

INTEGRATED MANAGEMENT IN THE MARLBOROUGH SOUNDS MARINE AREA: DESIGNING A COMMUNITY-BASED APPROACH



PREPARED FOR

SOUNDFISH

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PURPOSE	1
1.3 APPROACH.....	1
1.4 GEOGRAPHICAL SCOPE	2
1.5 KEY TERMS.....	2
1.6 REPORT STRUCTURE	3
2 FRAMING THE PROBLEM: WHY IS A NEW APPROACH NECESSARY?.....	4
2.1 A ‘WICKED’ AND ‘MESSY’ PROBLEM.....	4
2.2 A COMPLEX PLACE	4
2.3 MANAGEMENT PLANNING	5
2.4 PUBLIC PARTICIPATION.....	6
2.5 SCIENCE	7
2.6 SUMMARY AND CONCLUSIONS	7
3 MANAGEMENT FRAMEWORKS	9
3.1 CARRYING CAPACITY	9
3.1.1 SUMMARY AND CONCLUSIONS – CARRYING CAPACITY	11
3.2 COLLABORATIVE GOVERNANCE.....	11
3.2.1 SUMMARY AND CONCLUSIONS – COLLABORATIVE GOVERNANCE.....	14
3.3 CONCLUSIONS.....	15
4 LESSONS LEARNED FROM NEW ZEALAND EXPERIENCES	16
4.1 LESSONS LEARNED.....	16
4.2 PRINCIPLES IDENTIFIED FROM NEW ZEALAND CASE STUDIES	21
4.3 TOOLS	23
4.4 SUMMARY AND CONCLUSIONS	24
5 PROPOSED STRUCTURE AND PROCESS FOR A COMMUNITY-BASED APPROACH TO INTEGRATED MANAGEMENT IN THE MARLBOROUGH SOUNDS MARINE AREA	25
5.1 PRINCIPLES FOR INTEGRATED NATURAL RESOURCE MANAGEMENT USING A COLLABORATIVE APPROACH	25
5.2 A PROPOSED STRUCTURE AND PROCESS.....	29
STEP 1: ESTABLISH INITIAL GOVERNANCE GROUP.....	29
STEP 2: OBTAIN COMMITMENT AND FUNDING	29
STEP 3: DEFINE SCOPE, TIMEFRAMES AND TERMINOLOGY	29

STEP 4: DEVELOP A CLEAR PROCESS	29
STEP 5: SELECT COMMUNITY REPRESENTATIVES	30
STEP 6: CONFIRM AGENCY REPRESENTATIVES AND SUPPORT	30
STEP 7: SELECT FACILITATOR	30
STEP 8: ENSURE TECHNICAL SUPPORT IS AVAILABLE	30
STEP 9: IMPLEMENT THE PROCESS	31
STEP 9: CONTRIBUTE TO BEST PRACTICE.....	31
5.3 THE NEXT STEPS: PROJECT ESTABLISHMENT PHASE.....	34
REFERENCES CITED	37

EXECUTIVE SUMMARY

SoundFish is concerned about the capacity of the Marlborough Sounds marine area ('the MSMA') to sustain the existing diverse range of human uses without fundamentally breaking down as a resource and ecosystem. The organisation's goal is for current and future uses in the MSMA to be accommodated in a way that does not compromise the integrity of the social, cultural, ecological and economic values of the MSMA for future generations.

SoundFish believes that a new style of integrated management is needed to achieve this goal. It has the vision of a management process that involves stakeholders in setting policy about the future of the MSMA and that this process underpins the management policies and plans of the relevant government agencies.

This report sets out an approach (or 'road map') to direct the successful achievement of a new style of integrated management for the MSMA with a strong community input. In order to do this, the report provides a statement of the problem facing management of the natural resources within the MSMA, suggests frameworks with which to address the problem, reviews lessons learned from previous New Zealand experience, derives a set of principles for sound integrated natural resource management, and outlines the key steps forward.

FRAMING THE PROBLEM: WHY IS A NEW APPROACH NECESSARY?

Natural resource management in the MSMA faces 'wicked' problems in a 'messy' world. 'Wicked' problems are situations with multiple and competing goals, and uncertainty about cause and effect relationships. This means that there is no single right answer. A 'messy' context describes situations where problems are interconnected – solving one problem will affect another. As a result, there is increased contest for resources and concern has been expressed that the Sounds are under increasing pressure as a result of greater use. At the same time, public agencies are under growing scrutiny and required to provide greater accountability.

The Sounds are characterised by complexity – a diverse set of uses and values is represented by a large number of stakeholder groups and these uses occur across areas under multiple landownership. Given this diversity, and resource competition, management agencies need to work closely together and planning documents need to be integrated. Isolationism does not work where 'the problem' lies at the interaction of uses and values (rather than the management of a specific activity).

Statutory plans are the fabric of resource management – any work toward integrated management for the MSMA must underpin their development. However, New Zealand's statutory planning regime includes various plans produced by different public agencies. Some co-operative effort between agencies is evident, suggesting that the time may be ripe to 'springboard' toward greater inter-agency collaboration. Non-statutory documents (such as a community vision) may help 'glue together' statutory plans. It is suggested that the community take leadership to achieve such outputs.

Management agencies expend a lot of effort dealing with confrontational and reactive stakeholder engagement in resource management. The Government has signaled its interest in shifting to collaborative consensus-building approaches as a way to address this situation.

Two key aspects of the management 'problem' or challenge are evident. Both highlight the need for integrated management:

1. **Managing complexity:** the diverse set of uses and values, including their interactions.
2. **Achieving meaningful collaboration:** between the community and agencies, between different sectors of the community, and between agencies.

MANAGEMENT FRAMEWORKS

Frameworks offer a way to think about and work through problems. They help by providing an agreed way to structure what is happening (and what could happen in the future), as well as offering common language. Two management frameworks are offered as helpful ways to view the situation: carrying

capacity offers a framework for the management of complex uses/values, and collaborative governance provides a means for community/agency engagement.

Carrying capacity is about setting limits on human activity in order to protect or sustain the host environment and is expressed as the 'limits of acceptable change' in resource and social conditions. Adoption of the contemporary carrying capacity model provides a frame of reference for responding to the sort of issues facing the MSMA ('wicked' and 'messy' natural resource issues).

Stakeholder involvement is fundamental to carrying capacity and can be provided through collaborative governance. This is a form of public participation that is: open to all interested parties including iwi; operates on a consensus basis (if not obtainable, then all options are set out); supported by a skilled facilitator and sound information; mandated by a public agency (or other); has realistic timelines and adequate resourcing.

These two frameworks can be combined together and used to support the preparation of statutory plans.

LESSONS LEARNED FROM NEW ZEALAND EXPERIENCES

The issues facing the MSMA are not unique, although characteristics of the MSMA environment make dealing with them particularly challenging. Responses to similar issues in other places provide an opportunity to learn from past practice. A review of four New Zealand models where collaborative processes have been used as part of integrated natural resource management were examined to identify lessons learned (critical success factors). These are summarised in Table A as a set of principles for sound integrated natural resource management.

The nature of the MSMA 'problem' has strong parallels with the rationale for developing the Fiordland Marine Area management model. The Fiordland Marine Guardians approach offers considerable utility for the MSMA as a potential successful (proven) process for framing a way forward. It achieves the vision expressed by SoundFish for *'a management process that involves stakeholders in setting policy about the future of the MSMA and that this process underpins the management policies and plans of the relevant government agencies'*.

However, the context or situation of the MSMA is very different to Fiordland, particularly with respect to greater complexity of human activities and smaller geographical size. Adaptation of the Fiordland process, therefore, is required ('one size does not fit all').

A key benefit to management agencies is that they can fulfill their statutory role hand in hand with the community-based group (following the 'Guardians' model). The aim of the community group would be to provide a clear voice for the community.

PROPOSED STRUCTURE AND PROCESS FOR A COMMUNITY-BASED APPROACH TO INTEGRATED MANAGEMENT IN THE MARLBOROUGH SOUNDS MARINE AREA

The following steps are suggested:

1. Establish initial governance group
2. Obtain commitment and funding
3. Define scope, timeframes and terminology
4. Develop a clear process
5. Select community representatives
6. Confirm agency representation and support
7. Select facilitator
8. Ensure technical support is available
9. Implement the process defined in Step 4
10. Contribute to best practice.

Table A: Principles for integrated natural resource management using a collaborative approach

Principle		Key features
Structure	A representative body (forum) that includes people from all relevant community sectors and has a mandate from the community	<p>Individuals must be seen to represent the community and have the mandate to act. Let community groups select individuals based on criteria (specification of required attributes). Individuals should be seen as nominated spokespersons rather than representatives of specific groups, and have the capacity to make decisions ‘at the table’. This means the group should comprise ‘wise heads’ drawn from all relevant sectors.</p> <p>Consider how to involve those interests without formal organisations (e.g. choose a prominent person with those interests).</p> <p>Involve people ‘on the ground’ who know what is going on in the MSMA. Diversity of knowledge and background is key.</p>
	Government agencies willing to engage and take advice from the forum	<p>By working with the forum and with one another, the agencies can achieve their own goals. The forum can act as ‘the glue’ for agencies to work together.</p> <p>Individuals representing the agencies need to be ‘the right people’ but stakeholder must also be convinced that the agency as a whole supports the process – it is part of the agency’s ‘management think’. If agencies do not ‘buy in’ to the outcomes, then ultimately it is a waste of time.</p>
	Clear specification of purpose, outputs and roles	<p>The purpose, intended outcomes and outputs need to be clearly specified, as do the roles of all participants (community, agency, scientist, etc).</p> <p>The egg analogy is useful – the community group is the egg yolk and the agencies are the egg white (they support and advise the community group).</p> <p>Outputs commonly pursued are a Vision and a Strategy for the area.</p>
	A defined process or methodology	<p>Develop a clear process or methodology, seek agreement from participants to this process, and then follow it carefully.</p> <p>Set a realistic timeline. Collaborative processes take a long time because it takes time to build trust. On the other hand, be wary of disengagement if timelines stretch too much. Seek commitment from everyone for an agreed time period or to the achievement of agreed outcomes.</p>

Principle		Key features
		<p>State any 'givens' clearly at the outset – stakeholders need to know the boundaries within which the process is operating (such as legislative constraints and geographical boundaries).</p> <p>Common steps are:</p> <ol style="list-style-type: none"> Develop a shared vision (statement of values) – i.e. start with what have in common. Collate information (baseline; cause/effect interactions). Identify and prioritise issues (problem identification). Work through issues one by one. Identify solutions (management strategies and their implications; 'gifts and gains' approach whereby different sectors give on some issues and gain on others). <p>Do not skip steps (e.g. don't jump to discussing solutions before gathered information and identifying the issues/problems).</p>
	A skilled and respected facilitator	An independent, professional facilitator is required. Attributes include: respected, impartial and trustworthy; able to earn the confidence of all stakeholders; prepared to invest energy and persistence in the outcome; knowledgeable about the area of interest and the process required; independent from participating groups.
Operating style	Willingness to seek a common outcome (leave agendas at the door)	Everyone needs to leave their 'hats' at the door. The process is about the common good – not 'what's in it for us' but rather ' what's best for the MSMA '. This will require a willingness to compromise .
	Operates under a consensus style, with ability to compromise ('gifts and gains')	The style of decision-making needs to be by consensus – the whole group agrees to the whole proposal. The notion of ' gifts and gains ' is useful – everyone gives a little on some things and gains a little on other things. Effectively this means negotiating issues so that, overall, everyone benefits because the MSMA is better off.
	Considers the long-term and interconnections	Decisions need to consider all implications , and not be made in isolation (e.g. fishing only). Issues can be dealt with holistically because the forum is not constrained by agency boundaries. A long timeframe is required – it will be years before it is evident whether the resource is tracking in a positive direction.

Principle		Key features
	Respectful of everyone's rights (listen and learn)	Everyone's rights need to be respected . People need to feel they've been given a fair go - they have been involved and listened to.
Support	Adequate, long-term funding	Access to government funding will be necessary – central or local government. These initiatives require adequate funding. Compensation for time and expenses of forum participants should be available. Ministerial support is useful - and necessary if legislative changes are an intended part of the outcome.
	Sound information base (economic, social, cultural and environmental aspects of resources and their management) and engagement with scientists	Bring together all information into one place, so there is a common knowledge base . Engage scientists so that they work collaboratively with the forum.
	Respect for traditional knowledge and information from people 'on the ground'	Respect both traditional and scientific ways of assessing information. Part of the role of forum participants is to report what is happening ' on the ground '.
	Formal and informal monitoring to document change	Monitoring (social and environmental) is important to document progress toward or away from goals. When monitoring suggests failure of management to achieve these goals, there must be opportunity to renegotiate the goals or adapt to changing conditions.
	Secretariat support	Personnel support is required.

1 INTRODUCTION

1.1 BACKGROUND

SoundFish is concerned about the capacity of the Marlborough Sounds marine area ('the MSMA') to sustain the existing diverse range of human uses without fundamentally breaking down as a resource and ecosystem. The organisation's goal is for current and future uses in the MSMA to be accommodated in a way that does not compromise the integrity of the social, cultural, ecological and economic values of the MSMA for future generations.

SoundFish believes that a new style of integrated management is needed to achieve this goal. It has the vision of a management process that involves stakeholders in setting policy about the future of the MSMA and that this process underpins the management policies and plans of the relevant government agencies, notably the Marlborough District Council (MDC), the Department of Conservation (DOC) and the Ministry of Fisheries (MFish).

SoundFish's goal goes to the heart of environmental management in New Zealand and has several threads, including the need for:

1. Management that protects community values (economic, environmental, social, cultural).
2. Integrated management across uses and values.
3. Collaboration between government agencies, and between government and the community (business, residential, NGOs, visitors, etc).
4. A science-based approach (research to assess uses/values and monitoring of trends).

1.2 PURPOSE

The purpose of this report is to provide an approach (or 'road map') to direct the successful achievement of a new style of integrated management for the MSMA with a strong community input. In order to do this, the report provides a statement of the problem facing management of the natural resources within the MSMA, suggests frameworks with which to address the problem, reviews lessons learned from previous New Zealand experience, derives a set of principles for sound integrated natural resource management, and outlines the key steps forward.

1.3 APPROACH

In preparing this report, the following approach was followed:

1. Discuss the project with key management agencies (MDC, DOC, MFish).
 - a. Discuss and confirm level of interest in developing the methodology.
 - b. Identify relevant material.
2. Identify relevant management frameworks via literature review.
3. Review and critique existing New Zealand approaches (e.g. Fiordland Marine Guardians). This took the form of telephone conversations with 15 key individuals as only one written evaluation was identified.
4. Identify principles underpinning successful models.
5. Outline a structure and process that suits the character of the Marlborough Sounds.

1.4 GEOGRAPHICAL SCOPE

The focus of this report is the **Marlborough Sounds marine area**, bounded by Cape Soucis in the West and Whites Bay in the East (Figure 1). Because the surrounding land contributes to the values of the MSMA and has direct influence upon the marine environment, the geographical scope of the MSMA includes the adjacent land up to the ridgeline.

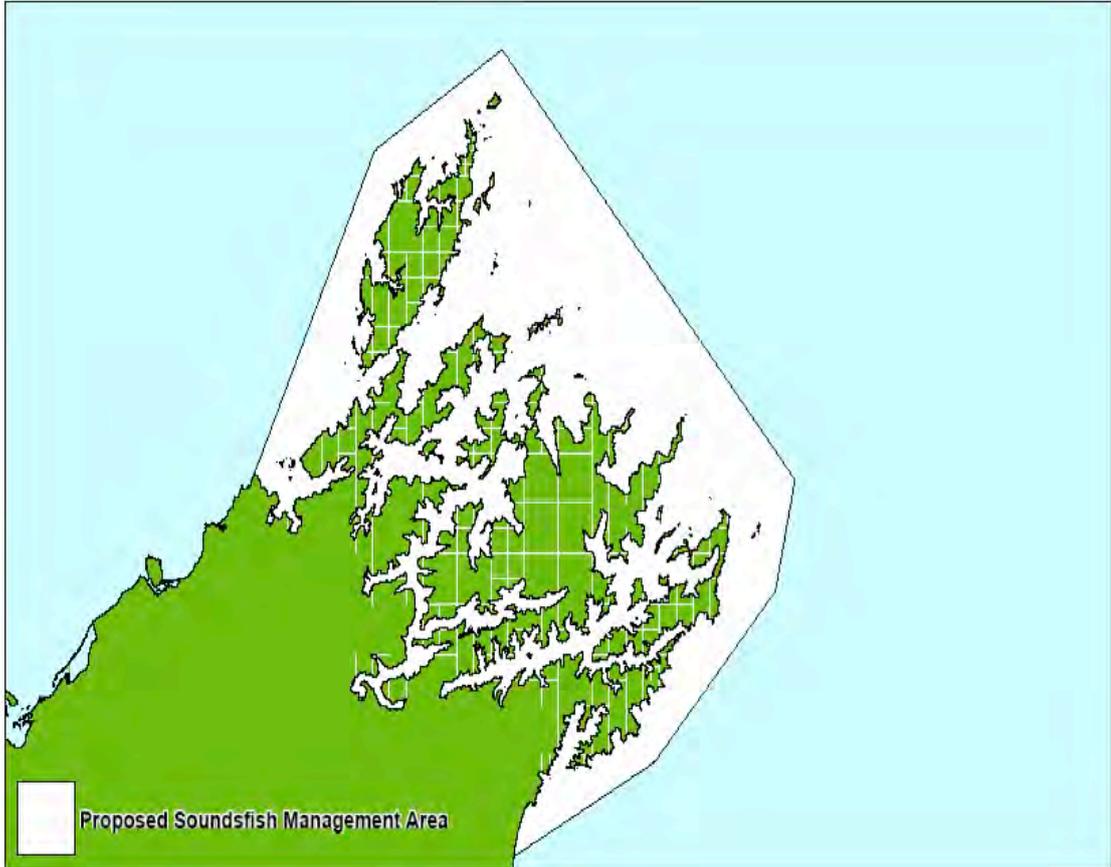


Figure 1: Map of the Marlborough Sounds marine area

The MSMA comprises a labyrinth of enclosed and relatively sheltered waters within Port Underwood, Queen Charlotte Sound, Pelorus Sound, Tennyson Inlet, Croiselles Harbour and around D’Urville Island. In contrast to the coastal waters, the Marlborough Sounds’ landform is rugged, sloping steeply away from the shoreline to prominent spurs and ridges on the skyline. Bays, coves, beaches, inlets, peninsulas, headlands and cliffs all mark the point where land and water meet.¹ The MSMA encompasses 1500 kms of coastline and extends two nautical miles out to sea.

1.5 KEY TERMS

Many resource management terms mean different things to different people, and it is common for the same (or at least, similar) concepts to have a variety of names. The development of a common language is a recommendation of this report. This section describes how terms are used in this report.

Collaborative governance brings multiple stakeholders together in common forums with public agencies to engage in consensus-oriented decision-making that aims to make or implement public policy. This definition stresses six criteria: (1) the forum is initiated or supported by public agencies or institutions; (2) participants in the forum include non-governmental stakeholders; (3) participants

¹ Draft Marlborough Regional Policy Statement (MDC, draft: December 2010)

engage directly in decision-making and are not merely ‘consulted’ by public agencies; (4) the forum is formally organised and meets collectively; (5) the forum aims to make decisions by consensus (even if consensus is not achieved in practice); and (6) the focus of collaboration is on public policy or public management.²

Environment includes ecosystems, natural and physical resources and amenity values. The social, economic, aesthetic and cultural conditions that affect or are affected by the environment are also part of the environment (after s2, RMA 1991).

Integrated natural resource management approaches focus on sustaining natural resources so that the goods and services derived from them by humans are maintained, as well as the underlying biophysical processes and resources. The environment and its use is a dynamic inter-connected system. Therefore, natural resources need to be managed in an integrated manner.

At the heart of integrated natural resource management is the interactions of humans with the natural environment, and the decisions they make about using and managing resources. It is about the management of the impact of people on the natural resources in a way that is holistic (includes all elements of the biophysical system), comprehensive (embraces the full range of uses and values attached to resources) and systematic (considers interactions between these elements).

Public participation processes cover a range of mechanisms for involving or engaging the public in decision-making. These include ‘popular’ participation processes, designed to include as many people as possible, and ‘stakeholder’ participation processes, designed to include groups or individuals judged to have an interest in the matter under consideration.³ This report uses the term **stakeholder engagement** to describe the latter. The form of participation may be consultation (usually takes the form of an agency requesting comment on particular topics, plans, consent applications, etc) or collaboration (whereby stakeholders are involved in decision-making or make recommendations to decision-makers).

Stakeholder refers to individuals and organisations with an interest in the area or issue under consideration (but does not include public agencies).

Uses refers to the full range of human activities that occur in the MSMA. These include, but are not limited to, fishing (commercial, recreational, customary), forestry, aquaculture, tourism (hospitality, transport, activity), shipping (cargo, passenger), residential (permanent, bach), recreation (swimming, kayaking, boating, sailing, etc), conservation (natural and historic heritage), customary use, tangata whenua values, and outdoor education.

Values is used in the sense of meanings and things that hold worth, rather than in the sense of entrenched societal attributes.

1.6 REPORT STRUCTURE

The report comprises five sections. Following the introduction (section 1), the need for a new integrated approach to management in the MSMA is outlined (section 2) which sets out the rationale for this report by stating ‘the problem’. A frame of reference or way to thinking about the situation is provided in section 3 by way of a brief review of relevant literature. Lessons learned from previous responses to this sort of problem are described in section 4. A set of principles is derived (section 5.1) and a proposed structure and process for a community-based approach to integrated management in the MSMA is then outlined (section 5.2). Specification of the next steps to achieve its successful implementation is given in section 5.3.

² Adapted from Ansell and Gash (2008)

³ Taylor Baines & Associates (no date)

2 FRAMING THE PROBLEM: WHY IS A NEW APPROACH NECESSARY?

2.1 A 'WICKED' AND 'MESSY' PROBLEM

Natural resource management in the MSMA faces 'wicked' problems in a 'messy' world.⁴ 'Wicked' problems are situations with multiple and competing goals, and uncertainty about cause and effect relationships. This means that there is no single right answer. A 'messy' context describes situations where problems are interconnected – solving one problem will affect another. As a result, there is increased contest for resources. At the same time, public agencies are under growing scrutiny and required to provide greater accountability.

More specifically 'wicked' policy problems are characterised by⁵:

1. No clear definition of 'the problem' – it can be framed in different ways (therefore, problem identification must be undertaken jointly with all players).
2. The problem is never 'solved', it is hard to know when to stop. This usually happens when time/money/patience runs out (therefore, some parameters on 'when the job is done' are required).
3. Answers are good/bad, not true/false. Because they are judgemental, there is scope for varying judgements (therefore, collective agreement is important).
4. Every problem is essentially unique owing to context, which makes one-size-fits-all solutions unhelpful (therefore, a process for each place/problem is necessary).
5. Problems are symptoms of other problems. Interconnections exist between lower-level and higher-level problems, which makes decisions about how to tackle the problem challenging – if policy addresses too high a level, then nothing is resolved; if too low a level, then only symptoms are addressed (therefore, there are multiple possible management responses and careful deliberation on options is necessary).

These characteristics challenge the traditional way of undertaking resource planning and shift it to being as much about the *process* of planning as the *product* (the final planning document). The planning process is about building relationships between the community(s) and those who manage the resource (the public agencies), as well as within communities and across agencies.

This definition of the nature of the problem suggests several factors that must be addressed when thinking about resource planning for the MSMA. The remainder of this section is structured around these parameters:

- Confirmation that the MSMA is a 'wicked' and 'messy' place (section 2.2)
- The need for an integrated planning framework to address this 'messiness' or complexity (section 2.3)
- Emphasis on developing relationships between agencies and communities to ensure meaningful public participation (section 2.4)
- The need for science (section 2.5).

2.2 A COMPLEX PLACE

A diverse set of human uses and values is played out within the MSMA. These span multiple economic activities (forestry, fishing, aquaculture, tourism, shipping, etc), residential occupation, and recreational

⁴ This section draws heavily upon Lachapelle et al. (2003); a digestible discussion of this type of thinking

⁵ Nie (2003)

and cultural values, as well as ecological values and ecosystems services. Values of the Sounds identified by the community range from the ability to make a living to tranquility and history/heritage/culture, amongst others.⁶ The diverse nature of the MSMA is part of its appeal as a special place to many people.⁷ It is a place for which people appear to hold deep attachment.

Coupled with this diversity is the widely-held view that the number of users has significantly increased within the Sounds in recent years, placing increased pressure on natural resources.⁸ Values considered by the community to be most at risk are water quality (marine and freshwater), isolation/tranquility, health and safety, landscape, indigenous flora and fauna, fish resources and fisheries, and local communities.⁹ A wide range of issues and use conflicts relating to these risks has been identified.¹⁰ The recent temporary moratorium on blue cod fishing within enclosed waters of the MSMA illustrates that some natural resources have become scarce.

Underpinning the uses and values of the MSMA is 'patchwork quilt' landownership. The Sounds have multiple land tenures: public land occurs alongside private land in a mosaic of landholdings and landowners. The 'common marine and coastal area' effectively is held as a commons and is 'ownerless'.¹¹ Rights of access, navigation and fishing remain unchanged, however, these rights can be constrained (e.g. by wahi tapu conditions).

The array of interests expressed within 'the MSMA community' reflects the diversity of use and value. The Sounds supports a wide array of communities and community groups that span residents, industry, environmental groups, iwi/hapu/whanua and visitors. While most interests within the MSMA have representation in one or more of these community or sector groups, the groups operate independently. There is no single 'community voice' for the MSMA, indeed, research has identified a "lack of consensus that is evident between many of the different users of the Sounds".¹²

SoundFish has commissioned a report describing the values and uses of the Marlborough Sounds marine habitat and fishery.¹³ This work confirms the broad array of uses and values and their interconnectedness. It identifies the need for improved management of the MSMA and, particularly, that "the community needs to be encouraged to take 'ownership' of and protect the Marlborough Sounds".¹⁴

In summary, the work undertaken to date confirms that the MSMA represents a place that is both 'wicked' (multiple goals, complex) and 'messy' (inter-related uses and values, their effects and management). Suggestions for a community-based style of leadership have been made.

2.3 MANAGEMENT PLANNING

Policies and plans under the Resource Management Act, Conservation Act and Fisheries Act address management of different parts of the environment. Because of their 'messiness' or interconnected nature, uses and values that occur in the MSMA require management agencies to work together and key planning documents to 'talk to each other'. Each agency has its own statutory roles and responsibilities: they should not be carried out in isolation. New Zealand's environmental management regime faces its greatest challenge (and greatest opportunity) in places such as the MSMA.

The District Council's Marlborough Regional Policy Statement and Marlborough Sounds Resource Management Plan, the Department of Conservation's Conservation Management Strategy, and the Ministry of Fisheries' fish plans, amongst other documents, need to align. This suggests the need for a higher level of agreement than individual plans permit (given they deal with component parts of the

⁶ Corydon Consultants (2009)

⁷ Ibid. (p25)

⁸ Earle (2009), McKenzie (2008)

⁹ Corydon Consultants (2009, p26/27)

¹⁰ Corydon Consultants (2009), Earle (2009), McKenzie (2008)

¹¹ Marine and Coastal Area (Takutai Moana) Act 2011

¹² Earle (2009, p102)

¹³ McKenzie (2008)

¹⁴ Ibid. (p56)

whole). Agreed outcomes should underpin **all** documents relating to the MSMA. One approach is a higher level or 'big picture' vision for the MSMA.¹⁵

At present, implementation of policies and plans tends to be reactive. Agencies respond to requests for consent/concession/permit or intervene once issues have already arisen. A more proactive process would shift emphasis to future direction setting rather than on control mechanisms for current issues.

Public agencies currently engage with Sounds' communities in various ways. DOC is poised to review its Conservation Management Strategy, a document that it calls its 'handshake with the community'¹⁶ and involves public participation. The MDC is reviewing its Regional Policy Statement and, similarly, has engaged in public participation. In 2009 MDC and DOC jointly commissioned multi-stakeholder focus groups to identify a community vision for the Marlborough Sounds, which included identification of values, risks to these values, a 50-year vision and changes required to achieve that vision.¹⁷ Relevant material on community views, therefore, already exists. However, despite these efforts, the ability to achieve an optimal outcome is compromised by each agency addressing its own areas of responsibility in relative isolation, albeit that some areas of co-operation are evident.¹⁸

In summary, the statutory management planning regime includes various plans produced by different public agencies. Some co-operative effort between agencies is evident (most notably the shared community vision exercise¹⁹), suggesting that the time may be ripe to 'springboard' toward greater inter-agency collaboration. Some material on community views relevant to integrated management already exists.

2.4 PUBLIC PARTICIPATION

Environmental management in New Zealand is predicated on the principle of societal or community benefit. The role of public agencies is to manage the environment so as to provide the greatest value to New Zealanders, both present and future generations.²⁰ This creates an obligation on public agencies to involve their communities in the identification of the benefits or values that they want, at the very least. Therefore, some form of public participation is imperative. However, this is not an easy task owing to the diversity of communities and interests.

The Minister for the Environment describes the problem with public participation in resource management this way⁷:

All too often the focus is on the environmental issues which divide us, while ignoring the values and beliefs we mutually hold. Sector groups, both industry and environmental, have often tended to take extreme positions in the hope that it will move the balance their way. This approach ignores the indisputable fact, that environmental policy can only be effective if pursued consistently over the long term. No one ends up getting everything they want. Issues tend to be endlessly debated in expensive and lengthy litigation proceedings while the environment continues to degrade.

¹⁵ Conclusions are based on analysis of the New Zealand system of environmental planning, rather than an assessment of individual plans.

¹⁶ Department of Conservation (2011)

¹⁷ Corydon Consultants (2009)

¹⁸ Earle (2009), McKenzie (2008)

¹⁹ Corydon Consultants (2009)

²⁰ The purpose of local government is "to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future" (s10(b), Local Government Act 2002). DOC manages natural and historic heritage "for the greatest benefit and enjoyment of all New Zealanders" and "so that its values are passed on undiminished to future generations" (<http://www.doc.govt.nz/about-doc/role/mission-vision-and-statutory-mandate/mission-and-vision>, accessed 11 April 2011). MFish conserves and manages fisheries "for the benefit of all New Zealanders ... that way, all New Zealanders can get the best value from this resource" (<http://www.fish.govt.nz/en-nz/info/aboutus/default.htm>, accessed 11 April 2011).

The Government wishes to move beyond this approach and “favours a collaborative approach to dealing with the complex environmental problems facing New Zealand”.²¹ Research on collaborative governance for New Zealand environmental policy has identified that “the lack of institutionalisation of consensus-building processes in New Zealand, combined with the emphasis on individual participation, resulted in multiple local processes that were protracted and costly for the participants”.²²

The existing problem with public participation, therefore, can be characterised as the difficulty of engaging with a wide range of interests (different voices) and the divisive nature of much of the resulting engagement. If this is the problem, the solution is clear – a transparent and consultative approach with consensus-based stakeholder involvement which provides ‘one voice’ for the community. This style of public participation is favoured in much of the literature (see section 3) and has been pursued in recent government initiatives (such as the Land and Water Forum, see section 3.2).

However, effective and meaningful engagement remains a challenge. The theory on consultation and collaboration is burgeoning – the missing link is best practice guidance to implement collaborative governance ‘on the ground’. The question is not what to do but how to do it.

2.5 SCIENCE

The need to make resource management decisions based on sound evidence is well accepted in New Zealand and internationally. A key issue is the availability of adequate high quality data – obtaining the right information for decision-makers can be costly and the timeframes of science sometimes lag behind those required for decision-making.

Another issue is the integration of science into the decision-making process. This has two facets. First, is the acceptability of science by stakeholders. Too often study results are discussed in terms of the acceptability of the methods employed rather than the findings and their implications. The integration (and stakeholders’ acceptance) of science within the policy making process is needed to offset this problem.

Second, is that science is a highly specialised activity and reductionist in nature – individuals from specific disciplines disaggregate a problem in order to study it. Seldom do teams of scientists combine at the end of their research to ‘build’ data into a cohesive whole. Some exceptions exist which provide greater use of integrated science programmes.

The Parliamentary Commissioner for the Environment²³ states the problem this way:

Environmental policy-making ... must deal with complex issues that reveal limitations in our knowledge and understanding of natural systems, and uncertainty about the extent of human impacts on those systems now and in the future.

Single perspectives of specific scientific disciplines, worldviews and stakeholder interests will only lead to partial solutions. Today's complex environmental issues require research to be more integrative across scales of time and space, and to be more open to exploring their social dimensions.

2.6 SUMMARY AND CONCLUSIONS

1. Natural resource management in the MSMA comprises planning for multiple, often competing, uses and values. Management actions directed toward one part of the environmental ‘system’ are likely to affect other parts because the uses and values are interconnected. Yet decisions must

²¹ Hon. Nick Smith, Speech to Second Annual Fresh Water Management Forum held in Wellington on 15 February 2011 (<http://www.beehive.govt.nz/speech/speech-second-annual-fresh-water-management-forum-amora-hotel-wellington>, accessed 11 April 2011).

²² Salmon et al. (2008, p9)

²³ Parliamentary Commissioner for the Environment (2004)

be made without adequate knowledge of these cause/effect relationships. Such problems have been called 'wicked' and 'messy'.

2. Concern has been expressed that the Sounds are under increasing pressure as a result of increasing use.
3. The Sounds are characterised by complexity – a diverse set of uses and values occurs across areas under multiple landownership and is represented by a large number of stakeholder groups.
4. Given this diversity, and resource competition, management agencies need to work closely together and planning documents need to be integrated. Isolationism does not work where 'the problem' lies at the interaction of uses and values (rather than merely the management of an individual activity).
5. Planning should emphasise:
 - a. The process followed as well as the planning document/s that is produced.
 - b. The interactions between uses/values, their effects and management responses.
 - c. Direction setting, as well as responding to present-day issues.
6. Statutory plans are the fabric of resource management – any work toward integrated management for the MSMA must underpin their development.
7. One way to assist with integration of public agencies is to provide a high level vision. Such non-statutory documents may help 'glue together' statutory documents.
8. Given environmental management is for the benefit of New Zealanders, this obligates agencies to involve New Zealanders in decision-making. Public agencies already do this in a variety of ways.
9. Management agencies expend a lot of effort dealing with confrontational and reactive stakeholder engagement in resource management. The Government has signaled its interest in shifting to collaborative consensus-building approaches as a way to address this situation.
10. Ways to successfully achieve consensus building (how to engage the public, or stakeholders who are those with an interest) remain vexed.
11. Sound science underpins good environmental decision-making. The role of science is to provide sound information for decision-making and to measure success. Particular challenges for scientists relate to working within the decision-making process (with stakeholders as well as agencies).

From this summary, two key aspects of the management 'problem' or challenge are evident. Both highlight the need for integrated management:

- Managing **complexity**: the diverse set of uses and values, including their interactions.
- Achieving meaningful **collaboration**: between the community and agencies, between different sectors of the community, and between agencies.

3 MANAGEMENT FRAMEWORKS

Frameworks offer a way to think about and work through problems. They help by providing an agreed way to structure what is happening (and what could happen in the future), as well as offering common language to minimise misunderstanding.

It is a challenging task to identify management frameworks relevant to the problem outlined in section 2. The natural resources literature is extensive with multiple areas of focus. Many conceptual frameworks have relevance (e.g. systems thinking, place-based planning) because they offer some assistance in dealing with parts of the problem.

Mindful of the two primary aspects of the management problem outlined in section 2 – managing **uses/values** and their interactions, and meaningful **collaboration** – two frameworks are put forward in this section. First, the concept of carrying capacity is discussed, as a way to frame the management of uses and values. Second, the notion of collaborative governance is examined, as a means for community/agency collaboration.

3.1 CARRYING CAPACITY²⁴

The term ‘carrying capacity’ or simply ‘capacity’ expresses the notion that ultimately there are limits on the ability of environments to sustain human use, and that ignoring those limits may result in irreversible environmental change and a decrease in quality of life. Capacity has been studied for several decades and ways of thinking about ‘the problem’ has evolved. Early applications of carrying capacity had a narrow focus on defining a single number or amount of use appropriate for an area. It is now widely recognised that there is no single capacity value for a natural resource area. Many factors influence the nature of the carrying capacity(s) for a site, including place, season and time, user behaviour, management objectives, facility design, patterns and levels of management, and the dynamic nature of the physical setting.

Therefore the notion of carrying capacity has been reframed. The question ‘how much use is too much?’ has given way to ‘what are the appropriate or acceptable conditions?’ This begs acknowledgement of what conditions are desired (the values of the area), and the definition of ‘acceptability’ for these conditions (a judgement about what condition or standard is appropriate for these values).

Contemporary applications of the carrying capacity concept provide structured processes for making decisions about human activities. They are called ‘objectives, indicators and standards’ (OIS) approaches because of their structure:

1. Defining the desired values for the area and threats to them
2. Identifying clear management **objectives** that align with these values
3. Selecting **indicators** of quality that reflect the management objectives
4. Establishing **standards** that express the minimum acceptable condition for each indicator
5. Measuring baseline conditions and developing a monitoring process
6. Determining specific management options available if indicators exceed standards.

Objectives, indicators and standards approaches comprise two components:

- Measurement of the amount and type of use, and its effects on other parts of the environment (descriptive, objective – **science** required)
- Judgment about what is desirable and appropriate for an area, usually specified as management objectives and outcomes (evaluative, subjective – **decision-making** required).

²⁴ This section draws heavily on Whittaker et al. (2011) and Booth and Espiner (2006)

Past experience indicates that the real challenge lies in the judgmental part of the process. Scientific measurement can be challenging, as discussed in section 2.5, but the critical science issue is how well it supports decision-making.

Application of use limits in resource planning remains popular – they are a pragmatic way to provide certainty and address the issue of resource degradation directly. The problem with this is that environmental impacts are not solely related to *numbers* of fish caught, trees planted, visitors, etc. As already noted, other factors may have a large influence (such as visitor behaviour – a small number of people can wreck the experience of others). Nonetheless, adverse effects may be strongly related to amount of use; in these cases, use limits may be effective. **This presupposes that use-impact relationships are known, which is seldom the case.** The conclusion is that definition of capacity in terms of *amount* of use is usually not adequate but use limits may be a helpful tool in the management of effects.

Capacity models may be either demand or supply driven, that is, they may address the quantity or type of use (e.g. size of catch; quantity of water space; prohibited activities) or ways for the environment to cope (e.g. expanded infrastructure). The aim is to ensure that ‘quality’ is not impaired.

Public involvement is provided through stakeholder engagement throughout the process – in setting the objectives, indicators and standards and discussing management response options and their effects. Public participation is a fundamental component of the OIS framework.

While it is not the purpose of this report to review applications of carrying capacity OIS approaches in New Zealand, a few examples are noted to illustrate their currency. The recent report on managing freshwater from the Land and Water Forum takes a carrying capacity approach, concluding that “we need limits, standards and targets in line with national needs, values and objectives which are applied taking account of the needs, values and objectives of communities”.²⁵ Recent work in Fiordland (Fiordland Integrated Coastal Management Project) followed a carrying capacity OIS model. For that work, characteristics of effective indicators and standards were derived (Tables 1 and 2).

Table 1: Characteristics of effective indicators (Booth and Espiner 2006, p14; originally adapted from Manning 1999; Vaske et al. 2002)

1) <i>Specific</i>	Indicators should define specific rather than general conditions
2) <i>Objective</i>	It should be possible to measure the indicator in an unambiguous way
3) <i>Reliable and Replicable</i>	Indicators are reliable if measurement reveals similar results under similar conditions. This is important because monitoring of indicators is often conducted by many different people
4) <i>Related to human activity</i>	There should be a strong correlation between the defined human activity and indicators of change
5) <i>Sensitive</i>	Indicators need to be sensitive to small changes in conditions over short time periods (e.g. one year)
6) <i>Manageable</i>	Indicators need to be responsive to management actions
7) <i>Efficient to measure</i>	Indicators need to be monitored regularly in a relatively simple and cost effective manner
8) <i>Significant</i>	Indicators must reflect some attribute pertaining to the quality of the resource or stakeholder value

²⁵ Land and Water Forum (2010, pix)

Table 2: Characteristics of effective standards (Booth and Espiner 2006, p15; originally adapted from Manning 1999; Vaske et al. 2002)

1) <i>Quantitative</i>	Standards restate management objectives in quantifiable terms, and should state the level of acceptable impact, e.g. no more than X species per unit area showing obvious avoidance or defensive behaviour toward, or dependency on humans (Hughey and Ward 2002)
2) <i>Time- or space-bound</i>	Stating the standard in terms of time or space allows managers to express how much of the impact is acceptable, how often, and where (e.g. “per hour” or “per day”)
3) <i>Expressed as probability</i>	It will often be pragmatic to include a tolerance within the standard to account for occasional events that might prevent management from attaining the standard 100% of the time (e.g. “a water quality rating of AAA in 80% of tests”)
4) <i>Output oriented</i>	Standards should focus on the conditions to be achieved, not the way the managers attain it. A standard of “no more than 35% of visitors feeling crowded” is better than “only 150 people per day at the site” because it emphasises the desired output
5) <i>Realistic</i>	Standards need to be set within the context of current human activity levels, and the political climate

3.1.1 SUMMARY AND CONCLUSIONS – CARRYING CAPACITY

1. The concept of carrying capacity is about setting limits on human activity in order to protect or sustain the host environment.
2. Carrying capacity is expressed as the ‘limits of acceptable change’ in resource and social conditions. This requires the definition of resource values, in order to identify parameters of the resource (indicators) that are to be managed within an agreed acceptable limit or threshold. This approach ensures that resource management achieves the desired resource conditions (standards).
3. Applications of carrying capacity include an objective component (science, measurement) and a judgement component (managerial, decision-making).
4. Models developed to operationalise the carrying capacity concept establish objectives, indicators and standards (OIS) for the area under consideration.
5. Stakeholder involvement is fundamental. Stakeholders have input into establishing values, identifying threats to these values, confirming the indicators, and setting the standards for resource/social conditions.
6. The process focuses upon outcomes desired resource/social conditions are defined and protected.
7. The planning process is scientifically defensible: (1) its design is substantiated by a large international research literature; and (2) decision-making within the process is informed by scientific study of relevant parameters.

3.2 COLLABORATIVE GOVERNANCE

As noted in section 2.4, the Government has signaled that it wishes to see more resource management processes using consensus decision-making, but as yet New Zealand has limited experience with this style of public participation.

A recent process that used a collaborative approach was the Land and Water Forum. A short paper was prepared based on that experience²⁶ (and research on the model is underway²⁷). The Forum considered the defining attributes of a collaborative process to be:

- a. It is open to all interested groups to send their own representatives (and in the case of a catchment the process should be open to all landholders) and includes iwi representation.
- b. It operates with a consensus rule.
- c. It has a skilled independent facilitator/chair.
- d. Where a consensus cannot be reached, options should be set out.
- e. It is supported by the provision of information on economic, social, cultural and environmental aspects of resources and their management, and by scientific information about them, in order to allow the participants to come to an integrated understanding.
- f. It has a mandate from a public decision-making body to address an issue or group of related issues, and reports to that body, but it can also be an applicant-led process undertaken in support of an identified development project, or come about through a community or industry initiative.
- g. It has a realistic timetable within which it is required to complete its work. Collaborative processes take time but need time constraints.
- h. It is resourced to do its work. Funding may come from the decision-making body and participants may also contribute resources. It is important that the resources that the collaborative process has at its disposal are utilised for the benefit of the process as a whole.

Influential in the approach taken for the Land and Water Forum was research that compared New Zealand and Nordic countries.²⁸ The researchers suggest six critical success factors:

- a. Sufficient empowerment of the participants (beyond the 'reference group' model) including if possible, confidence-building indications from decision-makers that consensus recommendations – at least within predefined limits – will be implemented.
- b. Selection of cases for resolution which offer opportunities to break with the zero-sum or win-lose patterns of past interaction, through the potential to adopt innovative solutions to achieve win-win outcomes.
- c. Providing sufficient time and resources for the process (including an excellent professional secretariat) to enable participants to work through the learning and deliberative processes, consider creative solutions, and consult and persuade those to whom they are accountable.
- d. Careful selection of the chair for the process – looking beyond mere facilitation skills to find someone who enjoys wide respect, and has the authority, experience and commitment to succeed.
- e. Elevation of the status of the collaborative process, and shifting the risk/benefit profile of participation, by conferring high status on group membership; paying to obtain the time commitment of NGO leaders; and esteeming consensus outcomes.
- f. Mitigating perceptions of betrayal by providing reasons that justify compromised interests and identities, and subsequently, transparently monitoring performance of what was collectively agreed. Consideration may need to be given to the Swedish practice of effectively 'freezing out' from collaborative processes those organisations whose leadership strategies are not committed to reaching a consensus with other stakeholders.

The same authors noted that the largest influence upon how readily issues could be resolved was whether advocates took an "uncompromising 'property rights' stance, or elected to take into consideration the objectives of others in the community".²⁹

²⁶ Land and Water Forum (2011)

²⁷ By the Ecologic Foundation

²⁸ Salmon et al. (2008)

The Land and Water Forum highlight key parameters of effective collaboration³⁰:

1. A variety of possible outcomes should be available from which participants can choose.
2. Collaboration should occur early in the planning process.
3. Independence is required:

Participants will not reach a consensus unless they feel that their responsibility to do so is real, inescapable and not constrained. They must feel that the decision-makers will have serious regard for it, and will not allow it to be subverted. Parties to a collaborative process must feel that they have been asked to lead.

4. Decision-makers should be involved, as well as those impacted by outcomes. Decision-makers should consider themselves servants of the process.

A useful summary of key criteria for successful public participation processes is provided by Borrini-Feyerabend et al. (2004) (see Table 3). The authors use the term 'deliberative and inclusive process' (DIP) to describe the public participation process. As noted in section 1.5, the area suffers from alternative terminologies – DIP is broadly similar to collaborative governance. It includes deliberation (careful consideration; discussion of reasons for and against) and inclusion (it actively involves others).³¹

Table 3: Criteria and safeguards for public acceptance and effectiveness of a deliberative and inclusive process (Borrini-Feyerabend et al. 2004, p401 – originally adapted from Rowe and Frewer 2000)

Criteria fostering the acceptance of a deliberative and inclusive process and/ or decision by citizens and the wider public:

- **Representativeness:** representative sample of the affected population
- **Independence:** process conducted in an independent, unbiased way
- **Early involvement:** increases sense of ownership and role at the stage when value judgements are important
- **Transparency:** the public able to see progress and how decisions are made
- **Influence:** visible impact on policy

Criteria for effective process (effective design and implementation of a deliberative and inclusive process):

- **Resource accessibility:** access to appropriate resources (information, time, experts, materials) enables participants to engage and carry out their roles effectively
- **Clear and well-defined methodological design:** the scope of the exercise, its procedures and the expected outcomes are defined at the outset
- **Structured decision-making:** debate is enabled over the underlying assumptions, how the decisions are made, the extent to which they are publicly supported
- **Cost-effectiveness:** the investment (time and money) in the process is suitable to the scale and importance of the decisions

The Land and Water Forum highlighted the issue of the degree to which power or authority is shared in a collaborative process. It notes that decision-makers have an obligation to have regard to collaborative outcomes, although they may choose a different course than that recommended to them. The Forum's report outlines the problem³²:

The problem arises on the one hand when the collaborators fail to accept the decision-makers' ultimate right to do so [choose a different course of action], or on the other when decision-makers exercise the right to decide without proper respect to the weight of the process that has been set up to inform them. If the collaborators aren't listened to they'll feel they've wasted their time.

²⁹ Salmon (2008, p8)

³⁰ Land and Water Forum (2011)

³¹ Borrini-Feyerabend et al. (2004)

³² Land and Water Forum (2011)

Finally, the Forum report states that³³:

Successful collaborative processes generate trust, create social capital and assist in the implementation of the consensus that they arrive at. They create impetus for further collaborative efforts to achieve agreed goals.

The selection of stakeholders is seldom discussed in the literature. Some guidelines are offered in Table 4.

Table 4: Guidelines on identifying key stakeholders (adapted from Booth and Espiner 2006, p15; originally adapted from Eagles et al. 2002; Thomas and Middleton 2003)

<p>Individuals with influence over the natural area might include:</p> <ul style="list-style-type: none">▪ Leaders of the local community or action group▪ Representatives of government (local, regional and/or national)▪ Non-governmental organisations▪ Indigenous peoples▪ Affected landowners▪ Occupiers (farmers, those renting property or holding leases)▪ Business people and their representatives, involved in economic activities such as forestry, fishing and tourism▪ Environmental groups▪ Protected natural area planners, managers and their workforce▪ Representatives of those who organise or influence visitors to the area▪ Researchers with projects in the area▪ Media <p>Questions that may help identify key stakeholders:</p> <ul style="list-style-type: none">• What are people's relationships with the area (eg., how do they use and value it?)• What are their various roles and responsibilities?• In what ways are they likely to be affected by any management initiative?• What is the current impact of their activities on the values of the area?• In summary, do they care and/or are they affected?
--

A notable feature of the collaborative governance literature is the heavy emphasis on theory and scarcity of 'how to' guidelines for implementing the approach. The Land and Water Forum commented on this problem.³⁴

3.2.1 SUMMARY AND CONCLUSIONS – COLLABORATIVE GOVERNANCE

1. The Government is seeking a form of public participation that builds consensus. This style of participation has been called 'collaborative governance', but different terms have been used (e.g. 'deliberative and inclusive processes').
2. The essence of collaborative governance is: open to all interested parties including iwi; operates on a consensus basis (if not obtainable, then all options are set out); supported by a skilled facilitator/chair and sound information; mandate from a public agency (or other); timelines are realistic and resourcing adequate.

³³ Land and Water Forum (2011)

³⁴ Ibid.

3. This style of public participation appears to offer promise for management of the MSMA because it responds to the type of natural resource management 'problem' facing the area (see section 2).
4. There is little in the way of 'best practice' guidelines available for practitioners wishing to implement this style of community engagement. More work on appropriate tools is required before the MSMA approach can be implemented.
5. Selected models that have taken a collaborative approach in New Zealand are discussed in section 4.

3.3 CONCLUSIONS

1. Adoption of the contemporary 'carrying capacity' model (objectives-indicators-standards approaches) provides a frame of reference for responding to the sort of issues facing the MSMA ('wicked' and 'messy' natural resource issues).
2. Adoption of a collaborative governance approach provides a way to involve the public that is based on building consensus.
3. These two frameworks can be combined together and could be used to support the preparation of statutory plans.
4. The specific approach and tools to implement the carrying capacity framework using a collaborative approach need to be developed/chosen. This is discussed in section 4.

4 LESSONS LEARNED FROM NEW ZEALAND EXPERIENCES

The issues facing the MSMA are not unique, although characteristics of the MSMA environment make dealing with them particularly challenging. Responses to similar issues in other places provide an opportunity to learn from past practice – what has been successful and what has not.

Selected New Zealand models where collaborative processes have been used as part of integrated natural resource management were examined to identify lessons learned (section 4.1). Lessons (or critical success factors) described by others (in the New Zealand context) are outlined in section 4.2. Section 4.3 describes the ongoing development of tools that may be used to implement and support integrated management with strong community input.

4.1 LESSONS LEARNED

Numerous models exist where the community has been involved in natural resource management. Four models with particular resemblance to the MSMA ‘problem’ were selected and individuals were contacted by telephone to discuss strengths and weaknesses of their model (see Table 5). The focus of this critique was to elicit lessons learned.

Two general observations may be made. First, approaches all differ and are specific to their individual circumstances – they were developed in response to a local situation. There is no standard model, although the Fiordland Marine Guardians is moving toward becoming such a standard.

Second, there is a lack of evaluation. Heavy reliance on individuals’ opinions was necessary for this analysis because few models have been formally reviewed (i.e. written critique available). A more thorough review would be beneficial (to learn from past mistakes and avoid reinventing the wheel), ideally at a national level. A goal of such work could be the preparation of guidance notes for Government and stakeholders.

Discussions with stakeholders identified work underway in Tasman Bay (Tasman District) on integrated management. This suggests an early conversation with Tasman District Council would be worthwhile. It would be wise to draw a clear geographical boundary between the two projects, and to ensure they dovetail.

Discussions with individuals involved with the four models generated a wide range of comments. Grouped into categories, these lessons are summarised as follows:

Process factors

1. The process is about building trust – between agencies, between sectors of the community, between agencies and the community.
2. If the process starts with distrust, then the process is particularly challenging (ideally, set up this type of process before controversial issues erupt).
3. Everyone’s rights need to be respected.
4. A clear methodology is critical – it is ‘the rock’ for all participants throughout the process. Design and follow it carefully.
5. It is important to use a professional facilitator and have a good chairperson (different people).
6. It takes longer than anticipated (and is therefore expensive) – such processes require a significant commitment from all participants. Think of a marathon rather than a sprint.

Table 5: Collaborative models reviewed

Model	Description ³⁵
<p>Fiordland Marine Guardians (www.fmg.org.nz)</p>	<p>The FMG grew out of concern from Fiordland users about the escalating pressures on the Fiordland marine area resulting from increasing human use, the need for improved integrated management of the area and a desire that the local community be more involved in the management of Fiordland’s marine environment.</p> <p>Initially, community representatives formed the Guardians of Fiordland’s Fisheries Inc, which later became the Guardians of Fiordland’s Fisheries and Marine environment Inc. This group included commercial and recreational fishers, charter boat and tourism operators, environmentalists, marine scientists, community representatives and tangata whenua (Ngai Tahu).</p> <p>At their first meeting, the Guardians of Fiordland adopted a vision that guided the Guardians of Fiordland in developing their Fiordland Marine Conservation Strategy, which was published as a draft in October 2002. The production of the Strategy involved publishing information, prioritising issues, and consulting the public and stakeholders (including local and central government management agencies).</p> <p>A major success for the Guardians of Fiordland was in their gaining stakeholders’ agreement to proposals for the integrated management of the Fiordland marine environment. Generally, this involved each stakeholder group relinquishing benefits in the interests of ensuring the quality and sustainable management of the Fiordland marine environment and fisheries. The Guardians of Fiordland referred to this process as the ‘gifts and gains’. One notable proposal by the Guardians of Fiordland was for the protection of small, discrete areas containing items of special significance. These areas have become known as ‘china shops’.</p> <p>In 2003 this Strategy was presented to Ministers, and ultimately led to the enactment of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. The Act established the Fiordland Marine Guardians to provide advice on fisheries management, biosecurity, sustainable management, and marine preservation and protection for the Fiordland Marine Area. The Act facilitates and promotes co-operation between the Guardians and management agencies (i.e. a statutory requirement to do so).</p> <p>It took ten years from start up (1995) to enactment of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005.</p>
<p>Te Korowai o Te Tai o Marokura Kaikōura Coastal Marine Guardians (www.fishnet.co.nz/teamkorowai)</p>	<p>Modeled on the Fiordland Marine Guardians, Te Korowai was formed in 2006 when local people got sick of seeing their coast being abused and uncared for. Their goal was for the community to be able to enjoy the bounty of Tangaroa and to make sure that bounty remained for future generations.</p> <p>The group provides local leadership about the use and protection of the Kaikōura marine environment. A vision has been defined and a comprehensive, integrated management strategy is being prepared - a korowai (cloak) for Te Tai o Marokura. The group is an incorporated society and uses an independent facilitator. All policy decisions are made by local Kaikōura residents, advised by agencies and advisory members.</p> <p>To progress the management strategy, a range of processes will be used to capture users’ values and ideas for future management. These ideas will inform the development of a range of options. Preferred options will be written into a draft management strategy, for community comment, before being presented to government and the community for support.</p>

³⁵ Information sourced from the organisation’s website and discussions with individuals

<p>Fiordland Integrated Coastal Management Project (www.ifm.org.nz)</p>	<p>Unlike the previous models, this project was initiated by government agencies. Environment Southland (ES) & the Department of Conservation (DOC) set out to collaborate in the development of an holistic approach to the management of activities for which they have statutory responsibility in Fiordland. Because ES and DOC are governed by differing legislation and have difference management responsibilities, some differences of opinion on how the coastal environment of Fiordland should be best managed had occurred. This created uncertainty for people wanting to run a business or recreate in the area, and had cost implications for ratepayers and taxpayers.</p> <p>The aim of the project is to find a better way forward that results in a high level of agreement and acceptance between the two management agencies and the communities they are serving about how much activity is enough in different parts of Fiordland where the National Park and the coastal marine area meet.</p> <p>A methodology³⁶ was developed, which included the establishment of a forum of stakeholders and management agencies. The methodology has been worked through for Milford Sound. Plans changes as a result of work to date are still under consideration by DOC and ES, therefore, stakeholder responses to any such changes have yet to be seen. This model has gained respect from some quarters (the Tourism Industry Association wish to see it become a national model), but its ultimate success is still uncertain. Both agencies agree it has worked well for inter-agency collaboration.</p>
<p>Mackenzie Country Forum</p>	<p>Established in 2011, this group evolved from concern about cubicle dairy farming proposals for the Mackenzie country and the wider effects of intensive farming within a sensitive landscape. Environmental groups initiated a symposium in November 2010 which brought together interested parties. A commitment by the Minister for the Environment to help seek ‘a better way’ to deal with these sorts of decisions lead to the establishment of a Forum. Representatives of various interests first met in February 2011. The intended output is a high-level spatial strategy. In its early stages, the Forum has generated interest at the ministerial level.</p>

³⁶ Booth and Espiner 2006

7. Setting a realistic timeline is important – need to allow plenty of time but attrition sets in if long delays between stages and may run the risk of the process feeling like ‘how long is a piece of string’. Seek commitment from everyone for an agreed time period. Disengagement may occur if timelines stretch too much. On the other hand, it is important to ‘take as long as it takes’ (i.e. some conflicting advice was offered).
8. Everyone needs to leave agendas (‘hats’) at the door. The process is about the common good – not “what’s in it for us” but rather “what’s best for the MSMA”.
9. Common steps are:
 - a. Develop a shared vision (statement of values) – i.e. start with what have in common.
 - b. Collate information (baseline; cause/effect interactions).
 - c. Identify and prioritise issues (problem identification). Work through issues one by one.
 - d. Identify solutions (management strategies and their implications; ‘gifts and gains’ approach whereby different sectors give on some issues and gain on others).
10. It is important not to jump to discussing solutions before gathered information and identifying the issues/problems.
11. The style of decision-making needs to be by consensus – the whole group agrees to the whole proposal. The notion of ‘gifts and gains’ is useful – everyone gives a little on some things and gains a little on other things.
12. Decisions need to consider all implications – not be made in isolation (e.g. fishing only).
13. State any ‘givens’ clearly at the outset – stakeholders need to know the boundaries within which the process is operating (such as legislative constraints).
14. Skills needed to develop a strategy are different to those needed for strategy implementation – might need different people for the two stages.
15. It is useful to gain Ministerial support and access government funding.
16. A legislative outcome (like the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005) should be considered as a possible goal.

People factors - community

17. Individuals must be seen to represent the community – and have the mandate to act – there is trust between the community and the individuals to act on their behalf. Important to get the balance of interests right.
18. Let the sectors decide who they want involved (if people are difficult, then their own sector can deal with that). Provide criteria for people selection.
19. Relevant individuals will probably ‘present themselves’ – those who have been involved in other planning processes. So it may be a matter of top-down shoulder-tapping and bottom-up selection (from community organisations).
20. While the group should represent the range of interests in the community, individuals should not be seen as ‘representatives’ of specific organisations. There will not be time to canvas ‘constituent’ bodies for their input as a matter of course. Individuals need to be able to contribute to decision-making ‘at the table’. Their role is to provide information and outline the views of their particular sector (including the implications of different management actions), as well as to take part in decision-making as part of the whole group.
21. Choose people who know the area ‘on the ground’. Diversity in background is very helpful – a broad range of views is important.
22. Think about representation of areas of interest and representation of geographical areas.
23. Talk with iwi about how they wish to be represented.

24. Compensation for time and expenses should be available (input may be restricted otherwise).
25. It will be challenging to engage with people who do not live locally, those who do not have any organisation that represents them, and landowners given their large number.
26. It will not be possible to accommodate everyone with an interest.
27. The size of a group to represent the variety of Sounds activities may be large. This could present issues. Ideally, aim for a group of 8-12 people.
28. Care needs to be taken that specific interests do not 'take over' and dominate.
29. People need to feel they've been given a fair go and have been involved. Especially as stakeholders may be wary that agencies will use the process and information 'against them' (to limit their activities).
30. Consideration needs to be given to the succession of forum members, although continuity throughout the process is important.
31. A regular community forum (say twice a year) may be helpful to engage with people who are interested but not a direct participant in the process.

People factors - agencies

32. Relevant agencies should be invited once the community group is strong and confident. The rationale is that the community group needs time together to coalesce and gain confidence.
33. One challenge is gaining support from the agency as a whole (not just the local people) – how to integrate this style of work into 'management think'? If agencies do not 'buy in' to the outcomes, then ultimately it is a waste of time. Cannot judge this until later (when see the results used or ignored in subsequent projects and plans). It is easy for an agency to revert to old ways – obtain 'wins' that help agency to see the benefits.
34. Individuals representing the agencies need to be 'the right people'. Also need to wheel in the Chief Executives occasionally to show full agency commitment. The agency representatives need to be seen as supporting the process (rather than imposing their agency views) – it is about collaboration rather than consultation.
35. Agencies must be prepared to have their decision-making opened up to scrutiny.
36. Being involved in the process will mean agency representatives learn about things outside their areas of interest – it is good for them to see the whole picture (although it may feel that it is not relevant and they are wasting their time).
37. A forum can act as 'the glue' for agencies to work together.

People factors - getting the power balance right

38. It is positive that the integrated management initiative is being generated from the community (rather than from government agencies).
39. Power traditionally lies with government agencies. It is important to get the right balance.
40. Consider the egg analogy – the community group is the egg yolk and the agencies are the egg white (they support and advise the community group). Neither can exist without the other.
41. The Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 makes co-operation between agencies and the Guardians a statutory requirement. This is unusual and has been successful.
42. The level of involvement of agencies is a challenging feature of these processes – what role they take needs careful thought and definition.

Information factors

43. Bring together all information into one place ('characterisation report'), so there is a common knowledge base (it is not just held in different people's heads).
44. Scientific monitoring takes time – it will be years before can see whether the resource is tracking in a positive direction. A long timeframe is required.

Other factors

45. Geographic and contextual differences are evident for the MSMA in comparison with Fiordland and Kaikoura. Given the diversity and complexity in the MSMA, the level of specificity of outcomes may have to be at a higher level than what resulted in Fiordland (the Fiordland Marine Guardians model).
46. Decisions made by the forum (rather than the government agency) have greater community support/acceptance.
47. The size of area and intensity of use is relevant – Fiordland is a large area which allowed for spatial separation of conflicting uses and this was very helpful.
48. Treaty of Waitangi settlements may provide for the establishment of co-governance groups.

4.2 PRINCIPLES IDENTIFIED FROM NEW ZEALAND CASE STUDIES

Principles based on New Zealand experience have been developed by Teirney (facilitator for the early stages of the Fiordland Guardians and Te Korowai) and by Chapin et al. (in prep.).

Chapin et al. reviewed four South Island case studies that illustrated transformation from a trend of environmental degradation toward a more sustainable approach. In each case, the transformation was triggered by public concern, and solutions were locally generated rather than imposed by an external authority or motivated by infusion of funds from an externally based NGO with its own agenda.

They developed a set of design principles that define conditions that facilitate a shift to more sustainable practices. They note that no one principle, by itself, is sufficient.

- **Sense of place** is a critical pre-condition for stewardship: without it, people have no motivation to look after the area. A strong sense of place helps people to overlook differences (political, ethnic, economic, gender) and to invest the substantial effort (transaction costs) needed to explore and negotiate sustainable solutions. It also increases the likelihood of **prioritising long-term solutions over short-term benefits** because people's attachment to the place means they are less likely to discount the value of long-term benefits. Perceived impacts or trends toward degradation in valued places are often the triggers that motivate efforts to change.
- **Collective engagement of all key stakeholders and willingness to compromise** for the common good is another pre-condition. Solutions that are imposed from outside or that exclude some key groups are more likely to be undermined when conditions change.
- **Rights to organise and manage** (or the informal capacity to do so) are an important pre-condition to any collective effort. The lack of these rights may trigger demands for more sustainable solutions. When one or more key stakeholder groups has no rights to participate in negotiations, solutions are less likely to be robust and durable.
- **Negotiated consensus on long-term sustainability goals** is one of the greatest challenges in shifting toward sustainability, because stakeholders may hold different values or have vested interest in the *status quo*.
- Once a consensus for a sustainable transformation is reached, **formal and informal monitoring, both social and environmental** is important to document progress toward or away from stewardship goals. When monitoring suggests failure of management to achieve these goals, there must be **opportunity to renegotiate the goals or adapt** to changing conditions.

- All of the successful transformations toward stewardship involved a **skilled facilitator**, who earned the confidence of all stakeholders and who invested passion, energy, and persistence in the outcome, and was viewed by all parties as someone who was both trustworthy and impartial and who prioritised a jointly negotiated outcome above their own personal or group agenda.

The same paper outlines guidelines for fostering consensus building (noting that the process by which it is attempted strongly influences the outcome):

- Recognition and acceptance by all stakeholders of cultural, social and environmental contexts and a willingness to compromise for the common good
- Understanding of, and communication with, all relevant stakeholders
- Willingness to engage policy makers
- Ability to listen, communicate (patience; skilled facilitation), and, if necessary, compromise for the common good ('gifts and gains')
- Information-gathering and knowledge-seeking at relevant scales (education)
- Planning with flexible guidelines for operation and adaptation
- Respect for both traditional and scientific ways of evaluating ecosystems
- Identifying funding that is tied to achieving a desired and durable outcome rather than the goals of a subset of stakeholders

Teirney (2011) has compiled a set of critical success factors based on her work with the Guardians in Fiordland (derived from presentations, documentation of the process and personal reflections):

1. The primary focus of all participants was maintaining or improving the health of the Fiordland marine area to be used and enjoyed.
2. Participant groups selected their own representative/s.
3. Personal or participating group agendas were set aside in the interests of finding solutions for the marine area that all participants could agree to.
4. A Guardians' vision was agreed at the first meeting. This was a flagship for the Guardians throughout the process.
5. The Guardians' shared their knowledge and experience providing the basis for the group to understand the Fiordland marine area, identify the issues, negotiate solutions and develop the strategy. In other words, local knowledge ground-truthed the strategy.
6. The relevant agencies were invited to work with the Guardians to provide support and advice about agency responsibilities and associated management mechanisms but were not members of the Guardians. Respective roles of the Guardians and the agencies can best be described by an 'egg analogy'.
7. The Guardians adopted a 'gifts and gains' approach when negotiating issues that first and foremost benefited the Fiordland marine area but also benefited the groups involved.
8. The Guardians considered issues holistically because they were a community-based group and not constrained by agency boundaries.
9. By working together with the Guardians and with one another, the agencies achieved their own goals. This integrated approach has continued successfully since the Fiordland Marine Area Act was passed in 2005.
10. For a multi-interest group to achieve a meaningful stake in looking after a marine area, guidance from someone who is knowledgeable about the area of interest, about the process required and who is independent from the participating groups is necessary.
11. Such an initiative requires adequate funding.

12. Ministerial support is necessary if legislative changes are part of the outcome. The Ministers of Fisheries and Environment were involved right from the start. Delivering a solution rather than a problem played a major part in their support.

An independent review of the effectiveness of the management of the Fiordland Marine Area (FMA)³⁷ represents the only formal evaluation of a relevant New Zealand model that was identified during this project. The review covered the five years since the passing of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005. Its findings were very positive, effectively endorsing the FMA management model:

1. The structures, mechanisms and processes established by the Act have contributed to the effective management of the FMA. The management model has a high level of support amongst the Guardians and management agencies.
2. Management agencies regularly seek the Guardian's advice and input, appearing to genuinely value their role and expertise. Co-operation and collaboration between the Guardians and management agencies has contributed to effective management.
3. The Guardians enjoy strong local awareness, understanding, and support. Trust and respect for the current Guardians is a key reason that users support marine management measures.
4. The Fiordland Marine Conservation Strategy (developed prior to the Act) laid the foundations for specific provisions of the Act and set important principles and expectations around how decisions would be made.
5. Over time, the Guardian's areas of focus have changed, with more recent areas including advice on resource consents, monitoring and research proposals, and biosecurity measures. The Guardians could usefully be more strategic in their choice of areas of focus.
6. Few shortcomings or major concerns were identified, although high agency staff turnover and lack of priority sometimes accorded to the Guardians and the management model were noted.
7. Success stories include:
 - a. The support for the Guardians members, the local knowledge that they bring to the table, and their ability to represent the interests of the FMA foremost
 - b. The benefits that flow from local user involvement on the Guardians (e.g. the FMA users are their local peers, which helps in gaining support, compliance with the regulations and compliance monitoring)
 - c. The trust and support for the Guardians as evidenced by the community and management agencies wanting the Guardians to be 'at the table' on all manner of local decisions
 - d. The co-operative working relationships between the management agencies
 - e. The effective and professional relationship between the Guardians and the management agencies.

In summary, the small amount of New Zealand literature that is available on principles for sound integrated management using a community-based approach aligns with the advice obtained through direct contact with selected stakeholders. A formal evaluation of the Fiordland Marine Area management model found it to be a successful approach. As noted in section 3.2, the dearth of guidance about **how** to implement collaborative approaches is an area that warrants attention.

4.3 Tools

The 'how to do it' question is difficult, not only because there is no manual to follow, but also because 'one size does not fit all' owing to contextual differences. However, there is a growing set of tools or methods being developed, which range from ways to facilitate community input through to ways to

³⁷ Allen & Clarke (2010)

assign significance to values. Many remain under development, and some have been developed for other contexts (especially freshwater).

This presents the challenge of which tool/s to adopt or adapt for use in the MSMA. A small selection of the tools/information available to assist resource decision-makers includes:

- AgResearch – systems thinking and deliberation model
- Ecologic Foundation – review of the Land and Water Forum
- Landcare Research, Cawthron Institute and others – Freshwater Values, Monitoring and Outcomes framework
- Lincoln University – river values assessment system
- DOC – Beneficial Outcomes Approach; place-based planning
- New Zealand Landcare Trust and others – Integrated catchment management (Motueka)

Of particular importance is the identification of the best engagement model – how to structure the ongoing dialogue between stakeholders and agencies. In summary, what is the best way to operationalise collaborative governance ‘on the ground’ for the MSMA?

The literature offers some advice. A particularly useful discussion of collaborative approaches is provided by Borrini-Feyerabend et al. (2004). For example, they identify and discuss the following methods: citizen juries, citizens panels, consensus conferences, deliberative opinion polls, voting exercises and future search conferences, innovative development, participatory rural appraisal/participatory learning and action, issue forums, multi-criteria mapping (p.393-395).

4.4 SUMMARY AND CONCLUSIONS

The nature of the MSMA ‘problem’ has strong parallels with the rationale for developing the Fiordland Marine Area management model. The Fiordland Marine Guardians model offers considerable utility for the MSMA – a fact confirmed by key informants. It offers a potential successful (proven) process for framing a way forward for integrated management of the MSMA. It achieves the vision expressed by SoundFish for ‘*a management process that involves stakeholders in setting policy about the future of the MSMA and that this process underpins the management policies and plans of the relevant government agencies*’.

However, the context or situation of the MSMA is very different to Fiordland, particularly with respect to greater complexity of human activities and smaller geographical size. Adaptation of the Fiordland process, therefore, is required (‘one size does not fit all’).

Lessons from past experiences of a similar nature provide useful advice about the nature of a community-based structure and process for integrated management in the MSMA. This advice is summarised further in section 5.1 (see Table 6).

There are few written guidelines on how to operationalise collaborative processes. The best advice will be gained from direct involvement of people who have done it before. Similarly, various tools (some still under development) may be useful – direct contact with researchers could help identify relevant tools. The next steps are discussed in section 5.2.

5 PROPOSED STRUCTURE AND PROCESS FOR A COMMUNITY-BASED APPROACH TO INTEGRATED MANAGEMENT IN THE MARLBOROUGH SOUNDS MARINE AREA

Drawing on the previous sections, a set of principles for integrated natural resource management using a collaborative approach is derived (section 5.1). Then a proposed community-based structure and process for integrated management in the MSMA is outlined (section 5.2). Finally, the next steps (over a 12 month period) toward achieving this outcome are set out (section 5.3).

5.1 PRINCIPLES FOR INTEGRATED NATURAL RESOURCE MANAGEMENT USING A COLLABORATIVE APPROACH

A set of principles has been derived to guide development of a methodology for the MSMA (Table 6). These principles are based on lessons learned from past practice in New Zealand (section 4) and structured into principles associated with structure, operating style and support needs.

Table 6: Principles for integrated natural resource management using a collaborative approach

Principle		Key features
Structure	A representative body (forum) that includes people from all relevant community sectors and has a mandate from the community	<p>Individuals must be seen to represent the community and have the mandate to act. Let community groups select individuals based on criteria (specification of required attributes). Individuals should be seen as nominated spokespeople rather than representatives of specific groups, and have the capacity to make decisions ‘at the table’. This means the group should comprise ‘wise heads’ drawn from all relevant sectors.</p> <p>Consider how to involve those interests without formal organisations (e.g. choose a prominent person with those interests).</p> <p>Involve people ‘on the ground’ who know what is going on in the MSMA. Diversity of knowledge and background is key.</p>
	Government agencies willing to engage and take advice from the forum	<p>By working with the forum and with one another, the agencies can achieve their own goals. The forum can act as ‘the glue’ for agencies to work together.</p> <p>Individuals representing the agencies need to be ‘the right people’ but stakeholder must also be convinced that the agency as a whole supports the process – it is part of the agency’s ‘management think’. If agencies do not ‘buy in’ to the outcomes, then ultimately it is a waste of time.</p>
	Clear specification of purpose, outputs and roles	<p>The purpose, intended outcomes and outputs need to be clearly specified, as do the roles of all participants (community, agency, scientist, etc).</p> <p>The egg analogy is useful – the community group is the egg yolk and the agencies are the egg white (they support and advise the community group).</p> <p>Outputs commonly pursued are a Vision and a Strategy for the area.</p>
	A defined process or methodology	<p>Develop a clear process or methodology, seek agreement from participants to this process, and then follow it carefully.</p> <p>Set a realistic timeline. Collaborative processes take a long time because it takes time to build trust. On the other hand, be wary of disengagement if timelines stretch too much. Seek commitment from everyone for an agreed time period or to the achievement of agreed outcomes.</p> <p>State any ‘givens’ clearly at the outset – stakeholders need to know the boundaries within which the process is operating (such as legislative constraints and geographical boundaries).</p>

		<p>Common steps are:</p> <ol style="list-style-type: none"> Develop a shared vision (statement of values) – i.e. start with what have in common. Collate information (baseline; cause/effect interactions). Identify and prioritise issues (problem identification). Work through issues one by one. Identify solutions (management strategies and their implications; ‘gifts and gains’ approach whereby different sectors give on some issues and gain on others). <p>Do not skip steps (e.g. don’t jump to discussing solutions before gathered information and identifying the issues/problems).</p>
	A skilled and respected facilitator	An independent, professional facilitator is required. Attributes include: respected, impartial and trustworthy; able to earn the confidence of all stakeholders; prepared to invest energy and persistence in the outcome; knowledgeable about the area of interest and the process required; independent from participating groups.
Operating style	Willingness to seek a common outcome (leave agendas at the door)	Everyone needs to leave their ‘hats’ at the door. The process is about the common good – not ‘what’s in it for us’ but rather ‘what’s best for the MSMA’ . This will require a willingness to compromise .
	Operates under a consensus style, with ability to compromise (‘gifts and gains’)	The style of decision-making needs to be by consensus – the whole group agrees to the whole proposal. The notion of ‘gifts and gains’ is useful – everyone gives a little on some things and gains a little on other things. Effectively this means negotiating issues so that, overall, everyone benefits because the MSMA is better off.
	Considers the long-term and interconnections	Decisions need to consider all implications , and not be made in isolation (e.g. fishing only). Issues can be dealt with holistically because the forum is not constrained by agency boundaries. A long timeframe is required – it will be years before it is evident whether the resource is tracking in a positive direction.
	Respectful of everyone’s rights (listen and learn)	Everyone’s rights need to be respected . People need to feel they’ve been given a fair go - they have been involved and listened to.
Support	Adequate, long-term funding	Access to government funding will be necessary – central or local government. These initiatives require adequate funding.

		<p>Compensation for time and expenses of forum participants should be available.</p> <p>Ministerial support is useful - and necessary if legislative changes are an intended part of the outcome.</p>
	<p>Sound information base (economic, social, cultural and environmental aspects of resources and their management) and engagement with scientists</p>	<p>Bring together all information into one place, so there is a common knowledge base.</p> <p>Engage scientists so that they work collaboratively with the forum.</p>
	<p>Respect for traditional knowledge and information from people 'on the ground'</p>	<p>Respect both traditional and scientific ways of assessing information.</p> <p>Part of the role of forum participants is to report what is happening 'on the ground'.</p>
	<p>Formal and informal monitoring to document change</p>	<p>Monitoring (social and environmental) is important to document progress toward or away from goals.</p> <p>When monitoring suggests failure of management to achieve these goals, there must be opportunity to renegotiate the goals or adapt to changing conditions.</p>
	<p>Secretariat support</p>	<p>Personnel support is required.</p>

5.2 A PROPOSED STRUCTURE AND PROCESS

This section applies the principles presented in section 5.1 to form a plan of action, expressed as a series of steps. Table 7 summarises the steps.

STEP 1: ESTABLISH INITIAL GOVERNANCE GROUP

1. Establish a group to 'drive' the process (until a forum is established). This may be SoundFish or a different group.

STEP 2: OBTAIN COMMITMENT AND FUNDING

2. Gain acceptance and 'buy in' from management agencies and stakeholders. Genuine commitment is a prerequisite. Community acceptance of the approach needs to occur before individuals are selected for participation (Step 5).
3. Seek funding.

STEP 3: DEFINE SCOPE, TIMEFRAMES AND TERMINOLOGY

4. Identify the task at hand clearly. This will include specification of purpose, expected outcomes and outputs, as well as participant roles.
5. Determine the extent of 'power' lying with the community group and clearly specify this to avoid any misperceptions. This rests with the willingness of the agencies to consider (and act on, as appropriate) recommendations from the group. The power of the group lies in the strength of the collective and its ability to negotiate outcomes and act as 'one voice' from the community to the responsible agency/s.
6. Set out a realistic timeframe: "Collaborative processes take time but need time constraints".³⁸
7. Set out any 'givens' (boundaries) for the process.
8. Specify a common language to avoid people 'talking past each other' and misunderstanding each other's perspective.
9. Develop a single document that incorporates all of these tasks (effectively Terms of Reference for future stages).

STEP 4: DEVELOP A CLEAR PROCESS

10. Design a process to follow the principles of an outcomes-indicators-standards approach within a community-based collaborative style of working.
11. Ensure the process includes the following steps:
 - a. Develop a shared vision (statement of values).
 - b. Collate information (baseline; cause/effect interactions).
 - c. Identify and prioritise issues (problem identification). Work through issues one by one.
 - d. Identify solutions (management strategies and their implications; 'gifts and gains' approach).

³⁸ Land and Water Forum (2011)

12. Outline the characteristics of the process (e.g. open and deliberative process, ability to compromise, consensus style, considers the long-term, respectful of everyone's rights, focus on interactions and connections).
13. Focus on effectiveness rather than efficiency – agencies struggle with the long and costly nature of collaborative planning.
14. Do not skip steps (to save money, for example) or all interference (from outside the group) as these things undermine the process and confidence in it.

STEP 5: SELECT COMMUNITY REPRESENTATIVES

15. Adopt and adapt the Fiordland Marine Guardians model – establish a community forum.
16. First, identify relevant types of interests; second, select individuals to represent them. People will already be known from their previous contributions to planning processes, so to a certain extent, people may 'pick themselves'. However input from the sectors themselves is important for the individual to have a mandate.
17. Develop specification criteria for the selection of individuals:
 - a. Commitment to what is best for the MSMA: acting for the 'greater good'.
 - b. Ability to work co-operatively in a group with stakeholders who may traditionally have been on 'other sides of the fence'.
 - c. Direct experience 'on the ground' in the MSMA within sector they represent.
 - d. Respected member of the sector they are chosen to represent.
 - e. Knowledgeable about their sector.
18. Balance the need for inclusion with the need for pragmatism in the size of the group. There is no right answer. As a guideline aim for 8-12 members .

STEP 6: CONFIRM AGENCY REPRESENTATIVES AND SUPPORT

19. Specify the roles for agency staff and scientists. It is suggested that the 'egg' analogy be followed, that is, that agencies provide support and advice to the community group but are not directly involved in decision-making. Relevant agencies are: MDC, DOC, MFish, perhaps MAF Biosecurity. Local staff members would be most relevant, however, 'buy in' to the process at the political level (MDC) and Head Office level (central agencies) is also critical.

STEP 7: SELECT FACILITATOR

20. Select an independent, professional facilitator.

STEP 8: ENSURE TECHNICAL SUPPORT IS AVAILABLE

21. Ensure science support is available to obtain an adequate information base (economic, social, cultural and environmental aspects of resources and their management) and engage directly with the scientists.
22. Obtain knowledge about customary use.
23. Set up monitoring (baseline established).
24. Establish a secretariat to service the forum.

STEP 9: IMPLEMENT THE PROCESS

25. Implement the process defined in Step 4.

STEP 9: CONTRIBUTE TO BEST PRACTICE

26. Consider how to add to New Zealand's social and economic 'capital' by developing guidelines on the process. The Marlborough Sounds are not alone in facing these issues.
27. Seek national funding for a case study of integrated natural resource management for the MSMA.

Each step is subdivided into tasks in Table 7.

Table 7: Steps to operationalise the proposed approach

Steps		Tasks	
Project establishment phase			
1	Establish initial governance group	1a	Set up a group to make initial decisions and guide early phases.
2	Obtain commitment and funding	2a	Identify relevant sectors of the community and management agencies.
		2b	Hold discussions with key stakeholders and agencies, seeking their commitment to the process/structure and their ideas.
		2c	Seek funding from local and national sources.
3	Define scope, timeframes and terminology	3a	Write a Terms of Reference document.
Process design phase			
4	Develop a clear process	4a	Review existing tools (e.g. AgResearch approach) that facilitate development of a vision, issues identification (etc) and choose one
		4b	Assess work undertaken to date (by MDC, DOC, MFish) and discuss with agencies how to integrate existing work with the new process
		4c	Prepare a step by step outline of how to implement this proposed methodology (i.e. this table outlines what to do – a clear statement is required that states how to do it)
		4d	Review this process with the Forum once established (i.e. prepare a draft, so potential Forum members can ‘see’ the task, but then allow members to discuss and revise the process).
Forum establishment phase			
5	Select community representatives	5a	Develop selection criteria for forum membership
		5b	Write role specifications for forum members (and agency representatives) – see also Task 6b
		5c	Identify all relevant community sectors and select individuals who will act as nominated spokespeople for each sector seek input from the sectors themselves
6	Confirm agency representation and support	6a	Confirm relevant agencies and seek representatives from each agency to participate in the forum
		6b	Write role specifications for agency representatives (and forum members) – see also Task 5b

Steps		Tasks	
7	Select facilitator	7a	Select an experienced facilitator
8	Ensure technical support is available	8a	In co-operation with agencies, confirm available support. This should cover secretariat, science and funding (see also Step 1)
Implementation phase			
9	Implement the process defined in Step 4	9a	Implementation
Review phase			
10	Contribute to best practice	10a	Prepare a set of guidelines or guidance notes drawing on lessons learned

5.3 THE NEXT STEPS: PROJECT ESTABLISHMENT PHASE

The project establishment phase could be completed within a 12-month period. Table 8 outlines detail about this first phase (Steps 1-3), including tasks, expected outputs, resources required and potential risks. This phase should be managed by the initial governance group.

It is suggested that the project establishment phase could form the basis for an application to the MDC for funding in the 2011/12 year. Completion of the phase provides a natural 'break point' to evaluate progress and respond to the MDC on progress.

Table 8 outlines that in 12 months time SoundFish should be in a position to have:

1. An appropriate governance group established for this project.
2. Start-up funding secured.
3. Knowledge about the level of support amongst key stakeholders and agencies for the project.
4. Incorporated good ideas obtained from the community and agencies.
5. A simple funding strategy prepared.
6. Knowledge about the level of support at the Ministerial level.
7. A document outlining the scope of the project.

Table 8: Project establishment phase specification

	Steps		Tasks	Output	Resources	Risks
1	Establish initial governance group	1a	<p>Set up a group to make initial decisions and guide early phases</p> <p>The purpose of this group is to manage the project up until the forum is established and the Chairperson is in place.</p>	A community group formed	Time contributed by initial governance group	-
2	Obtain commitment and funding	2a	<p>Identify sectors of the community and relevant management agencies to discuss the proposed structure and process outlined in this draft report</p> <p>This could include:</p> <ol style="list-style-type: none"> Management agencies: MDC, DOC and MFiSh. Iwi. Key organisations, e.g. Destination Marlborough, Havelock Business group, Chamber of Commerce. Industry sectors, e.g. commercial fishing, forestry, aquaculture, tourism. Significant associations, e.g. Forest & Bird, Guardians of the Sounds. Significant community groups, e.g. residents' associations. Existing stakeholder groups established by management agencies: Sounds Advisory Group. People from the Fiordland Marine Guardians and Te Korowai (to draw on their knowledge). 	A list of agencies, groups and individuals to be contacted	Time contributed by initial governance group	Failure to identify all relevant groups may leave some feeling disenfranchised. Response: May lead to subsequent lack of support; need to bring these groups/people into the process.
		2b	<p>Meet with stakeholders and agencies</p> <p>Use the draft report as a basis to hold discussions with key stakeholders and agencies. The purpose of the meetings is to:</p> <ol style="list-style-type: none"> Obtain ideas and input. Obtain support and agreement to participate. 	<p>Feedback obtained on the idea.</p> <p>Oral (ideally written) support obtained from stakeholders and agencies.</p> <p>Updated report reflecting</p>	<p>\$3,000</p> <p>Plus time contributed by initial governance group</p>	<p>Widespread lack of support from key stakeholders or agencies. Response: Would undermine effectiveness of approach. Need to consider whether to continue.</p> <p>1-2 groups or key agencies do</p>

	Steps		Tasks	Output	Resources	Risks
				stakeholder input.		not support the concept. Response: Seek assistance from other stakeholders/agencies. Take time to explain the benefits. Extend project timeframe in order to gain their support.
		2c	<p>Determine funding options from local and national sources</p> <p>Develop a simply funding strategy for the main body of work – sources of funds, best time to seek funds from each source, benefits (to funder), etc. Consider seeking input from a professional fundraiser.</p> <p>Meet with relevant Ministers (Environment, Fisheries, Conservation) about the initiative and seek their support (in kind). The Sounds could act as a national-level case study (to complement work underway in the Mackenzie country).</p>	<p>A simple funding strategy is written.</p> <p>Meetings held with Ministers.</p> <p>Letters of support obtained from Ministers.</p>	\$5,000	<p>Funding strategy not developed. Response: Would need to be developed before establishing the forum.</p> <p>Ministers do not support the initiative. Response: Assess why support is not forthcoming. Consider realignment of the project to meet their interests/goals.</p>
3	Define scope, timeframes and terminology	3a	<p>Write a Terms of Reference for the next stage(s)</p> <p>This should include definition of the task, its rationale, timeframes, terminology, expected outputs, boundaries, etc.</p> <p>This document will act as a key foundation for the subsequent steps in the process.</p>	A Terms of Reference is written.	\$4-7,000 (depending on brief)	<p>Not developed therefore next steps unclear and difficult to proceed with funding applications. Response: If agencies and Ministers support initiative, then the Terms of Reference must be developed.</p> <p>Lack of detail and clarity in Terms of Reference. Response: Address issues as identified, else next stage compromised.</p>

REFERENCES CITED

Allen & Clarke (2010). *Review of the Effectiveness of the Management of the Fiordland Marine Area*. Final report. Allen & Clarke, Wellington, New Zealand.

Ansell, C. and Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18, 4, 543-571.

Booth, K.L. and Espiner, S.R. (2006). *Managing human activity in Fiordland: A carrying capacity method*. Report prepared for Environment Southland. Social Science, Parks, Recreation and Tourism Group, Lincoln University, Canterbury, New Zealand.

Borrini-Feyerabend, G., Pimbert, M., Farvar, M.T., Kothari, A., Renard, Y. (2004). *Sharing Power: Learning-By-Doing in Co-Management of Natural Resources Throughout the World*. IIED and IUCN/CEESP/ CMWG, The Centre for Sustainable Development, Tehran, Iran.

Chapin, F.S., Mark' A.F., Mitchell' R.A., Dickinson, K.J.M. (in prep). Design principles for social-ecological transformation toward sustainability: Case studies in southern New Zealand. Draft paper kindly provided by the authors.

Corydon Consultants (2009). *Outcomes for Places, stakeholder views on future development in the Marlborough Sounds*. Report prepared for the Department of Conservation and the Marlborough District Council by Corydon Consultants, Wellington.

Department of Conservation (2011). Conservation management strategies - a handshake with the community. *Information sheet: March 2011*. Department of Conservation, Wellington. Available from: <http://www.doc.govt.nz/upload/documents/about-doc/role/policies-and-plans/cms/cms-information-sheet.pdf> (accessed 4 May 2011).

Earle, M. (2009). *Marine Spatial Planning in the Marlborough Sounds*. Master of Planning thesis, University of Otago, Dunedin, New Zealand.

Hughey, K. and Ward, J. (2002). Sustainable management of natural assets used for tourism in New Zealand: A classification system, management guidelines and indicators. *Tourism Recreation Research Education Centre (TRREC) Report No. 55/2002*. Lincoln University, Canterbury, New Zealand.

Lachapelle, P.R., McCool, S.F. and Patterson, M.E. (2003). Barriers to effective natural resource planning in a "messy" world. *Society & Natural Resources*, 16, 6, 473-490.

Land and Water Forum. (2010). *Report of the Land and Water Forum: A Fresh Start for Fresh Water*. Prepared by the Land and Water Forum for the NZ Government.

Land and Water Forum (2011). *Note on Collaboration*. Prepared by the Land and Water Forum for the NZ Government.

Mackenzie, A. (2008). *Marlborough Sounds Characterisation Report: The Values and Uses of the Marlborough Sounds Marine Habitat and Fishery - The Results of a Scoping Project for SoundFish*. Prepared for SoundFish by Evolve Environmental Consulting.

Marlborough District Council (draft as at December 2010). *Draft Regional Policy Statement*. Marlborough District Council, Blenheim.

Nie, M. (2003). Drivers of natural resource-based political conflict. *Policy Sciences*, 36, 307-341.

Parliamentary Commissioner for the Environment (2004). *Missing Links: Connecting Science with Environmental Policy*. Parliamentary Commissioner for the Environment, Wellington.

Salmon, G., Zilliacus, K., Scherzer, J., and Bärlund, H-M. (2008). *Collaborative governance on environmental policies affecting rural landowners: comparing Nordic and New Zealand practices*. Paper presented at the Yale University/UNITAR Conference on Environmental Governance, Yale University, 10 May 2008.

Taylor Baines & Associates (no date). 'Collaboration and Participation'. *Integrated Planning and Management of Tourism Based on Natural Assets: A Kete (information resource)*. Available from http://www.tba.co.nz/kete/PDF_files/ITP207_participation_models.pdf (accessed 23 April 2011).

Teirney, L. (2011). *Fiordland Marine Guardians: Critical Success Factors* (unpublished). Prepared by Laurel Teirney, Dunedin.

Whittaker, D., Shelby, B., Manning, R., Cole, D. and Haas, G. (2011). Capacity reconsidered: Finding consensus and clarifying differences. *Journal of Park and Recreation Administration*, 39, 1, 1-20.