2002) reviewed some of the community benefit issues raised in a redevelopment proposal for an aquatic centre in Australia. Shortcomings identified by Marriott, with respect to net community benefits, included: statements that claimed local identity benefits to be, at best, vague and, at worst, disingenuous; no definition of local was

provided; much evidence of community benefits was anecdotal; and many of the claimed benefits were generic in nature. Marriott (2002) also found that few of the beneficial outcomes identified in leisure research were considered by, or designed into, the proposal and that the proposals did not reflect many known needs of the community.

Obviously, communities know best what they need and should therefore participate in benefits-based management processes that affect them (Borrie & Roggenbuck 1994). In an urban-based pilot application of BBM conducted in two communities in Portland, Oregon, focus groups were held with general community members, community leaders and people involved in various community planning efforts. Individual interviews were also conducted with key informants identified from within the communities. The experiences and features of the communities in question, and their needs, were identified through the focus groups and interviews. Whilst it was acknowledged that the local park agency was ideally suited to help meet some of the needs identified within the two communities, this pilot project contributed little to any practical application of BBM (Borrie & Roggenbuck 1994).

Yuan et al. (2004) suggested that consideration of recreation values and public use of protected natural areas brings many issues surrounding place attachment and place identification into play. They note that surveys may not be the best way to understand values, as 'the values expressed by people may depend on who is asked, when and under what circumstances' (Yuan 2004: 286). The authors argue that a values-based approach based on the meanings the public hold for places is better suited to developing models of collaborative planning than traditional expert-driven, rational decision-making models. For managers to respond realistically to public expectations they must:

- Recognise that the nature of public planning is such that scientific, objective expertise is only one of the data sources that inform the planning processes
- Explore methods that incorporate a broader range of data inputs including place, place meanings and values
- Experiment with technologies that make the outcomes of management practices more transparent and accessible to affected publics (Yuan et al. 2004: 292)

Anderson et al. (2000), in a review of BBM pilot tests, suggested that there was a need to understand the characteristics of communities themselves, their demographics and their relationships with parks (including their distance from parks, size, community functions and so on). They also noted that research on community benefits has focused on key stakeholders within communities, rather than randomly selected groups of community residents. This can have implications for research results. For example, some studies have reported relatively high response rates for questionnaires, primarily because the people being surveyed are identified stakeholders and, in many cases, have had direct input into the research process. Stein & Anderson (2002), for example, found high levels of agreement with the management options suggested—but noted that this would be expected as the list of options came from the same group of people. According to More (2002), another criticism of the benefits selection processes is that they may favour the upper classes, where people are more articulate and attuned to processes of public involvement.

Findings from this section of the literature review are summarised in Table 5.

GENERAL FEATURES OF COMMUNITY Benefits	IMPLICATIONS FOR MANAGEMENT AND Application of the boa
• A range of methods can be used to identify benefits, e.g. focus groups, interviews,	• Identifying benefits is time and resource intensive
surveys	• The importance of particular benefits is
Community values and benefits can be	place-specific
abstract	• Involving stakeholders in processes can be
• Community benefits may be difficult to	time and resource intensive
quantify	Stakeholders should include local community
• Benefits need to be prioritised as they are	residents, as well as those with special
not uniform across communities	interests in parks
• Relationships with parks vary across	• Community/management interaction needs
communities	to go beyond just the identification
	of benefits

# TABLE 5.SUMMARY OF FINDINGS FROM THE LITERATURE SURVEY—COMMUNITYBENEFITS.

# 2.6 PUBLIC PARTICIPATION PROCESSES

It is clear that processes employed to involve communities in benefits-based management are not always ideal. Difficulties include the identification of relevant stakeholders and the nature of relationships between communities and parks, along with more general issues associated with community involvement in planning processes.

Barriers to achieving good public participation have been addressed in studies of planning approaches which include such participation. For example, Lachapelle et al. (2003) studied four western US park plans. These were selected on the basis of the type of planning issue (e.g. recreation, freshwater management), the focus of planning effort, the spatial scale of the planning process, the bodies responsible and the nature of planning meetings. The study revealed five dominant barriers that impeded one or more of the four planning situations. These were lack of goal definition; lack of trust; procedural obligations; inflexibility; and institutional design (Lachapelle et al. 2003). The authors noted that these barriers are unlikely to occur independently of each other, and suggested that effective planning requires the identification of a clear, specific set of goals. They attributed the failure to achieve clear goals to a lack of effective communication between planning teams, upper management and the public (Lachapelle et al. 2003).

There appears to be general agreement in the literature that involvement of the wider community in planning processes is difficult to achieve. A report produced for the Australian Committee on National Parks and Protected Area Management outlined the benefits and disadvantages of public participation in planning (Parks and Wildlife Commission of the Northern Territory 2002). The benefits of a 'robust' participation process that they identified included improved agency understanding of community expectations, user group needs, and stakeholder relationships, and improved public understanding of agency responsibilities. Disadvantages included time-consuming processes, the likelihood of high financial costs, the need for staff training and capacity building within organisations, and difficulties in obtaining constructive debate when interest groups are entrenched

in their views. The report identified good/best practices in public participation techniques and provided examples of participation techniques and performance indicators for various participation levels (Parks and Wildlife Commission of the Northern Territory 2002).

A number of resources that describe participation techniques are available. The International Association for Public Participation (2006a) outlines a public participation spectrum that illustrates the range of different levels of public impact possible in planning processes. For each type of involvement—inform, consult, involve, collaborate and empower—associated promises to the public and exemples of implementation techniques are presented. A more detailed public participation toolbox is also available that describes a range of participation techniques and points out both the benefits and potential downfalls associated with each (International Association for Public Participation 2006b).

The Canadian Parks and Recreation Association have compiled a practical guide and toolkit for applying outcome-based planning (Canadian Parks and Recreation Association 2008). The guide addresses issues associated with the determination of outcomes, the development of outcome statements and the ways an outcome model can be used as a planning tool. The toolkit outlines the following:

- Ways to identify benefits and determine what desired beneficial outcomes might be
- Planning tools that link desired outcomes and various elements of planning resources
- Tools that can be used to identify and design ways to measure benchmarks and results for the desired outcomes
- A range of tools to assist in the communication and implementation of outcome-based management strategies

A range of practical tools (including focus group scripts and outlines of on-site user surveys) have also been developed to help implement the benefits approach (Canadian Parks and Recreation Association 2008).

Booth & Grocke (1998) identified some issues associated with public participation in sports ground management in New Zealand. The use of focus groups, in particular, presented challenges in terms of keeping the process simple; anticipating what users interpreted as a 'benefit'; educating participants about processes and outcomes of the process; and managing preconceived ideas. They also found problems with the BBM approach in general, including: loss of detail from taking summaries of benefits and issues; difficulties with involving nonclub participants; and participants desire to know what the outcome of their involvement will be (Booth & Grocke 1998). These issues are all common to planning processes that involve communities.

A study in south-east Queensland examined the ways in which collaborative planning and management could be applied to rock climbers and associated stakeholders in protected areas (Steele 2006). The study found that barriers to collaborative planning included issues of representation, process, decision-making, power and responsibility. Collaborative planning had the potential to improve understanding between planners and climbers regarding issues relevant to climbing, such as the changing culture of climbing, agency resources and agendas, and environmental concerns (Steele 2006). A number of strategies for

a more collaborative approach to protected area planning emerged from the research. These included: better coordination and streamlining of resources; ensuring appropriate representation; providing a range of avenues for discussion and learning as a means of promoting trust and coordinated action; recognising that planners and managers are as complex, transient and diverse as outdoor recreation communities (Steele 2006).

A description of comprehensive public participation in community planning was reported in an Australian study focused on improved decision making about water and related management issues for the Lake Mulawa area of the River Murray system (McIntyre et al. 2006). A 'water benefits' approach allowed for the explicit expression and inclusion of a much greater range of values and benefits than would normally be provided for in water resource management. Water benefits were defined as 'people's perceptions of their wellbeing as a result of water, its use or management' (McIntyre et al. 2006: 2). Consultation led to the identification of six benefit domains or categories for the case study area: environmental improvement; increased tourism industry; foreshore management and development; more enjoyable recreation; promotion of indigenous culture; and greater understanding of the broader River Murray system. It was also recognised that the agencies, organisations and individuals with responsibilities in the plan needed to demonstrate how they were going to work together to achieve the identified outcomes.

DOC has commissioned research to examine the effectiveness of its own public participation processes (Airey 1996; CRESA 1998; James 1990; Warren 2002a, b). The results of these studies indicate room for improvement, but are not reported in detail in this report, as other research is currently addressing these concerns, and this report's focus is the BOA process rather than community consultation per se.

Findings from this section of the literature review are summarised in Table 6.

GENERAL FEATURES OF PUBLIC Participation processes	IMPLICATIONS FOR MANAGEMENT AND APPLICATION OF THE BOA
<ul> <li>Relationships between stakeholders need to be clearly defined, particularly who has what role in the planning process</li> <li>Outcome goals must be clearly defined, but this is difficult to do</li> <li>Public participation methods are complex</li> </ul>	<ul> <li>Implementing public participation processes is time- and resource-intensive</li> <li>The most appropriate method of participation needs to be considered</li> <li>People's roles in the management planning process need to be made explicit</li> </ul>
<ul> <li>Stakeholders often have entrenched opinions</li> <li>Ongoing communication is vital</li> <li>Public participation processes need to be transparent</li> <li>Some resources are available on best practice for collaborative planning</li> <li>Identification of performance indicators is important</li> </ul>	<ul> <li>Public involvement needs to go beyond the planning stages of any process</li> <li>The views of management representatives may be as diverse as those of other stakeholders</li> </ul>

TABLE 6. SUMMARY OF FINDINGS FROM THE LITERATURE SURVEY—PUBLIC PARTICIPATION PROCESSES.

## 2.7 OUTCOME INDICATORS

The literature suggests that public participation needs to go beyond the identification of benefits and the planning stages of management. An iterative relationship is recommended that maintains public involvement through to the implementation stages of management plans. A beneficial outcomes approach requires the identification of indicators which can be used to assess benefit outcomes and applied management actions. There is a great deal of literature about monitoring recreation in protected areas, but not much that specifically addresses indicators of beneficial outcomes.

Balmer & Clark (1997a) noted that indicators need to provide measurement tools that allow performance audits to focus on what is really important, not just on what is easily measured. The challenge is to develop measurement indicators and standards for outcomes, quality and efficiency rather than just for outputs. Balmer & Clarke (1997a) suggested that two levels of indicators need to be considered: general global or social indicators that relate to the community at large, and more specific or direct indicators that focus on individual participants or groups. Balmer & Clarke (1997b) reported on a series of workshops which were conducted in five Canadian cities to develop, adopt or adapt measurement techniques that related to community priorities and benefit outcome statements for parks and recreation. A sample group was constructed from community leaders in each city. Half of the people in each group had vested interests in the field of parks and recreation, and half represented wider perspectives. For each city, a number of benefits related to parks and recreation were identified and ranked by importance. Workshop participants then identified indicators and measurement tools that might be applied to each of the priority benefits and programmes/ services (Balmer & Clarke 1997b). Although the measures suggested have not been applied in the field, the two publications that report on this project offer an extensive collation of possible indicators and measurement tools (Balmer & Clarke 1997a, b).

The Lake Malawa study (McIntyre et al. 2006) collected some useful information on benefit indicators-the measures respondents indicated as being important or relevant when assessing the success of the implementation of different actions in the management plan. Most of the indicators suggested required the establishment of an initial baseline against which changes could be measured. There was potential for community involvement in baseline data collection and ongoing monitoring (McIntyre et al. 2006). The indicators offered by the community showed management agencies what to concentrate on when trying to deliver the benefits identified. While there was little argument between different stakeholder groups as to the identification of benefits and their achievement possibilities, the research showed that the implementation process may generate conflict unless the community is involved in the process (McIntyre et al. 2006). As the 'best practice' participation report (Parks and Wildlife Commission of the Northern Territory 2002) noted: 'even following an agreed public participation process it is unlikely that all participants will be completely happy with all decisions made. The important thing is that they are satisfied with the process'.

An American study reported on a project that sought to develop or refine social and biophysical indicators and standards for visitor and community benefits, and resource quality in the watershed area of two Minnesota lakes (Schneider et al. 2006). Several recreation benefit factors were identified as important across the watershed. These were: recreating in a natural environment, achievement, autonomy, recreating with similar people, and learning. Although the study found that most of these factors were attained most of the time, it was also shown that they were primarily attained in only three of several available areas. This suggested future possibilities of crowding, disproportionate resource impacts and possible safety concerns. The authors suggested that the best indicators of benefits will be determined by on-site teams, but acknowledged that a number of possible indicators exist for each of the benefits sought. Possible indicators associated with the attainment of 'recreate in a natural environment', for example, include the following measurable features: the amount of erosion/shoreline, the amount of development within the project area, water quality, scenery quality, the number and types of signs, and access type and visitor numbers (Schneider et al. 2006).

As observed in other benefit research, Schneider et al. (2006) found that benefits sought varied according to activity type and visitor or setting locations. According to these authors, such differences suggest a need for differentiation in marketing and planning in order to optimise experiences for different user groups. They also suggested that marketing strategies are needed to enhance place attachment, and to provide educational and learning opportunities for visitors. Study respondents generally agreed, for example, that the lakes and recreational use of them were economically important to the local area. There was less agreement that commercial navigation was important to the area, suggesting that an opportunity existed to educate visitors about the importance of this. Schneider et al. (2006) noted that managers might want to monitor benefits that they consider critical, such as health and safety.

The marketing of benefits, and their importance, is critical as a means of communication between those involved in recreation and protected area management and stakeholders with their diversity of interests. The Canadian Parks and Recreation Association (2008) outlines some useful strategies for adopting a social marketing approach in benefits-based management. Compared with traditional marketing, this approach seeks long-term or permanent change, long-term investment and has a broad scope and approach.

Findings from this section of the literature review are summarised in Table 7.

GENERAL FEATURES OF INDICATORS	IMPLICATIONS FOR MANAGEMENT AND APPLICATION OF THE BOA
<ul> <li>Baselines need to be established before outcome measurement starts</li> <li>All parties must agree on which indicators</li> </ul>	• Establishing baselines requires managers to have clear ideas of the expected outcomes of their management actions
should be measured • What the best indicator is for each outcome	• Long-term outcomes need to be measured, as well as short-term outputs
must be established • Using indicators usually requires a long-term approach to monitoring and management	<ul> <li>Identifying and applying indicators provides opportunities for visitors and communities to be educated about benefits</li> </ul>
Using indicators provides opportunities for community involvement	• Marketing is important as a means of communication

TABLE 7. SUMMARY OF FINDINGS FROM THE LITERATURE SURVEY—OUTCOME INDICATORS.

# 2.8 CONCLUSIONS

The published research and practice literature lacks adequate documentation of BOA applications. In order to understand how to implement the BOA for this study, direct contact with practitioners was required.

The benefits literature has developed in parallel with the various stages of the BOA process itself. The greatest amount of research effort has been in the identification of benefits, with an increasing volume of work examining public participation processes and methods (as part of a broader field of literature) and, more recently, the beginnings of a literature on outcome indicators.

The BOA is underpinned by a collaborative style of planning. Communities/ stakeholders are inherent in the process, and their engagement is pursued in a variety of ways. Because of the emphasis on collaboration, several planning principles must be emphasised. These are:

- Communication is necessary at all stages of the process
- Procedures must be transparent
- An iterative approach should be used

It is not possible to realise all the benefits that might be desired from a particular place. Ultimately, managers must have a clear understanding of the benefit outcomes to be targeted at each place.

# 3. Context for the trial BOA application

This section addresses the characteristics of DOC management planning and the case study sites in order to provide context for the BOA study. The legal, policy and planning framework within which the Stewart Island/Rakiura process is subsumed is reviewed. This review provides the context for the case study applications, as well as institutional information relevant to the evaluation of the BOA's utility for DOC. In order to understand the case study context, section 3.2 outlines the nature of the DOC Stewart Island/Rakiura management plans, and section 3.3 briefly describes Stewart Island/Rakiura and its resident community.

# 3.1 DOC POLICY AND PLANNING APPROACH

DOC is increasingly taking an outcomes-focused approach to its management of protected areas and recreation resources. This shift has been documented by Booth & Edginton (2009), and their conclusions are summarised in this section.

Since the early 2000s, DOC has moved to a strong social outcomes focus within its strategic documents. This is beginning to filter down into management planning documents. To date, the written specification of outcomes is a mixture of output and outcome statements. DOC has moved from a narrow definition of social outcomes, and a strong emphasis upon satisfying site-based users, to recognition of a full spectrum of outcomes for the public. While, philosophically, DOC is 'thinking outcomes'; prior to the current study it had not made the shift to *applying* the BOA process at a specific place, or used the approach to address a specific issue or operate a programme.

## 3.1.1 Strategic plans

DOC's strategic direction document (DOC 2009) uses an outcomes orientation and acknowledges the human dimensions of conservation management. It is headed by the outcomes-related statement that 'New Zealanders want their natural and historical heritage conserved' and describes DOC's purpose as 'to increase the value that New Zealanders attribute to conservation' (DOC 2009: 11). Five objectives are listed to achieve this goal, including that 'the Department will seek to entrench conservation as an essential part of the sustainable social and economic future of New Zealanders, especially through fostering recreation, use, and enjoyment on conservation land' (DOC 2006: 11).

The strategic direction makes plain the *public* outcomes of DOC's work rather than simply the recreation-related benefits. It therefore embraces the BOA model of a broad definition of social outcomes.

On an annual basis, DOC prepares a long-term strategic business plan, known as a Statement of Intent (SOI). Analysis of DOC's SOIs between 2001 and 2009 indicates a significant reframing of recreation management strategy from outputs to outcomes management. The social benefit outcome statement (called 'the appreciation outcome') for the 2006-09 SOIs stressed benefits and people's connection with conservation: 'People enjoy and benefit from New Zealand's natural and historic heritage and are connected with conservation' (DOC 2006a: 71). 'Benefits' are defined within the document as follows: 'Benefits means to enhance or improve social conditions (such as community health) or to receive some personal or individual advantage, gain or profit through passive or active involvement with New Zealand's indigenous biodiversity for a range of reasons, including recreation, education, tourism and business at places managed by the Department of Conservation'. Benefits are explained as encompassing 'household and community benefits, personal benefits (such as better mental health, physical health, personal development and growth, personal appreciation and satisfaction, and physical fitness), economic benefits and environmental benefits' (DOC 2006a).

# 3.1.2 General policy

Two general policy statements relating to DOC were published in 2005. One covered national parks (NZCA 2005), while the other encompassed all other types of protected area (DOC 2005). These documents provide 'guidance for consistent management planning for the wide range of places and resources administered or managed by the Department' (DOC 2005: 9). This guidance is constructed around the notion of 'outcomes at place', thereby establishing an outcomes orientation for DOC's statutory planning framework, although the general policies stop short of presenting outcome statements per se.

Outcomes are defined as 'a goal or end result of conservation action or a series of actions' (DOC 2005: 59) and are integral to management planning, in that 'The starting point for determining the management objectives for a place is to identify the values of the place ... which need to be preserved and protected. Management objectives can then be formulated to achieve planned outcomes that are consistent with the intrinsic values' (DOC 2005: 12). Through the policies they express, these documents cement outcomes-focused planning. Examples include:

- Each national park management plan will identify the outcomes planned for places within the national park consistent with the values of those places identified in the planning process (General Policy for National Parks, policy 8.1a).
- Recreation opportunities will be provided on public conservation lands and waters. Where provided, they should be consistent with the values and outcomes planned for places (Conservation General Policy, policy 9.1a).
- People and organisations interested in national parks will be consulted when statutory planning documents for national parks are developed, including outcomes sought for places within national parks (General Policy for National Parks, policy 3d).

The importance of the general policies relates to the direction they provide for the management planning documents: CMSs and national park management plans (NPMPs). The two General Policy documents provide the framework to ensure national consistency with respect to interpretation of the legislation and its enactment in CMSs and NPMPs.

# 3.1.3 Conservation management strategies and management plans

Conservation management in each of the conservancies that comprise DOC's regional structure is guided by a document which expresses the strategic management direction for the conservancy. This document is called a Conservation Management Strategy (CMS). In 2007, a national framework was prepared to guide CMS content. This specifies that a CMS will include:

- National statements that apply across a CMS area
- A framework for statements about particular conservation issues, such as pest animals/plants, that apply across a CMS area
- Standard objectives and policies that apply across a CMS area
- The requirement to include more focused outcome-based management for specific places within a CMS area

The framework also includes a companion document that outlines what nationally-agreed tools should be used for implementing the directions contained in the framework. This includes guidance on what can be included as 'places' and a simplified recreation opportunity classification system to be used as the foundation for describing the range of opportunities available:

The operative components of each CMS will be: (1) management objectives and policies (general direction across/among places or for resources not included in specified places); and (2) place objectives, outcomes and policies. For each 'place' identified within a CMS, the strategy will identify

- 1. *An outcome statement*. This comprises 'word pictures' of a future desired state as it will be experienced by visitors to that place. This may be broadly similar to, or better than, the present state. The language of the outcome will be written in an appealing or inspiring manner.
- 2. An objectives statement. This lists the actions required to achieve the desired outcome(s). 'Objectives' are statements of a future desired state at a place, which may not necessarily relate to the experience of a visitor, that are clear and specific about the end result sought in terms of its nature, extent or scale. 'Place objectives' in a CMS may be time bound, but this is not a requirement.
- 3. *Policy statements*. Policies for places establish principles or courses for action and can be decision-making tools that help achieve the outcomes or objectives.

The terminology used by DOC (above) differs from the BOA literature (section 2); however, the intention is similar. CMS documents will identify the outcomes being planned for (by way of 'outcome statements'), and then describe the objectives and policies to achieve these outcomes.

CMSs provide one avenue for defining an outcome-based approach to conservation management. In order to achieve all facets of the broad social outcomes mandate established by DOC's strategic direction, including recreation-related benefits that accrue off-site (such as health benefits), DOC will need to pursue nonplace outcomes via other mechanisms. This may include, for example, enhanced societal attitudes toward conservation/recreation.

Management plans currently under review, including the RNPMP, are being written to execute the outcomes approach required by the General Policies. As these plans are still in draft form, or in preparation, it is too early to comment upon them.

## 3.1.4 Collaboration with stakeholders

Critical to the successful implementation of the BOA is the involvement of stakeholders. As is usual practice now in public agencies, DOC encourages public participation. Other than an overarching reference to the Treaty of Waitangi<sup>6</sup> (and thus a requirement for a relationship with Maori), public participation clauses in conservation legislation are not detailed in terms of *how* to seek public engagement and *who* should be the focus of this engagement. The process laid out in the National Parks Act 1980 (section 47) for the preparation/review of national park management plans is illustrative of the statutory requirements imposed on DOC:

- 1. Consult with the Conservation Board.
- 2. Through notices in newspapers, notify the public of the intention to prepare review the management plan and invite written suggestions.
- 3. Prepare the draft management plan in consultation with the Conservation Board.
- 4. Through notices in newspapers, invite written submissions from the public on the draft management plan.
- 5. Write to those people who provided written suggestions earlier in the process, inviting written submissions on the draft management plan.
- 6. Provide free inspection copies of the draft management plan.
- 7. Hear oral submissions from submitters who request this opportunity.
- 8. Amend the draft plan as appropriate and send to the Conservation Board for its consideration.
- 9. Send revised plan to the New Zealand Conservation Authority for its approval.
- 10. The Authority to consult with the Minister of Conservation in its deliberations.

While this particular process provides for public participation, it is silent on how best to do this, other than referring to public notices and hearings. However, conservation legislation does not limit public engagement to the measures outlined in the statutory process (such as those mentioned above). Instead, it leaves the design and execution of the public participation process to the discretion of DOC planners.

The norm for public participation in DOC processes is for the public's views to be sought on documents (various forms of written statements to which the public can respond). A typical approach for public involvement is for the planner to call a public meeting when a planning document is released (e.g. discussion document, draft management plan). The planner will explain the purpose and content of the document (often using an audio-visual presentation), outline how the public can communicate their views to DOC and answer any questions. Informal discussion usually occurs over a cup of tea at the conclusion of the meeting. Prior to the public meeting, key stakeholders may have been consulted (e.g. local authorities, iwi, key conservation and recreation groups, concessionaires).

<sup>&</sup>lt;sup>6</sup> Te Tiriti O Waitangi/the Treaty of Waitangi was signed in 1840 between Britain and more than 500 Maori chiefs, establishing New Zealand as a British colony. The Treaty has an important and increasingly recognised role within New Zealand's legal, social and economic fabric; however, its interpretation remains contested.

In their design of an outcomes framework for DOC, Booth et al. (2002: 31) concluded that 'the Department's work with stakeholders places emphasis on site-based users ... off-site consumers do not receive the level of consultation equivalent to the magnitude and significance of this group'. Furthermore, the same authors noted that community involvement appeared to be viewed by DOC as a prerequisite for achieving conservation goals, rather than with any view of promoting the benefits to stakeholders from their participation.

A key point is that while DOC has standard practice with respect to public participation, the form of engagement, as outlined above, has scope for improvement with respect to greater participation by the community. With reference to the public participation spectrum (International Association for Public Participation 2006a), DOC could move from the 'inform' end of the spectrum towards the 'empower' end. This provides the opportunity for innovation by applying processes such as the BOA.

# 3.1.5 Lessons and challenges

Booth & Edginton (2009) concluded their review of DOC's shift towards an outcomes approach with a set of lessons and challenges. These comments are re-presented here; lessons are discussed first.

First, the 'outcomes at place' notion that is integral to DOC's planning framework was born out of a lack of resources to manage all places intensively. The identification of 'places' (that is, the important parts) in CMS documents and management plans provides a lesson about the need to be strategic and put resources into the places that matter most. By preparing strong strategic documents (general policies and CMSs), the need for detailed conservation management plans is reduced and planning resources are used more effectively.

Second, the initiative for adopting the BOA into DOC processes was strongly influenced by the New Zealand Government's 'whole of government' focus on outcomes. This set the stage for DOC to follow suit. When it did so, recreation management was a key driver, based on the visitor strategy (DOC 1996) which specified goals and defined outcomes for different visitor group experiences. This indicates that recreation can lead other facets of park agencies' work in applying BOA principles.

Third, a shift in DOC's focus from on-site visitors to the wider public of New Zealand has been highlighted in the Department's Strategic Vision ('New Zealanders want their natural and historical heritage conserved') and in the SOI documents which now describe benefits from, and connection with, conservation. This fits with the BOA approach. The Department is now collecting relevant data on public values to inform this approach.

Despite the organisation having made some progress, Booth & Edginton (2009) identified challenges DOC faces in further integrating the BOA into its work. In particular:

• Prior DOC experience with the adoption of recreation planning tools (such as the Recreation Opportunity Spectrum (ROS)) indicates that the uptake of the BOA may be slow and its initial application may be inconsistent. DOC's institutional culture has been one of output management and it will take several years to change this through the implementation of 'place-based outcomes' in the CMSs.

- Skill development in terms of public engagement and the written specification of outcomes will require refinement, as planners develop these skills and 'learn by doing'.
- Consistency will be required across DOC staff (not just planners) in terms of engagement with the community for plan development and implementation.
- It cannot be assumed that agreed outcomes will be achieved and DOC must do more than simply measure output achievement. Output measurement is important and can indicate a certain level of outcome achievement, but it is critical to also directly measure outcomes. A corollary is that before outcomes can be measured, there must be well-written outcomes statements.
- DOC is faced with the issue of measuring outcomes outside of 'place', specifically:
  - -How to incorporate benefits from recreation into the national health bill when DOC's mandate is restricted to managing protected areas.
  - -How to measure outcomes at place. What do you measure and how do you judge success? The best means to achieve such measurement remains unclear, but it is apparent that DOC is not resourced to measure all potential outcomes and that it will take a multi-agency approach to achieve this.

# 3.2 STEWART ISLAND/RAKIURA PLANNING PROCESS

The BOA was tested as part of the review of the existing Stewart Island/Rakiura Conservation Management Strategy (SIRCMS) and preparation of the first Rakiura National Park Management Plan (RNPMP) (the National Park was gazetted in 2002). These two plans were being developed in tandem, with a joint public participation process, since Rakiura National Park comprises 85% of Stewart Island/Rakiura. The joint process provided the opportunity to test the BOA in both forms of DOC management planning (CMSs and management plans). In practical terms, combining the processes had negligible effect upon the BOA application.

The three 'places' used as case studies in this study represented the areas identified early in the planning process as warranting special attention within the planning documents. Subsequent to the study, the remaining national park land was subsumed within two additional 'places'. Thus the total land area of RNP was included within a 'place'.

The statutory process for the RNPMP/SIRCMS is given in Appendix 2, with an indicative timeline. Table 8 outlines the planning steps relevant to the BOA application.

Subsequent steps in the planning process (see Appendix 2) will provide the test of the BOA, in that submissions on the draft planning documents will be one means to judge the success of the process in obtaining community views. Ultimately, implementation and achievement of outcomes can be assessed only on the completion of the 10-year life of the management plan.

# TABLE 8. RNPMP/SIRCMS PLANNING PROCESS STEPS RELEVANT TO THE BOA APPLICATION.

Note: This table illustrates that considerable public involvement had already taken place before the BOA study was undertaken

DATE	ACTION	DESCRIPTION	RELATIONSHIP WITH BOA APPLICATION
Sept 2005	Community meetings	Community advised of future planning process. A 'blank sheet' approach with respect to planning for the whole island was used, i.e. people asked what they wanted to see (and not see) in 20 years' time.	Undertaken prior to BOA application
Aug 2006 and ongoing	Consultation with Conservation Board	Conservation Board consulted on pre-draft notification process. Updates at each Board meeting.	Undertaken prior to BOA application
Sept 2006	Discussion document	Te Rūnanga o Ngãi Tahu advised. Public was notified of intent to review CMS and prepare draft NPMP and asked for suggestions for the drafts. 406 feedback responses received in response to this document by early 2007.	Undertaken prior to BOA application
Sept 2006	Community meetings	Meetings arranged to take place when discussion document was released. Planning process and purpose of discussion document explained.	Undertaken prior to BOA application
Sept 2006 onwards	Development of draft planning document(s)	Draft CMS and NPMP developed in consultation with the Conservation Board and other persons/organisations as practicable and appropriate.	BOA application forms part of this step, providing means for consultation with 'other persons/ organisations'and information for the draft CMS/NPMP

# 3.3 STEWART ISLAND/RAKIURA: THE PLACE AND ITS PEOPLE

Stewart Island/Rakiura has a permanent population of approximately 400 residents, all of whom live in or around Oban township. The 175 000-ha island is predominately public land (mostly national park) with some private land (mostly in Maori ownership). Figure 2 provides a map of the island, with arrows indicating the location of the three case study sites: Ulva Island, Mason Bay and Port Pegasus/Pikihatiti.

The island is a 20-minute flight or one 1-hour ferry journey from the South Island. As became apparent during the public participation process of this study, a strong sense of place attachment pervades some Islanders' sense of belonging to the island.


Figure 2. Map of Stewart Island/Rakiura showing extent of Rakiura National Park (shaded area), main settlement (Oban) and other localities mentioned in the text.

As the national park status suggests, the island has national importance in terms of biodiversity (e.g. its kiwi population) and some recreational activities (particularly hunting). For this reason, the public participation process was not confined to the Island (this is discussed further in section 5).

# 4. Adapting the BOA model for application by DOC

The BOA was developed for implementation in the USA. Different planning and institutional arrangements in New Zealand suggested a certain amount of adaptation of the process was required before it was suitable for application in DOC management planning. Therefore, the *principles* of the BOA were followed, with some adaptation of the community consultation steps that had been followed elsewhere. The rationale for this decision included the lack of clearly prescribed implementation steps for the BOA, the successful adaptation of the Recreation Opportunity Spectrum to suit DOC's requirements in the early 1990s (Taylor 1993), and literature suggesting that the principles were the most useful part of the BOA (e.g. McCool et al. 2007). Furthermore, incremental application of the BOA model has been encouraged by some of the model's architects, endorsing the 'learn as you go' style of implementation (Driver & Bruns 2009). Refinement of the approach for DOC purposes was achieved by:

- Identifying the steps in the BOA process used within the USA
- Using this knowledge to develop a process appropriate for New Zealand

#### 4.1 APPLICATION IN THE USA

Because of the lack of formally published material outlining the BOA implementation process, this section draws upon information gathered directly from practitioners and from chapters of a book intended to fill this gap (Driver 2009c). The drafts of these chapters became available in the later stages of this research project, so were used during the study evaluation phase rather than the design phase. Nonetheless, they are presented in this section, as they represent the only examples of BOA applications that have been written up for publication. Several of the chapter authors identified phases and steps in the BOA process. Modified versions of these are presented in Table 9.

From Table 9, key stages in the BOA process can be identified (adapted from Driver 2009a):

- 1. Undertake *demand and supply analyses* to determine recreation desires of identifiable markets and then, considering available alternative supplies, select the primary recreation/tourism market segments (i.e. decide what type and number of people will be served, where and when).
- 2. Define *recreation management zones* and their corresponding recreation/ tourism market niches.
- 3. Specify target outcomes.
- 4. Develop *management objectives* that specify targeted outcomes for specific facilities, sites, management units, and definable recreation/tourism 'niches' within management units.
- 5. Develop *setting condition prescriptions* to maintain the essential setting characteristics needed to attain targeted outcomes.

- 6. Develop an *implementation plan*, including management, marketing and monitoring actions (monitoring to identify the degree to which targeted outcomes have been attained, as well as monitor attainment of management objectives and setting prescriptions) and supportive administrative actions (funding, staffing, managing partnerships engaging other service providers, and implementing partnerships for project implementation).
- 7. Implement, revise (as required) and evaluate the plan.

Two stages of the BOA process are most critical to this study, given its focus upon community consultation and monitoring. These are: the means by which demand information may be gathered and analysed (Phase 2 in Table 9) and development

PHASE STEPS · Ensure that supervisors endorse Outcomes Focused 1. Preparatory actions Management Organise the planning team Understand responsibilities and constraints, identify critical issues and concerns Consider additional collaborative and public involvement efforts · Identify critical issues and concerns Ensure that all members of the planning team understand the BOA 2. Gather and analyse information · Define market segments about supply and demand Identify logical recreation management zones and special recreation niches Assess and interpret the preferences of your likely on- and off-site customers 3. Develop the management plan · Identify beneficial outcomes and determine which outcomes can and should be targeted in a set of feasible alternatives within each management zone · Develop management objectives · Identify and prescribe the essential setting characteristics Rank alternatives and select the preferred alternative Define the essential recreation-tourism service environment 4. Develop an implementation plan · Identify management actions to be implemented · Identify marketing actions to be implemented · Identify monitoring actions · Identify supporting administrative actions Provide ample opportunities and time-frame for review of the proposed plan 5. Implement the plan · No steps specified 6. Revise the plan as required · No steps specified 7. Report on performance · Ensure that evaluations document the realisation of targeted outcomes

TABLE 9. STEPS IN THE BOA PROCESS (AFTER LEE & STAFFORD 2009). Note that some of the material in this table is explained in greater detail elsewhere in this report, and some of the terminology differs from that used in this report.

of a monitoring plan (Phase 4, step 3—identify monitoring actions). Monitoring measures are discussed in section 9. The remainder of this section highlights practice in the USA for identifying values and preferences from on- and off-site 'customers' (Phase 2—demand assessment).

Demand studies may take various forms, but questionnaires, surveys and/or focus groups are commonly used. Bruns et al. (2009a) suggested the use of a combination of informal interviews, focus groups, and in-depth mail-back studies to conduct recreation preference assessments. In their application of the BOA to the McInnis Canyons National Conservation Area (managed by the USDI Bureau of Land Management (BLM)), these authors concluded that focus groups and facilitating two-way iterative communication produced the most useful results. They also noted that informal interviews have tended to be undervalued in such information-gathering processes, and surveys overvalued. However, they noted that no one method produces adequate results, hence the need for a combination of approaches.

Focus groups of homogeneous types of people (e.g. motorised users, residents) have been used by BLM to identify current and desired outcomes and define them explicitly. Public workshops were found to provide information of too general a nature. Multiple focus group meetings have been held, with each focus group representing an identifiable sub-group within the community. Meetings with focus groups can be iterative (i.e. as many meetings with each group as is necessary to complete the process).

Within the Alpine Loop Backcountry Byway BOA study, three separate datagathering methods were developed and employed (Virden et al. 2009). First, a series of focus groups was conducted with local residents, community leaders and tourism industry providers in the surrounding communities. This phase of the research was used to identify the important issues, activities, setting preferences and benefits according to the various stakeholder groups. The focus groups provided insight into the issues and questions that needed to be incorporated into a subsequent round of visitor and resident surveys. Second, an on-site and mail-back survey was administered to 1200 visitors. Third, a mail survey was administered to residents from each of the three local communities to assess their preferences and attitudes toward tourism in the Alpine Loop Backcountry Byway. The authors note that focus groups cannot provide information representative of the views of a whole community or particular community segments—traditional surveys with random sampling do this better.

More detail about the use of visitor surveys for the BOA process is provided by the Gunnison Gorge National Conservation Area study (Bruns et al. 2009b). Visitor preference surveys were used to identify recreation use patterns, associated preferences for psychological experiences, other outcomes, recreation settings, possible alternative management actions, information sources, economic expenditure and demographic variables. Results helped to determine which kinds of experiential and other beneficial outcomes are most important to specific groups (the BOA calls these 'customer markets'). The aim was to link outcome preferences to setting character preferences and also to the various management actions required to achieve them and facilitate desired outcome attainment.

In summary, a range of participatory methods has been used in the USA to gather information on community values and outcome preferences as part of BOA planning processes. The use of a variety of methods for collecting this information has been recommended.

# 4.2 ADAPTATION FOR THE STEWART ISLAND/ RAKIURA CASE STUDY

The most appropriate ways to obtain community-defined expressions of beneficial outcomes within the Stewart Island/Rakiura planning process were identified by the researcher in consultation with DOC Southland Conservancy and National Office management planners and scientists. The BOA process derived from this consultaion for application in New Zealand is shown diagrammatically in Fig. 3. The approach focused on participatory public workshops.

The factors which influenced this New Zealand model of public participation using BOA principles included:

#### • Community preferences for style of consultation

The Stewart Island/Rakiura community had previously advised DOC that consultation processes should be inclusive of all residents. Previous attempts to discuss management issues/policy with specific stakeholder groups had been poorly received. Therefore, public meetings were held rather than workshops targeting specific groups of stakeholders.

#### • Existing information on community preferences

Four hundred and six feedback responses were received on the Department's Discussion Document (released September 2006; DOC 2006b). An on-site and telephone survey of Stewart Island/Rakiura residents and visitors had been undertaken in association with national park designation in 2002 (Booth & Leppens 2002). These contributions provided valuable insights into the views of the community, but also meant that the BOA process was not 'starting from scratch'.

#### • Strategic planning direction

DOC's 'outcomes at places' planning regime (see section 3.1.5) meant that public participation should be structured around 'places'. Three places on Stewart Island/Rakiura had been identified as important to the community in the discussion document feedback. These places were Ulva Island, Mason Bay and Port Pegasus/Pikihatiti (Figs 4–7). Effectively, these 'places' represented part of the identification of management zones in the BOA process (see section 4.1 and Table 9 above).

#### • Geographic barriers

Stewart Island/Rakiura is costly to visit. DOC was aware that people living off the Island also had an interest in its future plans for public conservation land on the Island but would be unlikely to travel to the island to participate in the process. Therefore, two public workshops (one each in Invercargill on the mainland and Oban on Stewart Island/Rakiura) were held for each of the three case study places (Ulva Island, Mason Bay and Port Pegasus/Pikihatiti).

#### • Statutory requirements

DOC has an established way of undertaking public participation, largely dictated by statutory requirements (see section 3.1). This planning 'culture' includes community expectations of public meetings.

#### • Stage in the planning process

The use of a workshop approach as the main method of consultation meant that it was not possible to obtain a quantitative demand assessment (i.e. the identification and ranking of beneficial outcomes by the community). If the BOA participatory process was being implemented from the beginning of the planning process, some form of quantitative survey may have been appropriate. As already noted, several stages of community input had already been conducted and the planning process timeline had been publicised. The study had to fit these timeframes.

Sections 5 and 6 describe and critique the community's input into this Modified BOA planning process. As outlined in Fig. 3, community involvement took the form of workshops—two workshops for each 'place'. As a precursor to each workshop and to stimulate comment, a pre-workshop paper was circulated which summarised public comments received at that point in the process. Given the BOA was being applied part-way through the Stewart Island/Rakiura planning process, the workshops were intended to confirm the feedback already received, define outcomes and identify public opinion about potential policy options.





Figure 4. Map showing all of the 'places' identified for Stewart Island/Rakiura, including the three BOA case study 'places'—Ulva Island, Mason Bay and Port Pegasus/ Pikihatiti.

Figure 5. Ulva Island 'place'.



Figure 6. Mason Bay 'place'.



Figure 7. Port Pegasus/ Pikihatiti 'place'.



# 5. BOA workshop arrangements

This section outlines the nature and conduct of the workshops used as the means to identify community-defined beneficial outcomes. Section 6 records the structure of the workshops and section 7 presents outputs from the workshops.

#### 5.1 PRE-WORKSHOP PAPERS

In recognition that 406 people had provided feedback on the discussion document and valuable information had been collected from these reponses, pre-workshop documents were prepared and circulated by DOC planners prior to each set of place-based workshops. This step was the key tension between the needs of the Stewart Island/Rakiura planning process and the BOA study. It resulted from the implementation of the BOA part-way through the planning cycle and would not have been a problem if workshops organised along BOA lines had represented the first contact with the community—in this situation, no written statement would have been circulated prior to the meetings. From a BOA perspective, a 'blank slate' approach was preferable for community development of outcomes for each place. However, this was not possible for all of the three study sites and only the Port Pegasus/Pikihatiti workshops provided the opportunity to test the BOA in the absence of a pre-circulated outcome statement (a statement of outcomes was omitted from the pre-workshop document). Outcomes are addressed in section 6.5.

The pre-workshop documents summarised views provided in the feedback responses for each 'place' and fulfilled three roles:

- To show people who had provided feedback that their views had been heard
- To set up the workshops to 'test' the ideas provided through feedback responses
- To stimulate thinking and so prepare the community for the workshops

Appendix 3 presents the pre-workshop documents for Ulva Island and Port Pegasus/Pikihatiti, to illustrate the style and content of these documents.

Each document provided the following information:

- Statement of purpose: explaining that the document was a prompt for workshop discussion
- Context and current management description for the place under discussion
- Prompts about place definition (including a map)
- Draft outcome statement (with the exception of the Port Pegasus/Pikihatiti document)
- Possible future management options

The documents provided draft outcome statements for each of the three 'places' (with the exception of Port Pegasus/Pikihatiti) and outlined some implications of each outcome (so people could understand what the outcome might mean).

For each case study site, a different approach was taken with respect to the presentation of a draft outcome statement in the pre-workshop paper. The approach became increasingly flexible with each set of workshops, which enabled comparisons to be made in approach (discussed in section 6.8). Furthermore, as the process progressed, each pre-workshop paper contained less 'policy speak' than the preceding papers—the style of writing changed to be more 'user-friendly' to signal the draft nature of the papers to readers.

Differences in the pre-circulated outcome statements across the three 'places' reflect varations in the community's responses to the discussion document. A broad consensus was evident for the values of Ulva Island, so a single draft paragraph could be developed which encapsulated key points. However, feedback received on Mason Bay was split between those who wished for the status quo ('remote' option) and those who wanted a more permissive or 'developmental' approach to be taken in the future. For this reason, two draft outcome statements were prepared. Because of our desire to 'test' the BOA approach in the absence of pre-prepared outcome statements, no draft outcome statement was provided in the Port Pegasus/Pikihatiti pre-workshop paper. Instead, it was noted that an outcome statement would be developed as part of the workshops. Appendix 3 and DOC (2007a) present the pre-workshop documents (including draft outcome statements) as part of the record of workshop proceedings.

The pre-workshop documents were checked by DOC staff. This ensured that each document was consistent with DOC's statutory roles, other concurrent projects (e.g. weed control) and recent community discussions (e.g. the recreation opportunity review). The intention was to ensure that the 'possible management options' identified in each paper were consistent with DOC management as a whole.

Some people interpreted the material in the pre-circulated material to be DOC policy, i.e. that DOC 'has already made up its mind'. This perception may reflect the problem of lack of trust in public participation processes identified by Lachapelle et al. (2003). At each workshop, the facilitator stressed that these statements were merely a springboard for discussion and not a pre-determination of policy. The presentation of management policy detail in the documents also proved troublesome, particularly details of potential sizes for concessionaire groups, which generated debate at several workshops.

Nonetheless, the written statement provided information sought by the community and saved time with respect to discussion of management regulations. The facilitator was able to quickly 'tick off' non-controversial sections.

#### 5.2 WORKSHOP LOCATIONS

For each of the three study 'places' (Ulva Island, Mason Bay and Port Pegasus/ Pikihatiti), two workshops were held: one in Oban (Stewart Island/Rakiura) and one in Invercargill (Southland), for the reasons already explained. In addition, two issue-specific workshops were convened (25 and 27 September 2007) to address hunting on the island. These two workshops were held in Invercargill and Hamilton (North Island), reflected the main locations of feedback respondees. While the hunting workshops were outside the scope of this study, a modified version of the BOA was used for them and is discussed in this report. The use of dual workshop locations was to facilitate input from those people the BOA process calls *on-site visitors* and *off-site users*. The latter includes host/gateway communities, such as Oban residents, as well as distant communities, even though these people may not visit the area under discussion.

The Invercargill workshops included a trial internet-based programme, which allowed interested individuals who could not attend the workshops to participate via the internet. This opportunity was taken up by five people for Ulva Island, none for Mason Bay and three for Port Pegasus/Pikihatiti. In all cases, individuals resided outside Southland and their input was read out by one of the planners— internet participants could see and hear proceedings but could not speak directly to the workshop. This trial was not specifically linked to the BOA, and appeared to have no effect upon it (as applied in this study), so it is not discussed further within this report.

There were noticeable 'cultural' differences between the Invercargill and Oban workshops. The difficulty of running public meetings in Invercargill has been commented upon by planners, although the reasons for this phenomenon are unclear. The Oban meetings were characterised by: good attendance (12, 19 and 28 participants at each workshop, excluding DOC staff and the researcher who acted as facilitator); people closely involved with the places took part; there was full participation—everyone contributed; the involvement of DOC staff was low-key (they were there to listen and answer questions if required); and all participants appeared to have been to the places under discussion. All Oban workshops were held in the Island's community centre, where most public meetings on the island are held.

The feeling at the Oban workshops was positive, indeed, passionate. This was illustrated by a participant who read (but did not sing) a song he had written about Mason Bay, at the close the Mason Bay workshop, and the same participant read a poem he had written about a trip to Port Pegasus/Pikihatiti, at the corresponding Port Pegasus/Pikihatiti workshop. These personal touches closed the meetings and added an emotional link to the places under discussion.

In contrast, the Invercargill meetings were 'troublesome', in that they had lower attendance (12, 12 and 22 people excluding DOC staff, the researcher/facilitator and internet participants); the people who attended were more distant in their connection to the places (with the exception of private landholders); there were cliques within the audience; the proportion of central/local government staff attending was high (only 10 'real' community members attended the Ulva Island workshop); internet communication resulted in a more stilted 'flow' of discussion as typed comment was read aloud by the DOC staff member handling this input; the venue was a large city distant from the place under discussion. In summary, the BOA process worked very well in Oban for all three places, and not so well in Invercargill, although it improved with each subsequent meeting.

One result of the dual workshop approach was that Island residents attended the Oban workshops and everyone else attended in Invercargill, with a few exceptions<sup>7</sup>. Thus there were, effectively, separate discussions for residents and non-residents. A risk associated with the dual approach was the potential for the two workshops to identify different desired outcomes. This did not occur, but if it had, it would have presented a difficulty for planners.

<sup>&</sup>lt;sup>7</sup> A few non-residents attended the Oban Ulva Island meeting and one Island resident attended both the Oban and Invercargill meetings for Mason Bay and Port Pegasus/Pikihatiti.

#### 5.3 WORKSHOP TIMING

Workshops were scheduled as part of the planning process cycle: Ulva Island (15 and 17 May 2007); Mason Bay (14 and 16 August 2007); Port Pegasus/Pikihatiti (4 and 6 September 2007). Workshops were held on mid-week evenings, with the Oban workshop on Tuesday evenings and the Invercargill workshops on Thursday evenings. Evening meetings are standard practice for public meetings in Southland, based on the assumption that more people are able to attend at that time of day.

All workshops began at 7.00 pm and closed by 9.45 pm. This 2.75-hour period was considered to be the maximum achievable during a mid-week evening. Each meeting had a10-minute tea break at approximately 8.20 pm. A couple of people left at tea time at one workshop (the Invercargill Mason Bay meeting); otherwise, participants stayed for the duration of the workshops.

Completing the BOA workshop process in less than three hours was a challenge. A tight reign on discussion was required to keep to the pre-determined timetable (for a timetable example, see the Port Pegasus/Pikihatiti workshop plan in Appendix 4). However, this did not appear to limit discussion, and the experience during these workshops supported the assumption that three hours was the limit for concentration.

### 5.4 FACILITATION

A team approach was taken to running the six case study workshops. Kay Booth (researcher) was the main facilitater; Anke de Jong (Southland Conservancy management planner) assisted Kay and recorded community input on large sheets of paper that the participants could see; and Peter Wilson, as assistant Southland Conservancy management planner, took detailed notes (by hand and via tape recorder) and ran the internet participation process.

The roles taken by the researcher and planner varied slightly by workshop, in order to try out different approaches. For the final set of workshops (Port Pegasus/ Pikihatiti), shared facilitation was used, with Anke de Jong running key parts of the BOA process. The enhanced role of the planner in facilitating workshops was deliberate, and linked to the purpose of 'learning by doing' (action research). This ensured Anke was familiar and comfortable with the process, and thus able to conduct these and future workshops and pass on this knowledge.

A team of three people was ideal for the workshops. For example, the facilitator did not have sufficient time to ensure that she always understood what participants were saying. The planner was able to follow discussions and seek clarification when necessary. The 'team of three' ideal presents a challenge for future public workshops, as the usual DOC approach is to use one management planner for such meetings, although other DOC staff commonly attend such meetings and could assist (this was successfully trialled for the hunting workshops).

#### 5.5 WORKSHOP PARTICIPANTS

Several issues arose associated with the nature of the participants and their participation in the process. Some of these issues were generic to any type of public participation process, others were specific to the BOA process.

A common issue for public participation is that participants are self-selected. As noted in Section 2, it is difficult to achieve wide involvement of the community in planning processes. If individuals choose not to attend the workshops, their voices are not heard. In an attempt to overcome this problem, people were invited to contact DOC management planners directly with their views if they could not attend workshops. A handful of people took advantage of this opportunity for each set of workshops. Their comments were read out at appropriate points in the discussion. Another generic issue is the concern that some individuals tend to dominate procedings. It was easier to facilitate the Oban meetings, as the residents knew each other and were aware and respectful of each others' points of view.

The Stewart Island/Rakiura planning process had already involved two rounds of public meetings prior to the six workshops that involved the BOA process (see section 3.2). It is reasonable to think that members of the community may have believed they had already told DOC what they wanted.

It assists implementation of the BOA process if workshop participants know the places being considered well, otherwise it is difficult for them to contribute to all aspects of the discussion. Those unfamiliar with the place under discussion are, by necessity, restricted to discussion of outcomes such as economic benefit and community pride. At each of the six workshops, one or two attendees had not been to the places under discussion (e.g. an employee of a government agency; an interested member of the public). These people were usually very quiet. When one person was asked why she had attended (when she had never visited the place), she simply replied that she was interested in the place.

The BOA process places responsibility upon participants to contribute. The shift from the traditional DOC style of public meeting (where the main activity was DOC informing the attendees about a particular issue) needed to be made clear to attendees. Therefore, the pre-workshop documents highlighted that participation was expected, so that people did not come along with the mindset that they should just listen and not say anything. This suggests that the public, as well as DOC, needs to adapt to the BOA model. Participation rates at the workshops indicated that this aspect of the BOA had been successful.

Several participants (4–5, from both the Oban and Invercargill meetings) said that they enjoyed the workshops. One person stated at the end of the Oban Ulva Island workshop that it was the best DOC public meeting she had attended (of many). Another Oban participant (at a different workshop) said he attended various public meetings and enjoying them was unusual—but he had done so under this (the BOA) approach.

Almost half of the participants at the Oban workshops attended all three placebased workshops. Fewer 'regular' attendees were present at the Invercargill workshops. Regular attendance allowed people to 'learn the process'. At the Oban Mason Bay meeting (second set of workshops), one individual took the initiative, given her understanding of the process, and asked others whether they felt Mason Bay was different from Ulva Island. This gave community members greater involvement (temporarily removing the need for the facilitator) and was a positive development.

Workshop invitations were distributed widely, including to the various types of associated provider (to use the BOA terminology) such as local government agencies (e.g. Southland District Council) and tourism operators. The BOA process emphasises the importance of including agencies such as these in the process, as they often have significant influence on the types, amounts, and quality of visitor and conservation opportunities made available.

DOC staff from the local area o+ffice attended all workshops. They were briefed about the importance of being at the workshop to listen (and answer questions) rather than to inform the workshop participants of DOC plans. This sort of role may be challenging when staff know community members and wish to respond rather than listen. Indeed, at one meeting a local DOC staff member spoke often and 'held the floor'. This altered the dynamics and shifted the focus away from participation to information provision.

# 6. BOA workshop process

A description and critique of the BOA-derived process used in the Stewart Island/ Rakiura planning workshops is presented in this section. Material has been drawn from post-workshop debriefing sessions, discussions with National Office management planners and overseas practitioners, and input received from the November 2007 DOC Management Planners Workshop. A full description of workshop proceedings is available separately (DOC 2007b).

#### 6.1 OUTLINE OF THE WORKSHOP STRUCTURE

The 'building blocks' of the BOA concept provided the basis for our workshop structure. The BOA dimensions of activity opportunities, experience opportunities and benefit (outcome) opportunities, were translated into separate parts of the workshop. Then setting characteristics (facilities, regulations, etc.) were discussed. The derivation of a workshop process or structure was informed by material supplied from the USA by BOA practitioners, including scripts for stakeholder focus group meetings.

The workshop structure had seven parts:

- 1. Introduction
- 2. Activities
- 3. Place
- 4. Experiences
- 5. Outcomes
- 6. Settings
- 7. Close

Development of the workshop structure took the following factors into account:

- That the primary workshop focus was identification of outcomes sought by the community.
- That the secondary focus was discussion of setting characteristics—which would not be pursued until outcomes were satisfactorily resolved.
- That there was a requirement that the workshops conform with national standards being developed by DOC for Conservation Management Strategies (CMSs) (discussed in section 3.1.3). These standards could influence matters such as the size of guided concessionaire groups.
- That the characteristics of each case study site suggested different approaches, reflecting community comment that had been received about each site during and/or prior to the planning process.
- That a pre-policy document would be circulated prior to each workshop.

A workshop plan was prepared for each pair of place-based workshops (an example is presented as Appendix 4). The plans evolved as a result of learning and fine-tuning the process during the progression of the six workshops. At each workshop, the evening's structure or programme was written on a white board and referred to during the workshop, so participants could follow progress.

During each workshop, the facilitator noted any comments on management regulations and 'parked them'. This was deliberate, so that the meeting could avoid getting lost in detail. A promise was made (and kept) to return to these points later (within the settings section of the workshop, at which point these issues were handled first). It was recognised that participants had come along to discuss such points, and it was important to do so. Contentious aspects of the management settings part of the workshop were the recreation and concession management actions.

Care was taken to explain the management planning process to participants. They were often keen to know whether they had further opportunity for input (it was explained that this could occur via the formal submission stage after the draft plans are released for public comment).

#### 6.2 ACTIVITIES

The part of the workshop where participants were asked to identify what activities currently take place within the area consistently worked well. The descriptive nature of the information provided an easy way to 'warm up' participant involvement in the workshop. It took a small amount of time (usually 10 minutes) and allowed participants to mentally picture and 'key into' the place under discussion. There was usually a large amount of overlap between Oban and Invercargill workshops on the lists of activities generated.

This information is relevant to the development of plans, in that it provides acknowledgement of how the place is perceived by people. The list of activities (see Table 10) provided a thorough overview of what participants did at each place. A common result was that the list was much longer and more varied than the 'traditional' view of activities as expressed by management plans. Community values were evident from the supporting discussion about some activities (e.g. Mason Bay is a place that some Islanders have gone for a holiday since their youth).

#### 6.3 PLACES

For each case study workshop, participants were asked how they defined the geographic boundaries of the 'place' under discussion and whether they perceived this 'place' as special. Note that participants were not asked to endorse the choice of the three places per se, as they had already been identified from feedback responses to the Discussion Document.

This step forms part of the BOA specification of *management zones*, modified to suit the DOC 'outcomes at place' management planning focus, which encapsulated all types of value, not just recreation (on which the BOA is focused). The workshop process easily accommodated participant-generated place definition.

The pre-workshop documents provided maps and these were used during workshops to elicit perceived boundary lines of places. The purpose of this discussion (to define policy settings in plans) was made explicit to participants.

# TABLE 10.ILLUSTRATION OF COMMUNITY EXPRESSION OF ACTIVITIES(DOC 2007b: 30, 39, 40).

ACTIVITIES AT MASON BAY: FROM OBAN WORKSHOP	ACTIVITIES AT PORT PEGASUS/PIKIHATITI: FROM OBAN WORKSHOP	
• Tramping	• Hunting	
• Hunting	• Fishing	
Beach combing • Shooting		
Bird watching	• Day walks	
• Relaxing	• Kayaking	
• Photography	• Holidaying	
Honeymoons	Anchorage for commercial and pleasure craft	
• Fishing	• A place for reflection	
• Botany	Historical/history appreciation and	
Dune exploration	explanation	
Painting/drawing	Spiritual connection	
<ul> <li>Viewing colour/patterns of native plants</li> </ul>	• 'A magic place'	
Ambergris searching	• 'A wilderness'	
<ul> <li>Kids exploring windswept manuka</li> </ul>	• Sight-seeing'	
Historic appreciation	• Adventure	
Swimming in the creek	Challenge	
Whitebaiting	Remote adventure	
• Eeling	Anchorage for trawlers and squid boats in	
• Experiencing the elements	bad weather	
Aircraft landing	ding • Hunting	
• Camping	• Stop-over on the way to the titi islands	
Hide and seek activities, hiding     Diving		
Educational/school group activities     Socialising	• Diving for scallops (one of the last places in Stewart Island/Rakiura)	
occumbing	Male-bonding	
	Wildlife viewing	
	Conservation refuge—mainly with Pearl Island	
	• Visual splendour ('greens, golds, browns meld in with the water')	
	• Artists and photographers produce amazing work there	
	Sailing/cruising	
	Marine mammal viewing	
	• Research	
	• Botany	
	• Geology	

All workshops identified place boundaries to the satisfaction of participants. The discussion about boundaries provided information about how participants perceived the place, which reinforced the 'activities' and 'experiences' results from the workshop. Similar boundaries were identified at both Oban and Invercargill workshops for all 'places'.

The discussion of a track leading to Mason Bay illustrates the type of place definition discussions which took place. The question was whether the track should be included in the definition of the Bay within the RNPMP. Participants at both (Oban and Invercargill) workshops said no. They believed the track was connected with, but separate from, Mason Bay itself. Box 1 provides an example of workshop participants' definition of 'place'. Place boundaries shown in Figs 5-7 were drawn using workshop input.

#### Box 1. Definition of the Mason Bay 'place' from Oban workshop

The following comments were made by workshop participants about what they consider to be part of the Mason Bay 'place':

- The Mason Bay place is the dune system, the beach, and from Island Hill out to the coast.
- Mason Bay extends to the western end of the 'gorge' [referring to the Scott Burn catchment].
- Mason Bay includes the Freshwater River.
- Going through the 'gorge' and then through the Chocolate Swamp is part of the Mason Bay experience.
- The corridor through to Mason Bay from the Freshwater River is part of the place for those who walk in; however, it may not be part of the place for those who fly in.
- Boundaries are not important when defining a place—it is not possible to put a 'hard and fast' line on a map with regard to a place.
- Whether or not the 'Mason Bay corridor' includes the Freshwater River was discussed, with most people expressing the view that as the Freshwater River is a corridor for multiple uses, it is not part of the Mason Bay place.
- Whether or not the sea/waves and coastal marine environment should be included in the Mason Bay place was also questioned. Most participants thought that they should be.
- A comment made was to use the catchment boundaries of the Mason Bay beach area to define the place. The Duck Creek catchment extends back towards Island Hill, with the Scott Burn catchment starting beyond.

The workshop participants settled on Mason Bay being from Island Hill to the coast, including all catchments that flow out to the beach (e.g. Duck Creek, Martins Creek, Leask Creek, etc.), with the Freshwater Track being a key access route to the Bay.

#### **6.4 EXPERIENCES**

Addressing 'experiences' was a powerful part of the workshop process. Participants contributed key words and phrases, many of which evoked the meaning of places (e.g. 'like a cathedral', 'echoes of the past', 'walking in the footsteps of pioneers', 'finding solitude'). Much of the information gathered during this part of the workshops had not been offered in responses to the discussion document. It was new information to the planners and elaborated the community's values for each place.

This part of the workshops worked best with a focus on present use (rather than present and future use). Once experiences associated with present use had been identified, workshop participants addressed future experiences. This was done with reference to differences thought appropriate (or not) in comparison with the present experiences already listed. The transition from activities to experiences was very clear for participants.

Box 2 provides an example of present and desired future experiences as expressed by workshop participants.

# Box 2. Expression of present and desired future experiences at Port Pegasus/Pikihatiti from Invercargill workshop

#### Present experiences available:

- Finding solitude
- Wildness/wild nature
- Knowledge from history
- No-one around
- Unique landscape (granite domes)
- Challenge: recreational boating and reward to get there -- 'bit of a mission'
- Semi-accessible subantarctic experience
- Halfway house to subantarctic islands
- Grandeur and awesomeness of nature
- Flora, and alpine environment at sea level
- Sea lion habitat
- Clarity of water
- Scallops and oysters and other things
- The ability to hunt at the original liberation point of whitetail deer
- Walking in footsteps of pioneers
- Weather-185 km/h winds
- Feeling of closeness to Antarctica
- History: tin mining and sealing
- New Zealand's first registered ship built there
- First substantial fish freezer
- Experience of the history-what people have done with picks and wheel-barrows
- Navigation through waters
- Wildlife encounters really in your face-quite different to anywhere else
- Waterfalls
- Smugglers Cove
- Unique landscape—Gog/Magog
- Part of Stewart Island identity

#### Future experiences sought:

- The same as it is now
- Leave it alone
- Wilderness values
- No further development

## 6.5 **OUTCOMES**

This part of the workshop had two parts. First, the 'bottom-up' generation of outcomes from participants (prior to the tea break) and, second, discussion of pre-circulated outcome statements (after the tea break), with the exception of Port Pegasus/Pikihatiti workshops, where the outcome statement was written over the tea break and presented to participants. The discussion of pre-circulated statements was the result (as explained earlier) of the needs of the on-going Stewart Island/Rakiura planning process (see sections 3.2 and 5.1). Appendix 5 illustrates the style of pre-circulated outcome statement and the type of comments received, in this case for Ulva Island. For a complete record for all workshops, see DOC (2007b).

#### 6.5.1 Generation of outcomes

Initially it was difficult to make the link between experiences and outcomes in workshops. However, the second set of workshops (for Mason Bay) was adjusted to ask participants what they wanted to see happen at Mason Bay (benefits) and what they did not want to see happen there (risks to achieving these benefits). This style of questioning worked well and responses were recorded under two columns, headed 'positive' (benefits) and 'negative' (risks). An example of workshop participants' expressions of benefits is provided in Box 3. Outcomes suggested were varied, and included comments such as 'sheltered anchorage for commercial vessels', 'internationally important showcase for conservation' and 'research location'.

The question 'what are the big take-home messages' forced participants to sum-up key points at the end of this section. The responses to this question summarised outcomes into a few key points and helped link to the next section (discussion of the pre-generated outcome statement).

A key dimension underlying the workshop structure was the need to prioritise the desired outcomes. The literature review (section 2) identified the wide array of possible outcomes from protected areas. The question addressed in the workshops was: which outcomes (once identified) should be targeted? To address this question, a priority-setting exercise, or expression of preferences, was built into the workshop process (each participant would label their top three preferences with gold stars to provide a visual identification of collective preferences). However, this exercise was not needed in the workshops as the participants provided clear messages about their dominant values.

#### Box. 3. Benefits of Mason Bay from Oban workshop

- Remoteness—although a comment was made that not all visitor groups would necessarily experience remoteness at Mason Bay
- Interpretation-of the natural, cultural and historic values of Mason Bay
- Space—as in plenty of space available for activities
- The sand dunes provide a benefit as a showcase for conservation
- That Mason Bay in general is an internationally important showcase for conservation, perhaps more so than Ulva Island because it is harder to get to
- The benefits international visitors derive from visiting Mason Bay and their importance to the Stewart Island/Rakiura economy were mentioned
- A statement was made that Mason Bay should be left in its natural state, the concept of commercial lodges is supported and there is a need to consider the impact of humans on other species—the plant and animal communities at Mason Bay are internationally significant

The workshop then produced a list of values and things about Mason Bay that were of the most importance. This list is as follows (in no particular order):

- The dunes
- Remote values
- Economic benefits deriving from guiding, kiwi spotting, and the 'coast to coast' trip/product
- Sense of ownership ownership by the local community
- A spiritual quality

#### 6.5.2 Pre-circulated outcome statements

Each workshop varied in terms of the approach taken to the development of the outcome statement. The use of the pre-prepared draft outcomes statement worked well for both Ulva Island workshops. In Oban, the statement provided confirmation of what had already been raised during the workshop. Thus, the outcome statement generated from feedback responses to the discussion document were consistent with the outcomes identified in the workshops, allowing a consistent community message to be identified. At the Invercargill workshop, the outcomes statement provided a basis for discussion, as participants had not engaged well in previous steps in the workshop process. The group was more comfortable discussing material provided to them than in generating it themselves.

The pre-workshop document for Mason Bay provided two outcomes statements. At the tea break for each of the two workshops, the planning team chose the statement that best reflected the sentiment of the workshop. The preference from participants at both workshops appeared to be for the status quo (Outcome 1), based on their contributions to the activities, places, experiences and outcomes workshop sections. The workshop participants discussed outcome statement 1.

At the Invercargill Mason Bay workshop, participants appeared to be moving away from the initial 'status quo' position during the discussion of settings. Comments about commercial accommodation and helicopter access indicated participants were more permissive with respect to visitor access than suggested by the 'status quo' position. The facilitator noted this and checked back with the group whether they still agreed with Outcome 1 (with their noted modifications). This was confirmed.

No pre-circulated outcome statement was provided for the Port Pegasus/Pikihatiti workshops. The power of the previous steps in the workshop process was demonstrated, as an Outcome was derived from key words and phrases recorded from participants' comments on the activities, experiences and outcomes workshop sheets. As with any process of this type ('ground-up'), quick and decisive thinking was required during the workshop (and in the 10-minute tea break) to formulate the outcome statement. The group quickly agreed with the

# Box 4. Outcome statement for Port Pegasus/Pikihatiti from Invercargill workshop

Access to Port Pegasus/Pikihatiti is challenging and rewarding. It is a place where solitude can be found. Following in the footsteps of pioneers, history is evident with Port Pegasus/Pikihatiti being the site of the first registered ship being built, the site of New Zealand's first fish freezer and the site of New Zealand's first liberation of whitetail deer. Wildlife and flora and fauna can be encountered as well as the grandeur and awesomeness of nature in a unique granite landscape. Visitors are able to explore, learn, and appreciate these values.

statement (and were impressed with the translation of their words into a policy statement). At the Invercargill workshop, a brief discussion of the Oban outcome statement was held and broad agreement between the two was evident. In sum, the experiment to generate the outcome at the workshop (in the absence of a pre-circulated statement) was successful. Box 4 shows the outcome statement developed by the Invercargill workshop participants.

Comments on the outcome statements from participants included aspects that were missing, as well as specific words that were liked or disliked (and why). The level of analysis was, at times, sophisticated. Participants proved capable of replacing inappropriate words, prioritising and placing emphasis, identifying what was missing and highlighting what they liked and disliked about each outcome statement. Examples of the types of comments made at workshops include:

- Alteration to the meaning and intent of statements (e.g. 'encouraging exploration' of historic sites was changed to 'respecting' these sites)
- Assessment of balance within the statement (e.g. a comment that visiting nature came across as the dominant purpose for nature protection, but that it should be to provide a safe haven for wildlife, protect landscape values, etc.)
- Changes to capture the essence of the 'place' (e.g. distinction between 'those who visit' and 'visitors'. This reflected the feeling that once someone had been to Mason Bay, it would become special to them—the term 'visitors' was felt to be a generic label and not suitable for the sense of belonging engendered by visiting Mason Bay)

## 6.6 **SETTINGS**

Some participants were more comfortable talking about management actions, such as whether huts should be increased in size, or helicopter landings allowed, and concessionaire client numbers increased. Indeed, some participants had come along with 'burning issues' and quickly raised them. As noted earlier, these issues were acknowledged and 'parked' until the settings part of the workshop, when they were discussed, together with the issues identified in the pre-workshop paper.

Provocative questions (e.g. do you want to see a luxury lodge there?) were used to start up discussion, when people were slow to engage. At times, a participant would undertake this role on their own initiative, independent of the facilitator.

Sometimes it appeared that the discussion of management setting attributes (e.g. concession group size) was disconnected from the outcomes statement. The need to implement certain management actions to realise the agreed outcome was sometimes disputed. This was most apparent when it affected an individual's livelihood (e.g. tourism operator). However, the workshop process made this type of inconsistency apparent (this is discussed further in the next section).

Box 5 provides an example of views on settings (illustrated by aircraft and vehicles) expressed by workshop participants.

## Box 5. Community views about aircraft and vehicles draft management policies for Port Pegasus/Pikihatiti from the Invercargill workshop

Draft management policy: aircraft and vehicles (as outlined in document circulated prior to the workshop)

- No aircraft landings within the national park
- No vehicles within the national park, except for management purposes.

A discussion was held regarding aircraft access to Port Pegasus/Pikihatiti. Comments on this were that aircraft access should not be permitted within the national park except for emergency purposes (above mean high water spring). But it was specified that aircraft landing on the private land in North Arm was generally seen as okay.

A number of participants stated that, ideally, there should be restrictions on aircraft landing on boats within Port Pegasus/Pikihatiti as well, except in an emergency. Another comment with regard to advocacy across jurisdictional boundaries was that Port Pegasus/Pikihatiti is a place where integrated management is required, given the strong links that exist between the marine and terrestrial environments. The management of cruise ships was suggested as another issue requiring an integrated approach.

Further to the discussion regarding advocacy and integrated management, the subject of marine protection for Port Pegasus/Pikihatiti was raised. There was strong support from workshop participants to investigate some form of marine protection for Port Pegasus/ Pikihatiti, with more support for a mataitai than a marine reserve. It was suggested that all agencies with responsibility for Port Pegasus/Pikihatiti (Southland District Council, Environment Southland, and the Department of Conservation) undertake this jointly.

Comments were made that activities on the private land at Port Pegasus/Pikihatiti could potentially pose a 'risk' to the way Port Pegasus/Pikihatiti is currently managed, and that floating hotels/moored accommodation facilities are not likely to be appropriate at Port Pegasus/Pikihatiti.

## 6.7 CONNECTION BETWEEN PARTS OF THE WORKSHOP PROCESS

The BOA process builds from one step to the next. This connection or step-wise progression was recognised by many participants. To put it simply, they 'got it' with respect to the overall process. This was apparent when the pre-workshop paper outcome statement was discussed, as participants identified key words and phrases that were missing or needed amendment, drawing on words already expressed and recorded on their sheets from the activities, places, experiences and outcomes parts of the workshops.

This was not apparent at the Invercargill meetings for Ulva Island and Mason Bay, where there appeared to be a disconnection between early parts of the workshop (activities/place/experiences/outcomes generation) and later parts (the discussion of outcome statements and setting characteristics). It is not clear why this occurred, other than it may be due to the divergent views of the group participants. The development of a ground-up outcomes statement at the Invercargill Port Pegasus/Pikihatiti workshop overcame this problem, as participants' own words and phrases were used, although this possibly also reflected the less-divergent views of that workshop's participants. In later workshops, the regular attendance of some participants allowed the facilitator and planner to compare responses for one 'place' with those for another. It helped to see 'places' on a spectrum—the three places held different places within community views, notably:

- Ulva Island was perceived to be a place where protecting nature, especially wildlife, was paramount, and that this was important for wildlife tourism purposes and the ability to 'showcase' the Island internationally.
- Mason Bay was 'our place', encapsulating place attachment for Islanders and non-Islanders also. Its wildness was highlighted.
- Port Pegasus/Pikihatiti held the position of a remote place where the past (historic heritage and stories) could be discovered but nature would always claim back her own.

#### 6.8 REFINEMENT OF THE BOA PROCESS

The 'action research' component of this work was evident in the development of ideas that occurred through the workshop period (May to September). After each workshop, the debriefing session included time reflecting on improvements for the next workshop. Specific areas where this occurred included applying lessons learned from the Oban workshops to the Invercargill iteration of each 'place', as well as refining the BOA process from one set of workshops to the next. Refinements to the process have been discussed in relevant sections of this report. The Port Pegasus/Pikihatiti workshops provide the most complete application of the BOA in this study. Because of this, the Port Pegasus/Pikihatiti workshop plan has been included in Appendix 4.

#### 6.9 AN ISSUE-BASED APPLICATION

An assumption made in the early stages of this project, and subsequently overturned, was that the BOA would only suit place-based, and not issue-based, applications. The successful modification of the BOA for application in hunting workshops indicates the model's ability to cope with issue-based applications.

This early assumption related to the application of the BOA to hunting policy, which was the primary Stewart Island/Rakiura issue at the time the study was being planned. Initial thinking was that as New Zealand's statutory framework was the key driver of hunting policy, community values may not be able to be accommodated in the process. Specifically, the issue for Stewart Island/Rakiura is that the National Parks Act 1980 states that introduced animals (which include deer) shall, as far as possible, be exterminated. However, hunters on the island and elsewhere are interested in maintaining the deer. In summary, DOC cannot deliver what the hunting community wants—a managed deer population.

The BOA was applied in modified form at two workshops held to discuss hunting (and hunters' huts, the development of which has been of particular interest to hunters). Approximately 50 people attended each hunting workshop. As it was not formally part of this study, the information presented here has been drawn from discussion with the DOC management planner who ran both hunting workshops. The researcher provided advice on to the planner during preparation for the workshops.

The BOA workshop process was altered to reflect attendance by members of an activity-based stakeholder group. The workshop structure was as follows:

- 1. Experiences
- 2. Activities (other than hunting)
- 3. Benefits/outcomes
- 4. Question and answer session on existing management regime
- 5. Future management settings: small group work with reporting back

The workshop started with identifying experiences, to find out why hunters visited Stewart Island/Rakiura, especially given that getting there represents a major journey for North Island hunters. This information proved very fruitful, as it was for the place-based workshops previously described. Activities were addressed next. Since the reason participants' gave for visiting Stewart Island/ Rakiura was activity-based (hunting), 'activities' seemed more logically to fit later in the process. Participants were asked about other activities they undertook or that other visitors pursued and whether any activity conflicts occurred with hunting. A Q&A session was incorporated into the process, especially for North Island hunters, to ensure hunters were briefed about the current management regime.

Two significant differences in the process from the usual BOA were the use of small discussion groups and the absence of outcomes generation. The use of small groups to identify future management settings worked well, most probably because workshop participants were homogeneous, with shared views. Each group took a topic (pre-arranged by the planners), discussed it and reported back. Report-back sessions indicated general agreement by the whole group with the smaller groups' findings.

An outcome statement for hunting was not pursued for two reasons. First, it did not fit within DOC's place-based management planning framework ('outcomes at place'). Second, the legislative imperatives already mentioned were well-known to be 'at odds' with hunters' views and two workshops were not going to resolve the long-standing issue surrounding the management of deer on Stewart Island/ Rakiura.

# 7. Evaluating the efficacy of the BOA for DOC management planning

From the four applications of the BOA studied here (three place-based and one issue-based), some principles about the advantages and disadvantages of the BOA for DOC management planning can be derived. Assessment criteria include:

- Match with institutional arrangements (policy direction, planning culture)
- Efficacy in obtaining expressions of community values and preferences
- Practical considerations

## 7.1 FIT WITH DOC POLICY AND PLANNING DIRECTION

The BOA concept fits very well with the DOC strategic policy approach (outlined in section 3.1). DOC's focus upon 'outcomes at place' is reflected in the BOA philosophy. The BOA was developed for the purposes of managing for outcomes in public agencies such as DOC. It is tailored for a range of applications, with management planning being a primary purpose.

Specific challenges will be the preparation of outcomes statements, since the 'outcomes at place' approach is new to DOC and its management planners. This issue will arise irrespective of whether or not the BOA is used. With respect to Stewart Island/Rakiura, the RNPMP/SIRCMS planning documents will be guided by national direction outlined in policy documents and standard templates. This will influence aspects of plan development and writing (for example, the wording of outcome statements and the potential conflict this may engender with expressed community views).

Because of the lack of documented applications of the BOA, this study has relied on discussions with practitioners, who are advocates of the framework (early innovators). There may be difficulties with the process that have yet to be identified. This reinforces the value of the current study to the international planning community and suggests DOC may need to take an adaptive management approach with respect to BOA implementation. The trial application of the BOA in this study is timely given the rapidly changing planning environment in DOC at present. It provides an opportunity to influence the style of management planning within the organisation.

#### 7.2 STYLE OF PUBLIC PARTICIPATION

Public meetings are established DOC public participation practice. Given that the mode of communication (public meeting) remains unchanged under the BOAderived process used in this study, implementation of the BOA will require little transition for DOC in terms of consultation method. Its benefit lies in the *conduct* of the meetings. As described in section 3.1, meeting processes currently tend towards information provision rather than meaningful consultation, although this varies according to the preferences of the management planners involved. The BOA provides a way to structure public meetings to facilitate public engagement.

The success of the study workshops in identifying community values and outcomes is best described by the Southland management planner, who noted a 'really positive and inspiring vibe' in the Oban workshops and that she was 'amazed how the outcome [at the Port Pegasus/Pikihatiti workshops] was developed' (de Jong 2007).

Implementing the BOA workshop process may have resource implications for DOC (although this issue is common to all public participation processes, as noted in section 2). The BOA approach worked well with three people running the place-based workshops, while the hunting workshops fully-employed two people. A single planner working alone would be challenged to both facilitate and record workshop material. Given that a variety of DOC staff usually attend public meetings at present (management planners and Area staff in particular), application of the BOA may not increase the 'cost' in terms of staff involvement, but may alter the roles played by staff. One approach may be for staff from other Areas and Conservancies to assist one another. This would have the dual benefit of sharing facilitation and providing an 'independent' facilitator (albeit a DOC employee).

The use of a public workshop process in this study meant that the identification of values was qualitative in nature. To identify the magnitude of community acceptance of the outcome statement (and their associated values), quantitative survey work would be required. However, the RNPMP/SIRCMS process allowed confirmation of the feedback responses (encapsulated within the pre-workshop papers) at the workshops, which provided an element of quantitative information. Similarly, the statutory public submission process which will be undertaken for the draft RNPMP/SIRCMS will provide an indication of the extent to which views are held within the community.

The choice of running the Stewart Island/Rakiura workshops on an inclusive public basis differs from the approach commonly used in the USA, where key interest groups are targeted (and separate workshops held for motorised users, concessionaires, local residents, etc.). It has been noted by practictioners that large undifferentiated group workshops are likely to fail to identify important differences between interests in terms of outcomes sought. The risk is that the park will attempt to provide all things to all people—the BOA avoids this by selecting the primary 'markets' to be served for each management unit. This criticism is accepted. However, the benefit of public workshops is the cross-fertilisation between interests. As noted earlier, the workshops achieved some common acceptance *across* the interests represented. The implication is that future applictions of the BOA may benefit from using both approaches—targeted interest group workshops and public workshops.

#### 7.3 COMMUNITY 'BUY IN'

An underlying reason for the BOA's success at engaging the community in the workshops process was the tenet that DOC was asking the participants what they wanted. This appeared to help diffuse potential issues and took the focus away from the 'burning issues' that people brought to the workshop. These were addressed, but only once the significant 'bigger picture' had been scanned. As noted in section 6.6, inconsistencies between setting characteristics and desired outcomes were plain to participants. Transparency was achieved.

The nature of the process (and apparent 'ownership' by participants of outcomes statements) may present an issue of too much 'buy in'. This has the implication that workshop participants may be unhappy if the statements appear in revised forms within the subsequent management plans. This would only present a problem where statements diverged from DOC's legal/policy imperatives or significant differences were encountered across workshops (which did not occur in the case studies).

In a BOA-style process it can be difficult to know when is the appropriate time to identify policy boundaries to the public. In the case studies, policy parameters were communicated in written documents: the initial discussion document followed by the pre-circulated workshop documents.

The Mason Bay workshop in Invercargill provides a good example of this problem. As noted in section 6.9, the statutory basis of national parks means that DOC cannot deliver what the hunting community wants—a managed deer population. The risk from the workshops was that hunters might leave the meeting thinking their message had been accepted by DOC. This was mitigated by clear statements at the beginning and end of the workshops that community input received that evening would be used together with other planning imperatives, such as the law.

Several participants stated they enjoyed the BOA workshops (section 5.5), and one submitter (a member of a North Island conservation board and therefore familiar with DOC planning processes) said the Mason Bay pre-workshop draft document was excellent. This is a positive outcome in itself.

However, the process may have a limited 'shelf life', in that participants may tire of the same intensive process. The research and planning team sensed that regular attendees at the three sets of workshops were nearing saturation (this had an advantage in that these people knew the process, anticipated what was required and led others, as already noted). In future applications, perhaps a progression of BOA-style workshops could be used, especially where the process is implemented from the beginning of the planning process. This would depend on the number of regular attendees and particularly suit stable communities. It also depends on whether future workshops will be largely structured around 'place'. As for hunting, workshops could be structured around interests (e.g. motorised recreation) for multiple places, rather than all interests for each individual place.

#### 7.4 WORKSHOP STRUCTURE

The BOA workshop process is transparent, in that it leads participants through steps that build upon each other, culminating in an outcome statement which links to management policies. Advantages of this approach are:

- Participants can see the progression of the process—it is a building block approach
- Participants have direct input into this process—their words are used to develop policy statements (where the outcome statement is generated at the workshop)

The approach is flexible. It was adjusted for the hunting issue workshops and proved useful in both guises (place-based and issue-based applications). It was helpful when implemented part-way through the process, although the management planners noted that, ideally, it should be implemented from the beginning of the process.

The process could handle discussion of management policy detail (important to many participants) as well as obtaining 'high-level' community-generated value statements.

# 7.5 CONTRIBUTION TO MANAGEMENT PLAN DEVELOPMENT

Material generated from the workshops will be integrated into planning documents—this step is beyond the scope of this study. Nonetheless, several observations can be made.

First, it was evident that each step of the BOA process (i.e. activities  $\rightarrow$  place  $\rightarrow$  experiences  $\rightarrow$  outcomes  $\rightarrow$  settings) provided two outputs. These were a *list* of attributes (e.g. list of activities, list of experiences) and information obtained from the *discussion* surrounding the preparation of the list. Both outputs provide a rich source of information about community preferences for the 'place'.

Second, the style of discussion provided direction in terms of priorities or preferences held by the community. This is an important element of the BOA, as it is assumed that the management agency cannot deliver on all things the community may desire. As noted in section 6.5.1, while the facilitator was prepared for a prioritisation exercise, this did not prove to be necessary.

Third, principles of writing outcome statements have been derived, which may assist in subsequent outcome definition. Statements should be:

- Visionary, i.e. ignore the detail
- People-oriented—the statement places the natural heritage in the context of people's experience and desires (which may include protecting the environment)
- Linked to identifiable management outputs (e.g. habitat restoration, interpretation)
- Written in the future tense, i.e. what will be (not what is)
- Include means to measure the attainment of the outcome (e.g. no introduced predators)

- Brief but encapsulate a broad range of relevant dimensions
- Written so that they do not emphasise management actions (outputs) to achieve the outcomes—that is left for management objectives and policies

Other issues surrounding the writing of outcomes statements are not addressed in this report, because of the limited scope of the study.

#### 7.6 APPLICATION ELSEWHERE IN NEW ZEALAND

Testing the BOA via one planning process begs the question: how will it work in other places? This question was raised at DOC's November 2007 South Island management planning workshop. Responses from planners included that:

- The BOA process aligns well with DOC's current management planning practice and its likely future direction.
- The process appears to provide a good model for DOC with respect to community engagement in management planning.
- The success of the BOA cannot be judged until the level of community acceptance of the final documents is evident.
- Stewart Island/Rakiura represents an area with a smaller number of issues and places than other DOC conservancies and areas. The process would be challenged to a greater extent elsewhere.
- Since the process requires knowledge of 'place', it would be difficult to apply it at a conservancy-wide level.
- International visitors were not included (and it is acknowledged that concessionaires' views do not represent those of their customers).
- Iwi consultation would need to be separate in many areas (as iwi had requested this).

It is instructive to note that the BOA workshop process was able to be successfully adapted from a place-based purpose to an issue-based purpose (hunting). Perhaps the answer in applying the BOA elsewhere in New Zealand lies in potential further adaptation of the process, with adherence to its principles. It would also be useful to implement the process from the beginning of plan development.

# 8. Measuring outcomes

The BOA planning process highlights the importance of having a monitoring plan for each planning issue addressed, and that it is implemented so that there is ongoing evaluation of outcome achievement (see section 4.1). This section discusses the derivation of monitoring indicators and statements. Because outcome statements for the SIRCMS/RNPMP are yet to be confirmed, this section highlights the *principles* of preparing monitoring statements specific to the BOA process.

Monitoring is the systematic and periodic measurement of key indicators of biophysical and social conditions (Eagles et al. 2002). The purpose of a monitoring plan is to measure the attainment or maintenance of these conditions.

A key question is: what should be measured? The BOA demands that both the outputs (from management actions) and outcomes are measured (Driver &Bruns 2009). A significant difference from the existing monitoring paradigm is the emphasis BOA places upon *outcomes* monitoring. This presents a challenge to many management agencies where, traditionally, *outputs* have been the focus of monitoring programmes (indicators have included such things as number and quality of facilities, and number of visits). DOC is no exception to this.

The development of a robust monitoring system is discussed elsewhere (see, for example, Eagles et al. 2002). Because the BOA expands the focus to include *outcomes* (as well as *outputs*) measurement, this is likely to present certain difficulties.

The first difficulty is the specification of outcomes statements. In section 7.5 it was noted that the ability to measure the achievement of the outcome should be one of the principles of writing a good outcome statement. In other words, the construction of the statement itself will dictate how readily its achievement can be monitored. For example, some parts of outcome statements derived from the workshops suggest possible means to measure the attainment of the outcome (e.g. no introduced predators), while other parts of these statements do not (e.g. measurement of the showcase aspect in Ulva Island outcome statement is difficult to conceptualise). However, as noted earlier, these statements may not be phrased as they will be in the final plans.

The second difficulty is that measurement of outcomes is likely to affect the plan timeframe. By definition, most outcomes define conditions sought at the end of the plan's lifetime (or later). Evaluation will not be *complete* until the planning process and plan implementation is concluded. However, ongoing monitoring is required to provide the opportunity to 'get back on track', where necessary, and to avoid the long delay in measurement that would otherwise occur.

The third difficulty is that the achievement of value-based outcomes will generally require data collection from visitors and other stakeholders (Driver & Bruns 2009). Data collection has increasingly formed part of DOC's monitoring programme over recent years.

In summary:

- Attainment of both outputs and outcomes must be measured
- Outcome statements must be constructed to facilitate measurement
- Monitoring is ongoing
- Monitoring is likely to require information to be gathered from visitors and residents

# 9. Conclusions

The aim of this study was to determine the utility of the BOA for management planning on public conservation lands. In order to do so, the study:

- 1. Identified the social benefits/outcomes derived from public conservation lands and their management
- 2. Developed participatory processes so that community-defined expressions of beneficial outcomes could be obtained
- 3. Applied the participatory processes to a specific case study
- 4. Defined principles for outcome specification and measurement

## 9.1 UTILITY OF THE BOA FOR DOC MANAGEMENT PLANNING

This study has tested the BOA within the DOC Stewart Island/Rakiura planning process. Management planners found it was a good process for engaging the community and obtaining insight into community values and preferences. The workshop proceedings state: 'As a result of holding these workshops, the Department has gained valuable and important direction from the community regarding future management of Stewart Island/Rakiura' (DOC 2007b: 6).

The utility of BOA lies in its positive fit with DOC's strategic planning direction and its flexibility across place- and issue-based applications. The output from any management planning process is two-fold and consists of:

- The production and implementation of a management plan
- The development and maintenance of relationships between the public agency and the community

The BOA will ultimately be tested on both roles

#### 9.1.1 Production and implementation of a management plan

Assessment of the value of the BOA to preparation and implementation of the RNPMP/SIRCMS plans cannot be judged at this time, as the planning documents remain in preparation. A key 'output' sought from the workshops was the production of outcomes statements for the Stewart Island/Rakiura plans. In order to achieve this, an understanding of the community's values and desires for each 'place' was required. The BOA appears to be a good mechanism for identifying how people feel about a place (their values) and what issues require management.

The BOA public participation process derived in this study provided a useful approach for identifying participants' expressions of values about 'places'. In an ideal situation, a BOA-style workshop would be held at the beginning of the planning process (with no pre-circulated material), from which a written statement could be developed and checked back with the community at a second set of workshops, perhaps with some other form of community input to estimate the degree of community acceptance. For the RNPMP/SIRCMS process, this

'check back' will occur during the statutory stage of public submissions on the draft plan. At that point it will become apparent whether the BOA process has helped to elicit community views prior to public notification of the draft plans.

Ultimately, the success of the process will be realised after plan publication and the implementation of plan provisions. The question that remains unanswered is whether the outcomes statements and the related management objectives achieve what participants in the planning process envisaged, and whether the BOA process has contributed to better planning documents. The plans are operative for 10 years and this period will be required to assess the implementation of the plan and whether planned-for outcomes are achieved.

### 9.1.2 Development and maintenance of relationships

The public meeting style of communication used for the BOA application matched the usual DOC approach. However, the conduct of the public meetings, run as participatory workshops, was significantly different. This had a positive benefit. All participants appeared to enjoy the workshops and several people made the effort to approach the planner and/or researcher to say so. No negative feedback was received.

## 9.2 STRENGTHS AND WEAKNESSES OF THE BOA FOR DOC PLANNING PURPOSES

The strengths and weaknesses of the BOA with respect to DOC management planning needs are summarised in Table 11. These have been identified from the case study application and a general evaluation of the BOA based on discussion with DOC management planners.

### 9.3 STUDY OBJECTIVES

#### 9.3.1 Identify social benefits/outcomes

The literature review identified that catalogues of outcomes have been prepared and a recent compilation (IUCN World Commission on Protected Areas 2006) was presented as Table 1. It is suggested that this list is comprehensive and appropriate for DOC purposes.

#### 9.3.2 Develop participatory processes

A New Zealand BOA workshop process was developed and refined through application. This workshop process proved useful as a means for management planners to obtain values and outcomes from community participants and positive feedback was received from some people. The process was flexible enough to accommodate place-based and issue-based public participation.

#### 9.3.3 Apply to a specific place context

The BOA public participation process was developed within the Stewart Island/ Rakiura planning process and applied to three place-based case study sites. In addition, it was modified and used for workshops discussing hunting issues.

DIMENSION	BOA STRENGTH	BOA WEAKNESS	IMPLICATION
Policy context	Fits well with DOC 'outcomes at place' concept.	None identified.	Suitable for adoption by DOC in terms of policy alignment.
Community participation	nmunity participation Very successful with a committed community where participants unfamiliar workshop participants are place' or those who do passionate and knowledgable to give views publicly, a about the 'place' and willing to commit to the process.	Challenging to engage workshop participants unfamiliar with the 'place' or those who do not wish to give views publicly, as process relies on participant input.	Very good process for structuring community participation in DOC management planning. Does not overcome the age-old problem of engaging non- traditional audiences.
	Successful where there are conflicting voices, as the process for identifying and developing values is non-threatening and transparent to all participants.	May give an impression to the public that DOC will act on their opinions (because BOA process asks for these opinions). Participants must be made aware that public policy will be taken into account as well as their views.	
	Provides a fresh approach for engaging with communities.	Regular participants may tire of the same process. BOA workshop process can be refined for subsequent workshops.	
	Produces a clear articulation of community views (and reasons for them).	Nil.	
	Provides a useful method for structuring responses from traditional 'established' sectors of the community.	No better than other processes in engaging non-traditional audiences.	
Plan preparation	Public involved in producing outcomes statements. Likely to increase support for plans.	Potential for discord if the outcomes statements generated at the public workshops are not used in the plans.	Success unclear until mangement planning documents produced and community responses obtained.
Resources	Costs of running BOA workshops similar to costs of existing participatory processes.	Need for several (2-3) people to facilitate workshop process.	Neutral cost implications.

#### TABLE 11. STRENGTHS AND WEAKNESSES OF THE BOA FOR DOC MANAGEMENT PLANNING.

# 9.3.4 Develop indicators of outcome measurement over time

Indicative measures to monitor potential outcome statements have been offered, based on a review of the literature about outcome monitoring.

#### 9.4 **RECOMMENDATIONS**

The BOA is a useful process for DOC management planning. It is recommended that:

- 1. DOC adopts the BOA approach for management planning and that it be implemented right from the start of management planning processes
- 2. The BOA implementation process (Fig. 8) be applied. This extends the process used in this study (see Fig. 3) and accommodates:
  - a. Gradual modification of BOA workshops as they are applied throughout a planning process (i.e. progressive development of community input via two rounds of workshops)
  - b. Development of participants' capability in the process—they become familiar with the approach and comfortable with engaging in it
  - c. Optional use of a discussion document (as per current DOC practice) at the outset of a management planning process
  - d. Utilisation of public workshops (Round 1) to develop 'outcome' statements (with no pre-circulated statements)
  - e. Some communication of DOC policy requirements and how these affect what the community might want during Round 1 of the workshops, to facilitate confirmation of these policies at Round 2 workshops
- 3. If desired, a quantitative survey be developed to measure the extent of community acceptance of outcomes
- 4. An evaluation of the success of the BOA process be undertaken once the RNPMP and SIRCMS are operational

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#### Gather data

Gather existing information about community views (e.g. responses to discussion document (if used), surveys)

## Design and advertise public workshops for each 'place' [Workshops Round 1]

• Separate workshops for each 'place' identified from existing community views or managers' knowledge

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- · Select workshop locations and times
- Identify facilitation team (draw upon cadre of DOC management planners)
- Prepare workshop plan
- No pre-circulated paper

#### **Conduct workshops Round 1**

• Conduct a series of public workshops centred around 'place' (and 'issues' if required), in order to confirm known community views or identify same, confirm choice of 'places', derive an 'outcome' statement for each 'place' and obtain input on potential policy options

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• Utilise the following workshop structure: Introduction → Activities → Place → Experiences → Outcomes → Settings → Close

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### Prepare paper

Prepare a paper to summarise known community views, outline draft 'outcome' statement and proposed policy options for each 'place'

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## Design and advertise public workshops for each 'place' [Workshops Round 2]

- Separate workshops for each 'place' identified from existing community views
- Select workshop locations and times
- Identify facilitation team (draw upon cadre of DOC management planners)

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- Prepare workshop plan
- Circulate paper prior to each workshop

#### **Conduct workshops Round 2**

- Conduct a series of public workshops centred around 'place' (and 'issues' if required), in order to confirm feedback on the 'outcome' statements and policies developed in response to community input at workshop 1 and outlined in the paper
- Utilise the same workshop structure as used in Round 1, modified to focus particularly upon outcomes and management settings

## Prepare outcome statements, policies and objectives for management plan

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## 11. References

- Airey, S. 1996: The effectiveness of the public consultation process. Part 1: Conservation Management Strategies 1992–1996. New Zealand Conservation Authority, Wellington, New Zealand.
- Allen, L.R. 1996: A primer: benefits-based management of recreation services. *Parks and Recreation* 31(3): 64–76.
- Allen, L.R.; Stevens, B.; Harwell, R. 1996: Benefits-based management activity planning model for youth in at-risk environments. *Journal of Park and Recreation Administration* 14(3): 10-19.
- Anderson, D.H.; Nickerson, R.; Stein, T.V.; Lee, M.E. 2000: Planning to provide community and visitor benefits from public lands. In Gartner, W.C.; Lime, D.W. (Eds): Trends in outdoor recreation, leisure and tourism. CABI Publishing, Wallingford, UK.
- Balmer, K.; Clarke, B. 1997a: Benefits indicators: measuring progress towards effective delivery of the benefits of parks and recreation. Rethink (West) Inc., Calgary, Canada.
- Balmer, K.; Clarke, B. 1997b: The indicator pilot project: update. Rethink (West) Inc., Calgary, Canada.
- Booth, K.; Driver, B.L.; Espiner, S.R.; Kappelle, R.J. 2002: Managing public conservation lands by the Beneficial Outcomes Approach with emphasis on social outcomes. *DOC Science Internal Series 52*. Department of Conservation, Wellington, New Zealand. 57 p.
- Booth, K.; Edginton, M. 2009: Challenges of adopting the Outcomes Approach: New Zealand's Department Conservation. Pp. 157-167 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Booth, K.; Grocke, C. 1998: The application of benefits based management to the management of sports fields. Paper presented at the New Zealand Recreation Association Annual Conference, December 1-4 1998, held in Dunedin, New Zealand.
- Booth, K.L.; Leppens, J. 2002: Rakiura National Park: a benchmark study of tourism and the Stewart Island Community prior to the creation of the National Park. Unpublished report, Southland Conservancy, Department of Conservation, Invercargill, New Zealand.
- Borrie, W.T.; Roggenbuck, J.W. 1994: Community-based research for an urban recreation application of Benefits-based Management. Paper presented at the Proceedings of the Second Symposium on Social Aspects and Recreation Research, February 23–25, San Diego, California, USA.
- Bruns, D.; Driver, B.L.; Hopkins, B.; Peck, P. 2009: Application of OFM on the McInnis Canyons National Conservation Area. Pp. 201–227 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Bruns, D.; Tucker, K.; Arkins, J. 2009: Applying and implementing OFM on the Gunnison Gorge National Conservation Area. Pp. 253–277 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Canadian Parks and Recreation Association 2008: Relevant recreation: a practical tool kit for applying outcome-based planning to all parks and recreation Activities. Unpublished report, Canadian Parks and Recreation Association, Ottawa, Canada.
- CRESA (Centre for Research, Evaluation and Social Assessment) 1998: Community consultation by the Department of Conservation—an independent review. Department of Conservation, Wellington, New Zealand.
- de Jong, A. 2007: South Island planning workshop presentation notes. Unpublished BOA paper notes for presentation held on 8 November in Christchurch. Southland Conservancy, Department of Conservation, Invercargill.
- DOC (Department of Conservation) 1996: Visitor strategy. Department of Conservation, Wellington, New Zealand.

- DOC (Department of Conservation) 2005: Conservation general policy. Department of Conservation, Wellington, New Zealand.
- DOC (Department of Conservation) 2006a: Department of Conservation: Statement of Intent 2006-2009. Department of Conservation, Wellington, New Zealand.
- DOC (Department of Conservation) 2006b: Stewart Island/Rakiura conservation management strategy review and Rakiura National Park management plan preparation: discussion document. Southland Conservancy, Department of Conservation, Invercargill, New Zealand.
- DOC (Department of Conservation) 2007a: Stewart Island/Rakiura Conservation Management Strategy review and Rakiura National Park Management Plan preparation: summary of feedback responses. Southland Conservancy, Department of Conservation, Invercargill, New Zealand.
- DOC (Department of Conservation) 2007b: Stewart Island/Rakiura Conservation Management Strategy review and Rakiura National Park Management Plan preparation: summary of public workshops. Southland Conservancy, Department of Conservation, Invercargill, New Zealand.
- DOC (Department of Conservation) 2009: Department of Conservation: Statement of Intent 2009-2012. Department of Conservation, Wellington, New Zealand.
- Driver, B.L. 1998: Uses of the benefits approach to leisure. Parks and Recreation, 33(1): 22-25.
- Driver, B.L. 2009a: What is outcomes-focused management? Pp. 19–37 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Driver, B.L. 2009b: Why outcomes-focused management is needed. Pp. 1-18 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Driver, B.L. (Ed.) 2009c: Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA. 400 p.
- Driver, B.L.; Bruns, D. 2009: Implementing outcomes-focused management on public nature-based recreation and related amenity resources. Pp. 39–73 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Dustin, D.L.; Goodale, T.L. 1997: The social cost of individual 'benefits'. *Parks and Recreation* 32(7): 20-21.
- Eagles, P.F.J.; McCool, S.F.; Haynes, C.D. 2002: Sustainable tourism in protected areas: guidelines for planning and management. *Best Practice Protected Areas Guidelines Series No. 8*. IUCN World Commission on Protected Areas, Gland, Switzerland.
- Eckhart, A.S.; Allen, L. 1998: Benefits-based programming: improving the health of seniors. *Parks and Recreation* 33(7): 21–25.
- Ewert, A.; McAvoy, L. 2000: The effects of wilderness settings on organized groups: a state-ofknowledge paper. USDA Forest Service Proceedings RMRS-P-15-VOL-3, USA.
- Heron, J. 1996: Cooperative inquiry: research into the human condition. Sage, London, UK.
- International Association for Public Participation 2006a: IAP2 Public Participation Spectrum. <u>www.</u> <u>iap2.org.au/spectrum.pdf</u>. (Viewed 20 November 2006).
- International Association for Public Participation 2006b: The IAP2 Public Participation Toolbox: Techniques to share information. <u>www.iap2.org.au/toolbox.pdf</u>. (Viewed 20 November 2006).
- Lachapelle, P.R.; McCool, S.F.; Patterson, M.E. 2003: Barriers to effective natural resource planning in a 'messy' world. Society and Natural Resources 16: 473-490.
- Lee, M.; Stafford, B. 2009: Application of OFM on the Red Rock Ranger District of the Coconino National Forest. Pp. 229-238 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.

- James, B. 1990: Public participation in management planning. An investigation of participants' views and experiences. *Science and Research Series 23.* Department of Conservation, Wellington. 65 p.
- Marriott, K.L. 2002: MSAC Redevelopment review: an assessment of net community benefit. HM Leisure Planning Pty Ltd., Melbourne, Australia.
- McCool, S.F.; Clark, R.N.; Stankey, G.H. 2007: An assessment of frameworks useful for public land recreation planning. General Technical Report PNW-GTR-705. Portland, Oregon: US Department of Agriculture, Forest Service, Pacific Northwest Research Station.
- McIntyre, W.; Tucker, D.; Green, M.; Syme, G.; Bates, L.; Porter, N.; Nancarrow, B. 2006: Water benefits accounting and assessment: Lake Mulawa case study. CSIRO: Water for a Healthy Country Research Flagship, Canberra, Australia. <u>www.clw.csiro.au/publications/</u> <u>waterforahealthycountry/2006/wfhc-WaterBenefitsAccounting.pdf</u>. (Viewed 20 November 2006).
- Moore, R.L.; Driver, B.L. 2005: Introduction to outdoor recreation: providing and managing natural resource based opportunities. Venture Publishing, Inc., State College, Pennsylvania, USA.
- Moore, S.A.; Smith, A.J.; Newsome, D. 2003: Environmental performance reporting for natural area tourism: contributions by visitor impact management frameworks and their indicators. *Journal of Sustainable Tourism 11(4)*: 348–375.
- More, T.A. 2002: 'The parks are being loved to death' and other frauds and deceits in recreation management. *Journal of Leisure Research 34(1)*: 52–78.
- Newsome, D.; Moore, S.A.; Dowling, R.K. 2002: Natural area tourism: ecology, impacts and management. Channel View Publications, Clevedon, UK.
- New Zealand Conservation Authority 2005: General policy for national parks. Department of Conservation for the New Zealand Conservation Authority, Wellington, New Zealand.
- Nilsen, P.; Taylor, G. 1997: A comparative analysis of protected area planning and management frameworks. In McCool, S.F.; Cole, D.N. (Eds): Limits of acceptable change and related planning processes: progress and future directions. *Intermontane Research Station General Technical Report 371*. USDA Forest Service, Ogden, Utah, USA.
- O'Sullivan, E. 1999: Setting a course for change: the benefits movement. National Recreation and Park Association, Ashburn, Virginia, USA.
- Parks and Wildlife Commission of the Northern Territory 2002: Public participation in protected area management best practice. The Committee on National Parks and Protected Area Management, Palmerston, NT, Australia.
- Philipp, S.F. 1997: Race, gender, and leisure benefits. Leisure Sciences 19: 191-207.
- Pierskalla, C.D.; Lee, M.E.; Stein, T.V.; Anderson, D.H.; Nickerson, R. 2004: Understanding relationships among recreation opportunities: a meta-analysis of nine studies. *Leisure Sciences 26*: 163–180.
- Roggenbuck, J.W.; Driver, B.L. 2000: Benefits of nonfacilitated uses of wilderness. Pp. 35-49 in: Proceedings: wilderness science in a time of change. Vol. 3: Wilderness as a place for scientific enquiry. May 23-27 1999. RMRS-P-15-Vol-3, Rocky Mountain Experiment Station, USDA Forest Service, Ogden, Utah, USA.
- Schneider, I.E.; Wilhelm, S.; Heisey, J. 2006: Visitor benefits, crowding and values: cumulative visitor report 2003-2004 Lake Shelbyville and Carlyle Lake, *Department of Forest Resources Staff Paper Series 188*. University of Minnesota, Minnesota, USA. <u>http://purl.umn.edu/37715</u>. (Viewed 20 November 2006).
- Sefton, J.M.; Mummery, W.K. 1995: Benefits of recreation research update. Venture Publishing Inc., State College, Pennsylvania, USA.
- Shin, W.S.; Jaakson, R.; Kim, E.I. 2001: Benefits-based analysis of visitor use of Sorak-San National Park in Korea. *Environmental Management 28(3)*: 413–419.
- Steele, W. 2006: Engaging rock climbers—creating opportunities for collaborative planning and management in protected areas. *Australasian Parks and Leisure 9(4)*: 42-48.

- Stein, T.V.; Anderson, D.H. 2002: Combining benefits-based management with ecosystem management for landscape planning: Leech Lake watershed, Minnesota. *Landscape and Urban Planning* 60: 151–161.
- Stein, T.V.; Anderson, D.H.; Thompson, D. 1999: Identifying and managing for community benefits in Minnesota State Parks. *Journal of Park and Recreation Administration* 17(4): 1-19.
- Stein, T.V.; Lee, M.E. 1995: Managing recreation resources for positive outcomes: an application of benefits-based management. *Journal of Park and Recreation Administration* 13(3): 52–70.
- Sutton, S. 2004: Outdoor recreation planning frameworks: an overview of best practices and comparison with Department of Conservation (New Zealand) planning processes. Paper presented at the New Zealand Tourism and Hospitality Research Conference, 8–10 December 2004, Wellington, New Zealand.
- Taylor, P.C. 1993: The New Zealand recreation opportunity spectrum: guidelines for users. Hillary Commission for Sport, Fitness and Leisure and the Department of Conservation, Wellington, New Zealand.
- Virden, R.; Vogt, C.; Knopf, R.C. 2009: Assessing the benefits of the Alpine Loop Backcountry Byway in Southwestern Colorado. Pp. 287-310 in Driver, B.L. (Ed.): Managing to optimize the beneficial outcomes of recreation. Venture Publishing, State College, Pennsylvania, USA.
- Walker, G.J. 1998: On-site optimal experiences and their relationship to off-site benefits. *Journal of Leisure Research* 30(4): 453-471.
- Warren, J. 2002a. Department of Conservation: lessons to be learnt about community consultation. Unpublished report prepared for the Department of Conservation, Wellington. Centre for Research, Evaluation and Social Assessment, Wellington, New Zealand.
- Warren, J. 2002b: Survey findings: evaluation of the consultation guidelines. Unpublished report prepared for the Department of Conservation, Wellington. Centre for Research, Evaluation and Social Assessment, Wellington, New Zealand.
- Yuan, M.; McIntyre, N.; Payne, R.J.; Moore, J. 2004: Development of a spatial values-based recreation planning framework for Canadian crown lands. Pp. 93-99 in: Working papers of the Finnish Forest Research Institute 2. Presented at the International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas: Policies, methods and tools for visitor management. June 16-20, Rovaniemi, Finland. <u>www.metla.fi/julkaisut/</u> workingpapers/2004/mwp002.htm. (Viewed 20 November 2006).

## 12. Glossary

**Activity**: Recreational and non-recreational pursuits, such as hunting, photography, etc. Activities may have a variety of styles, such as wilderness camping c.f. camping in a fully-serviced campground.

**Beneficial outcomes approach (BOA)**: A management planning framework which explicitly defines the outcomes for which areas will be managed, defined in terms of positive outcomes to be targeted and negative outcomes to be avoided. Outcomes must fit within the legislative and resource constraints of the agency, and are translated into management objectives and policies. Developed in the USA, the BOA is primarily used by public agencies managing natural resources.

**Benefit**: A positive consequence from the use and/or management of the resource.

Benefits may be divided into categories or domains commonly expressed as:

- Personal benefits: psychological and psycho-physiological
- Social/cultural benefits and improvements
- Economic benefits
- Environmental benefits

Three types of benefit may occur:

- An improved change in a condition: e.g. improved physical health
- Maintenance of a desired condition, prevention of an unwanted condition, or reduction of an unwanted condition: e.g. maintenance of family relationships
- Realisation of a satisfying recreation experience

**Management setting**: See *Setting*. Relates to the degree of access to a given site, the number, standard and type of facilities and services provided, and the extent of management regulation.

**Outcome**: The beneficial (desirable) and non-beneficial (undesirable) consequences of the management and use of resources.

- Undesirable (non-beneficial) outcomes are adverse environmental and social impacts
- Desirable (beneficial) outcomes—see Benefits

**Outcomes at place**: DOC structures its management planning around 'outcomes at place', that is, the plans express outcomes (and objectives and policies) for identified geographical 'places' which comprise those parts of the conservation area which require more specific management direction—they are those areas to which the plan will give special attention.

**Place**: A 'place' is an area to which DOC will give special attention within a management plan or strategy because it is recognised as requiring specific management direction.

**Setting**: The environmental, social and managerial conditions which comprise the recreation site:

- *Environmental setting* focuses upon the degree of environmental modification
- Social setting relates to other users, including their density and conduct
- *Managerial setting* includes access, the provision of facilities and services, and the degree of regulation

# Appendix 1

## BENEFITS TYPOLOGY

Specific types and general categories of benefits attributed to leisure by one or more scientific studies (Moore & Driver 2005: 29).

Personal development and growth       • Adaptability       • Catharsis         Self-esteen       • Cognitive efficiency       Personal appreciation/satisfactio         Self-reliance       • Problem solving       • Self-actualisation         Self-chance       • Router learning       • Flow/absorption         Self-assurance       • Cultural/historic awareness/learning/       • Exhifaration         Self-affirmation       appreciation       • Stimulation         • Values clarification       • Environmental awareness/understanding       • Sense of adventure         • Learn new skills and develop and apply       • Tolerance       • Challenge         • Academic/cognitive performance       • Balanced toring       • Personal diprecized quality of life/life satisfacti         • Independence/autonomy       • Willingness to take risks       • Creative expression         • Sense of control over one's life       • Acceptance of one's responsibility       • Acatherica and other mental performance         • Leadership ability       Mental health and maintenance       • Spirituality       • Nature appreciation         • Leadership ability       Mental health and maintenance       • Spirituality       • Academic and retuced depression/         • Spiritual growth and greater       • Prevention of and retuced depression/       • Environmental stewardship         • Creativity enh	PERSONAL BENEFITS: PSYCHOLOGICAL				
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<ul> <li>Self-competence</li> <li>Nature learning</li> <li>Flow/absorption</li> <li>Self-assurance</li> <li>Cultural/historic awareness/learning/</li> <li>Self-affirmation</li> <li>appreciation</li> <li>Environmental awareness/understanding</li> <li>Sense of adventure</li> <li>Challenge</li> <li>Challenge</li> <li>Challenge</li> <li>Sense of adventure</li> <li>Sense of adventure</li> <li>Challenge</li> <li>Challenge</li> <li>Nostalgia</li> <li>Academic/cognitive performance</li> <li>Balanced living</li> <li>Perceived quality of life/life satisfaction</li> <li>Sense of control over one's life</li> <li>Accademic of one's responsibility</li> <li>Academic and other mental performance</li> <li>Sethet of one's responsibility</li> <li>Academic and other mental performance</li> <li>Spirituality</li> <li>Mental health and maintenance</li> <li>Spirituality</li> <li>Academic and other mental performance</li> <li>Spirituality</li> <li>Academic and restoration)</li> <li>Identification with special places/fee</li> <li>Spiritual growth and greater</li> <li>Prevention of and reduced depression/</li> <li>appreciation of spirituality</li> <li>Positive changes in mood and emotion</li> <li>Transcendent experiences</li> </ul> PERSONAL BENEFITS: PSYCHOPHYSIOLOGICAL Improved perceived quality of life <ul> <li>Reduced spinal problems</li> <li>Increased body fat/obesity/weight control</li> <li>Increased body fat/obesity/weight control</li> <li>Increased body nation of better balance</li> <li>Management of arthritis</li> <li>Reduced or prevented hypertension</li> <li>Increased bode mass and strength in children</li> <li>Management of arthritis</li> <li>Ingroved control and prevention of diabeter</li> <li>Cardiovascular benefits, with heart</li> <li>connective tissue</li> <li>System (i.e. resistance to illness)</li> <li>problem</li></ul>	• Self-reliance	Problem solving	Self-actualisation		
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	• Improved control and prevention of diabetes	s capacity, benefits to people with asthma)	• Reduced consumption of alcohol,		
Reduced risk of lung and colon cancer     Improved response time     tobacco, and other drugs	• Reduced risk of lung and colon cancer	• Improved response time	tobacco, and other drugs		
• Better muscle strength and joint functioning • Reduced incidence of disease • Reduced need for some medications	• Better muscle strength and joint functioning	• Reduced incidence of disease	• Reduced need for some medications		

#### SOCIAL/CULTURAL BENEFITS

Community satisfaction and morale	Social support	Nurturing of others
Community identity	• Support for democratic ideal of freedom	• Understanding and tolerance of others
• Pride in community/nation (i.e. pride	• Family bonding/better family life	• Environmental awareness, sensitivity
in place/patriotism)	<ul> <li>Keeping children engaged/away</li> </ul>	Enhanced worldview
Cultural/historical awareness and	from less desirable activities	<ul> <li>Nurture new community leaders</li> </ul>
appreciation	Higher class attendance	<ul> <li>Socialization/acculturation</li> </ul>
Reduced social alienation	Lower dropout rates	Cultural identity
• Reduced illness and social impacts of such	• Increased trust in others	Cultural continuity
<ul> <li>Community/political involvement</li> </ul>	<ul> <li>Increased compassion for others</li> </ul>	• Prevention of social problems by at-risk
• Increased productivity and job satisfaction	Reduced loneliness	youth

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#### Appendix 1 continued

<ul> <li>Ethnic social integration</li> <li>Social bonding/cohesion/cooperation</li> <li>Conflict resolution/harmony</li> <li>Reduced crime</li> <li>Greater community involvement in environmental decision making</li> </ul>	<ul> <li>Reciprocity/sharing</li> <li>Social mobility</li> <li>Improved image of public agencies</li> <li>Community integration</li> <li>Promotion of voluntary community efforts</li> </ul>	<ul> <li>Developmental benefits in children</li> <li>Increased independence of older people</li> <li>Networking by seniors</li> <li>Increased longevity and perceived quality of life</li> </ul>
<ul> <li>Maintenance of physical facilities</li> <li>Stewardship/preservation of options</li> <li>Improved air quality through urban forestry</li> <li>Husbandry/improved relationships with natural world</li> <li>Increases in 'leave no trace' use</li> <li>Understanding of human dependency on the natural world</li> </ul>	<ul> <li>Environmental ethic</li> <li>Public involvement in environmental issues</li> <li>Environmental protection</li> <li>Ecosystem sustainability</li> <li>Species biodiversity</li> <li>Maintenance of natural scientific laboratories</li> </ul>	<ul> <li>Preservation of particular natural sites and areas</li> <li>Preservation of cultural/heritage/ historic sites and areas</li> <li>Promotion of ecotourism</li> </ul>
ECONOMIC BENEFITS		
<ul> <li>Reduced health costs</li> <li>Increased productivity</li> <li>Less work absenteeism</li> <li>Reduced on-the-job accidents</li> <li>Amenity use of hazard areas</li> <li>Decreased job turnover</li> </ul>	<ul> <li>International balance of payments (from tourism)</li> <li>Local and regional economic growth</li> <li>Local amenities help attract industry</li> <li>Employment opportunities</li> </ul>	<ul> <li>Contributions to net national economic development</li> <li>Promotion of places to retire and associated economic growth</li> <li>Increased property values</li> </ul>

Note: Some of the specific types of benefits are subsumed within more general types, so there is some redundancy in this list. Sources: first published in Driver (1990), revised for Driver & Bruns (1999), and further revised for Moore & Driver (2005). Many benefits are supported by more scientific research than are others. The best reference for the scientific bases of these benefits is The Benefits Catalogue by the Canadian Parks/Recreation Association (1997).

## Appendix 2

## SUMMARY OF THE COMBINED PROCESS FOR REVIEWING THE STEWART ISLAND/RAKIURA CONSERVATION MANAGEMENT STRATEGY AND PREPARING THE RAKIURA NATIONAL PARK MANAGEMENT PLAN

INDICATIVE TIMELINE	ACTION (SPECIFIED BY LEGISLATION)
Aug 2006	Consultation with Conservation Board
	Department to consult Conservation Board on pre-draft notification process.
Sept 2006	Pre-draft notification
	Te Runanga o Ngai Tahu advised of intention to review CMS and prepare NPMP.
	Public notification of intent to review CMS and prepare draft NPMP and call for suggestions for the drafts (published
	in a newspaper circulating in Stewart Island/Rakiura and Southland, and in daily newspapers circulating in Auckland, Hamilton, Wellington, Christchurch and Dunedin), within the time period specified (there is no legislative time limit).
	Development of drafts
	DOC to develop draft CMS and NPMP in consultation with the Conservation Board and other persons/organisations
	as the DOC Director-General (D-G) considers practicable and appropriate.
Jan 2008	Notification of drafts and call for submissions
	DOC to give notice by advertisement published in a newspaper circulating in Rakiura and Southland and in daily
	newspapers circulating in the cities of Auckland, Hamilton, Wellington, Christchurch, and Dunedin that the drafts
	are available for inspection at a place and at times specified in the notice, and calling upon interested parties to
	lodge written comments with the D-G on the drafts before a date specified in the notice (either 2 months or 40 working days, whichever is longer).
	DOC to give notice to appropriate regional councils, territorial authorities, iwi authorities, and (so far as is
	practicable) to all parties which made written suggestions in response to the pre-draft notification (to include all information outlined above).
	Department to make drafts available for public inspection during normal office hours, free of charge, at the office of
	the D-G in Wellington, and in any other places and quantities as are likely to encourage public participation in the development of the proposal.
	Other consultation
	The D-G may, after consultation with the Conservation Boards affected, obtain public opinion of the drafts by any
	other means from any person or organisation.
	Hearings
	All submitters are to be given reasonable opportunity to be heard on their submissions on the drafts by
	representatives of the D-G and the Conservation Board (the D-G and Board to jointly agree what is a 'reasonable opportunity').
	Representatives of the D-G and the Conservation Board have the option of hearing submissions from any other parties consulted on the draft. They need not have made a formal written submission on the drafts.
	Amendment of drafts and consideration of submissions
	DOC to prepare a summary of the submissions and public opinion made know about it.
	DOC to consider the submissions and public opinion made known about the drafts, and to amend the drafts as it sees fit.
	DOC to send the Conservation Board copies of the draft CMS, draft NPMP, and the summary of submissions.
	This to be completed in 8 months from the public notification of the drafts. A longer period may be sought from the Minister of Conservation.

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INDICATIVE TIMELINE	ACTION (SPECIFIED BY LEGISLATION)		
Sept 2008	Consideration by Conservation Board		
	Conservation Board to consider the drafts and associated documents.		
	Conservation Board has the option of requesting that DOC reconsider aspects of the drafts, before sending them to the New Zealand Conservation Authority (NZCA).		
	In addition to the drafts, the Conservation Board is to also send the summary of submissions, the statement on the extent to which the comments received on the draft have been excluded/included in the revised drafts, and a statement on any issues that the Conservation Board and DOC have been unable to reach agreement.		
	This information is required to be sent to the NZCA within 6 months of the Conversation Board receiving it.		
	A longer period may be sought from the Minister of Conservation.		
March 2009	Consideration by New Zealand Conservation Authority		
	The NZCA to consider the drafts and associated information, and modify the drafts as it sees fit.		
	The NZCA may consult other parties, including DOC and Conservation Board.		
	Consideration by Minister of Conservation		
	The NZCA to send the drafts and any relevant information to the Minister of Conservation.		
	The Minister of Conservation may provide the NZCA with written recommendations on the drafts.		
	When the Minister is formulating any recommendations Te Runanga o Ngai Tahu may advise the Minister of Conservation directly, and the Minister must have particular regard to that advice regarding any site.		
	The NZCA considers these recommendations, and has the option of sending the drafts back to the Minister of Conservation for further consideration, with any new information that the NZCA wishes to add.		
	Approval by New Zealand Conservation Authority		
	After considering the comments from the Minister of Conservation, the NZCA makes any subsequent changes and then approves the documents.		
	The CMS and NPMP come into effect either on the date approved by the NZCA (or a date stipulated by the NZCA and noted in the documents).		
2009	Notification and availability of approved documents		
	DOC to give public notice that the CMS and NPMP have been approved. The public notice must be published in a newspaper circulating in Stewart Island/Rakiura and Southland, and in daily newspapers circulating in Auckland Hamilton, Wellington, Christchurch and Dunedin.		
	The approved documents to be available for public inspection during ordinary office ours, free of charge, at places agreed by the Board and the DG, and at the office of the DG in Wellington (and DOC National Office if this is different		

## Appendix 3

## PRE-WORKSHOP DOCUMENTS FOR ULVA ISLAND AND PORT PEGASUS/PIKIHATITI

## ULVA ISLAND — APRIL 2007

Review of the Stewart Island/Rakiura Conservation Management Strategy and preparation of the Rakiura National Park Management Plan.

Note: This policy is a draft policy written as a starting point for discussion at the Ulva Island workshops that are scheduled for 15 May in Oban and 17 May in Invercargill. These workshops will be particularly concentrating on working through the outcomes that are sought for Ulva Island as a whole and potentially including a discussion on the relationship between the surrounding coastal marine area and Ulva Island.

The policy provides an overview of the Department of Conservation views which are based on analysis of the 406 written submissions received on the initial discussion document and the department's own priorities. The purpose of the Ulva Island workshops is to identify what views are held by the community (which may be different from those of the department, or similar)

## INTRODUCTION

Ulva Island is a nationally and internationally significant pest-free island, situated within Paterson Inlet/Whaka a Te Wera. It represents one of the best examples of a lowland forested ecosystem remaining in Southland. It is highly valued for its biodiversity, its accessibility, and its importance to the tourism industry.

#### Natural resources

#### Physical

Ulva Island is the largest island (267 ha) situated within Paterson Inlet/Whaka a Te Wera, approximately 1.5 km offshore from the main Stewart Island/Rakiura landmass. Most of the island is administered by the Department of Conservation as part of the Rakiura National Park. Prior to this, the island was managed as a scenic reserve. There is a small area of freehold land at Post Office Bay (7.8 ha) owned by the Hunter family, with a wharf and causeway on a designated public road.

## Biological

Ulva Island is of high ecological significance as a pest-free island, largely in its natural, pre-human state. It is free of mammalian predators and browsers found in the rest of Stewart Island/Rakiura, such as rats, wild cats, and possums. As such, Ulva Island is nationally and internationally important as a conservation asset. As with the rest of Stewart Island/Rakiura, Ulva Island is free of mustelids such as stoats and weasels. It is a haven for endangered species, and of significant as a seeding source and 'island ark' for the long term recovery, protection and (re) introduction of species native to Stewart Island/Rakiura, in conjunction with other islands.

A list of significant species, known pest-plant species, and introduced diseases and pathogens found on Ulva Island can be found in Appendix 1.

## Historical and cultural heritage

Ulva Island has a long history of human visitation, both Maori and European.

The European association began with Charles Traill, who settled on Ulva Island around 1870. Traill operated the first post office in the area, as well as a small general store. Traill, an early naturalist, also sought to preserve the natural values of the island. As such, Ulva represents an historic early example of preservation, as well as an example of early island tourism. It became Stewart Island/Rakiura's first scenic reserve.

Current historical features on the island include (not necessarily managed by the Department of Conservation):

- The original post office building (on private land)
- The cottage adjacent to the post office and various outbuildings (private land)
- Exotic and indigenous plantings (some on private land)
- The Traill family gravesite, where Charles and Henriette Jessie Traill are buried

Several archaeological sites are also recorded on the New Zealand Archaeological Association database.

## People's benefit and enjoyment

The island is highly valued as a destination by recreational and commercial visitors, and is significant to Stewart Island/Rakiura tourism. The physical beauty of the island, its relative quiet and sense of solitude, combined with the prolific bird song mean that most visitors derive considerable benefit from visiting the island. As such it receives over 20 000 visitors per year and this number is steadily increasing. Recreational visitors constitute the majority of visitors, and approximately 3000 of these visitors access the island through commercial concessionaires.

Most visitors use commercial water taxi and boat operators to access Ulva Island from the Golden Bay wharf, disembarking at the jetty at Post Office Bay. Some visitors also land at West End Beach.

#### **Other values**

Reserved

## SPATIAL DEFINITION

The west end of Ulva Island is the area west of a line drawn from halfway along Sydney Cove to Boulder Beach. This area receives the most recreational use, and contains most of the current facilities. The east end of Ulva Island is the area east of the line drawn from halfway along Sydney Cove to Boulder Beach.

The coastal marine area is the waters of Paterson Inlet/Whaka a Te Wera that immediately surround the island.

The marine reserve is Ulva Island/Te Wharawhara Marine Reserve, gazetted in 2004. Its boundaries are shown on the map below.

[MAP NOT SHOWN]

## JUSTIFICATION FOR ULVA ISLAND AS A 'PLACE'

Ulva Island may be treated as a place for the purposes of this part of the planning process. A 'place', as defined in the General Policy for National Parks 2005, is an area identified in conservation management strategies and national park management plans for the purposes of integrated conservation management. It may include any combination of terrestrial, freshwater and marine areas and may be determined by a range of criteria, including, but not limited to: ecological districts, geological features, catchments, internal departmental, regional or district council or rohe/takiwa boundaries, land status, major recreation or tourism destination, commonality of management considerations, or unique management needs.

A place therefore can be considered as a 'unit', or 'area' within a national park or conservation management strategy area (e.g. Stewart Island/Rakiura) with specific outcomes, objectives, and policies prescribed in planning documents in order to manage that 'place'. Places form the basis of conservation management.

Ulva Island as a 'place' includes the island itself, most of which is within the national park. To achieve the integrated management of Ulva Island, Ulva Island as a 'place' may also include the foreshore and the adjacent coastal marine area including the marine reserve boundaries and it may also include the airspace over and above this area. The intrinsic values of the island, such as its biodiversity, natural habitat and ecology, as well as the recreational experience that it provides, are also considered part of the island as a 'place'.

#### Outcome

Ulva Island is a place where New Zealand's biodiversity and natural heritage can be experienced in an inspirational setting. There are no introduced predators, the forests are intact, the bird-life is prolific and there is a range of other indigenous fauna, surrounded by a protected marine environment. Visitors to this internationally important open island sanctuary gain an appreciation of island habitat restoration and conservation management through recreational opportunities that do not disturb other visitors experiencing the quiet nature and bird song that can be heard on the island. As part of island conservation, the island also provides an opportunity for scientific research of native habitats and ecosystems. Ulva Island is a showcase for natural heritage and conservation management.

## **Objectives**

- 1. To provide for the continued protection of the native biodiversity on Ulva Island as an unmodified predator-free island sanctuary, including the introduction of further native species where appropriate.
- 2. To provide a safe sanctuary for key species for future release back onto the main island of Stewart Island/Rakiura.
- 3. To sustain the predator-free nature of Ulva Island with appropriate biosecurity controls and policies.
- 4. To encourage and facilitate scientific study and research, consistent with the outcomes for Ulva Island.
- 5. To maintain free public access to Ulva Island.
- 6. To manage commercial concessionaire opportunities to Ulva Island at appropriate levels, consistent with the outcomes for Ulva Island as a place within the National Park.
- 7. To further increase public awareness of the natural heritage of Ulva Island through interpretation and education of Ulva Island as an example of successful island restoration.
- 8. To provide for the protection and interpretation of archaeological and historic sites on Ulva Island, including those on private land.
- 9. To facilitate and encourage integrated conservation management between the different agencies that have a statutory role in the management of Ulva Island and the surrounding environment.

### **Policies**

- 1. The Department of Conservation should undertake further ecological restoration work on Ulva Island, including further native species introductions as appropriate.
- 2. Where illegal or accidental introductions of a pest species occur, all possible steps will be taken to remove them.
- 3. The Department of Conservation should work with boat operators (including the cruise ship industry) landing on Ulva Island, concessionaires, the Southland Regional Council, as well as other stakeholders to develop a Code of Practice to minimise the risk of predator invasion from boats, stores and provisions and other items carried onto the island. The Code of Practice may consider the use of incentives for operators complying with the guidelines, and procedures to deal with breaches of biosecurity.
- 4. Concessionaires should be required to ensure that all members of their party are aware of and implement appropriate biosecurity measures to protect and enhance Ulva Island as an island sanctuary.
- 5. The public will have free access to the island; however, the Department of Conservation should investigate a restriction on access during the hours of night and a restriction on overnight stays and/or camping on Ulva Island for recreational visitors. Bylaws may be investigated as an option of achieving these restrictions.
- 6. Concessionaire opportunities that are consistent with the outcomes sought for Ulva Island as a place include guided walking, bird watching and nature appreciation activities. In addition, any other concession activities that are applied for should need to ensure these are entirely consistent with the

outcomes sought for Ulva Island as a place, such as adding no artificial noise to the Ulva Island environment.

- 7. Concessionaires should be limited to an allocation of between 15 000 visitors per annum to Ulva Island. Should an applicant for a concession seek changes to this limit, the applicant should be required to undertake appropriate research approved by the Department of Conservation that addresses physical and social carrying capacity effects.
- 8. Concessions party sizes should be restricted as follows:
  - a. A maximum party size of 20 inclusive of guides on the Post Office Bay to Sydney Cove circuit track
  - b. A maximum party size of 8 inclusive of guides on the Post Office Bay to West End and Boulder Beach circuit track. And up to a maximum of 6000 visitors per annum on this track, as part of the 15 000 visitors as specified in policy 7 above;
- 9. In the event where rare exceptions to party size limits posed in policy 8 above can be justified, prior to approving such exceptions, the Department of Conservation should investigate and implement an appropriate combination of measures to ensure that the visitor experiences consistent with outcomes sought for Ulva Island as a place, are maintained and enhanced. Some options that may be considered are:
  - a. To manage groups as to avoid more than three interactions with other groups per trip; and/or
  - b. To encourage large group sizes of 20 inclusive of guides to split the group into two or more smaller groups; and/or
  - c. To manage groups as to travel in only one direction on island tracks; and/or
  - d. To investigate and implement appropriate measures to space out groups whilst on island tracks.

Bylaws may be investigated as a method of achieving the maintenance and enhancement of the visitor experience.

- 10. The Department of Conservation may encourage recreational users and water taxi operators to adopt similar measures as in policy 9 above, to maintain and enhance the visitor experiences consistent with outcomes sough for Ulva Island as a place.
- 11. Concessionaire access to the east end of Ulva Island may be considered in the future provided the following criteria can be met:
  - a. To investigate and implement appropriate measures to spread out the arrival and departure times of groups at the Post Office Bay wharf; and
  - b. If it can be demonstrated that the activity will not have an adverse impact on the biodiversity of this section of the island; and
  - c. If the visitor assets and facilities on the eastern end of Ulva Island can sustain an increased level of use consistent with the outcomes at place for Ulva Island.
- 12. As resources allow, the Department of Conservation should undertake research and monitoring to ensure the following:

- a. That the facilities currently in place on Ulva Island are capable of sustaining increased numbers of recreational and commercial visitors; and/or
- b. That the visitor experience currently available on Ulva Island can be sustained with an increased number of recreational and commercial visitors.
- 13. An education programme and materials should be developed, building on past experience, knowledge, and practice to educate and inform the public about conservation management, using Ulva Island as a showcase for its natural heritage and as an example of successful island restoration.
- 14. The Department of Conservation may encourage concessionaires to undertake interpretation and education roles where possible in accordance with policy 13 above, and to acknowledge this work as a contribution to appreciation of conservation values and natural heritage.
- 15. Further work may be undertaken, to identify historical and archaeological sites on Ulva Island, and to encourage preservation measures where appropriate.
- 16. The Department of Conservation should work alongside other agencies that have a statutory role for the management of Ulva Island, to ensure that an integrated approach to conservation management is undertaken across jurisdictional boundaries, which is consistent with the outcomes sought for Ulva Island as a place.
- 17. Further to policy 16 and in accordance with section 6(j) of the General Policy for National Parks (2005), the Department of Conservation may investigate extending the national park boundary surrounding Ulva Island to the line of mean low water springs to achieve the outcomes sought for Ulva Island as a place. At the time of this investigation, the Department of Conservation should liaise with agencies that have a statutory role in the management of Ulva Island, as well as key stakeholders to ensure that the implications of this proposed boundary change are fully known and acceptable to those agencies and to the community.

## APPENDIX 1

### Current introduced plant species found on the island

Gorse Ulex europaeus Marram Ammophila arenaria Beech Nothofagus spp. Monkey puzzle Araucaria araucana Coprosma grandifolia Macrocarpa Cupressus macrocarpa Darwin's barberry Berberis darwinii Hieracium Hieracium pilosella Chilean flame creeper Tropaeolum speciosum Old man's beard Clematis vitalba Selaginella Selaginella kraussiana German ivy Senecio mikanioides Chilean rhubarb Gunnera tinctoria Bomarea Bomarea caldasii Exotic grasses (including Cortaderia selloana) Mouse-ear chickweed Cerastium fontanum

## PORT PEGASUS/PIKIHATITI PUBLIC WORKSHOP—SEPTEMBER 2007 PROMPT FOR DISCUSSION

## Review of the Stewart Island/Rakiura Conservation Management Strategy and preparation of the Rakiura National Park Management Plan

Note: This document takes a slightly different approach to the documents sent out prior to the public workshops for Ulva Island and the public workshops held regarding the Mason Bay area.

It does not contain a 'pre-draft outcome(s)' like the previous pre-draft documents as this will be worked through at the public workshops themselves. However, this document does still contain an explanation of the current context and the possible future management options written as a starting point for discussion at the Port Pegasus/Pikibatiti workshops that are scheduled for 4 September in Oban and 6 September in Invercargill.

These workshops will follow a similar process to the process used for the Ulva Island and Mason Bay workshops and will seek to work through the outcomes that are sought for Port Pegasus/Pikibatiti as a place within the Rakiura National Park. This discussion may potentially also work through the relationship between the Port Pegasus/Pikibatiti area and the other parts of the national park that surround it, including the area sometimes referred to as the Southern Wilderness. It may also include a discussion on the relationship between the national park and the coastal marine area.

The formulation of this document has been guided by the 406 written feedback responses received on the initial discussion document. Some possible management actions are suggested to give you a feel for what direction could be taken and help discussion at the workshops.

## CONTEXT AND CURRENT MANAGEMENT

The Port Pegasus/Pikihatiti area is situated at the southern end of Stewart Island/ Rakiura. It consists of a complex and diverse terrestrial environment connected to a marine inlet and harbour system, known as Pikihatiti. The sheltered harbour within the Port Pegasus/Pikihatiti area contains many anchorages for boats, which provide the main form of access into the area. The Port Pegasus/Pikihatiti area also provides opportunities for a number of recreational activities, such as tramping, hunting, fishing, diving, kayaking, and nature appreciation.

The collection of inland waterways, inlets, coves and bays covers an area of approximately 40 square kilometres. The harbour includes three main islands, Pearl Island (the largest) in the north, Anchorage Island in the centre, and Noble Island in the south. Between these three islands lie the four major passages used

to access the inner reaches of the harbour by sea. These passages open out into the two main arms of Port Pegasus/Pikihatiti harbour—North Arm and South Arm. South Arm is slightly larger than North Arm. Numerous streams flow into the bays and coves within these arms, with some, such as Cook Arm, extending back from the coast in tidal mudflats and estuaries for several kilometres.

The terrestrial environment surrounding the Port Pegasus/Pikihatiti area is similarly complex, with unique underlying granite bedrock overlaid with softer materials. Over time, these softer layers have eroded revealing the substantial and imposing rock outcrops (exfoliating granite domes) that surround the harbour such as Bald Cone above Shipbuilders Cove, and the twin Peaks of Gog and Magog. Smith's Lookout, above the South Arm, is the highest peak in the southern part of this area, at 474 m a.s.l. Features such as these are found nowhere else in New Zealand, and support a unique ecology. In the north of the Port Pegasus/Pikihatiti area, above the North Arm, the ridge of the Tin Range begins, rising up to 500 m a.s.l. at Lees Knob and Granite Knob. In between the granite outcroppings of the south and the Tin Range in the north, the land is bisected by several small river systems and streams, with some, such as Pegasus Creek, forming waterfalls (e.g. Belltopper Falls) where they exit the land into the sea.

The Port Pegasus/Pikihatiti area has a largely intact ecosystem, extending from the tops of the granite peaks to the floor of the seabed, though some areas surrounding the coast have been historically modified by activities associated with human settlement, such as fire. Outside of the sheltered coastal regions, the area is characterised by low level vegetation, similar to that of sub-alpine regions on the Tin Range further north, and on the mainland. The Port Pegasus/ Pikihatiti area also supports a number of wetland, heathland, turf, rock veneer, and cushion communities.

Stewart Island brown kiwi (tokoeka, roa), yellow-eyed penguins (hoiho), southern New Zealand dotterel, sooty shearwater (titi), and numerous other species of sea bird nest in the Port Pegasus/Pikihatiti area. Because of the isolated nature of southern Stewart Island/Rakiura, the area east of the Tin Range became the last known refuge for kakapo in the latter part of last century. All known kakapo living in the area have since been relocated to predator-free island sanctuaries. The largest of the islands in the Port Pegasus/Pikihatiti area, Pearl Island, has been used in the past as a temporary home for threatened species, most recently in 1998.

The area is rich in cultural and historical values, with seasonal occupation by Maori in transit to and from the Titi islands, and from European settlers. Sporadic settlements have occurred in many of the bays and inlets within Port Pegasus/ Pikihatiti, such as Shipbuilders Cove, and North Arm. Shore-based sealing and whaling occurred in the early days. In the latter, a permanent settlement was established in the late 1800s to serve the tin mining industry established on the southern slopes of the Tin Range above Diprose Bay. Later, a fish freezer was established here, which functioned into the 1930s.

Activities such as tramping (predominantly day walks), hunting, fishing, diving, kayaking, and historic appreciation are the main recreational opportunities available in the area. These activities are generally undertaken as day trips whereby visitors overnight on boats moored in Port Pegasus/Pikihatiti harbour, although there is a tradition of overnight camping at a number of (informal) campsites surrounding the harbour, or at the two Rakiura Hunter Camp Trust huts.

The Port Pegasus/Pikihatiti area also can be accessed on foot via the Tin Range from the Rakeahua Valley. This route is not maintained, requires substantial fitness and experience, and is generally only undertaken by a small number of visitors per year.

There are no Department of Conservation accommodation facilities in the area or maintained tracks, however, the Rakiura Hunter Camp Trust maintain two publicly accessible hunter huts—one in Pegasus Passage serving the northern Port Pegasus/Pikihatiti hunting block, and the other in Islet Cove, serving the southern Port Pegasus/Pikihatiti hunting block. The tramway from Diprose Bay in the North Arm is protected and maintained as a historic asset by the Department of Conservation.

Specific historical features in the Port Pegasus/Pikihatiti area include (but are not necessarily managed by the Department of Conservation):

- The tin mining area on the southern and eastern slopes of the Tin Range.
- The route of the tramway from Diprose Bay in North Arm to the southern slopes of the Tin Range, built to serve the tin industry in the late 1800s.
- The settlement site in North Arm.
- A settlement site in Shipbuilders Cove, South Arm.
- Several archaeological sites are recorded by the New Zealand Archaeological Association.

## DEFINING PORT PEGASUS/PIKIHATITI AS A 'PLACE'

Discussion at the public workshops would be helpful regarding how people conceive the Port Pegasus/Pikihatiti area as a place within the national park. Questions might include:

When you think of the Port Pegasus/Pikihatiti area, what extent does it have to you?

How far should the 'Port Pegasus/Pikihatiti' area extend inland?

What is the relationship between the Port Pegasus/Pikibatiti area and the other surrounding parts of the national park, including the area sometimes referred to as the southern wilderness.

Refer to Fig. 1 [not shown] which has been included to assist you with defining the Port Pegasus/Pikihatiti area.

A place can be considered as a 'unit', or 'area' within a national park or conservation management strategy area (e.g. Stewart Island/Rakiura) with specific outcomes, objectives, and policies prescribed in planning documents in order to manage that 'place'. Places form the basis of integrated conservation management.

A 'place' may include any combination of terrestrial, freshwater and marine areas and may be determined by a range of criteria, including, but not limited to: ecological districts, geological features, catchments, internal departmental, regional or district council or rohe/takiwa boundaries, land status, major recreation or tourism destination, commonality of management considerations, or unique management needs. The Port Pegasus/Pikihatiti Place is a sought-after destination for some visitors; however, access into the area is difficult, limited by weather, sea conditions and cost. Commercial fishers often use the area for shelter.

## WHAT OUTCOME WOULD YOU LIKE TO SEE FOR THE PORT PEGASUS/PIKIHATITI AREA??

We look forward to working this through at public workshops scheduled for the 4 September (Oban) and 6 of September (Invercargill).

These views will be taken into consideration along with the views we have beard from the feedback responses to the discussion document, to create an outcome for the future management of the Port Pegasus/ Pikibatiti area.

## POSSIBLE FUTURE MANAGEMENT OPTIONS:

The following are discussion points with regard to future management options for the Port Pegasus/Pikihatiti area. They are intended only as a guide and prompt for discussion at the public workshops.

## Natural resources

- Protect and restore native species, biodiversity and ecosystems.
- Protect and recognise natural character and outstanding landscape values.
- Manage the exfoliating granite domes at Port Pegasus/Pikihatiti to protect their unique geology and ecology.
- Manage the Port Pegasus/Pikihatiti islands as pest-free island sanctuaries.
- Manage the introduced animals in the Port Pegasus/Pikihatiti area with a high priority on possum control.
- Manage Port Pegasus/Pikihatiti in a weed-free state.

## Archaeological, cultural, and historic heritage

- Foster the relationship with iwi with regard to the management of the Port Pegasus/Pikihatiti area.
- The following archaeological, cultural and historic sites should continue to be actively managed for their historic values:
  - -Port Pegasus/Pikihatiti tin mining site, including the tramway, Surveyors Track, thesettlement site, and mining remains
  - -Port Pegasus/Pikihatiti shipbuilding base, Cooks Arm
  - -Port Pegasus/Pikihatiti Maori occupation site, Cooks Arm.
- Undertake further work to identify historical, archaeological and cultural sites in the Port Pegasus/Pikihatiti Place and (where appropriate) to undertake protection, monitoring, and management measures.

## Recreational visitors (non commercial and commercial)

• Manage the Port Pegasus/Pikihatiti area as a remote and wilderness recreational opportunity.

- Investigate the following facilities:
  - -A tramping track to the summit of Bald Cone; and/or
  - -A tramping track from Disappointment Cove to Broad Bay; and/or
  - -A marked route from Cook Arm to the Fraser Peaks.

## **Concessionaire visitors (commercial)**

- Concessionaire opportunities may include:
  - -Day walking activities at specific sites;
  - -Guided hunting
  - -Nature appreciation
  - Historic appreciation
  - -Marine mammal viewing
- Party size of 8 within the remote zoning of the Port Pegasus/Pikihatiti Place.
- Party size of 6 within the wilderness zoning of the Port Pegasus/Pikihatiti Place.
- Concessionaires staying overnight within the national park should be required to stay at designated sites;
- Guided day parties within the Port Pegasus/Pikihatiti Place should be restricted to the following sites:

Short-stop visits:

- -Belltopper Falls
- -North Arm Old Hotel site
- -Cook Arm shipbuilders' base
- -Broad Bay settlement
- -North Port Pegasus hunter hut
- -South Port Pegasus hunter hut
- —Small-craft retreat

## Day visits:

- -Diprose Bay-tramline access to Tin Range
- -Disappointment Cove to Broad Bay
- -Bald Cone
- —Fraser Peaks
- Access to these sites should be subject to the following criteria:
  - -Short stop sites to have an annual allocation of 225 visitors per site
  - -Day visit sites to have an annual allocation of 225 visitors per site
  - -For the management of its historic values, the Shipbuilders Base site in Cook Arm should have an annual allocation of 100 visitors at this site
  - -Monthly allocations and/or daily allocations may also be considered to ensure concessionaire access to these sites are appropriately managed;
- No concessionaire accommodation facilities should be established within the national park.

## Visitor information and monitoring

• Undertake research and monitoring to ensure the facilities provided in the Port Pegasus /Pikihatiti Place are capable of sustaining the numbers of visitors consistent with the outcome sought for the Port Pegasus/Pikihatiti area;

- If it is identified by research and monitoring that the visitor impact at Port Pegasus/Pikihatiti is no longer consistent with the outcome sought for the Port Pegasus/Pikihatiti Place, the Department of Conservation may investigate the following options:
  - -Working with concessionaires to better manage the impact of visitors at specific site or series of sites; and/or
  - -Reducing the annual allocation of concessionaire visitors at a specific site/s or series of sites; and/or
  - -Removing a site or series of sites if appropriate

## Aircraft and vehicles

- No aircraft landings within the national park.
- No vehicles within the national park, except for management purposes.

## Working with others

- Work alongside other agencies that have a role for the management of the Port Pegasus/Pikihatiti area, to ensure that an integrated approach to achieving the outcome for the Port Pegasus/Pikihatiti Place is undertaken across jurisdictional boundaries.
- In liaison with the community and guided by scientific research, investigate the appropriateness of some form of possible marine protection for the coastal marine environment in the Port Pegasus/Pikihatiti area.
- Work with appropriate agencies to achieve measures to avoid or mitigate the effects of possible future oil exploration and/or production activity on the Port Pegasus environment.

## Appendix 4

## PORT PEGASUS/PIKIHATITI WORKSHOP PLAN

Meeting held 7 pm, 6 September 2007, public library, Invercargill

## 5 pm

## Pre-Workshop (PW/AdJ/KB)

- Sign in (list of attendees)
- Name stickers
- Head count
- Tea, coffee, biscuits available
- Boards 1+2: set up map, outcome statement, blank sheets
- White board: write up workshop structure

7 pm

## Introduction

## ANKE—Background/context

- Recap on what has happened so far in planning process—use printout on whiteboard
- Up to step 4/5
- This workshop—focus on Port Pegasus/Pikihatiti and what will happen there—acknowledgement of pre-draft policy and where this fits in
- Similar approach to Ulva Island and Mason Bay workshops—but slightly different with regard to (1) having no outcome statement, although (2) still presented some possible future management options (from responses received to the discussion document)
- Hands-up regarding who attended either Ulva Island or Mason Bay workshop

## ANKE—Introduce Kay

• Independent facilitator, does not work for DOC or other government agency

## **KAY—Introduction**

- Want to hear your views about Port Pegasus/Pikihatiti
- Going to follow a particular structure—wish to take you through—will explain that shortly
- Participant introductions (round robin)—if too many people, then show of hands: DOC, Conservation Board, other governmentt officials, locals, concessionaires, anyone else
- Internet participants

## KAY—Workshop purpose

- To hear what you want to see at Port Pegasus/Pikihatiti for next 10 years (plan timeframes)
- Think of your grandchildren—1 or 2 generations: so really beyond 10 years timeframe
- Aim is to identify what you want for Port Pegasus/Pikihatiti—its character, values, appropriate activities
- Pre-draft discussion document—management options (prompts for discussion)
- Want to develop an outcomes statement—no draft this time—work it out together

## KAY—Workshop goal

- My goal is to hear what you want for Port Pegasus/Pikihatiti
- DOC is here to hear that also—hence note taking and tape recorder (check tape is OK)
- Anke will also be involved in running this workshop

## **KAY—Housekeeping matters**

- Timeframe—we expect to finish by 9.30 pm or soon after
- The purpose of this meeting is to hear your views on the future of the Port Pegasus/Pikihatiti area:
  - -I hope to hear from everyone here
  - -You don't need to agree with each other, or with anyone else present. You are entitled to your own view, and you have a perfect right to have a unique opinion
  - —One opinion is as valid as another
  - -One person speaking at a time (but not for too long!)
  - -Will shut down side conversations if distracting for others
  - -Kay's role-to finish on time
  - -Views will differ-let's be frank but respectful
- Any apologies?

7.10 pm

## Existing activities and definition of 'place'

## KAY—Activities for Port Pegasus/Pikihatiti (not by zone)

'What currently happens in the Port Pegasus/Pikihatiti area?'—brainstorm

Record: List of activities on butchers' paper

## ANKE—Place definition

As comes up in **activities** discussion, Kay to prompt for:

- 1. What area were you thinking of when you gave me activities for Port Pegasus/ Pikihatiti? What parts of Stewart Island/Rakiura make up the Port Pegasus/ Pikihatiti area?
- 2. Is Port Pegasus/Pikihatiti a 'special place'?
- 3. Check boundaries in both directions (landward, seaward)
- 4. Relationship to what is known as the Southern Wilderness expanse landward?

**Record**: Anke uses felt pen to trace boundary on map. Participants need blank map (hand out).

## **KAY**—Activities check

'Are there any activities that are missing now that we've defined Port Pegasus/ Pikihatiti area?'

Achievement: Overview of what currently happens at Port Pegasus/Pikihatiti and 'where' is Port Pegasus/Pikihatiti.

People 'keyed' in

7.35 pm

## Experiences

ANKE—Facilitate

- KAY—Board
- Experiences

Now think about what people get out of these activities

What goes on in people's heads when they are doing these activities

- = Present activities—not future
  - Some experiences may already be referred to on the 'activities' sheet—use these as examples.

Distinction between activities and experiences.

Think in terms of **experiences** you have when visiting Port Pegasus/Pikihatiti Draw on examples people already offered when discussing activities

Prompts: Close encounters with kiwi

Sense of remoteness in the wilderness

- For what reason do you go to Port Pegasus/Pikihatiti?
- Why Pegasus/Pikihatiti?
- To gain what experience?
- What do you like about going there?

### Zones

Are there any parts of Port Pegasus/Pikihatiti where people have specific types of experiences?

Zones-should treat differently to rest of Port Pegasus/Pikihatiti

#### Prompts

What is it about Port Pegasus?/Pikihatiti

What is special about Port Pegasus/Pikihatiti?

What are the 'take home messages' you want me to take away with me?

#### Future

Present situation—got that now

Future situation—does it look the same? What is different?

Do you want to have certain experiences in 20 years' time?

Are there any new experiences that you will be looking for?

Are there any additional or different reasons that you think you may go to Port Pegasus/Pikihatiti for in the future?

Record: Key words and phrases on butchers' paper

Achievement: list of experiences sought (by zone perhaps)

7.50 pm

### **Benefits/outcomes**

KAY—Facilitate

ANKE-Board

So far, we have thought mainly about experiences you have from visiting Port Pegasus/Pikihatiti **now** 

Now we want to think into the future

## Positive and negative outcomes

What do you want to see at Port Pegasus/Pikihatiti in the future (next 2 generations)

What stuff do you not want to happen there?

Positive things-what benefits will be obtained?

Negative things—what risks are there to achieving these things we've discussed?

**Record**: Separate lists of +ve and -ve outcomes sought/to be avoided—headings 'benefits' and 'risks'

## **Prompts**:

- Individual or personal benefits: that you want to attain, or see others attain
- Household, groups or entire community benefits: here you don't need to be a participant/go to Port Pegasus/Pikihatiti to attain the benefit.
- Economic benefits: attained by businesses and Island community
- Environmental benefits

Think about experiences: Also other outcomes: protecting the kiwi; work for charter boats; etc.

Are there any risks to your well-being or the community's well-being etc. that you would want to ensure do not happen for Port Pegasus/Pikihatiti?

Economic benefits and risks?

Environmental benefits and risks?

## Rank benefits (only if a large list)

Choose top three. Hand out three stars to each person. Get people to stand up and put stars next to items

**Achievement**: List of all benefits sought by group. May have priority benefits identified (those with the most stars)

8.05 pm

#### **Pre-circulated document**

ANKE—To introduce the document

- Who needs a copy?
- Provided some possible management options to give you something concrete to think about in advance
- Have not offered an outcome statement (like you had for Ulva Island / Mason Bay)—you have the opportunity to do this from scratch after cuppa

KAY—'Outcome statement' explanation

- Written statement of what you want to see at Port Pegasus/Pikihatiti in the future
- Will direct DOC to manage for this—i.e. directs what actions DOC will take
- Need to think of all things that need managing—natural values; recreational use; etc.

At tea time—we will write up key points—after tea, we will see where we have got to—what is missing—check we have it right

Take spare copies of document

8.10 pm

Break time-cuppa-15 minutes

## Write up key 'take home messages' from butchers' paper onto fresh OUTCOME sheet

Plan B-have outcome statement from Oban ready on large sheet (back up plan)

## Put activities and experiences sheets on floor so people can see them

8.25 pm

#### Outcome statement development

#### KAY—Facilitate

ANKE-Board

Now want to re-visit the points we come up with and see what **vision (outcome)** they suggest

Have written-up 'take home messages'

- Have we picked out the essence?
- What is missing?—think of all the things that need to be managed
- What is it about Port Pegasus/Pikihatiti?
- What is different about Port Pegasus/Pikihatiti cf. Mason Bay and Ulva Island?

**Plan B**: Have pre-determined outcome statement ready on large sheet in case workshop flounders

Record: Write up key phrases and words to form part of outcomes statement

Achievement: Identify key parts of an outcome statement—and any parts that do not have agreement

8.50 pm

### Settings

(pre-draft policy: 'Possible future management options')

KAY—Facilitate

ANKE—Ask questions/discuss

#### **ANKE—Current situation**

To what extent does Port Pegasus/Pikihatiti already meet this vision?

- Think about what things are already working/in place.
- Think about what existing things mean your vision won't be achieved—what you don't want.

#### **ANKE—Future situation**

Follow layout of pre-circulated document—priority = sections that have already been raised during workshop

- Natural resources—is this a given?
- Archaeological, cultural and historic heritage
- Recreational visitors (commercial and non-commercial)
- Concessionaire visitors (commercial)
- Visitor information and monitoring
- Aircraft and vehicles
- Working with others

Anything else we have not picked up on?

#### **KAY**—Review

Reflect back on **outcome statement**—anything else to be added, now talked about the detail?

If run short of time: Focus on things people have raised and want to talk about.

Achievement: Now have your views on the things needed to achieve what you want at Port Pegasus/Pikihatiti

9.25 pm

## KAY—Close

- Good overview of what is important to you about Port Pegasus/Pikihatiti
- Identified key take-home messages that need to be put together as part of an outcome statement (if have)
- Anything else you want to say-need to get off your chest? ROUND ROBIN

## ANKE—Outline what will happen next

- Port Pegasus/Pikihatiti workshop in Invercargill
- Hunting / hunting hut workshops in late September—Invercargill and Hamilton
- In the meantime, looking at pulling together all the bits in between and will look if any further workshops are required for key gaps in information and/ or direction from the public
- Otherwise, once we have revised objectives and policies based on the direction we have received to date this will be included in the draft plan to be notified in the first half of next year
- Questions? Is everyone happy with how things are going?

## KAY-Thanks for coming

Close 9.40 pm

Team notes:

## Issues that may arise

- Park issues on 'spare' whiteboard (or butchers' paper sheet)
- Hunting issues—hunting workshops

## Need to take

- Butchers paper and pens (felt tips)
- Stands or pins to hang butchers' paper on wall—in place where people can see sheets
- Stars (three stars per participant)
- Hand outs of pre-circulated document
- Large sheet print out of 'Plan B' outcome statement
- Some ballpoint pens (in case people don't have pen)
- Tape recorder and tapes
- Map of all of Stewart Island/Rakiura
- Map of Port Pegasus/Pikihatiti as a place
- Pictures of Port Pegasus/Pikihatiti or Stewart Island/Rakiura
- Copies of the summary of feedback responses
- Public participation booklet
- Document on process? Where we are now?

## Appendix 5

## ULVA ISLAND PRE-CIRCULATED OUTCOME STATEMENT, AND COMMENTS ABOUT IT GENERATED IN WORKSHOPS

#### OUTCOME STATEMENT PRESENTED IN PRE-WORKSHOP PAPER

#### WORKSHOP COMMENTS— OBAN

#### WORKSHOP COMMENTS— INVERCARGILL

Ulva Island is a place where New Zealand's biodiversity and natural heritage can be experienced. There are no introduced predators, the forests are intact, the bird-life is prolific and there is a range of other indigenous fauna, surrounded by a protected marine environment. Visitors to this internationally important open island sanctuary gain an appreciation of island habitat restoration and conservation management, through interpretation and through recreational opportunities that do not disturb other visitors experiencing the quiet nature and bird song that can be heard on the island. As part of island conservation, the island also provides an opportunity for scientific research of native habitats and ecosystems. Ulva Island is a showcase for natural heritage and conservation management at its best

#### Suggested changes were:

- 'New Zealand's'—change to local as not all examples of New Zealand's biodiversity can be found on Ulva Island.
  'Introduced predators'—change to
  'browsers' or 'pests' as use of the word
  'predator' could be too restrictive, particularly as a weka could be classified as a predator.
- Other words for this paragraph suggested were 'inspirational', to mention the relationship between the rest of Stewart Island/Rakiura and Ulva Island and to mention the involvement/ importance of people with regard to Ulva Island.
- 'Restoration'—a question was asked regarding 'what are we restoring?'
- There was agreement that the second sentence of the outcome statement was too long and needed to be shortened.
- 'Recreational opportunities'—change to 'limited' or words to that effect, and to add 'educational' as well.
- 'Quiet nature'—a comment was made to change this to 'no artificial noise'.
- A request was made to make the last outcome more positive—to remove the 'do not'.
- The 'habitats and ecosystems' sections were suggested as requiring a wording change.
- To talk about Ulva Island as a 'world-class showcase' for conservation management.

#### Suggested changes were:

- A 'predator' needs to be defined—it was considered that the current definition is possibly too restrictive especially if it refers to weka, which can be considered as a predator.
- A discussion was held with regard to what might be meant by 'protected marine environment'. It was explained that a 'protected marine environment' could include reference to the existing mataitai and the existing marine reserve around Ulva Island.
- The importance of preserving fishing opportunities on Ulva Island.
- That the first sentence is too long and needs revising.
- That the 'open island sanctuary' is important enough to be a sentence on its own.
- A question was asked regarding what 'open' means in an open island sanctuary. It was explained that the word 'open' refers to a system of island classification used by the Department of Conservation that enables public access.
- That the word 'Interpretation' should be swapped for a reference to education as it refers to a wider range of potential activities.
- A question was raised with regard to whether 'sustainability' should be added into the outcome. A discussion followed regarding how the word 'sustainability' does does not necessarily fit with words such as 'remote'.
- Historical nature—a request was made to mention more groups of people who have a history and relationship to Ulva Island, including those who have lived on the island, and continue to live on the island from time to time.
- That most historical sites are on private land, but visitors are not necessarily aware of the boundaries.

Continued on next page

Appendix 5 continued

OUTCOME STATEMENT Presented in Pre-Workshop Paper	WORKSHOP COMMENTS— Oban	WORKSHOP COMMENTS— INVERCARGILL
		• A discussion was held regarding recreational zoning. It was considered that a range of experiences should be managed on Ulva Island and that a difference should be maintained in between the post office, West end and East end discussion zones.
		• That the term 'wilderness' should not be used as it could potentially devalue the term when used for other areas that retain more 'wild' qualities.
		• That there is a very special beach on the island at Sydney Cove.
		• That the cultural dynamics of the island, in terms of the long-standing relationships between people of Maori descent and people of European descent, are mentioned.

## Can application of the Beneficial Outcomes Approach (BOA) assist management planning processes for conservation lands in New Zealand?

The BOA is a management planning process developed in the USA for public agencies managing natural resources. The BOA framework is structured around identifying the outcomes for which areas are to be managed. By focusing upon the 'end-points' (outcomes), the BOA helps make public agencies more accountable and responsive to the community. This study evaluated the BOA for use in management planning for New Zealand public conservation lands, and developed a community workshop process which was applied to management planning for Stewart Island/Rakiura.

Booth, K. 2009: Applying the Beneficial Outcomes Approach (BOA) to protected area management planning on Stewart Island/Rakiura, New Zealand. *Science for Conservation 296*. 100 p.