



Planning approaches for the management of surf breaks in New Zealand

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Dedication to Matthew Skellern and Jonathan McCarthy

This research is dedicated to the late Matthew Cooper Skellern (pictured below). Matt was an incredibly dedicated, compassionate and perceptive student and practitioner of planning and resource management in New Zealand. His voluntary contributions to the movement for surf break protection were substantial in the short time he was given.

A full obituary was prepared by the Surfbreak Protection Society's committee and is available online via this link:

<http://www.surfbreak.org.nz/?p=2475>

The authors of this document were working alongside Matt in the field of surf break protection and its integration within the wider field of resource management. Although Matt will be much missed in the ongoing dialogue, the original thinking and strategic outlook developed whilst Matt was with us remains highly relevant today.

The Matt Skellern Bipolar Trust has been established by his family to “inspire new and effective services for people with bipolar – and to increase public awareness and reduce the associated stigma”. More information about the Trust can be found in the brochure available online from this link:

http://www.healthychristchurch.org.nz/media/105694/mattskellernbipolartrust_brochure.pdf

The work done by the late Jonathan ‘Fang’ McCarthy also needs to be acknowledged and became a source of significant inspiration for Matt during his research. Jonathan was amongst a group who pioneered the concept of a swell corridor and led some of the earliest environmentalist movements within the New Zealand surfing community. Both Jonathan and Matt were emerging as strong advocates for the surfing reserves model and its potential as a planning and management tool.

It is hoped that this research report can capture a glimpse of the vision and potential embodied by these two passionate people. The authors would like to acknowledge the huge input from both Matt and Jonathan in this field and hope that this report can carry forward some of their energy and imagination.



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Coastal camping and lifestyle at one of New Zealand's surf breaks of national significance; Meatworks on the Kaikoura coast. Photo: S. Orchard

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Thank you to all the people who contributed their thoughts and time in responding to follow-up interviews and for allowing the views and information Matt originally collected from them to be reused in this report.

Finally, thanks also to the Bay of Plenty Regional Council, Auckland Council and Surfbreak Protection Society for their financial support, and not least for seeing the value in completing Matt's original research work.



1 Introduction

There is a strong surfing culture, heritage, and community that shares a common spirit in New Zealand and around the world. Surf breaks are places where the practice of surfing predominantly occurs and have recently been recognised within statutory planning frameworks in New Zealand (Department of Conservation, 2010). Surf breaks are unique coastal features with natural characteristics that are diverse and connected across a broad range of spatial scales. Their surrounding environments and associated values have a variability that requires experience to develop a practical knowledge of their local characteristics. This fluidity and transient nature presents considerable challenges for planning and management professionals to address.

The continuing rise in popularity of coastal recreation and demand for coastal living is placing pressure on our coastal environments (Cicin-Sain, 1993; Nichols, 1999). Resource use, development and changing settlement patterns have impacts on the features and characteristics of the areas where surf breaks are found (Scarfe, Healy, & Rennie, 2009; Scarfe, Healy, Rennie, & Mead, 2009a). There are various threats to the existence and qualitative values of surf break environments including pollution, restricted public access, poor water quality, and the impacts of activities that alter the natural character of the coastal environment. These threats have social, ecological, economic and cultural implications, particularly for local surfing communities that are inextricably linked to the places where their culture is practiced. Changes to surf break environments ultimately affect the health and wellbeing of people and communities, including biological and non-human life forms.

There are numerous cases documented where issues concerning the values associated with surf breaks have arisen in the past, yet the outcome has been degradation and even complete loss of a surf break (Lazarow, 2007; Oram & Valverde, 1994; Scarfe, Healy, Rennie, & Mead, 2009b). Human activities can be often identified as the leading cause of damage to these environments; however these effects can be difficult to substantiate given the complex nature of coastal ecosystems, in both their landward and seaward extent. As a result, there is a need for guidance on strategic application of appropriate planning mechanisms that can lead to sustainable outcomes for the people and communities interested with an interest in surf breaks.

Surf breaks are located within the 'mixing zone' where inland environmental influences meet the dynamics of coastal processes and broader oceanic systems (Cicin-Sain & Knecht, 1998; Rennie, 1993). This is significant for statutory planners and coastal managers as it requires attention to how the interface between land and marine environments may be viewed.

There is a broad sphere of social, cultural, economic and environmental benefits available when we can successfully maintain the access to, use and enjoyment of surf break environments. As a form of recreation, surfing has many positive benefits that contribute to a healthy, family-orientated and community-based lifestyle (Peryman & Orchard, 2013). The surfing activities of past generations and the heritage values of surf breaks are particularly important to recognise in relation to the strength of our cultural identities and the sense of belonging to many places along the New Zealand coastline (Peart, 2004; Stephenson, 2008). Together, these factors create a deep connection to these environments that sustain us and many other life forms.

New Zealand was the first country in the world to adopt surf break protection within its resource management policy framework. This came as a result of a groundswell from the grass roots surfing community backed by sound knowledge and understanding in surfing science that had been developing internationally in the area of coastal science¹. This knowledge now traverses disciplines such as coastal geomorphology (e.g. Scarfe, 2008), oceanography (e.g. Mead & Black, 2001a, 2001b, 2001c), and economics (e.g. Lazarow, 2007; Nelsen, Pendleton, & Vaughn, 2007). This has shaped the existing policy framework for surf breaks in New Zealand to date. These disciplines are all relevant to planning practitioners who, in the application of statutory planning mechanisms, are required to synthesise a wide range of information in making decisions.

Surf breaks are now specifically provided for under the New Zealand Coastal Policy Statement 2010 (NZCPS 2010), the only mandatory national policy statement under the Resource Management Act 1991 (RMA). The purpose of the NZCPS 2010 is to state policies to achieve the purpose of the RMA - to promote the sustainable management of natural and physical resources - in relation to New Zealand's coastal environment. It came into force on 3 December 2010, wholly replacing the NZCPS 1994. Local authorities are required by the RMA to give effect to the NZCPS 2010 through their plans and policy statements. Resource consent decision-makers must also have regard to relevant NZCPS 2010 policies.

It is anticipated that there will be a period in which councils transition from the NZCPS 1994 to the NZCPS 2010. This will be reflected in regional and district council plan changes, and include the review of currently operative planning documents as councils develop second generation plans. This is a critical time for those with interests in surf breaks to make sure that national level policies are reflected appropriately at regional and local management levels.

Although New Zealand was the first place to formally recognise surf breaks within a statutory planning framework for resource management, there are significant implementation challenges and opportunities to learn from overseas experience². There is also a range of non-governmental organisations focused primarily on growing the movement for preserving the culture of surfing through the use of surfing reserves and other forms of non-statutory activities.

There is a risk that planners operating within the current statutory planning framework will fail to incorporate valid information about surf breaks and merely entrench the processes that lead to their degradation and loss. It is vital that good planning outcomes from policy provisions for surf breaks are considered from the perspective of the communities interested in the access to, use and enjoyment of these unique coastal features.

¹ See evidence presented by experts on behalf of the Surfbreak Protection Society to the Board of Inquiry during the submissions on the proposed New Zealand Coastal Policy Statement 2008: <http://www.doc.govt.nz/getting-involved/consultations/results/new-zealand-coastal-policy-statement/hearings/evidence-a-z/#s>

² For example, the Bells Beach Surfing Reserve in Victoria, Australia has been in place since 1973 (Farmer & Short, 2007).

2 Background

This report deals specifically with current practices and literature around planning processes and sustainable management approaches for surf breaks. It primarily concerns surf breaks in New Zealand, but could also assist with preservation initiatives in overseas locations. It will assist with identifying issues and developing appropriate responses that avoid degradation of the integrity of surf breaks as unique features of the coastal environment.

The information in this document will be helpful to non-government organisations and community members interested in the protection of surf breaks. The research is also intended to assist in monitoring surf breaks and their surrounding environments and may aid in the preparation of impact assessments.

The research is also intended to assist in monitoring surf breaks and their surrounding environments and may also aid in the preparation of impact assessments. Specific wave quality related impact assessments are already established in the field of coastal science, known as Surfability Impact Assessment (ASR Limited, 2011; Lazarow & Castelle, 2002). However, impact assessment methods are not so well developed for assessing policy and planning decisions on surf breaks and the resulting effects on communities interested in the use of these places.



Sunset at arguably New Zealand's most famous surf break; Manu Bay, Raglan. Photo: S. Orchard

3 Methodology

It is important to acknowledge the unique circumstances surrounding how this report arrived at this final form, following the passing of the original energy behind the research concept, Matt Skellern. Matt had been in regular correspondence with both of the authors about his research, the topic of surf break management, and the wider context of planning for the sustainable management of coastal environments. Immediately prior to Matt embarking on his Masters of Planning thesis, Bailey Peryman spent a summer as a natural resources planning assistant at both Gisborne District Council, and Bay of Plenty Regional Council where Matt was working as a professional planner at the time. This report has been produced as a result of the authors continuing the extensive primary research Matt had already conducted.

3.1 Data Collection

This study utilises qualitative research techniques including the capture of primary information through formal interviews and correspondence as well as secondary data via a review of the relevant literature.

3.1.1 Literature review

The literature review was conducted with a focus on identifying concepts important to the management of surf breaks. Matt had collected an array of articles and reports and these were supplemented by the authors through an additional search of relevant literature. Documents with information on surf break management and planning and decision-making processes were identified using online searches or through interviews.

3.1.2 Case studies

A case study approach was utilised to characterise a range of management approaches in use in New Zealand and overseas. The cases chosen were based on the efforts of organisations involved in surf break management. In the international context these tended to be non-governmental organisations, whilst in New Zealand the organisations chosen were local government. This reflects the unique statutory context in New Zealand where surf break management techniques are being developed in response to statutory drivers.

3.1.3 Policy analysis

An assessment of the current statutory context for the management of surf breaks in New Zealand was also undertaken to inform the analysis and contextualisation of results. This was essential to support the research emphasis on identifying potentially useful management approaches for the New Zealand context.

3.1.4 Interviews and formal correspondence

Formal interviews were conducted with 19 individuals identified using a snow-balling sampling technique. Participants were chosen based on their position and role within government and non-government organisations and statutory planning processes as they relate to management

approaches for surf break environments³. This included six people involved in the Australian National Surfing Reserves (NSR) programme and two people involved in several international NGOs seeking to influence management approaches. Interviews were conducted face-to-face, via phone, or using Skype. These interviews sought to gain insights on the range of existing methods that could be considered within a comprehensive 'toolbox' for shaping sustainable management approaches for surf breaks.

Formal correspondence was also conducted with 28 planning, policy and science practitioners working within central and local government authorities in New Zealand. This included conversations with private practitioners involved in landscape planning assessments of natural character and natural landscapes in the coastal environment. Individuals were contacted from a database of contacts provided by a member of the Coastal Special Interests Group (a collection of coastal scientists, planners and policy-makers working in New Zealand local government), or via general reception contact points accessible online through local government websites. All regional councils were contacted, as were all district and city councils with coastlines adjacent to surf breaks of national significance identified in the NZCPS.

Interview questions and formal correspondence with respondents were focused on the research aims of this project:

- What are the issues affecting the integrity of surf breaks, their surrounding environments, the natural processes that shape them, and their associated values?
- What kind of knowledge, experience and skills are required to effectively provide for surf break environments?
- What are the approaches used to date for strategic planning processes and integrated management of surf break environments, both in New Zealand and overseas?
- How effective are these approaches, when compared to each other, for preserving and protecting the integrity of surf break environments?
- How could strategic planning mechanisms (statutory and non-statutory) for surf break management help support positive community outcomes in New Zealand?

Matt Skellern also audio-recorded presentations at three conferences in 2011 where surf break and coastal management and recreation topics were discussed, including those held by the Environmental Defence Society (Auckland, New Zealand – at which the two authors were also present), New Zealand Recreation Association (Nelson, New Zealand), and the Global Waves Conference⁴ (Biarritz, France and San Sebastian, Spain).

3.2 *Qualitative Analysis*

Qualitative analysis of interview transcripts and formal correspondence was undertaken by Bailey Peryman. This involved firstly becoming familiar with the data by listening to interviews already

³ Case knowledge is preferred in the social sciences for examining contemporary events and the desire to understand complex social phenomena (Yin, 1994).

⁴ <http://www.savethewaves.org/news/global-wave-conference-a-success>

undertaken by Matt and reading over other interviews and correspondence conducted by the authors. Following this, initial coding was undertaken at a broad level based on phrases and key words relating to the research questions set out above. The coding was then refined after reflecting on patterns in the data that related to the research questions. This resulted in the identification of four main themes (as described in the Results section below). The data was then re-coded to these four main themes, which became the categories for analysis and provided the basis for the structure of the results. Comments under each of these four themes were analysed for patterns, recurring comments and any sub-themes.

The intention was to use the research questions as a strategic guide during the process of understanding where Matt had got to in terms of his methodology and the resulting data collection process. They are developed from Matt's original drafts and were approved by Matt's original research supervisor (Stephen Knight-Lenihan) in a scoping report prepared prior to beginning the preparation of this revised report. These questions guided the collection of additional data, as well as the 'developed treatment' of data during the process of collating findings, thematic content analysis and coding (Davies, 1999; Lofland, Snow, Anderson, & Lofland, 2006; Yin, 1994)⁵. The research has been conducted with the consent of participants in full knowledge of this revised research project.



Surfers contemplate the ocean at Hickory Bay on Banks Peninsula. Photo: S. Orchard

⁵ The integrity of these methods is considered robust, given the actual interview questions answered by participants were able to be derived simply from these initial research questions.

4 Results

4.1 Review of surf break management concepts

Surf breaks are a finite and scarce natural resource (Scarfe, 2008) for a high number and diverse range of recreational users. Surf breaks, their surrounding environments and the values associated with their use are variable, unique and connected across a broad range of spatial scales. The spatial extent of a surf break can cover a large area and a range of ecosystems far beyond the location where surf-riding occurs (i.e. the 'surf zone', see Scarfe, 2008). The NZCPS includes the following glossary definition for a 'surf break':

A natural feature that is comprised of swell, currents, water levels, seabed morphology, and wind. The hydrodynamic character of the ocean (swell, currents and water levels) combines with seabed morphology and winds to give rise to a 'surfable wave'. A surf break includes the 'swell corridor' through which the swell travels, and the morphology of the seabed of that wave corridor, through to the point where waves created by the swell dissipate and become non-surfable.

'Swell corridor' means the region offshore of a surf break where ocean swell travels and transforms to a 'surfable wave'.

'Surfable wave' means a wave that can be caught and ridden by a surfer. Surfable waves have a wave breaking point that peels along the unbroken wave crest so that the surfer is propelled laterally along the wave crest (Department of Conservation, 2010).

The surf break environment includes components that may cross jurisdictional and traditional coastal management boundaries; and planning process and management approaches must recognise this.

Also important are connections between people, communities and surf break environments. These may include 'intrinsic' values, an aspect covered at length by McGinnis (2012) and exemplified by this quote (p. 14):

...a sea in a wild storm is valuable beyond the human capacity to understand it.

Surf breaks provide a range of values that span all of 'the four wellbeings' of sustainable development (social, economic, environmental and cultural), and support a healthy, recreational and family-based lifestyle (Nourbakhsh, 2008; Peryman, 2011a, 2011b; Spowart, Burrows, & Shaw, 2010). There are a broad range of aspects to a surf break that shape the overall experience and character of any given surf break environment and its associated values (see Table 1). Local knowledge is currently the most authoritative source of information on the various values of surf breaks (Peryman, 2011a), although establishing the quality and significance of surf breaks is highly subjective, as how a surf break and surfing experience is perceived is dependent on the views of different individuals (Peryman & Orchard, 2013).

Table 1: Values associated with surf break environments as identified by case study participants in Gisborne and the Bay of Plenty (adapted from Peryman & Orchard 2013)

Source of value	Aspects	Theme
Physical and mental health benefits for many user groups	<ul style="list-style-type: none"> • Host to many user groups who participate in many different forms of recreation with positive qualities for physical and mental health for people of all ages and walks of life 	Social
Educational value	<ul style="list-style-type: none"> • Focus for skills learning , including encouragement of young / learner surfers to participate, hold contests, and socialise in a supportive environment 	Social
Enabling interactions between community members	<ul style="list-style-type: none"> • Enable a diverse range of interactions contributing to a social fabric that extends into wider communities 	Social
Lifestyle value	<ul style="list-style-type: none"> • Associated with a healthy, family-orientated and community-based lifestyle 	Social
Spiritual value	<ul style="list-style-type: none"> • Source of spiritual energy and a place to exercise spirituality important to individual health and community well-being 	Social
Amenity and existential values	<ul style="list-style-type: none"> • Scenic and naturalness values significant to users, onlookers, coastal inhabitants and visitors • Contribute to visual and oral expressions of place – interconnected to wider landscape and seascape values • Transient and memorable nature of experiences • Raw and undeveloped natural landscapes and seascapes contribute to a wilderness experience which is valued • Built access and facilities not always desirable 	Social
Cultural use and enjoyment	<ul style="list-style-type: none"> • Access to, use and enjoyment of surf breaks are important aspects of the link between coastal culture and surf break environments 	Cultural
Places of cultural significance	<ul style="list-style-type: none"> • Surf breaks are considered sacred treasures and/or sacred areas important to cultural heritage 	Cultural
Commercially-focused activities directly associated with surf break environments	<ul style="list-style-type: none"> • Surfing associated with health promotion and leadership subjects with strong translation to lucrative action sports markets • Social constructs of ‘cool’ imagery with intergenerational, cross-gender and high marketing value • Surf-related tourism and surfing industry activities important to local, regional and national economy 	Economic
Natural features and life-supporting systems	<ul style="list-style-type: none"> • Finite natural resource with unique characteristics influenced by both terrestrial and aquatic environment • Ecological health of adjacent areas and catchments important to use and enjoyment • Environmental educational value as sites for experiencing a range of interconnected factors unique to the coastal environment 	Environmental

As a starting point, surf breaks are identified by general high usage and common knowledge among surfing communities. The *Wavetrack New Zealand Surfing Guide* (Morse & Brunskill, 2004) was also accepted as a legitimate identification proxy by the NZCPS Board of Inquiry (2009a, pp. 132–133) for identifying breaks of national significance. Peryman (2011a, 2011b) also developed a process for identifying and assessing surf breaks through the use of assessment criteria during engagement with local communities. These assessment criteria provide a guide for identifying significant values, features and characteristics of a surf break and cover a range of quantifiable factors including wave quality, type and consistency (Scarfe, 2008) and other social, environmental, economic and cultural considerations.

4.2 Surf break diversity

The following section from Rennie's (2008, pp. 27–28) planning evidence to the Board of Inquiry into the Proposed NZCPS hearings in 2008 outlines the beginnings of a rationale for addressing the diversity of surf breaks when considering management needs:

Drs Mead and Scarfe, who are at the international forefront of research and technological development in understanding the coastal environment, have presented the current state of scientific knowledge on surf breaks. That knowledge includes distinguishing between different types of break and the characteristics of these. They have also identified surf break vulnerability and that there are some breaks that are less common or that are outstanding 'specimens', and there are seascapes where specific breaks may form outstanding features. It is also apparent from their evidence that the technology does not exist at present to restore an outstanding natural break that has been disturbed or damaged by human intervention.

In essence, surf breaks are like animal species. When an animal species is rare or endangered we take action to preserve it and this usually involves some form of protection. When a species is rare or endangered we closely monitor their state. If they are at the point of extinction, we contrive to rescue them with artificial means like the breeding programmes for the Kakapo.

It is generally accepted that prevention is better than a cure, and that a fence at the top of a cliff is better than an ambulance at the bottom. As a result, for most rare or endangered species there are species management plans, closely tied to monitoring programmes. The RMA supports such programmes by providing for the protection of species and their habitat and this is supported by relevant rules in plans.

The point of this analogy is clear. If we think of surf breaks as equivalent to flora or fauna, then we would want to maintain diversity just as we maintain biodiversity. More particularly, we would expect to see rare and endangered breaks given the highest degree of protection that we can. A significant difference between species and breaks is that the break is a manifestation of the combination of several dynamic aspects of the environment that work together at particular times and places to produce the break. The break is place specific and unable to be restored if lost. We cannot breed new Raglan breaks from the existing ones. The loss of such breaks may be of low probability, but if it occurred it would be irreversible

and of very high significance. A specific policy offering protection is an appropriate precautionary approach.

Surf breaks as a component of the natural character of the general coastal environment may not need to be protected any more than birds in general need to be preserved. However, surf breaks as part of the natural character of particular regions may need some form of protection to preserve them.

Specific surf breaks may be regionally important or may be outstanding features of the region's CMA and may need protection. That there are particular surf breaks that are of national and international significance has been established and they clearly warrant protection.

From a planning perspective, therefore, there is sufficient knowledge about surf breaks that we should act and use whatever means are at our disposal to ensure effective monitoring and protection.

The NZCPS is one such means and it was specifically designed to integrate across the boundaries of the CMA. It is therefore able to address the need for protection in all three of the arbitrary divisions of the environment, the CMA, and the landward and oceanic extensions of its environment.

This analogy between surf breaks and biodiversity provides a suitable platform for considering human impacts and other interactions with these places. It could be expanded to characterise the surfers and other species and its different cultivars (i.e. as fauna), and surf breaks as their different habitats (e.g. flora).

4.3 The cultural dimensions of surfing

Cultural and geographical qualities are amongst the important qualitative perspectives for planners to consider. Of particular importance in cultural studies are the constructions of 'localism', a territorial sense of belonging to a place, and quality and 'the vibe' associated with surfing experiences (Butt, 2006; Olivier, 2010; Waitt & Frazer, 2012). These narratives are important insights on the connections to important places for the practice of surfing and coastal culture, including the different meanings of these experiences for people and communities.

In recent years there has been a substantial focus on quantitative assessments of surf breaks, the physical wave characteristics, and their surfability (Andrade & Pires, 2007; ASR Limited, 2011; Hutt, Black, & Mead, 2001; Mead & Black, 2001a, 2001b, 2001c, 2009; Mead, 2003; Scarfe, Elwany, Mead, & Black, 2003; Scarfe, Healy, & Rennie, 2009). Little work exists using qualitative social science and ethnographic research methods to assess the impact of changes in surf break environments for local communities and overall recreational interests in the coastal environment (Benedet, Pierro, & Henriquez, 2007; Lazarow, Miller, & Blackwell, 2009; Peryman, 2011c; Scarfe, Healy, & Rennie, 2009).

4.3.1 New Zealand perspective

New Zealanders generally have a strong affinity with coastal areas due to the amenity, recreational lifestyle, social values and perceived freedom associated with living beside the coast⁶. Through the use of waves for leisure and competition, surfing has been embedded into the New Zealand psyche during modern times, and has become a significant part of our cultural heritage (Williamson, 2000). This is both for those who partake in the art of riding waves for sport or recreation, and for those who enjoy observing surf users because of its intrigue among other reasons. Successful integration of these values into planning and management approaches is fundamental to achieving community outcomes.

Māori and Polynesian cultures are well versed in the skills to harness the energy of waves, and understand the natural rhythms of stars, currents and tides to navigate their way through the Pacific. Some traditional practices include riding waves such as the landing of fishing canoes through surf zone to land safely ashore. South Island iwi, Ngāi Tahu are known to have actively pursued surfing as a leisure activity and an artefact called the Poha (Bull kelp bags) was used by the Ngāi Tahu people for surfing is contained at Te Papa Museum in Wellington, New Zealand (Te Papa Tai Awatea Knowledge Net, n.d.). This practice is believed to have been undertaken as early as 1200AD.

The full spectrum of participation in surfing culture includes the most basic of learner experiences and the thrill of 'being' in the ocean, to descriptions of transcendental and profoundly spiritual experiences from surfers who feel a part of the flow of nature (Moore, 2011; Stranger, 1999; Taylor, 2007). There is a close relationship with surf life-saving that at times has generated conflict along cultural grounds and the use of different surf craft for various forms of sports and recreational pursuits (Pearson, 1982a, 1982b; Waitt & Clifton, 2012). However, despite differences in individual experiences, all surfers share a common bond with surf break environments that creates a global surfing community.

Surfing cultures and sub-cultures have been documented extensively in an Australasian context by the likes of Booth (e.g. 1994), and covered globally from the perspective of gender studies, the cultural geographies and subjectivity of space (Henderson, 2001; Knijnik, Horton, & Cruz, 2010; Stedman, 1997; Waitt & Warren, 2008; Waitt, 2008) to the analysis of 'story space', the influence of technology, and the construction of identities, narratives and the language relating to the practice of surfing culture (Booth, 1999, 2008, 2012; Flynn, 1987; Satchell, 2008; Walker, 2008, 2011). As a highly visual sport, the imagery associated with high performance surfers riding waves and the surfing culture in general have become highly marketable (Booth, 1996; Stewart, Skinner, & Edwards, 2008; Stranger, 1999, 2010), creating a lucrative surfing industry (Buckley, 2002a) as well as supporting the brands of many non-surfing related commercial entities (Buckley, 2003).

4.3.2 International perspective

Internationally, indigenous surfing culture is best documented in Hawai'i by Isaiah Helekunihi Walker (2011) in the book, *Waves of Resistance: Surfing and History in Twentieth-Century Hawai'i*. The

⁶ http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10856818

following excerpt from the description of the book on the University of Hawai'i Press website⁷ gives a brief but compelling insight to the deep connection between indigenous culture and surf breaks:

Surfing has been a significant sport and cultural practice in Hawai'i for more than 1,500 years. In the last century, facing increased marginalisation on land, many Native Hawaiians have found refuge, autonomy, and identity in the waves.

An example of the significance of this connection is illustrated by Walker (2011, p. 4):

Native ocean traditions like he'e nalu (surfing) ...remains a source of pride for Hawaiians today. As one surfer explained, "Surfing has been a part of our history for thousands of years, and when you surf you have that connection, you connect spiritually and physically to all the elements around you; this is a part of you, it's a Hawaiian thing".

In Australia there is an emerging challenge to the dominant European construction of beach and surfing culture, which is aiming to reinstate "the histories that are relevant to Aboriginal people" (McGloin, 2007).

4.4 Issues affecting surf break environments

Aside from providing valuable surfable waves, the coast is also where the majority of New Zealand's large urban areas are located and where many people travel to for holidays and recreation. The demand for coastal living often results in the intensification of existing coastal areas or the expansion of them through new subdivisions. Small coastal townships are experiencing pressure for development to meet coastal lifestyle demands. This includes infrastructure to provide access to the coast as well as various facilities for marine recreation activities (e.g. new parking areas, marinas, boat ramps and formed beach access) and services for increased residents (Peart, 2004, 2005, 2007).

The coast is also the location of much economic activity which is due, in part to being home to many sectors dependent on the coast such as shipping, boat building, commercial fishing, aquaculture, marine tourism, sand mining, and offshore oil and gas exploration and extraction. The operation of such sectors involves the allocation of space, development and use of the marine and coastal environment and they, like their land counterparts, face pressure to expand for economic growth (McGinnis, 2012; Peart, Serjeant, & Mulcahy, 2011). Therefore, the coastal environment is a place of competing uses which presents difficulties for surfers as with these other uses comes interference with the factors that are important for the surfing experience as well as more widely for use and enjoyment by the general public.

Until relatively recently, surfers were a coastal interest group that had been given little attention in coastal management (American Shore and Beach Preservation Association, 2011; Mize, 2007; Scarfe, Healy, Rennie, et al., 2009a; Short & Farmer, 2012). In New Zealand, participation levels for those who surf as a specific form of recreation (along with its many forms, including body-boarding) are close to 150,000; not much lower than the nation's favourite sport: Rugby which has 190,000 (Sport and Recreation New Zealand, 2008). Meaningful participation (Arnstein, 1969) of surfing communities is integral to including the relevant knowledge when making management decisions concerning coastal user groups (Ashbaugh & Sorensen, 1976; Rockloff & Lockie, 2004; Scarfe, Healy,

⁷ Retrieved November 9, 2012 from <http://www.uhpress.hawaii.edu/p-9780824835477.aspx>

Rennie, et al., 2009a). Effective engagement with these communities is important to consider in light of the cultural dimensions that are directly connected to surf break environments and increasing pressures on coastal and marine resources.

The wider environment, or catchment of a surf break, plays a significant role in determining how various factors combine to create a quality surfing experience. Amongst the most important factors for the surfing experience are wave quality and consistency, the unobstructed path of swell through a natural corridor to the shore, and a range of surfing options that are not crowded (Butt, 2010; Scarfe, 2008; Surfers Against Sewage, 2009). Access to a surf break, unpolluted water and the absence of obstruction by other watercraft are fundamental to the use and enjoyment of a surf break. The experience a surfer gains from a surf break environment also depends on the physical state of the coastal environment, as well as a combination of natural processes that create surfable waves. For example, a remote surfing area, or one with an adjacent nature reserve will provide a higher level of amenity in terms of a serenity or naturalness experience than a coastline with a large population base.

The following section outlines some of threats and known impacts to surf break environments and their associated values. These are important elements to consider in the preparation of environmental strategies, as well as for one-off impact assessments in planning and decision making processes. Practitioners should also be aware that these threats and impacts are not exhaustive, rather they serve as an indication of environmental factors to consider.

4.5 Threats and impacts

Identifying potential and existing impacts and threats to a surf break environment requires a holistic view of activities and natural processes affecting the surf zone itself, the landward extent of its catchment, and both the inshore and offshore extent of its associated swell corridor.

The near-shore environment of a surf break involves hydrodynamic characteristics that directly relate to wave surfability and the range of surf breaks available to surfers of different skill levels (ASR, 2011; Hutt et al., 2001; Scarfe, 2008). For example, activities that cause changes in sedimentation deposits at the beach break at Aramoana, New Zealand can impact positively and negatively on wave quality (Kilpatrick, 2005; Peryman, 2011c; Scarfe, Healy, Rennie, et al., 2009b). A beach break or river mouth break requires suitable sand banks that create surfable waves. Sand banks are formed by a range of natural processes including sediment and sand exchanges, water flows and tides that alter the seabed and cause waves to break favourably for surfing. The right combination of these factors is rare and subtle shifts in tide heights, wind or swell direction can drastically alter wave surfability.

In addition, swell is generated from offshore weather systems that travel across entire oceans, as well as from strong nearshore winds that generate 'windswell' (Scarfe et al., 2003; Scarfe, Healy, & Rennie, 2009; Scarfe, 2008). Activities such as large aquaculture farms, offshore drilling and mineral extraction, and structures built and placed within the marine environment for energy generation have the potential to dissipate swell energy leading to a reduction in wave quality (Butt, 2010; Surfers Against Sewage, 2009). Mining, marine transport and offshore energy generation also carry

significant risks and pose large threats to water quality, health and safety resulting from accidents, spills of toxic and hazardous substances such as oil (McGinnis, 2012; Peart et al., 2011).

Scarfe (2008) provides examples of various activities led by people that can destroy or improve surfing areas including: construction of jetties, altering of sand dunes, dredging of estuary, river and harbour channels, dumping of artificial nourishment and dredging spoil, armouring of coastlines against erosion, and the alteration of sediment sources, sinks and transport pathways. Natural influences of rising sea-levels, catastrophic natural events and changes in sea temperature will also have impacts on surf break environments and these are important to consider for their potential long term effects (Knights, 2007).

Water quality is especially important as it affects not only the safety and enjoyment of the surfing environment, but the actual shape and surfability of a wave. Water quality is affected by land-use activities within the landward catchment as well as movements of water bodies along and onto the coast from marine areas. Runoff during rainfall events and the location of discharge points in relation to a surf break environment can determine how safe and enjoyable an area is for surfing.

Impacts affecting access to surf breaks and the coastline in general have been well documented and include limitations, restrictions and conditions imposed by private land-owners, changing land-use and subdivision and the failure of coastal management and planning to engage with the growing impacts on coastal user communities (Freeman & Cheyne, 2008; Stocker & Kennedy, 2009; Thompson, 2007). The construction of amenities such as parking and access-ways is not always desirable and can impact on the naturalness of a surf break environment, as well as a sense of ownership, responsibility and belonging to a particular place (Peryman, 2011a). Peryman also documented tensions surrounding impositions on the customary practices of Maori in coastal areas (Peryman, 2011b).

Despite an emerging protection movement coming from within surfing communities, there is also a need to manage the impact of surfers. These include issues of crowding and conflict for natural and cultural host environments (Buckley, 2002a, 2002b). In many areas there is increasing demand for coastal recreation and surf tourism (Ponting, 2001, 2008, 2009) for which popular surf breaks may become a focus. This can involve varying forms of recreational and competitive surfing and surf tourism, and interactions amongst the range of activities that make use of breaking wave environments such as surf-lifesaving, wind surfing and kite surfing. An unwritten code of ethics about who has right of way and priority for surfing a wave are commonly respected as cultural practices and help to moderate the impacts of crowding. However, increased media exposure, over-crowding, and the resulting phenomenon of 'localism' can all have significant impacts on the quality of a surfing experience as well as the general safety of the surf zone (Ishiwata, 2002; Olivier, 2010; N. Young, 2000).

Managing adverse impacts

Many coastal and marine development and resource use proposals are being allowed to progress under the auspices of adaptive management where the onus is on the monitoring of environmental effects by local authorities, project proponents and local communities, and suitable responses to monitoring should adverse effects be detected. However, experts in coastal science who specialise in surfing science support the view that it is not practicable to manage adverse effects on surf breaks

adaptively as there is potential for irreversible impacts⁸. This is also reflected in the wording of NZCPS 2010 policy 16 that focuses on *avoiding* adverse effects on surf breaks of national significance (Board of Inquiry, 2009a). Where information is limited, application of the *precautionary principle* is an important consideration (Whiteside, 2006).

Scarfe et al (2009a, 2009b) and Lazarow (2007) state that the number of surf breaks being modified, and negatively impacted by development has increased over time as a result of the narrow focus of coastal management programmes and the exclusion of surfing interests in strategic and environmental impact assessments. Surf break user groups are expected to stay aware of potential adverse effects on surf breaks and advocate for their protection, request for regional and local councils to treat them as affected parties and make submissions on plans and resource consent proposals – all of which are actions that require a significant level of technical ability and resources to mobilise. When change occurs without effective engagement with people and communities with knowledge of surf breaks there may be risks to the values of surf breaks and the natural character of the coastal environment (Peryman, 2011a, 2011c).

In New Zealand, surfers' groups have successfully engaged with the current governance structure for resource management in the coastal environment, advocating for and establishing national-level guidance for protecting surf breaks (Board of Inquiry, 2009a, 2009b; Department of Conservation, 2010). Given the cascading hierarchical structure of the planning framework in New Zealand, the focus has now shifted to how local authorities will respond, and is an essential aspect of McGinnis' (2012, p. 55) call for "the cultivation of a broad ocean constituency in the public realm that supports a more sustainable ecological approach to planning, decision-making and policy making". In this context the role of the planner is fundamental in decisions made at the local level that affect surf break environments and the communities interested in their values.

Planning theory, which itself is a synthesis of concepts from multiple fields, contains many ideas that are valuable to coastal management (Marcucci, Brinkley, & Jordan, 2012; Marcucci, Russell, Smith, & Wainger, 2010). Information gathering activities are a vital aspect of contemporary coastal planning in New Zealand given the many information gaps. However, in some contexts important processes have arguably become a rushed as a result of recent moves to promote resource management efficiency. Engagement with community-based⁹ groups is another critical aspect that is relevant at several stages within the policy and planning cycle. Community engagement will be especially important in the next stage of work on surf break protection in New Zealand as local authorities develop their approaches to both national level policy and local issues.

⁸ See Dr Shaw Mead speaking in this video clip about protection of the critically endangered Maui's dolphin, retrieved 21 November 2012: vimeo.com/44464931

⁹ The use of the word 'community' can be understood in this context to mean broadly a 'community of interest' with representatives that can be found in many specific locations, but belonging to groups that are not constrained geographically or defined as a statutory entity.

5 Framework for the Management of Surf Breaks in New Zealand

The following is a review of the policy context and recent trends surrounding the development of policies for protecting surf breaks in New Zealand. This is primarily a review to help guide communities who are not involved in planning practice, although may also contain some insights for planning and coastal management practitioners.

5.1 *International context*

Recent advances in environmental policy in several countries have confirmed that surf breaks are environmental assets to be actively managed alongside other natural resources. However, New Zealand is the first nation to have a legally binding directive to protect surf breaks as part of its principal resource management legislation. This is a new policy development within the context of the RMA.

The RMA exists within an international context which reflects increasing global awareness of environmental issues. The influence of international conventions such as the 1972 Stockholm United Nations Conference in Environment and Development and 1992 Rio 'Earth Summit' has helped increase awareness of issues such as protection of the high seas and large marine areas, the effects of climate change, and the need for a sustainable future. In addition to raising awareness, more specific obligations have been established under various multi-lateral accords. This international context has set the stage for New Zealand policy development alongside attention to contemporary local issues (Ministry for the Environment, 2006; Young, 2001).

In the 1970s – 80s, at the national level, many developments in resource management thinking reflect an improving awareness of the finite nature of resources including those underpinning our primary production and tourism industries (Memon, 1993). This has shaped a paradigm centred on concern for more effective management of modern development patterns whilst remaining enabling in character, and greater attention to more integrated environmental responses and planning activities.

5.2 *The Treaty of Waitangi*

An additional and unique aspect of the New Zealand policy context is the influence of the Māori world view and the Treaty of Waitangi ('the Treaty'). The Treaty is an agreement made between the Crown and the Māori people of New Zealand. It is of direct relevance to resource management in New Zealand because it deals with the relationships between natural and physical resources and the Treaty partners including rights to, and governance over resources.

Article 2 of the Treaty includes the guarantee for Māori of:

... unqualified exercise of their chieftainship over their lands, villages and all their treasures
[Māori Language Version]

... the full exclusive and undisturbed possession of their Lands and Estate Forests, Fisheries and other properties ... [English Language Version]

Because of differences between the English and Māori versions of the Treaty, confusion has existed in interpreting and applying some of the terms used to describe governance activities and other aspects of the agreement. These include the use of Maori words for which there is no direct English equivalent. Examples include rangatiratanga (chieftainship) and kāwanatanga (referring to rights of governorship).

These matters have been advanced through the work of the Waitangi Tribunal in considering claims made against the Crown in respect of Treaty breaches, and in the evolving body of case law on Treaty matters. In 1987, the Court of Appeal identified that three major Treaty principles were (1) the principle of partnership, (2) the principle of active protection of Māori people in the use of their ancestral lands and water, to the fullest extent practicable, and (3) the principle of utmost good faith in the dealing of one Treaty partner with the other.

However, consideration of the Treaty in resource management matters is a dynamic and continuing process which includes contextualisation of the Treaty and its principles to resource issues and new developments and understandings. This process is underpinned by an ongoing relationship between the Treaty partners. Ongoing engagement and consultation are important aspects of that partnership, and the Court of Appeal (1993) found that essential elements of consultation included (1) sufficient information provided to the consulted party, so that they can make intelligent and informed decisions, (2) sufficient time for both the participation of the consulted party and the consideration of the advice given, and (3) genuine consideration of that advice, including an open mind and a willingness to change.

The Treaty of Waitangi has and continues to be a major influence on the development of the RMA. The Treaty is directly connected to resource management through section 8 of the RMA, and also through policies made under RMA mechanisms such as the New Zealand Coastal Policy Statement (NZCPS), other National Policy Statements, Regional Policy Statements, and statutory plans.

5.3 The Resource Management Act 1991 (RMA)

Reviews of resource management and local government legislation in the 1980s led to the development of the RMA in an attempt to provide greater integration within a single piece of legislation. As part of this process 78 statutes and regulations were repealed including the Water and Soil Conservation Act 1967 and Town and Country Planning Act 1977. These were replaced by the RMA in an attempt to create a comprehensive and more integrated approach to environmental management (Ministry for the Environment, 2006).

Section 5 of the Resource Management Act states that the purpose of the RMA is as follows:

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, 'sustainable management' means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while:

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations;

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

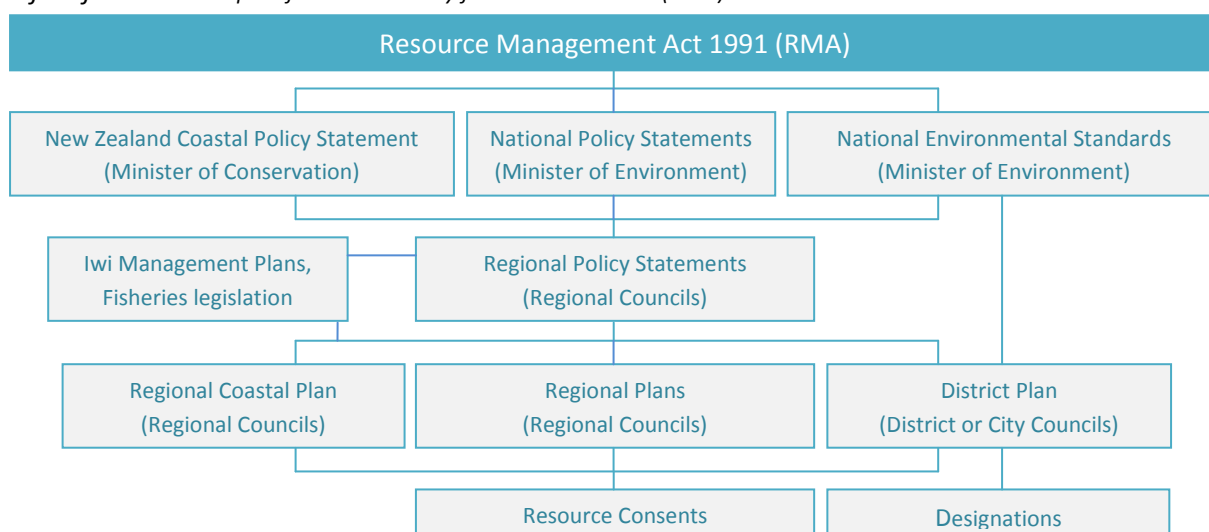
A full interpretation of Section 5 also requires attention to other parts of the legislation including Part II of the Act, Sections 6, 7, and 8 (see Appendix 1)¹⁰. These sections of the RMA set out certain principles that are to be either “recognised and provided for”, “had particular regard to”, or “taken into account” by relevant authorities.

It is important to note that the RMA does not provide for a fully integrated approach to resource management since some key activities are addressed by other legislation (Peart, 2008). These include some aspects of mining activities which are the subject of the Crown Minerals Act 1991, harvesting of fish, shellfish and seaweed (managed by the Fisheries Act 1996), control of pollution from ships and offshore structures (managed by the Maritime Transport Act 1994), and clearance of indigenous forest on private land (managed by the Forests Act 1949)¹¹. All of these activities have the ability to affect surf breaks.

5.4 Devolved responsibilities for resource management

Under the RMA, considerable responsibility is delegated to local government bodies including many aspects of day-to-day decision making (Ministry for the Environment, 2006; Quality Planning, n.d.). This core approach includes requirements for local government to develop a hierarchical policy and planning framework consistent with policy statements made at national level (Figure 1). The methods by which to achieve the purposes of the RMA are substantially up to local government to determine within this regional and local level policy and planning framework.

Figure 1: Key components of the RMA policy and planning framework important to the management of surf breaks. Adapted from the Ministry for the Environment (2009).



¹⁰ At the time of finalising this report the Government was proposing significant changes to sections 6 and 7 of the RMA, but these do not greatly affect the substance of this report.

¹¹ Some of the effects of clearances of indigenous forest are still managed by the RMA.

5.5 Applying an effects-based approach

A hallmark of the RMA is its 'effects based approach' which put simply, means that the effects of new activities on the environment must avoid, remedy or mitigate adverse effects on the environment (Environmental Defense Society, 2008; Peart, 2008; Rennie, 2011). Local authorities are required to address this through the design and implementation of their policies and plans. To achieve desirable outcomes consistent with the purpose of the RMA a range of other tools and methods are used within regional and local level plans (Ministry for the Environment, 2006; Peart, 2008). These include rules, resource consents, educational activities, and incentives to encourage desirable action on resource management issues (see also Appendix 4 for a summary of methods applicable to surf break management). Taken together, all of these policies, plans, and methods create the 'policy mix' relevant to the management of surf breaks under the RMA.

Critical to understanding the operation of the RMA is the role of rules in plans which become the 'regulatory backstop' in the policy mix. The enabling character of the RMA is that a land owner can use their land as they wish, unless the manner in which they use it contravenes a rule in a plan (district or regional) or an environmental standard. If it does, then a resource consent is required. However, the marine environment is managed differently via a prohibitive regime. This means that most activities are not allowed in the coastal marine area unless authorised by a rule in a regional coastal plan or other relevant legislation. Many activities may also be authorised by obtaining a resource consent or permit as appropriate, unless the relevant rules specifically prohibit the particular use for which the consent would be sought.

Under the RMA, the rules in plans are therefore a critical aspect of managing 'on-the-ground' impact. The policy regime, however, controls the nature of the rules since the rules in plans are designed to assist the implementation of the relevant policies. To achieve the protection of surf breaks and their enjoyment it is therefore important to ensure that appropriate policies are in the relevant policy statements, and that plans contain rules that will be effective in implementing these policies.

It is important to note that the introduction of protection requirements for surf breaks is consistent with an effects-based approach to resource management. This arises since the focus of policy is on discrete areas of the environment characterised by surfable waves, rather than on any particular activity. This generates the need to assess and understand the effects of various activities on these parts of the environment, better known as 'surf breaks'.

5.6 Focus on integrated management

Sections 30(1)(a) and 31(1)(a) of the RMA require the integrated management of natural and physical resources in recognition that such an approach is necessary to achieve the sustainable management of resources. The integration required includes across different legislation and jurisdictional boundaries, and across the different spatial, biophysical and socio-economic aspects important to management of resources.

Responses to issues under the RMA must achieve solutions which integrate across all relevant legislation, and as illustrated above, provisions made under other legislation also have the potential to influence outcomes for surf breaks. These influences could be both positive and negative from the perspective of surf break users depending on the situation. Examples include the establishment of

Marine Reserves under the Marine Reserves Act 1971 or other forms of protected areas under fisheries legislation. Such areas could include surf break environments and would tend to create greater levels of protection from development activities, but cannot be used purely to protect a surf break.

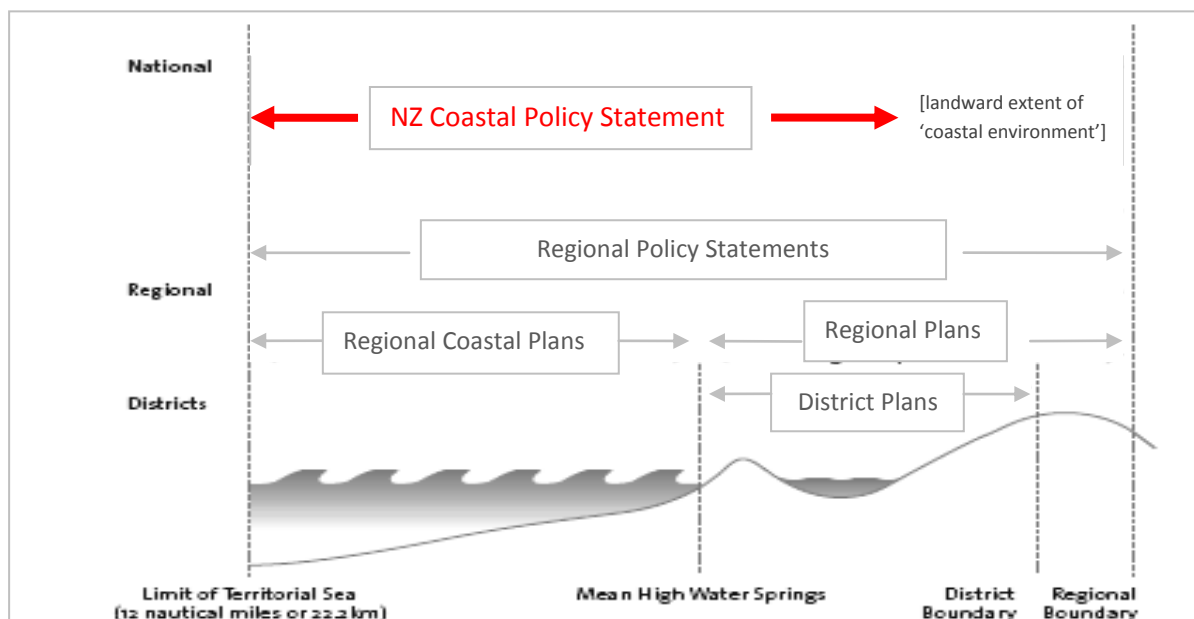
Because environmental responsibilities are dispersed across many different organisations in New Zealand, it follows that an integration of effort across these organisations is an essential component of effective resource management. This is particularly relevant in the coastal environment which is characterised by cross boundary issues such as those involving land water interfaces and jurisdictional boundaries (Makgill & Rennie, 2012; Orchard, 2011; Peart, 2007).

An additional aspect arising from the devolved nature of the RMA is that different priorities and approaches may develop in different regions. This has been identified as a source of potential weakness in addressing some coastal management issues (Young, 2003). However this setting also gives rise to opportunities for innovation. To promote consistency on key issues such as the uptake of good practice, important tools under the RMA are National Environmental Standards and National Policy Statements including the NZCPS.

5.7 Jurisdictional boundaries

National level tools such as the NZCPS must be considered and given effect to by other resource management processes. This includes in the preparation of various policies and plans at regional and local levels, and the approval of resource consents. These policies and plans cover different jurisdictional and planning areas with there being some obvious overlap and integration required amongst agencies (Figure 2).

Figure 2: Important jurisdictional boundaries for coastal management and relationship to the NZCPS “coastal environment”.



5.8 Defining the “coastal environment”

An aspect of the approach used by both the 1994 and 2010 NZCPS is that the exact boundaries of the “coastal environment” are not defined. In general the coastal environment includes the Coastal Marine Area (which refers to the area between the line of Mean High Water Springs (MHWS) and the outer limits of the territorial sea) and the adjacent land. Previously, the landward extent of the coastal environment has deliberately not been defined in spatial terms, but rather by reference to the matters addressed by the policy statement itself.

Consideration on a case by case basis has been the general approach taken to date. However, the NZCPS 2010 includes a policy on the extent and characteristics of the coastal environment to provide additional guidance to local authorities on this topic. To promote consistency, it identifies nine matters to be included in defining the coastal environment. Interpretation of these remains the role of local authorities and their planning processes and therefore the NZCPS 2010 itself has not directly resolved the matter of where and when NZCPS policies should be applied.

Any new measures adopted by local authorities to define the coastal environment will be important and all interested parties should give particular attention to the locations of sites and issues where coastal policy is applicable and necessary.

5.9 The development of surf break policy within the NZCPS

The NZCPS is required under section 57 of the RMA and provides essential guidance to local authorities for the day-to-day management of the coastal environment (Rosier, 2004). Its purpose is identified in Section 56 of the RMA which states:

The purpose of a New Zealand coastal policy statement is to state policies in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand.

The NZCPS 1994 was New Zealand’s first NZCPS and was subject to a scheduled 10-yearly review which included input from stakeholder groups (Rosier, 2004; D. Young, 2003). This process informed development of the new NZCPS 2010 which took effect on 3 December 2010.

The NZCPS 2010 differs significantly from its predecessor. It identifies 29 policies in relation to seven different national priority policy objectives as follows:

- *To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems.*
- *To preserve the natural character of the coastal environment and protect natural features and landscape values.*
- *To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment.*
- *To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment.*

- *To ensure that coastal hazard risks taking account of climate change are managed through a range of activities.*
- *To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development.*
- *To ensure that management of the coastal environment recognises and provides for New Zealand's international obligations regarding the coastal environment, including the coastal marine area.*

The 29 policies are not directly referenced to the priority objectives and in general there is a lack of detail in the document and supporting material to indicate how they might work together to achieve those objectives. As is typical of the planning ideology under the RMA, some of the stated policies are also in conflict with others, creating a situation which must be resolved by the planning system (Memon & Gleeson, 1995). The final determination of many matters, including the conflicting demands of stakeholders, becomes the responsibility of local governments and the communities they represent.

Amongst the new policy topics in the NZCPS 2010 is a definition for “surf break” and several policies which make direct reference to surf breaks (Department of Conservation, 2010). This represents a significant change in national coastal policy resulting from a high level of input from people with concerns for surf break environments and their management (Skellern, Rennie, & Davis, 2009).

5.10 Policy 16: Surf breaks of national significance

Policy 16 is the most obvious requirement for surf break protection in the NZCPS 2010. However it only applies to a set list of surf breaks (see Appendix 2: Schedule of Surf Breaks of National Significance) with no provisions made for extending or refining this list. For those surf breaks the requirements of Policy 16 are:

- Protect the surf breaks of national significance for surfing listed in Schedule 1, by:*
- (a) ensuring that activities in the coastal environment do not adversely affect the surf breaks; and*
 - (b) avoiding adverse effects of other activities on access to, and use and enjoyment of the surf breaks.*

The requirements of Policy 16 clearly identify two major aspects as being important; physical aspects of surf break environments, and aspects important to users of those environments. In 16 (b) consideration is given to adverse effects on the *users* of surf breaks, but interestingly does not specify that these users need be surfers. Users of surf breaks for purposes other than surfing would seem to be covered by 16(b) and this could include the full range of users who gain enjoyment and value from surf breaks including spectators who participate from a distance.

Policy 16 identifies the degree of protection required in terms of *avoiding* adverse effects. The definition of adverse effects is not defined in the policy though it is critical to its implementation. Effective protection mechanisms for implementing Policy 16 are likely to be methods which address and control sources of adverse effects in order to generate this outcome.



Whangamata Bar is one of New Zealand's surf breaks of national significance and is currently under threat from dredging activities associated with the development of a nearby marina. Coastal development proposals such as this need to understand surf break values, and appropriate responses to protect them. Photo: surfPix

5.11 Policies 13 & 14: Preservation of natural character / Restoration of natural character

Policy 13 is as follows:

(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment; including by:

(c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and

(d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes and patterns;

- (b) biophysical, ecological, geological and geomorphological aspects;*
- (c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
- (d) the natural movement of water and sediment;*
- (e) the natural darkness of the night sky;*
- (f) places or areas that are wild or scenic;*
- (g) a range of natural character from pristine to modified; and*
- (h) experiential attributes, including the sounds and smell of the sea; and their context or setting.*

The relationship between surf breaks and tests of natural character is also a new topic for discussion. As with Policy 16, Policy 13 is effects based in its operation and relies on an understanding of adverse effects in particular. These are to be *avoided* where outstanding natural character is involved, otherwise some degree of adverse effects is permissible. This difference is important in terms of the level of protection afforded to an area.

Policy 14 also applies to surf breaks as components of natural character. Policy 14 is complementary to Policy 13 and might encourage additional responses contributing to the protection of surf break environments, especially by way of active management initiatives.

5.12 Policy 15: Natural features and natural landscapes

Policy 15 is also relevant since surf breaks are examples of natural features and natural landscapes in the coastal environment. The policy is:

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

- (a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*
- (b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by:*
 - (c) identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:*
 - (i) natural science factors, including geological, topographical, ecological and dynamic components;*
 - (ii) the presence of water including in seas, lakes, rivers and streams;*

(iii) legibility or expressiveness—how obviously the feature or landscape demonstrates its formative processes;

(iv) aesthetic values including memorability and naturalness;

(v) vegetation (native and exotic);

(vi) transient values, including presence of wildlife or other values at certain times of the day or year;

(vii) whether the values are shared and recognised;

(viii) cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;

(ix) historical and heritage associations; and

(x) wild or scenic values;

(d) ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and

(e) including the objectives, policies and rules required by (d) in plans.

As with Policy 13, Policy 15 specifically introduces a protection mandate. Policy 15 introduces a further obligation to assess elements of the coastal environment, though against different criteria. As with Policy 13 the results are to be used as the basis for determining the degree of protection necessary. Again adverse effects are to be avoided where “outstanding” status is involved whereas some degree of adverse effects is permissible otherwise.

Policy 15(d) and (e) are of interest since they require local authorities to identify where protection of natural features and landscapes is required, and then make provisions to achieve the protection required. Therefore, interpretation and responses to this policy hinge on an understanding of what sort of protection is required. This is no simple task since it requires consideration of the nature of threats to the natural features and natural landscapes present. In practice these policies would seem to specifically require local authorities to address locations where surf break protection may be an issue as an element of their planning process. This creates an opportunity for interested parties to submit on the nature of protection required for surf break management, and to require that local authorities provide for this in their plans.

5.13 National and Regional Policy Statements (RPS)

The NZCPS is the only mandatory National Policy Statement (NPS) required under the RMA. Other NPSs are optional and may be produced by the Government to state policies and objectives on any issue of national importance relevant to the RMA (Ministry for the Environment, 2006, 2009).

A Regional Policy Statement (RPS) provides an overview of the resource management issues of the region and addresses how natural and physical resources are to be managed in an integrated way to

promote sustainable management. RPSs are required under the RMA and in preparing the RPS Regional Councils must have particular regard to the following sections:

Part II - sections 5-8 Purpose and Principles.

Section 30 -Functions of regional councils under the RMA.

Section 32 - Duties to consider alternatives, assess benefits and costs, etc.

Section 59 - Purpose of regional policy statements.

Section 61 - Matters to be considered by regional council.

Section 62 - Contents of regional policy statements.

First Schedule - Preparation, change, and review of policy statements and plans.

Second Schedule - Matters that may be provided for in policy statements and plans (Part I).

RPSs must give effect to national policy statements and must also not be inconsistent with any Water Conservation Order in place. Water Conservation Orders are another tool established under the RMA which can be used to place restrictions on the alteration of certain aspects of a water body (Ministry for the Environment, 2009).

5.14 Regional Plans and Regional Coastal Plans

Under the RMA, Regional Councils must prepare a Regional Coastal Plan and may also prepare other regional plans which must not be inconsistent. The purpose of these Plans is to give effect to the RPS and national policy statements (Ministry for the Environment, 2006). The statutory area that a Regional Coastal Plan must address is the Coastal Marine Area for which the landward limit is the Mean High Water Springs (MHWS) line (see Figure 2). However, Section 64(2) of the RMA states that:

A Regional Coastal Plan may form part of a regional plan where it is considered appropriate in order to promote the integrated management of a Coastal Marine Area and any related part of the coastal environment.

Consequently, some Regional Councils have chosen to embed the requirement for a Regional Coastal Plan within a Regional Plan of wider scope. An example is the “Regional Coastal Environment Plan” produced by Environment Canterbury to promote better integration of responses to coastal concerns which involve land-based activities.

In the context of surf break management, RPSs and Regional Coastal Plans are important statutory instruments for stakeholder groups to submit on and work with to achieve surf break protection outcomes. Regional Plans must also take into account any relevant planning documents recognised by an iwi authority (e.g., an Iwi Management Plan) or planning document produced by a group with customary marine title under the Marine and Coastal Area (Takutai Moana) Act 2011 that has been lodged with the council. These provide further opportunities for policy relevant to surf breaks within the overall management framework.

5.15 District Plans

District and City Councils (collectively referred to as Territorial Authorities) must also prepare plans to address their responsibilities under the RMA. These must also 'give effect to' national policy statements (including the NZCPS 2010) and regional policy statements and must 'not be inconsistent' with relevant Water Conservation Orders and Regional Plans and must also take into account any planning documents recognised by iwi authorities (Ministry for the Environment, 2003; Quality Planning, n.d.).

5.16 Implementation via Annual Plans and Long Term Plans

Under the Local Government Act 2002, each year, every local authority is required to prepare, and after public consultation, adopt an Annual Plan. This document details the work to be undertaken during the year, shows how much it will cost, where funds come from (e.g. rates, user pays) and sets out the objectives in each area of significant activity. Major performance measures and outputs are specified to help the public measure at the end of the year, how successfully the plan has been implemented. The same aspects are also included in Long Term Plans, except with a 10-year timeframe and the requirement to review these plans every three years.

As the Regional Policy Statement must contain objectives, policies and methods for the sustainable management of the region's natural and physical resources, it follows that the Regional Policy Statement will influence greatly the contents of the Regional Council's Annual and Long Term Plans. Similarly, Long Term and Annual Plans need to contain sufficient funding to enable the work necessary to obtain information and run processes that facilitate the making of surf break-relevant provisions in their policy statements and plans. Without the necessary information it may be difficult for local authorities to make sound planning decisions on activities that might affect surf breaks.

6 Methods to achieve policy objectives

This chapter does not include a full description of all of the many tools and methods that are available and may be applied within the above policy context. Readers are invited to read further on tools such as Resource Consents, Designations, Notices of Requirement and Outline Plans, and the many resource management processes such as Plan Changes, Applications for Resource Consents, Assessments of Environmental Effects, Section 32 provisions and making submissions and other consultation processes (Ministry for the Environment, 2003, 2006; Peart, 2008; Quality Planning, n.d.). In addition, the influence of case law, and the roles played by the Environment Court and Environmental Protection Agency (EPA) are important influences on resource management outcomes.

A key organising principle within the overall framework is the hierarchical arrangement of policies and plans from national to regional and local levels (Memon & Gleeson, 1995; Ministry for the Environment, 2006). Rules in plans largely determine actual on the ground outcomes, but these rules are there to implement the policies, hence, the importance of policies. It is also important to note that one or more plans may be relevant to a given policy topic and these may include both statutory and non-statutory plans (e.g. recreation and open space strategies) produced by relevant organisations which might be drawn on in formulating RMA plans or weighing particular issues when considering resource consent applications. In some instances, statutory organisations such as Councils also benefit from and may collaborate with established non-governmental organisations where those organisations are helping to implement the relevant policy objectives. International Approaches to the Management of Surf Breaks

The information gathered in this section largely concerns English speaking countries and, on a global scale it is recognised that there is much more knowledge, information and experience that is outside the reach of this work. This section provides a brief overview of the origins, approaches and relative impact of surf break protection initiatives in Australia, the United Kingdom and United States of America. A summary is also provided in Table 2.

These findings are based on interviews and other correspondence with respondents who are involved with the various non-governmental organisations running flagship initiatives in countries and regions where local people, including indigenous populations, identify with surf breaks, surfing culture and are impacted by coastal development issues.

6.1 Overview

Internationally, there are a range of non-governmental (NGO) and not-for-profit organisations that have been setup and developed by surfers and communities, generally in response to threats that existed locally. Many of these initiatives have then grown to address wider issues. There are a range of approaches and management tools, and they have generally originated from grass-roots advocacy, campaigning and engagement with formal authorities at local, regional, national and international levels. There is a notable level of networking at the international level with the aim of

generating more information-sharing, conference arrangements and advocacy to global bodies like UNESCO¹² - seeking to influence sectors that sit outside the traditional surfing community.

Community-based campaigns typically have two life-spans. The first typically concerns the imminent and existing threats of an activity or proposed development that is perceivably creating an adverse effect on surf break resources. These campaigns last until some agreement is reached or an activity or proposal is stopped from proceeding outright. Secondly, campaigns may address cumulative impacts through more educative programmes with longer term goals, for example, focusing on upstream pollution sources entering the coastal environment.

Recently, surf break protection campaigns have shifted towards more strategic approaches which are characterised by attempts to identify more sustainable and environmentally sensitive approaches to coastal management which include a broader recognition of all coastal user groups, rather than a focus on surfers. Although still focused on advocacy and campaigning in the public eye, meaningful engagement with state governments by campaign directors or paid employees of these organisations is increasingly becoming the target for effecting change.

In many places there is a large diversity of local and cultural expressions of surfing and the connection between people and places, even within parts of the same coastal township. Information gathered on management approaches for surf breaks always referred back to need for the integration of surfing interests with the broad spectrum of values people and communities associated with coastal, marine and ocean environments.

6.2 National Surfing Reserves – Australia¹³

National Surfing Reserves (NSR) is a programme initiated to recognise the quality of surf and the cultural significance of this to the local communities where iconic surf breaks are located. Along with this recognition, the intention is to assist with the long term preservation of surf breaks by giving the local community a voice and a recognised platform to participate in wider decision-making processes that affect the coast.

There are three main reserve types found in Australia: the first being a land-based reserve (e.g. Bells Beach Surfing Recreation Reserve) similar to a local purpose reserve in New Zealand; the second is not formally recognised and is general considered symbolic; the third is a Gazetted reserve found in New South Wales. The following from Short and Farmer (2012, p. 2) summarises the core purpose of the model:

A surfing reserve represents one mechanism to redressing both the casual attitude of surfers to their surf breaks and to the increasing threat to some of those breaks... they are a proactive step to recognise and preserve these sites before they become threatened or compromised.

¹² See for example, the Global Waves Conference (2011) which led to the creation of the International Surfing Communities Commission, and a resolution to present the case for surfing sites to be included in the UNESCO natural heritage roster: http://www.surfersvillage.com/feed/iphone.asp?id_news=54152

¹³ <http://www.surfingreserves.org> and http://www.lpma.nsw.gov.au/about_recreation/national_surfing_reserves

The model is now applied to 11 areas (which include a range from 500m to 7km of coastline, and multiple surf breaks within each reserve) with a further five proposals and potentially up to 50 national surfing reserves in total. 'Australia's first surfing reserve was officially gazetted by the Victorian government at Bells Beach in 1973' (Farmer & Short, 2007), and this is analysed in further detail in a brief case study below.

An earlier Farmer and Short (2007, p. 100) article also defines what a 'surfer' and 'surfing reserve' are for the purposes of formal recognition:

***Surfer:** any person who interacts physically with the surf for recreation. It includes bodysurfing, bodyboarding, surfboarding, surfskiing, surfboating, all forms of surf lifesaving and lifeguarding but excludes all surf interaction powered by wind and machines. It is estimated some 3 million Australians identify as 'surfers' on a regular basis.*

***Surfing reserve:** a part of the coastal environment recognised by the NSR-A and the local community for the quality and consistency of its surf and its long-term and ongoing relationship between the surf and surfers. It usually encompasses the beach and adjacent surf zone but may include features of the marine and coastal zone which intrinsically enhance aspects of the surfing experience, including structures such as surf clubs or localities such as the birthplaces of surfing in each state or a place considered sacred by surfers for a particular reason. A surfing reserve does not however attempt to exclude any user group and no statutory provisions are attached therein.*

NSR (Australia) consists of a Board with representation from surfing organisations, government and coastal research. The Board developed a background paper to NSR's, which outlines the criteria required for consideration as a NSR, together with information on the nomination process and how to arrange the dedication of a reserve. Each reserve depends on the formation of a local NSR committee that is encouraged to take ownership of the core components for becoming established:

1. Creating a booklet that captures the history of surfing (and often surf-lifesaving) at the location, the stories of Aboriginal cultures associated with the area, the wave conditions and break setups, and the more recent surf culture of the local community;
2. A plaque to be installed at the site (often with interpretive displays and signage);
3. A dedication ceremony

The intention is then for the committee to act as any local interest group in contributing to discussions regarding local coastal management, which has affectively been the case at some of the reserves.

In order to accommodate a range of surf breaks across different scales of significance, a three-tiered level of reserves: regional, national and world, has been developed along with criteria for their recognition (Short & Farmer, 2012):

Regional Surfing Reserve (RSR):

1. *Reasonable quality and consistency of the waves (i.e. a regional-class surfing break);*

2. *A place considered special by the local surfing community;*
3. *Long-term usage of the beach and wave environment by local surfing community, e.g. long-term surf lifesaving club (SLSC) and/or boardriders club with significant history.*

Using these criteria there could potentially be more than a hundred RSR's in Australia, though they would only be dedicated if there were strong support from the local surfing and broader community.

National Surfing Reserve (NSR)

Must fulfil all three of the following essential criteria (with Australian examples):

1. *Persistent quality of the waves (i.e. a national/world class surfing break) (e.g. North Narrabeen, Snapper Rocks, Jakes);*
2. *A place considered sacred by surfers (local and national) (e.g. Angourie, Crescent Head);*
3. *Long-term usage of the beach and wave environment by local and national surfing community, e.g. long-term surf lifesaving club and/or boardriders club with significant history (e.g. Maroubra, Killalea).*

Based on the above criteria it is anticipated there will be about 25 NSR's in Australia.

World Surfing Reserve (WSR)

Must fulfil all three of the following essential criteria:

1. *Exceptional quality and consistency of the waves, i.e. a world-class surfing break (e.g. the North Shore, Jeffreys Bay);*
2. *A place considered sacred by surfers throughout the world (e.g. Waikiki, Malibu);*
3. *Long-term usage of the beach and wave environment by local, national and international surfing community (e.g. Bells Beach, Margaret River, Manly).*

With these criteria we would only expect a handful of WSR's in Australia and a few score worldwide...

The local surfing community, which is usually a boardriders club or a group of long-term local surfers must initiate the nomination processes. This is regarded as an essential part of the process, as the Board feels strongly that it is the local surfers who should organise and 'own' the reserve... This involves the local surfing community holding a public meeting and then forming a Local Steering Committee (LSC) with office bearers to undertake three major objectives:

1. *Design a dedication plaque, for which the Board provides a template*
2. *Produce a NSR booklet that outlines the history and importance of surfing at the site*
3. *Arrange the actual dedication ceremony in collaboration with the relevant local and state authorities.*

These three steps usually take up to a year to achieve. As part of this process the Board allocates a 'buddy' to each local NSR committee to assist, advise and attend meetings as required or requested.

The Crown Lands Act 1989 has been the primary mechanism for giving statutory recognition to the surfing reserves concept in New South Wales. The Crown Lands Act extends State jurisdiction out to 3 nautical miles offshore, what is known as the State Territorial Waters, beyond which is the jurisdiction of the Commonwealth Government¹⁴. The following from Farmer and Short (2007, p. 5) outlines the story of how this relationship began:

In October 2006 the New South Wales Department of Lands approached the [NSR] committee... and proposed that a new category of Crown Land be enacted through their Regional Reserve Strategy called a 'Surfing Reserve' (under the Crown Lands Act 1989). The reserves would follow the high water mark and extend 500m seaward, thereby encompassing the actual surfing site. They would be formally gazetted as a Crown 'Surfing' Reserve and managed by a local committee appointed by the Minister for Lands. The committee accepted this proposal. As a result Angourie was the first such NSW surfing reserve and was gazetted at the 2007 dedication.

The process for NSRs in New South Wales (NSW) is slightly different again. Committees are setup with support from Crown Lands Office, given funding of AUD\$10,000 for creating a booklet, plaque and ceremony, and allocated staff human resources in kind (a commitment estimated at AUD \$250,000 to date). Reserve extent intended to protect the break itself and it is left to the local community to decide how far along the beach it is extended. In terms of protection, one of the research participants provided the following explanation:

For those reserves within the state of NSW, any proposal determined to be a development immediately involves the Crown Lands office in the consenting process. This triggers planning mechanisms for stating objections or working to mitigate impacts, involving stakeholders and finally the right to a legal appeal.

Development proponents have to undertake an impact assessment to prove their proposal will not adversely affect the values and purpose of a reserve, or 'unacceptably reduce the... significance of the reserve'. One respondent from the Crown Lands office acknowledged that social values are harder to measure or quantify, but stated that the 'case law in relation to reserve types is well established for upholding their purpose if this is challenged legally'. All use immediately within a reserve must be consistent with its stated purpose.

One respondent suggested that statutory recognition in other Australian states is yet to be given effect because of the perception that gazetted reserves are potentially driven by 'anti-development' environmental activism in regions where the potential for coastal development is highly valued by those exercising the majority of political power. Respondents involved with NSR committees locally and nationally felt that the purpose of the reserves is driven less by environmental activism, rather more the sense of community it develops amongst all of the user-groups.

¹⁴ http://www.ret.gov.au/resources/Documents/upstream-petroleum/Australia%C3%86s_Offshore_Jurisdiction.pdf



Plaque at the Manly-Freshwater National Surfing Reserve. Photo: B. Peryman

6.2.1 Case Study: Bells Beach Surfing Recreation Reserve

The Bells Beach Surfing Reserve was dedicated in 1973 and covers a narrow strip of land including a carpark, walkways and beach access ramps leading up to the shore edge (unlike the gazetted NSRs in NSW which covers the ocean area from the MHWL), is listed on the Victorian Heritage Register¹⁵ and Australia's National Heritage List¹⁶ to protect its cultural heritage associated with surfing, is subject to the Local Planning Policy Framework for the Surf Coast Shire¹⁷ (equivalent to a local Council) and a specific Bells Beach Surfing Reserve Coastal Management Plan¹⁸ – prepared in accordance with the Coastal Management Act 1995 and the Victorian Coastal Strategy 2008. Despite

¹⁵ http://vhd.heritage.vic.gov.au/vhd/heritagevic#detail_places;12711 ; Heritage Victoria (2009). Bells Beach Surfing Reserve (VHR 2032). Victorian Heritage Database. Retrieved 11 November 2009 from

http://vhd.heritage.vic.gov.au/vhd/heritagevic#detail_places;12711

¹⁶ http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=105875

¹⁷ http://planningschemes.dpcd.vic.gov.au/surfcoast/ordinance/21_mss08_surf.pdf

¹⁸ Surf Coast Shire. (2010). *Bells Beach Surfing Recreation Reserve: Coastal management plan and master plan.*

these formal management documents and their subsequent processes, members of the local community remain threatened by the Surf Coast Shire's approach to management¹⁹.

The Surf Coast Shire is the delegated land manager for this Crown Reserve that forms the Bells Beach Surfing Recreation Reserve on behalf of Department of Sustainability and Environment (DSE)²⁰:

The Surf Coast Shire is the appointed manager of the reserve under the Crown Land (Reserves) Act 1978. As such they are required to manage the reserve in accordance with Victorian Environment Assessment Council recommendations from 2004 and the Victoria Coastal Strategy 2008. The Crown Land at Bells Beach was first set aside as a public purposes reserve in 1879, and has since been permanently reserved for the protection of coastline. These reserves are managed for appropriate recreational use whilst minimising impacts on remnant values and the coastal environment. Detailed planning is required for individual reserves such as Bells Beach to determine what uses should be permitted and provide guidelines for what facilities should be provided. Planning and management in these areas must also be given special emphasis to protecting their outstanding natural landscape qualities.

Any use or development of the Reserve requires consent from DSE under the *Coastal Management Act 1995*. As a Nationally listed Heritage place, the Bells Beach Surfing Recreation Reserve also falls within the jurisdiction of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 which creates special requirements for protection and conservation²¹.

6.3 Surfers Against Sewage (United Kingdom)

Surfers Against Sewage (SAS) have been operational within the United Kingdom (UK) for 23 years, established in Cornwall in 1990. They are a 'campaign-based' organisation that arose largely out of concerns about the quality of coastal waters and the impacts on surfers from raw sewage discharges into the marine environment. Surfers were getting sick and wanted to do something about it, and their actions evolved quickly to a national scale. The organisation consists of a Board of Directors which offers technical support, then a team of nine staff, five paid full-time, and 7,000 paying members in the UK²². Their approach is based on several key points that form the basis of each campaign:

- Using credible, independent information sources and objective science to demonstrate issues and the problems for surfing communities;
- Being solutions-focused and asking for common sense outcomes that are for the good of the people;
- Communicating in the relevant language, using humane responses and raising awareness for directing actions;

¹⁹ <http://www.surfcoastnews.com.au/2012/04/21/protecting-bells-beach-or-crunch-time/> ;
<http://www.surfcoastnews.com.au/2012/04/24/a-call-to-arms-to-save-bells-beach/>

²⁰ Bells Beach Surfing Recreation Reserve Coastal Management Plan 2010

²¹ <http://www.environment.gov.au/epbc/protect/heritage.html>

²² Comparatively, respondents referred to the Marine Conservation Society in the UK has approximately 4,000 members, roughly 50 fulltime staff and focus on producing scientific documentation which arguably has less of a direct impact on the shape of decisions affecting peoples access to, use and enjoyment of the coastal environment for surfing.

- Take people on the campaign journey, allow volunteers to take ownership of issues and present the progress being made

In 2009, SAS launched the 'Protect Our Waves' campaign²³:

...to highlight the value of surfing waves and locations to the UK government and encourage MPs to debate legislation in order to recognise the importance of waves as a cultural, social, economic and environmental asset to coastal communities. SAS believes that waves and surf spots deserve to be seen as part of UK heritage and should be afforded greater recognition and protection through debate and legislation.

Some of the significant challenges they have faced are substantiating the impacts on surfers for public officials who often want 'a smoking gun' for absolute proof of the problem source. However, SAS appears to be developing a more proactive response to the challenges they face by virtue of lobbying and aiming for interventions at a legislative level, as well as through changes to project impacts on a case-by-case basis.

This approach covers both grass-roots and high level promotion of surfing community values and needs, with at least two major successes in changing a European Union Bathing Water Directive²⁴, and formal recognition of recreational user groups as a stakeholder by the Scottish Government in the Scottish Marine Bill 2009²⁵. SAS are aiming to have surfing recognised within legislation for marine protected areas and marine spatial planning, and acknowledge that strategic environmental assessments make their role a lot easier, given proactive versus reactive campaigns are a lot less energy intensive.

In terms of real benefits for surfers in local areas, SAS has assisted in providing²⁶:

...free real-time alerts whenever sewage pollution reduces coastal water quality and poses a significant threat to public health

This is supported by a long-term focus on seeing the UK stormwater and sewage system upgraded, a cost which they estimate at around £50bn, considered as 'not impossible' given they have affected £12bn of funding for this cause so far.

Respondents outlined that the SAS campaign approach relies on effective communication to the target audience and sometimes leads to tension resulting from messages communicated in the media. The key point was that a message needs to be received and generate a response in order to be effective. How you reach various groups depends on the language, imagery and level of technical knowledge used.

SAS have specific policies for whom they receive funding from, based on their core principles and the imperative to maintain integrity in the eyes of their primary funders – their membership base in the surfing community.

²³ <http://www.protectourwaves.org.uk/>

²⁴ <http://www.sas.org.uk/campaigns/sewage-and-sickness/european-bathing-water-directive/>

²⁵ <http://www.sas.org.uk/news/2010/02/10/sas-celebrate-the-inclusion-of-recreational-water-users-in-the-scottish-marine-bill/>

²⁶ <http://www.sas.org.uk/campaigns/sewage-and-sickness/sewage-alert-service/>

6.4 Surfrider Foundation

“The Surfrider Foundation operates through a network of grassroots chapters who take volunteer action to protect our ocean, waves and beaches through campaign, program and educational initiatives in their communities” (Surfrider Foundation, 2013, website).

There is a Surfrider Global HQ in California and 83 chapters in the USA, then there are four major regional branches in Europe, Brazil, Japan and Australia and a presence in 20 countries with 81 live campaigns in USA in 2012. Since 2006, Surfrider claim to have registered 220+ ‘coastal victories’ defined as: “a formal governing body making a decision to leave an area better off than it was before”²⁷.

*The core activities and campaigns that the Surfrider Foundation uses to protect our oceans, waves and beaches fall into the categories of Clean Water, Beach Access, Beach Preservation and Protecting Special Places*²⁸

Under the Surfrider Australia ‘Endangered Waves Campaign’ is the following qualification for what amounts to an endangered wave²⁹:

An ‘endangered wave’ is one where the wave itself is threatened, or the immediate coastal environment and surfing amenity is threatened, by at least two of the following impacts:

- Coastal developments
- Accessibility or Overcrowding
- Polluted Water
- Visual Amenity (as seen from the surf & the shore)
- Ecosystem Integrity
- Climate Change

Surfrider has helped to create a marine reserve at Rincon, Puerto Rico – Reserve Marina Tres Palmas – which recognises the value of both the surfing areas and the coastal, marine and ocean ecology³⁰:

Rincon's unique character and precious natural resources are the economic engine of our community. Protecting them will work to ensure our future economic, cultural and aesthetic well being.

Another example of a significant influence Surfrider have generated for a local community is a campaign to deconstruct the now defunct Matilija Dam in the Ventura River in California³¹. Projects like this demonstrate that dealing with impacts on surf break locations relates to offshore and inland ecosystems as much as the immediate surf zone. This results in benefits for more than just surfing communities.

6.5 Save The Waves Coalition and World Surfing Reserves

Save The Waves Coalition is a global non-profit organization dedicated to protecting and preserving the coastal environment, with an emphasis on the surf zone, and educating the

²⁷ <http://vimeo.com/55404943>

²⁸ <http://www.surfrider.org/campaigns>

²⁹ <http://www.surfrider.org.au/>

³⁰ http://ww2.surfrider.org/rincon/jan14_2004.asp#english

³¹ <http://www.surfrider.org/campaigns/entry/bring-down-matilija-dam>; <http://matilija-coalition.org/>

public about its value... The organization now is involved with programs and campaigns in numerous countries worldwide, helping local organizations and individuals protect their own coastline. Save The Waves has also added proactive programs such as documentary films and research projects, to further educate the public about the high environmental, social, and economic value of pristine surfing coastline.³²

Save The Waves Coalition³³ (STW) is based in San Francisco and in partnership with NSR Australia, launched the World Surfing Reserves³⁴ programme (WSR) which is modelled on the NSR approach. WSR was:

...founded in 2009 by an international group of surfers, scientists & environmentalists to create a global model for proactive surf break protection and stewardship.

Other WSRs have been created in Manly, Australia; Santa Cruz, California (USA); Malibu, California (USA); and Hawaiian Surfing Reserves (HSR) were formally gazetted by an Executive Order in 2010, with the aim of: “recognizing surfing’s cultural, historic and sports significance and to promote protection of world-renowned surf spots... [HSR] also acknowledged that the legislative framework for Hawaii NSR was based on the NSR Australian model. It is anticipated one or more HNSR’s will become WSR’s” (Short & Farmer, 2012, p. 8).

WSR includes a ‘vision council’ setup to identify what the programme would look like, went through a process of nominating and identifying key spots and putting them in an order of priority. A total of 126 nominations were received from 34 countries (Short & Farmer, 2012). Each site they expect to establish they build a local community who supports the designation and create a book that describes the history and heritage of surfing in the area. It is primarily a symbolic recognition and awareness tool, the overall effectiveness of which is similar to that described in the outline of the NSR model above.

Save The Waves is also involved in supporting campaigns for protection of surfing spots through its ‘Endangered Waves’ programme, as well as research on the economics of surfing, including measuring the economic impact of surfing in local areas and also the socio-economic value of surfing resources to the wider community.

³² <http://www.savethewaves.org/about>

³³ <http://www.savethewaves.org/>

³⁴ <http://www.worldsurfingreserves.org>

Table 2: Summary of key international surf break protection methods in the NGO sector

Organisation	Key Approach	Strengths and Weaknesses
National Surfing Reserves	Recognise local surfing culture and quality of surfing waves; Community-based advocacy; Symbolic recognition; Gazetted surfing area and other land-based reserves (NSW).	+ Empowering for local surfing community; raising awareness and long-term view; effective local board structure. - Vulnerable to threats due to limited spatial extent; lack of ongoing funding for management capacity; limited impact on legislative framework.
Save the Waves Coalition / World Surfing Reserves	Recognise local surfing culture and quality of surfing waves; Community-based advocacy; Symbolic recognition.	+ Empowering for local surfing community; raising awareness and long-term view; increasing organisational capacity. - Vulnerable to threats – political corruption; lack of ongoing funding for management capacity; limited impact on legislative framework.
Surfrider International	Campaigns; Educational programmes; Litigation.	+ Diverse approaches and historical successes; expansive global network; well-established organisational capacity. - Costly litigious approach; limited impact on legislative framework.
Surfers Against Sewage	Campaigns; Community-based advocacy.	+ Effective communication; raising awareness and long-term view; increasing organisational capacity and credibility. - Limited impact on legislative framework.

7 Current Management Approaches in New Zealand

7.1 Overview

This section firstly presents an overview of management approaches taken to date by all the regional councils, and then all of the territorial (district and city) authorities adjacent to nationally significant surf breaks in New Zealand (see Appendix 3 for a map of territorial boundaries). A more detailed table and information on the context and surf break policy status for local authorities is provided in Appendix 5. Five brief case studies from regions in New Zealand who have significantly developed policy provisions for surf breaks are also included.

Of the 27 surf breaks identified in the NZCPS 2010:

- 7 of the 27 surf breaks have statutory provisions in place for their protection at a regional level;
- 17 of the 27 surf breaks are acknowledged in regional planning frameworks, but have no specific policy provisions in place;
- 4 of the 27 surf breaks have specific provisions in territorial planning documents; and,
- 4 of the 27 surf breaks are included in community-led management strategies

Of the 470 surf breaks identified in the Wavetrack New Zealand Surfing Guide (Morse & Brunskill, 2004), 120 are identified in statutory policy and planning documents. Six out of 12 regional councils are in the process of gathering background information on surf breaks in anticipation of preparing specific policy provisions for their respective regional planning framework. One out of the 10 territorial authorities with surf breaks of national significance is in the process of preparing policy provisions for surf breaks affecting their respective district planning framework.

The majority of all practitioners spoken to acknowledge the new NZCPS 2010 policies that provide for surf breaks and noted the level of public submissions and interest in protection coming from surfing communities in their area. The two main constraints over the implementation of planning and management approaches are a lack of methodological guidance, and political pressure from central government to prioritise other areas of resource management (e.g. freshwater management). Chapter 7 contains a more detailed analysis of the results.

7.2 Case Study 1: Auckland

Auckland Council was formed using unique legislation, the Local Government (Auckland Council) Act 2009, creating a unitary authority. In terms of planning, Auckland Council is required to prepare a Spatial Plan which was adopted on 29 March 2012, and publicly launched on 29 May 2012 as the Auckland Plan. Auckland Council is now in the process of preparing a draft Unitary Plan:

The Auckland Unitary Plan is a combined resource management plan that will include the Auckland Council's regional policy statement, regional plans (including the regional coastal plan) and district plan (excludes the Hauraki Gulf Islands District Plan). The Unitary Plan is the council's main tool for achieving integrated management of the natural and physical resources of the region and provides rules for what you can do on your land and property.³⁵

³⁵<http://www.national.org.nz/Article.aspx?articleId=39618>

Implementation is a big focus of the Auckland Plan and there are statutory requirements to report on integrated programme management on a yearly basis. Seventy per cent of the spatial area is coastal waters and amongst the implementation action ‘targets’ is a Marine and Coastal spatial plan – first expected for adoption in June 2014³⁶. More specifically, as part of the strategic direction for Auckland’s recreation and sport, is the following reference to surf break protection³⁷:

Strategic Direction 5 – Promote individual and community well-being through participation and excellence in recreation and sport.

...Priority 2 - Prioritise and Optimise Our Recreation and Sport Facilities, Public Open Space Use and the Capability of Recreational and Sport Organisation.

...Action 3: “Identify and develop protection plans for significant surf breaks along Auckland coastlines”

The Auckland Council is identified as the delivery leader for this directive, along with key stakeholders including Iwi, Surfbreak Protection Society, and the recreation and sport sector. There is no specific timeframe identified, although staff spoken to are confident there are substantial provisions for surf breaks within the draft Unitary Plan being released in early 2013. The Auckland Council is an area to watch in terms of the wording of policy provisions, spatially and strategic driven planning and Council-community relations, and the integration of statutory plans.

The work supporting surf break protection in the Auckland region pre-dates both the NZCPS and the formation of Auckland Council, including early identification studies conducted in-house during 2009 that began the development of surf break assessment criteria and underpinned similar work in the Bay of Plenty and Gisborne regions by Peryman (2011a, 2011b). This was put on hold while the amalgamation was occurring, but has been picked up again in the process of creating the Auckland Plan and the forthcoming Unitary Plan.

The methodology for conducting this work is ad hoc, although based on robust surveying methods, a relatively high level of submissions from the Auckland surfing community (compared with the overall number and focus of submissions on the Auckland Plan), and engagement with key stakeholders. Low resolution mapping of the swell corridors of significant surf breaks is currently the only form of spatial definition given, whether these are used for anything more than background information (e.g. as overlays) is yet to be determined. There are 33 surf breaks identified by Morse and Brunskill (2004) in the Auckland region.

7.3 Case Study 2: Bay of Plenty

Bay of Plenty Regional Council has recently prepared a variation to their proposed RPS to give effect to the NZCPS 2010 through a revised coastal chapter. Hearings were completed in November 2012 and a decision is yet to be released³⁸. In the proposed variation, surf breaks are provided for through the following policy that has been tested by Council in the recent Proposed Bay of Plenty RPS process (all bold emphasis added; NB sections of the full draft policy omitted):

³⁶ <http://www.aucklandcouncil.govt.nz/EN/planspoliciesprojects/plansstrategies/theaucklandplan/Documents/apimplemen-tationupdate.pdf>

³⁷ <http://theplan.theaucklandplan.govt.nz/wp-content/uploads/2012/06/Priority24.jpg>

³⁸ <http://www.boprc.govt.nz/knowledge-centre/policies/coastal-policy-review/>

'Policy CE 7B: Ensuring subdivision use and development is appropriate to the natural character of the coastal environment.

When assessing the effect of coastal subdivision, use and development on the natural character of the coastal environment, particular regard shall be given to:

(a) Maintaining coastal margins in a natural state and protecting the natural values of beaches and dune systems, including their ability to reduce the impacts of coastal hazards such as tsunami and storm surge;

(b) Avoiding the introduction or accumulation of man-made elements where none were previously present or obvious; and

(c) Avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects on;

...

(v) Regionally significant surf breaks and their swell corridors, including those at Matakana Island and the Whakatāne Heads

Explanation

Policy CE 7B recognises that in some areas natural character has been mapped and directs decision makers to consider the appropriateness of development having regard of policy CE2A and local scale considerations. Previously zoned or consented subdivision should be considered "appropriate". Part (a) applies only to the mapped areas.

The policy identifies particular elements, features and patterns which, if present, in the coastal environment require a higher level of protection from development in terms of avoidance, remediation or mitigation of adverse effects. This policy will ensure that subdivision, use and development are appropriate for the characteristics of the area and will not result in significant adverse effects on the natural character of the coastal environment.

Surfing is an economically and socially important activity in parts of the Bay of Plenty. Breaks such as Matakana (i.e. Puni's Farm) have featured in the international media and together with Whakatāne Heads are considered to be of regional significance. It is therefore appropriate that particular regard is had to avoiding, remedying of mitigating potential adverse effects on regionally significant surf breaks and their swell corridors.

Surf breaks are also acknowledged in the broad level description of the section on 'natural character and the ecological functioning of the coastal environment' (bold emphasis added).

*The natural character of the coastal environment includes: the dynamic coastal processes and ecosystems of escarpments, sand dunes, **surf breaks**, estuaries and salt marshes; significant landscapes and seascapes; geological features and landforms; sand dunes and beach systems; river outlets; sites of historic or cultural significance; and an area's amenity and openness, and in some places its remoteness.*

The regional council also initiated a Surf Break Study in 2010 (Peryman, 2011b) One member of the BOPRC staff acknowledges that proposed policy provisions for surf breaks have been influenced by the Bay of Plenty Surf Break Study and a range of 'eloquent' submissions by individuals representing Surfbreak Protection Society and Bay Boardriders Club during the hearings process seeking changes that were largely accepted. Recognition and support for identified surf breaks was also submitted by Ngati Tuwharetoa (BOP) Settlement Trust and accepted by Council. Requests for specific policies to protect surf breaks and to incorporate a specific set of assessment criteria were rejected by Council. The following are the key decisions affecting surf breaks³⁹:

Submissions 88-5, 55-323(f), 88-7, 55-324(f), 88-8, 55-325(f): The NZCPS directs that surf breaks (other than those of national significance listed in Schedule 1 to the NZCPS, of which none are located in the Bay of Plenty) are recognised and protected in terms of their contribution to natural character. It is anticipated that surf breaks will be included in the assessment of natural character in the coastal environment (directed by Method 6) in line with the guidance given by Policy 13 of the NZCPS. Specific identification of regionally significant surf breaks is not directed by the NZCPS but may be an appropriate issue to consider during the statutory review of the Regional Coastal Environment Plan which is to be undertaken in 2011/ 12. It has been recommended in relation to Policy CE 10B, that surf breaks are added to the criteria to be considered when allocating space in the coastal marine area.

Submissions 33-1, 55-94(f), 33-43(f), 88-1, 33-45(f) 55-101(f) 55-113(f): It is appropriate to recognise that natural character may include landforms (including surf breaks) as directed by policy 13 of the NZCPS.

The proposed RPS is currently subject to appeals on the recommended version from the Council Hearings. A statutory review of the RCEP is being drafted and is due for publication in 2013 – the background report document released in April 2012 does not specifically mention surf breaks⁴⁰. Boffa Miskell have conducted a natural character assessment which informs both the RPS and RCEP, in particular, this affects policy and methods relating to mapped areas. This assessment does not specifically acknowledge surf breaks and assessment criteria developed within the Bay of Plenty Surf Break Study were not formally considered.

Provisions requiring that surf breaks be added to criteria when considering spatial allocation in the CMA have not been included in the proposed variation. It should also be noted that the proposed variation includes a method for the identification of areas for restoration or rehabilitation of natural character in the coastal environment – this may apply to the artificial reef structure at Tay Street as much as it might to terrestrial components of the coastal environment.

The information guiding the development of surf break provisions came from submissions, evidence presented at hearings, internal investigations, and the Bay of Plenty Surf Break Study. The surf break study published in April 2011 was not formally approved by the Regional Council, but is being drawn on by planning staff in the draft Regional Coastal Environment Plan. The Morse and Brunskill (2004)

³⁹ http://www.boprc.govt.nz/media/164174/council_s_decisions_on_submissions_coastal_environment_report.pdf

⁴⁰ http://www.boprc.govt.nz/media/212354/regional_coastal_environment_plan_review_report.pdf

guide was referenced and used in this study to identify 33 surf breaks of regional significance within the Bay of Plenty.

7.4 Case Study 3: Gisborne

Resource management issues in the Gisborne area are primarily the jurisdiction of a Unitary Authority, Gisborne District Council, that oversees the functions of both a district and regional authority. There are 6 nationally significant surf breaks in the region and a background study on the identification and protection of further surf breaks in the Gisborne District was published in 2011 (Peryman, 2011a). The aim of this study was to develop an understanding of what is necessary to identify surf breaks and their associated values to provide for their sustainable management in the coastal environment under the RMA.

There is a significant proposal for co-management of Makorori Beach which includes a specific objective to 'encourage the sport of surfing in establishing the first dedicated Surfing Reserve in New Zealand'⁴¹. This involves a local Ferris Family Trust that owns the land and has entered into a co-management agreement with the Gisborne District Council. The co-management plan identifies a range of issues concerning this area including a need to preserve the integrity of the natural character of the coastal environment through dune care and avoiding coastal erosion effects, the range of significant sites and cultural values associated with the location for Maori, the safety of access across a busy trucking route to what is a popular recreation spot in general, and the more recent history of the location as a highly valued surf break environment.

The plan includes significant changes to the way the area is able to be accessed by the public, with a solid traffic bollard along the edge of State Highway 75 heavily restricting access points to two specific locations. There is also the possibility that the access points will be chained-off overnight. NZTA-led and GDC consented changes to this area are largely predicated upon the need to secure the safety of public access along a busy highway and to restrict vehicle use affecting the natural values and existing vegetation. Access was previously undefined and some surfers had previously removed lighter-weight bollards put in to restrict access at certain points.

Currently, moves are underway to explore the various statutory management tools that will solidify the co-management plan including under the Reserves Act, and using bylaws enabled by the LGA 2002. The Ferris Family Trust is reportedly open to input from the community and interview participants suggested the co-management plan could be used as a tool to develop planning processes for the wider area to facilitate engagement between the co-management partners and the broader public. One participant suggested 'the element of private ownership of the reserve has been largely unrecognised by the public' and there is an active role in strategic planning for coastal areas that the surfing community should take ownership of. This participant felt there is a general awareness in the public of what the RMA is and how it can be a mechanism for ensuring their interests are preserved, and that this is leading to the community 'getting into a more proactive role'.

A range of surf breaks around the township of Gisborne are also adjacent to on-land reserves and the identification within the NZCPS 2010 is a strong step towards taking actions. Surf breaks not in

⁴¹ http://issuu.com/designartsnz/docs/maka_surf_park; http://issuu.com/designartsnz/docs/maka_point_plan

the main Gisborne township area were identified by Peryman (2011a) and also possess significant values.

There are currently no statutory processes in place for developing management approaches specific to surf break environments in the Gisborne region. Gisborne District Council's LTP 2012-2022, Year 1-3 work programmes specifically includes protecting surf breaks of national significance and other aspects of managing the coastal environment that relate to surf breaks⁴².

A background report was completed in June 2011 and formally adopted by Gisborne District Council⁴³. Morse and Brunskill (2004) identify 31 surf breaks in the region. The Operative RPS refers to submissions from surfers in the introduction to the coastal management chapter⁴⁴.

7.5 Case Study 4: Taranaki

Taranaki Regional Council (TRC) was the first local authority to provide for surf break protection under the RMA. The Taranaki Regional Policy Statement 2009 recognises 81 surf breaks that are important to the region. The list of breaks was based on TRC's Inventory of Coastal Areas of Local or Regional Significance in the Taranaki Region⁴⁵ (Taranaki Regional Council, 2004), the *Wavetrack New Zealand Surfing Guide* (Morse & Brunskill, 2004) and on consultation with local board-riding clubs (Taranaki Regional Council, 2009). The Taranaki Regional Coastal Plan (1997) also refers to the regional amenity value of a list of coastal areas including Stent Road and the Waiwhakaiho River Mouth and numerous other surf break locations both within the New Plymouth District and wider Taranaki region⁴⁶.

The 81 breaks in Taranaki's Regional Policy Statement (RPS) are mapped showing the location of an individual surf break or by a line extending along the coast where there is a surfing area. Some breaks are within a yellow shaded area identified as a "coastal area of local or regional significance" but it is not clear if the extent of the shading reflects the spatial area of the surf break. No further information is provided within the Taranaki RPS regarding the values of the different breaks or whether some are more significant than others. There is also no statutory link between the wording of the policies and the surf breaks shown in the RPS maps.

The Taranaki Regional Coastal Plan (RCP) is currently being reviewed and staff are in the process of collecting information in broad terms, analysing the NZCPS and gathering data. The RCP is the priority ahead of a change to the RPS, given satisfaction levels with the broad framework the RPS provides. The primary issue is how to deal with the concept of swell corridors, given the Taranaki Coastal Marine Area is effectively one big swell corridor for the 81 surf breaks identified in the RPS. Another challenge is balancing the level of resourcing put into data collection, given the broad range of issues to be addressed in the NZCPS. There are provisions also for the removal of redundant structures, some of which are responsible for enhancing surfable wave quality at particular locations in the Taranaki region. The two TRC staff interviewed both considered that a broad policy framework could include particular directives for:

⁴² <http://www.gdc.govt.nz/assets/Files/Ten-Year-Plan/2012-2022/Environmental-Policy-Activity.pdf>

⁴³ www.gdc.govt.nz/assets/Files/Environmental-Planning/RCEP-Surf-Break-Report.pdf

⁴⁴ <http://www.gdc.govt.nz/assets/Files/Planning-Policy/Regional/Policy-Statement/Chp-6-Coastal-Management.pdf>

⁴⁵ This document was prepared largely as an evaluation of the degree of public access to sites on the coast considered significant for recreational, cultural, ecological, and amenity values.

⁴⁶ <http://www.trc.govt.nz/assets/Publications/regional-coastal-plan/coastal-plan-index/3.-Issue3-mar2011.pdf>

- EIA to include surf break assessments;
- Monitoring and collection of baseline information;
- Assessing values, tracking changes against baseline information and assessing the acceptability of changes occurring; and,
- Adaptive management requires robust conditions and methods for monitoring

Land use and development impacts and access to the coast are considered primarily to be the responsibility of district and city councils. Conversations with the two councils with jurisdiction relating to the nationally significant surf breaks in the region are aware of their responsibilities and awaiting further policy development at a regional level before creating specific provisions relating to surf breaks.

In Taranaki, there is historically a significant contribution from the surfing community to seeing surf breaks recognised in plans and the knowledge of how they work that is vital to ensuring they are protected. Comments were made by both planning staff at TRC and a member of the local surfing community about the involvement of stakeholders like the Surfbreak Protection Society where the intention of ‘finding common ground’ has been successful in the past (there were no appeals taken to the Environment Court against decisions made on submissions and RPS hearings). Adding information on coastal values through schedules and planning maps is one proposal for increasing the efficiency and effectiveness of the Regional Coastal Plan (Taranaki Regional Council, 2010).

7.6 Case Study 5: Canterbury

There are two surf breaks of national significance in the Canterbury region, identified at Maungamanu and Meatworks in the coastal environment of Kaikoura. These fall within the jurisdiction of the Canterbury Regional Council (ECan) and Kaikoura District Council (KDC). Morse and Brunskill (2004) identify 45 surf breaks in the region.

The governance situation in the Canterbury region is unique as a result of intervening legislation from the central government through the Canterbury Earthquake Recovery Act 2011 and the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010. This legislation places a firm emphasis on freshwater management and earthquake recovery which is resulting in less resourcing for coastal management issues, as well as the removal of elected representation and limited appeal rights for regional resource management issues.

The Canterbury RPS became operative on January 15, 2013 and contains requirements for a coastal strategy to be developed within 5 years of the RPS becoming operative. The RPS also contains specific provisions for protecting the two surf breaks of national significance and identifying surf breaks of regional and national significance in the area through the use of objectives, policies and methods⁴⁷.

The hearing commissioners accepted that it was reasonable to give effect to the NZCPS over time. ECan are currently in the process of developing a change to the RPS to give effect to the NZCPS, although this is in the early stages of preliminary analysis and there is no timetable for

⁴⁷ <http://ecan.govt.nz/publications/Plans/crps-chapter8.pdf>

notification. The Canterbury Landscape Study was conducted by Boffa Miskell in 2009 as part of the Canterbury RPS review. Being released prior to the NZCPS 2010 gazettal, it does not contain analysis of surf breaks as part of natural character of the coastal environment. This serves to highlight the importance of the NZCPS 2010 policies as in this and other landscape studies surf breaks have not been included⁴⁸. It is expected that the review of the RCEP and the RPS will fully implement the NZCPS, and provide direction for local authorities.

The Kaikoura District Council (KDC) manages planning and activities on the land adjacent to the surf breaks of national significance. KDC is conducting a gap analysis of their district plan, looking for compliance with the NZCPS, and their landscape overlays are also being reviewed. This work is due for completion in February 2013, along with a project to develop a management plan for the Maungamanu area with community input on reserves and roading safety and access issues to be sought in the process. KDC also installed a toilet at Meatworks surf break which is maintained by Kaikoura Boardriders Club and considered a great outcome in terms of a community partnership.

KDC is also a major partner in the Te Korowai Strategy⁴⁹ released in October 2012 after 7 years of community-led research and collaborative partnership building. The strategy is focused on marine biology and management, and is viewed as a platform for boosting the prioritisation of coastal issues at a regional level⁵⁰. It identifies the two NZCPS 2010 surf breaks of national significance and a further eight surf breaks of 'regional significance' to the wider Kaikoura area (based on an informal assessment). Various statutory and non-statutory mechanisms are being considered for implementing this strategy, including a request for a separate Act of Parliament.

KDC staff have approached Lincoln University School of Landscape Architecture to offer the area adjacent to Maungamanu as a site for a major design design by 4th year honours students. KDC is also a gold certified Earth Check sustainable tourism destination with a strong educational and non-statutory focus on its environmental responsibilities.

⁴⁸ For example, see Statement of Evidence by Brown (2012) on the Proposed Waikato Regional Policy Statement, retrieved 8 September, 2013 from <http://www.waikatoregion.govt.nz/PageFiles/21512/7%20June/item%203.pdf>

⁴⁹ http://fishnet.co.nz/teamkorowai/docs/Kaikoura_Marine_Strategy_lo_res.pdf

⁵⁰ For more information see:

- Press release: http://fishnet.co.nz/teamkorowai/docs/Te_Korowai_launches_the_Kaikoura_marine_strategy.pdf
- Dec 2012 newsletter: http://fishnet.co.nz/teamkorowai/docs/newsletter_10_dec_2012.pdf

8 Components of effective surf break management

8.1 Identification of major themes

The following outlines the broad level themes that were identified from analysis of surf break management information, along with their associated sub themes. These are discussed in turn.

- *Theme 1: The policy framework.* Includes the integrated hierarchy of tools that guides the structuring and delivery of planning processes, mechanisms and associated work programmes to achieve sustainable management of the natural and physical environment. Sub-themes include:
 - *Issues and limitations on surf break policy implementation*
 - *Alternative policy framework and planning approaches*
 - *Tools for the 'bottom end' and policy acceptance*
- *Theme 2: Technical knowledge.* Includes the knowledge that informs the practice of planning and the decisions made both within the formal policy framework as well as outside of it. Sub-themes include:
 - *Workflow and policy-making processes*
 - *Developing policy based on science*
 - *The limitations of technical knowledge*
- *Theme 3: Local and indigenous knowledge, values and community interest.* Includes aspects of knowledge and information exchange, and relationships between individuals, groups and their environments. Sub-themes include:
 - *Perspectives on space*
 - *Place-based advocacy*
- *Theme 4: Effects on surf breaks.* Includes impacts and threats to surf breaks and subsequent effects. Sub-themes include:
 - *Human impacts*
 - *Balancing acts*

8.2 The Policy Framework

8.2.1 Issues and limitations for surf break policy implementation

There are a broad range of issues affecting surf breaks from a statutory planning perspective, including providing for the natural character of the coastal environment, recreational access, water quality issues, and involvement and collaboration with various authorities and organisations (to identify some of the dimensions). One respondent suggested that surf breaks are a symbol for

management of the coastal environment, “a microcosm of all the issues facing the coastal environment and users”.

The need to facilitate different interests, incorporate qualitative values and generally bring about more collaboration and partnership during the planning and policy process was consistently identified by respondents. These interests are discussed in more detail further in this chapter (technical knowledge and local knowledge). It was acknowledged that “there is a lot of noise coming from surf break interests”, and “communities are becoming more aware of RMA planning processes and acting more proactively and strategically as a result”. One respondent felt that the presence of specific policy provisions for surf breaks in the NZCPS exemplifies this fact.

Public engagement with the NZCPS is limited, and the strong presence of surfing interests was somewhat of an anomaly, “...the audience is mainly planners, lawyers, people who are deeply involved in implementing the RMA... it’s not a general public, user-friendly kind of document”. There is a tendency for planners to rely on “the normal planning process [to] flush out what people who use the breaks see as issues in the area”, meaning there is often an assumed level of capacity amongst surf break stakeholder groups to present these issues.

The plan-making process is a finer-grained level of detail than the submission process... topics like this require champions within the plan-making process, as opposed to just relying on some submitters being organised and mobilised and giving some science and being in tune with the process.

Although good submissions are acknowledged as having an influence in the formation of policy and planning documents, pulling this work together is largely reliant on a few individuals working voluntarily in the typically under-resourced NGO sector. As one respondent suggested, “you can have coastal management policy and plans but enforcement and maintenance is important... you need a networked voice-piece”. As a result, there is a general emphasis on the need for more partnerships and collaboration between the various interests in surf break protection, including Maori, and the agencies responsible for implementing statutory policies and plans. Respondents who spoke to Maori perspectives identified several examples of this need for partnership, and the responsibility to base relationships on the Treaty of Waitangi, first and foremost:

[There is a] fundamental responsibility of any planner, any organisation in this country to recognise the Treaty of Waitangi... partnership is one of the key parts of that, partnership and dialogue... it’s about knowing how to approach people respectfully

The lack of space for different perspectives on the environment leads to a clash between the layers of governance imposed by the RMA and LGA, the ‘watering down’ of plans, and the lack of a holistic approach in dealing with resource management issues:

When you talk about reserves, I guess it’s that holistic view, we don’t carve up the ocean. Those things have been imposed... those ideas of a marine reserve, fishing reserve, rohe moana, that carving up of things that are, perhaps they are tools that we find difficult to use because we recognise the sea as one, they are one entity, and we find it difficult to divide things as to responsibilities, zones of responsibility I guess, over this space.

Indigenous Maori ethics and perspectives suggest “you need to protect more than the waves in that space”, stating that “cultural practices are critical to recognise when planning”. Four respondents felt the effectiveness of Maori environmental management approaches is affected by the current methods for RMA and LGA implementation, an example being the lack of recognition for Hapū and Iwi Management Plans:

An iwi management plan is RMA-prescriptive, it is divorced from the customary fishery... so how can you deal with holistic people when you've only got parts of the pie on the distribution of resources?

Maori management plans are at the bottom of the heap, they're looked at but not really implemented effectively. You have sections 5-8 of the RMA, but when you really look at whether in fact places, these things and relationships are recognised and provided for... not really.

Some of these clashes in terms of priorities and the limitations of jurisdiction are also represented in the comments from staff in local authorities. National level directives to focus on freshwater management are exemplified by the situation in Canterbury where the regional council was removed in order to prioritise water management. A number of different Regional Councils also stated they are waiting for the outcome of statutory directives from the Land and Water Forum⁵¹ before completing reviews and drafting second generation plans. This in turn means delays to the hierarchy of plans falling out of the regional planning framework, which creates uncertainty for how the NZCPS might impact on their activities in the local areas where surf breaks are known to exist.

The dominant issue and limitation for territorial authorities undertaking surf break policy implementation was that it is “hard to understand how [surf breaks] could be impacted by land-based activities”, and that “our jurisdiction is limited, we don't control the CMA”. The role in maintaining general provisions for access to the coastal environment was generally recognised across the board, and suggestions were made for how District Plans could identify where future esplanade reserves could be located should a subdivision be proposed in the proximity of a surf break. The role of territorial authorities in providing space for car-parking and basic facilities for coastal recreationalists is also acknowledged, for example, Kaikoura District Council has been proactive about working with the local boardriders club to provide toilet facilities at one nationally significant surf break (before it was identified in the NZCPS).

8.2.2 Alternative policy frameworks and planning approaches

There was a range of different options and combinations of approaches suggested by respondents to achieve sustainable outcomes for surf breaks. See Appendix 4 for a full list of identification of mechanisms and suggested mechanisms either in use or potentially applicable.

In terms of a policy framework, there was strong favour for integrated catchment management planning and setting a “robust but flexible framework” within regional policy statements. Matters concerning hierarchy were discussed, in particular the level of protection that is afforded within objectives, policies, methods and rules in plans. For example, it might be that the physical area

⁵¹ A national level Government supported consultative forum of stakeholders, NGOs and experts focused on freshwater and land issues.

where surfable waves are ridden should be areas given the highest level of protection, and then a hierarchy of measures relating to associated values be considered with varying degrees of discretion based on surf break environment impact assessments:

What is more preferable, therefore, is a planning framework that requires a Surfing Impact Assessment as part of an application for a marine activity in a swell corridor.

Mapping was also discussed, but was considered difficult given the “very fluid and dynamic environment you are dealing with”. One respondent felt that drawing lines could open Councils up to litigation and ultimately become a costly exercise:

...better to have a robust policy framework and strong scientific or technical data before it, then assess each application on a case by case basis, rather than try to give all the answers before the planning framework is prepared and reflect these on a map.

In this context of limited and imperfect information, practitioners suggested they would adopt a precautionary approach and use adaptive management techniques to surf breaks, highlighted by this comment:

The Coastal Plan is likely to adopt a precautionary approach and use adaptive management techniques to surf breaks, where full information is not available the Council will be cautious if it's possible there will be an adverse effect and get more information and studies produced.

Respondents involved in planning practice also commented that this approach requires robust conditions on consents and guidance for monitoring, both of which can be stipulated in plans where surf breaks are potentially affected. Several respondents suggested it was important to acknowledge you can never have ‘perfect knowledge’ in any given resource management decision-making context. Adaptive management is therefore considered a suitable approach:

It bends the rules to suit the environment that it applies to and the values at risk. It is how you can partly deal with that lack of information, there is never enough but you still have to make management decisions.

...with sand mining the same approach could be done... [there is] never enough [information] but adaptive management can provide this while still making management decisions. Maybe 10 or even 30 years to see what effects manifest. This is the time frame development interests need to work within.

8.2.3 Tools for the ‘bottom-end’ and socialisation of policy development

The ‘bottom-end’ of the policy framework refers to where policies and plans meet the communities (and environments) subject to the outcomes of formal decision-making processes. Aside from identification of the statutory mechanisms available to planners, there were a number of specific comments about involving key stakeholders in the maintenance of coastal management policy and the ‘community buy-in’ this can generate.

National Surfing Reserves (NSR) were explored as a method for achieving this, based on their track record in Australia. There were two clear sides to the argument about the effectiveness of the NSR model, with one respondent suggesting they appear “more of a publicity stunt than the introduction

of a robust structure” to support the protection of surf breaks, but there is little doubt they are a “symbolic starting point for... making people understand why to protect the coast – more of a metaphor”. Respondents involved with National Surfing Reserves in Australia considered them an important way to get community involvement that is also cost-effective for the government.

A ‘reserve’ has the ability to penetrate people’s awareness on entry... awareness is paramount, a policy can get lost.

NSR proponents suggest that some variation of the NSR model may be a suitable option for developing the capacity for surfing community interest groups to participate in a protection programme supported through the formal planning framework. One respondent suggested it is a strong way to empower the local community:

By developing a reserve or some management system, first of all you empower the local surfing community, not only recognising that this is an important spot where they get stoked, their break is recognised not only for the quality of the surf but the cultural ties there... it gives a formal group to work with the land managers in the management of the area... socially it lifts both the awareness of locals of the importance of their break and what makes the coast a good location (e.g. geomorphology). It also empowers them in their ability to contribute positively to the management of that break.

The credibility of grass-roots organisations is critical in how they are perceived by the local community they claim to represent, with one respondent suggesting you need local surfers involved “who have respect from other locals who are happy for them to speak on behalf of them”. This credible reputation also applies to the authorities with whom they wish to engage and enter management partnerships. For Surfers Against Sewage in the UK, after 23 years of campaigning and the ‘experience of battles over time’, reputation is important to their increasing number of successes, the “groundwork [is] done, authorities can see you can use their systems and have exposed inadequacies”.

Monitoring was also commented on by practitioners with experience in researching and application of coastal science in a policy context. There were concerns expressed about a narrow focus in ecological features and a general lack of awareness of surf science related technology:

The technology is there to do everything you could possibly want [for monitoring]... we see a huge overemphasis on anecdotal evidence and it’s frustrating... we have all these tools but we very rarely see them used in the appropriate ways.

Respondents suggested that there are two levels that monitoring could occur, beginning with cameras and better engagement with regular users of the surf, invoking their role as ‘stewards’ and better relations with local Kaitiaki. Respondents pointed to the number of cameras on Australian beaches and the success of Surfing Reserves in raising issues, just through having “eyes on the beach”.

At the very least, each one of those nationally significant surf breaks should have a time-lapse camera on it... it’s a small cost.

Cameras were considered useful for capturing human use values, such as headcounts of numbers of people on the beach, and keeping records of wave quality, consistency and correlating these with hindcast data of the wave climate (e.g from offshore buoys) to moderate and identify both typical and optimum surf break conditions.

The next level up is undertaking more in-depth site-surveys to understand the physical make-up of each surf break and the preconditions that make it work. Studies to engage local communities to better understand cultural and social values were also suggested as part of site assessments.

The costs of undertaking monitoring was mentioned as a barrier to making better decisions about surf breaks, “no-one is going to go to that expense for no reason”. This message came from practitioners and individuals involved in NGOs, especially concerning the lack of “funding to resource the management and evidence-based policy”. Although the benefits of having this data collected will have a positive flow-on effect, “once you’ve got the data, you have every surfing student in the world wanting to do something with it”; and academic research was also referred to as a way to “focus on science not politics” when making policy decisions, given the gap in information identified in New Zealand.

Natural character assessments undertaken for regional policy-making purposes have so far failed to identify surf breaks beyond basic mention of their presence within Policy 13 of the NZCPS, identified in one criteria set as ‘perceptual values’. One practitioner noted that “identification criteria and methodology is uncertain, but we will engage stakeholders”, which was also the attitude of several other practitioners who felt the involvement of key stakeholders in the surfing community (e.g. SPS) would be important to developing robust provisions for surf breaks.

The key elements identified as important to the acceptance of policy were early engagement conducted over time, the intention of ‘finding common ground’ through dialogue with stakeholders before drafting provisions in order to get clarity on issues and responsibilities, and sound information identifying spaces and values. These responses are displayed by the Taranaki Regional Council approach to an extent, where “there were no objections or dissenting submissions challenging surf break provisions being provided for in the RPS”, suggesting their approach has been successful to date.

8.3 Technical knowledge

Table 3 outlines some of the key disciplinary areas, knowledge, skills and expertise identified in this research, based on comments in response to specific questions about the type of expertise, skills and understanding required to effectively provide for the management of surf breaks.

Table 3: Examples of disciplinary areas, knowledge, skills, and expertise relevant to surf break management

Discipline	Knowledge components	Key skills and expertise
Coastal planning and management	Planning framework and statutory responsibilities; current and potential impacts from poor water quality, loss of access and inappropriate development; coastal management theory; recreation and coastal use conflicts	Incorporating a broad range of information and scientific data into policy/plan/decision-making process; strategic environmental assessments; impact assessments; application of The Treaty of Waitangi/Te Tiriti o Waitangi; use of planning support systems (e.g. GIS)
Coastal Science (Geographical, Ecological and Environmental)	Systems found in the coastal environment, including connections with land-based, freshwater and wider marine biology (e.g. the 'mixing zone', confluence between land and marine ecosystems); ecosystem health and integrity; spatial variability and complexity (biophysical and human); physical and metaphysical phenomena	Conduct assessments and measurements of these systems and transfer knowledge to a format and language able to be applied in a policy context and to inform communities of interest; mapping and understanding spatial interactions and relationships
Coastal Science (Oceanography)	Coastal geomorphology (e.g. seabed features), hydrodynamic elements and functions (e.g. tides, currents, sediment flows); and climatic influences (e.g. swell generation and corridors, wind, climate change)	Mapping (e.g. bathymetry; oceanographic); numerical and physical modelling and measurement of physical processes; correlation with quantitative and qualitative physical assessments (e.g. surfability)
Social science and cultural studies	People's values and the meanings attached to various patterns, energies and phenomena of human and natural life-forms associated with surf breaks	Robust authoritative recording and reporting of diverse, variable and subjective information
Law	Statute, policy provisions and case law interpretations and their applications in practice	Writing formal submissions, support mediation and present cases to hearings and the Environment Court
Health sciences	Health impacts (positive and negative) of coastal environment on human population, particularly in relation to recreation as it affects personal, family and community wellbeing	Provide guidance, conduct assessments and measurements for policy uptake and public information
Surfing and coastal recreation	Local and regional values and changes/effects of various conditions for surfing, including seasonal changes; cultural connections and	Ability to provide ongoing information about a range of beach conditions; interact with planners

	social circles, including historical information; identifying and accessing surf breaks, particularly in remote areas	seeking authoritative information; describing waves, skill levels, surfing equipment, surfability of waves
Landscape Architecture and Planning	Broad landscape and seascape values and regional concepts, appropriate design interventions and applications	Provide guidance, conduct assessments and measurements for policy uptake and public information; designing to facilitate human use of the landscape
Creative Arts, Marketing, Communications and Public Relations	Communicating key messages and 'repackaging' information for different audiences	Interpretation of key pieces of information and presentation of these through choice and application of effective media, including print, social, visual and artistic expressions of words, images, sounds and forms
Recreation planning	Events, facilities and general recreation amenities for access to, use and enjoyment of the coastal environment; tourism management; beach safety	Asset management; strategic planning and assessment; recreation promotion; communication of important information (e.g. signage for educational, health and safety purposes)
Kaitiakitanga / Stewardship	Indigenous perspectives and values associated with care for the environment and everything in it, including as a food source/mahinga kai	Application of tikanga, kawa and indigenous values in planning for, monitoring and adapting the physical environment; application of Te Tiriti o Waitangi (Treaty of Waitangi)
Economics	Impacts and value associated with surf breaks as a natural asset and the activities related to their access, use and enjoyment	Economic assessments, studies, analyses and evaluations of costs and benefits
Professional facilitation	Group dynamics; conflict resolution	Fair and balanced design, convening and reporting of forums, events and meetings; building relationships and collaborative partnerships
Academic enquiry	Contemporary, theoretical and methodological issues for practical societal needs and challenges	Development of new methods for rigorous inquiry and analysis of contemporary issues; support for practical uptake, presentation and contextualisation of findings.

8.3.1 Workflow and policy-making processes

Respondents identified two aspects of workflow surrounding policy formation in response to questions about the adequacy of existing knowledge to support management approaches.

The first is the impact of political agencies in positions of power on information gathering and attempts at building partnerships. In New Zealand, respondents in policy positions often commented that resourcing of work programmes for gathering background information was politically driven, especially from central government and that this leads to coastal issues being given a lower priority. A preference for freshwater management responses and enabling of economic development interests, in particular were identified.

Overseas, one respondent from SAS suggested that after 23 years and lots of “banging heads against walls”, they have a more credible reputation with decision-makers:

The groundwork [is] done, authorities can see you can use their systems and have exposed inadequacies

SAS, as a group that exists outside of the policy and decision making framework, has focused on education around issues. This approach has two dimensions: raising awareness and advocating solutions within political circles with the intention of “blending in” changes that better reflect surfing needs; and through advocacy campaigns targeted at gathering sympathetic public support nationally, and “bringing supporters along for the journey” at a local, site-specific level.

The second major focus was on the lack of robust methods for transferring science to policy. One respondent posed the specific question of how “to give meaning to qualitative values within the policy framework”. Another two respondents, both coastal policy specialists questioned the workflow that some practitioners go through to incorporate important information in the policy development phase. This is perhaps best highlighted by the following comment:

...this is part of the problem, you have a big pile of facts and documents, and people's decision is to say that's too many I can't deal with that, let's forget about that and now let's make some policy... the workflow I'd like to see more of is reading a pdf, coding bits that are really important and those segments of info get exported out and then they become the things we action and look after and do something with – so not everyone has to read the 200 page reports.

Some examples of the techniques identified by respondents for gathering information on surf breaks include:

- Web-based mapping for gathering spatial information;
- Validating desktop data through stakeholder engagement and “the wisdom of the crowd”;
- Commissioning of academic research;
- Strategic environmental assessments (e.g. natural character and landscape assessments) and background studies.

Several respondents noted that information gathered can feed into a range of other policy or plan-making processes as well as helping to shape the prioritisation of staff work programmes. This is reflected in one comment in response to questions about the expertise of planners:

... good planners can translate scientific information into good policy, methods, controls on activities ...

Another respondent suggested that in general, good planning and policy making requires, “an understanding of the policy framework and the ability you have to control impacts and effects”, and also suggests that interested parties “get in touch with their local planning framework”. Respondents involved with the NSR programme in Australia note that integration with the formal planning framework is not really happening yet: “that’s something we could do a little more work on ... go into more detail”.

One respondent working at the national level of policy formation in New Zealand commented on public reaction to issues, noting that it is often different to issues addressed by the scientific, planning and researcher community. They considered this as important in terms of what gets dealt with in policies and plans. This tension of ‘expert versus local knowledge’ is reflected also in comments relayed by another respondent, noting that District Councillors had expressed issues around expert-driven assessments conducted for a statutory review of regional policies.

Most respondents acknowledged that to date, surf breaks are not well-reflected in assessments of natural character in the coastal environment. One respondent working at a national level of policy formation suggested that “achieving an adequate level of protection will arguably require guidance”. Some respondents suggested that effective recognition of the natural characteristics and cultural aspects relating to surf breaks could require ‘champions’ within policy-making teams:

Councils will need to have at least one staff member working on coastal policy who is aware and has a basic understanding of the issues affecting surf breaks... the basic mechanics of how they are generated, and swell corridors... for coastal planning you need a wide range of knowledge on different topics, and this is one of them.

8.3.2 Developing policy based on science

A broad policy framework requires detailed scientific background with reports that explain how surf breaks work that justify the policy. The weight of that policy depends on what lies behind it, the knowledge of the resource you are dealing with. Good information is vital to good policy, even if it is broadly based.

The quote above highlights the views expressed by most respondents speaking from coastal science, policy and planning positions. It was also expressed by respondents involved with NGOs overseas who have, over time, developed credible relationships with policy-makers by focusing on the use of impartial scientific perspectives on the issues affecting surfers.

Practitioners generally suggested they would rely on a precautionary approach and favour adaptive management techniques in the absence of full information, dealing with issues on a case-by-case basis. Those operating outside of the policy framework expressed a general desire to be innovative

and lead positive change and trends towards sustainability of the coastal environment – based around the symbol of surf breaks.

8.3.3 The limitations of technical knowledge

Respondents with coastal science and planning backgrounds generally acknowledged the importance of accepting the complexity of the coastal environment: “[surf breaks] are in such a dynamic environment it is going to be very difficult to gain a perfect knowledge”. Climate change and the impact of changing sea-levels, ecological knowledge, and the variable nature of wave conditions and coastal geomorphology were all considered as technical areas requiring specific expertise to support better understanding of surf break dynamics. One respondent also noted that surfers too may lack wider understanding of the characteristics that create surf breaks, affecting their input to policy formation:

Language is important to get this [complexity] across when some surfers don't even understand that [natural system interdependence, scale]

Specific comments were made about the need to capture and monitor values beyond the biophysical character of surf break environments, including the recreational and amenity values associated with human use. Gaining a better understanding of the economic impacts and lifestyle values associated with surf breaks was also identified by separate comments from two senior policy practitioners:

They are a dramatic part of the natural character of the coastal environment... they are part of the brand of the area.

...natural assets like surf breaks are the economic advantage and opportunity we have in this country...

There were suggestions that alongside use of technical knowledge, the increasing interest from surfing communities requires facilitation, dialogue and good communication between policy-makers and stakeholder groups. This was reflected particularly by respondents sharing Maori perspectives on the importance of dialogue during the policy-making process:

if the provisions are actually given to us and we talk about them and can say 'well this is what these guys want to do, what do we think about this?' ... that's how the process works with us, so long as we know what you're up to and we can have a look and can actually say 'yup, we accept that or this could be improved' then that's how it works... it's about knowing how to approach people respectfully

Across all respondents, there was reflection on the need for technical guidance, advice and an ongoing conversation amongst people involved in developing protection measures for surf breaks. For example, this comment about how the Global Waves Conference was intended to bring about more coherence in terms of how best to coordinate surf break preservation at a global level:

WSR needs a floating, general advisory board to support local approaches and bringing to the fore the universal concepts that must underpin surf break protection initiatives.

The Coastal Special Interests Group in New Zealand was consistently identified as an important forum in this regard and five respondents involved in this group expressed interest in seeing the results of this study. One respondent supporting an organisation at a global level suggested there is especially a need to establish “surfing as something more than a superfluous leisure activity”:

... we have to step right back and create the bank of knowledge that convinces people [this is necessary] ...surfers know this but struggle to articulate it, at least in English, because in other cultures they can articulate it just fine, and until then we are preaching to the converted ...

Respondents working outside the formal policy framework consistently identified the importance of acknowledging local cultural values and diversity before seeking to develop a knowledge base for the purpose of protecting surf breaks:

You need to ask, ‘why should you protect waves in the first place?’, make a proper case... [for example], why waves are important in terms of the physics of the planet, swell is an energy transporter, biological relationships, the chemistry of breaking waves that break down and release minerals

This applies particularly to whether there is acceptance of protection approaches locally, which was commented on by both practitioners and those seeking to influence the shaping of protection measures put in place.

For Māori, the values that underpin the practice of Kaitiakitanga are “huge concepts to appreciate”. Suggestions were made that knowledge and preservation approaches could instead be built into practices being “carried out on a daily basis by tangata whenua already according to tikanga (traditional practices)”. This differs from the perspective that Māori values need to be fitted into the RMA framework, best highlighted by these comments from two different respondents:

One of the things could be is that you give us your surfing provisions and we input them in our plan, and that gives them strength.

... what role can others do to assist Māori in managing surfing areas?

8.4 Local and indigenous knowledge, values and community interest

8.4.1 Perspectives on space

As it was mentioned in the section earlier on appreciating local and indigenous values when gathering technical information, the same concepts apply in terms of the diversity of cultural perspectives of local places. This is best highlighted by several comments from two respondents sharing Māori perspectives on space. The first comment demonstrates the importance of considering surf breaks beyond their purposes for surfing:

Surfers, well-meaning or not, have colonised other people’s space in the coast... Surfers right throughout the country need to have a cultural understanding of Māori spaces... How can you consider planning in our space when you (planners) haven’t had a conversation with us.

These comments followed on from examples of the rocks at Raglan being a food gathering area, and that surfers walk over this constantly with little regard for the space being valued for other reasons. The surf break and waves themselves were also viewed differently too:

To ride a wave wasn't just for the sake of riding a wave, it was a challenge, people who went out to fish on the reefs, they had to ride the waves to get back and they were good at it and had special things to do that, but in our tribal history at home I can't recall any stories about us just going out to ride waves... there will be tribes around who did that.

In terms of planning for the purposes of protecting the area for surfing, recognising the Treaty of Waitangi and building local relations with tangata whenua and other recognised users of the space are suggested as the best starting point:

...you have to talk to Māori first, that's what the Treaty says, that's what common sense says... it's not a matter of responsibility to the Crown, it's to our organisations Surfbreak Protection Society, Te Ngaru Roa aa Maui, it's in our communities here, to respond and respect and to take on board the hopes and aspirations of Maori here. Any rohe that they are around, that's the Treaty of Waitangi, not Crown responsibility, you can't abdicate those responsibilities.

In terms of the broader view of the coastal environment and how it is managed, it was stressed that the Māori view of the space they look after is based on the saying, "Ki Uta Ki Tai – from the mountains to the sea". This also applies to determination of 'significant' spaces:

When you say are there any spaces that are significant to Māori, then I would say all spaces are significant, but for a whole range of holistic, different purposes.

Two respondents also spoke of formal planning responses under the RMA:

Certainly there have been those hapū who have actually got their Hapū Environmental Management Plans and Iwi Management Plans in plans, but they are only the very basis... recognising cultural heritage values, these are a big question.

There were several comments in relation to questions about the involvement of local communities in planning that highlight the diversity, richness and layers of cultural values associated with particular spaces where surfing is practiced. For two Māori respondents, this was commented on in relation to the experiences of many different tribal groups, passed on in time through stories:

...the government only recognises 54 iwi in the country, there are probably about 1500-2000 hapū that are coastal and every one of them will have stories of their coast and what they did, and their fishing and their people who lived there and who did what.

...one of the things that underpins the Māori views on how things are, and anything, is called 'Whakapapa' – the layers of information, but also the integrity, keeping the Mauri of everything and the Mauri of things like the surf break. It's got its own soul, and you protect that. And that's one of the things that is the key really to kaitiakitanga: the practice of caring for and looking after a place, and everything in it.

Two respondents involved with surfing NGOs overseas shared similar perspectives on the need to preserve these local values based on their experiences observing beach cultures in multiple countries:

I'm constantly amazed at the diversity of cultures ...

... surfers are just another species, if you interfere with that natural process, you destroy a local cultivar ...

A respondent involved with the NSR programme in Australia also spoke of the connection between the strong local surfing culture in certain places and the unique characteristics of the surf break itself:

Because there was always surf it became a magnet, people came here to prove themselves, compete against each other, then there were the local surfers, there was like this culture... the scene came as a result of the place... the shape of the beach, the rock platforms, and this means you can surf anytime – that's the source, which made sense as to why it is the place that it is.

The value of this connection for spiritual aspects was also identified by respondents. One respondent talked about the connection to Atua (gods) that represent different spatial realms, and another respondent talked about regenerative importance of surf breaks:

Tangaroa... that's his domain, he arranges the surf, he gives us surf... if you're in harmony with tangaroa you'll get all the surf you want

I do like the economy, to have a good house and car... but in order to get that I need to maintain body, mind and spirit, not just body and mind.

8.4.2 Place-based advocacy

...in the past, surfers would never be considered

Advocacy based on local and community values has led to the recognition of surfing communities as a stakeholder within the policy framework. One respondent working at a national policy level in New Zealand commented that:

The usual organisations turned up to submit, but in terms of people in the general public realm who aren't routinely in the habit of making submissions on government policy papers, surfing really stuck out as attracting attention

Respondents working outside of the policy framework reinforced this rise of activity from the surfing community, with one commenting specifically on a possible reason for this:

Surfers are not bums, [they] have multi-generational connections to places and want to see these environments preserved

Representatives from NGOs overseas also noted how their advocacy influences decision-making arenas. For example, one respondent involved with NSR reported that gazetted surfing reserves in New South Wales “trigger consultation with the NSR committee”, and the Chair of one surfing

reserve has been invited to be on a community reference committee for a sewage upgrade in the vicinity of the surf break. Respondents involved with NSR consistently noted that representation from surfing communities needs to be trusted and from “a broad church of community stakeholders”, so not to be viewed as “a group with an agenda” and that other members of the community feel they are represented by “level-heads”.

There are challenges for surfer stakeholder groups still, with comments suggesting they are not immediately recognisable within the policy framework; “there is not a field of surfing expertise as such”. Respondents from NSR commented that symbolic surfing reserves are at least recognised by local surfing communities, with one response that “it’s more just an acknowledgement of what is”, that this “gives them a voice... a platform for advocacy and media” and is a tangible step for future recognition.

Advocating for immediate, mid-term and long term outcomes was reflected in the strategic approaches of all the NGOs seeking to influence the policy framework. For SAS, this is exemplified by their water quality campaign, securing immediate real-time information on raw sewage discharges, seeking to alter bathing water standards to better represent use by surfers, and to gradually get “onto the front foot... by effecting sustainable solutions” in legislation that better reflects surfing needs.

There is one reoccurring tension in the way Surfing Reserves are viewed. On one side, there are those who promote the added value of bringing the surfing community together and the awareness it gives “...that helps people realise how special the place is”. Two respondents involved with NSR commented that NSRs are “not driven by environmental activism, more the sense of community”, and that this is intended to include “all of the user-groups”.

On the other side, comments were made that in some areas NSRs were not supported locally by people that are wary of development, and that dedication as a Surfing Reserve could attract inappropriate attention and increased visitors that would alter the vibe of the place. Respondents involved with NSR at a nation-wide level commented that “for the reserve to be accepted at a local level then it needs to involve the local community”, and if it is clearly not wanted, then it will not go ahead.

This tension was also reflected by a Māori respondent speaking about involving tangata whenua and all local people with interests in a surf break, “how can you come and put a reserve in here when there already is [a Māori reserve] unless you’re talking to the people”.

8.5 Effects on surf breaks

8.5.1 Human impacts

Respondents with experience in coastal and surfing science felt that the non-linear relationship between impacts and effects for surf breaks are not well understood. This is perhaps exemplified by one respondent, an expert in oceanography and waves, referring to ‘collapse theory’ when asked about threats to surf breaks:

You can interfere with it and nothing appears to happen, because it’s non-linear, once you cross a threshold there’s no going back, and you could cross that without knowing it

Two respondents who specialise in coastal science support comments that this lack of understanding leads to human interventions that create more issues and can multiply existing problems:

The biggest issues are human impacts, the more managed it is the more issues there are [for surf breaks]

This non-linear relationship can also be understood through the effect it has on human health, leading to illnesses that surfers claim to be experiencing, such as gastroenteritis, particularly as a result of poor water quality. Pollution (point-source discharges, plastics, chemical toxins) and changes in sedimentation flows (from forestry-related erosion, dams, dredging) in general were identified as impacts that are predominantly carried into surf breaks by freshwater systems.

Offshore and marine impacts identified include the potential for reduction in swell energy from offshore renewable energy generation in the swell corridor, and changes to the seabed within the swell corridor as well as the surf break morphology itself resulting from mining, drilling and quarrying of rocks and sand.

It was suggested that changes in sea-level rise are also occurring as a result of human-induced effects on climate, but it was stressed that the *effects* of changes are the key issue:

For a surf break, the sea-level changes 3m every day with the tide, the matter is not whether it's destroyed or not, it's the effect of changes

Several coastal science, planning practitioners and individuals involved in NGOs spoke of the difficulties in substantiating these effects, with one respondent from SAS stating that:

Health officials want a smoking gun – absolute proof of the root of infection before making recommendations

This apparent lack of certain evidence and the subsequent willingness to act on issues being raised by surfers is a reflection of a wider problem:

Ignorance or neglect is a threat to a wave, because it leads to systemic failure to identify potential and real impacts

This apparent ignorance or neglect is also identified by two respondents involved with global initiatives to protect surf breaks, with one comment highlighting the vulnerability of surf breaks to poor coastal management decisions:

Places like Brazil and Italy have superb management plans, but how they are enforced is poor – developers hold sway – scientists are told to shut up or get the sack, but this is not well-documented

The impacts of human activities also apply to the availability of access to surf breaks, which can be limited by a range of different factors. All respondents identified issues concerning access. In New Zealand, local authorities discussed their role to maintain access through esplanade and recreational reserves, respondents at all levels of policy-making and others working in NGOs identified continuous private ownership as an effect of inappropriate subdivision. Respondents overseas also identified military exclusions as an increasing impact. Freedom camping (in New Zealand) and

whether or not this is provided for was also identified as an activity associated with accessing surf breaks that can impact on the overall surfing experience.

8.5.2 Balancing acts

The planet is always working towards homeostasis and so too is a beach always trying to find a dynamic equilibrium

Planning practitioners all identified they are constantly presented with issues that require a balancing of various impacts and effects, reflected at all levels. For example, in New Zealand, central government is pushing for a balance between economic development and environmental protection. In the coastal environment, there is a need to balance providing access and preserving natural character and, using another example, the impacts of recreational user-groups on dune systems can lead to 'restoration' projects that trap sand required for sand bars that would otherwise create 'beach breaks'.

In terms of protection approaches for surf breaks, respondents from both New Zealand and overseas NGOs identified potential impacts from the celebration or even simple identification of surfing areas. The example given by several respondents is that higher exposure in the media can lead to overcrowding, but tourism operators see benefits resulting from increased promotion of certain areas. Respondents involved in NSR suggested that even simple changes to the beach facilities can alter the vibe of the area which is stated as "critical to the surfing experience".



Many surf breaks are highly valuable for local communities yet never produce world class waves. Sumner Beach in Christchurch is an example of a surf break which produces consistent and accessible waves suitable for many activities; including long boarding, stand-up paddle boarding, kayak surfing, kite surfing, and learning to surf
Photo: S. Orchard

9 Discussion

The aim of this chapter is to discuss and further synthesises the key themes emerging from this research with a particular focus on the effectiveness of overseas approaches, and how to give effect to the policy provisions in New Zealand.

9.1 *Effectiveness of Overseas Approaches*

The two distinct approaches to surf break protection being practiced overseas are briefly discussed, as summarised in Table 2 (Chapter 5), in terms of their potential effectiveness in the New Zealand context. These are the Surfing Reserves model and the community-based advocacy and campaigns of NGOs representing surf-riding interest groups.

9.1.1 Surfing Reserves Model

In general, the effectiveness of the NSR model is yet to be truly tested, as the purpose and values of the surfing reserves within the NSR system have not faced any significant encroachments. For those reserves within the state of NSW, any proposal determined to be a development immediately involves the Crown Lands office in the consenting process. This triggers planning mechanisms for stating objections or working to mitigate impacts, involving stakeholders and finally the right to a legal appeal.

It appears the ultimate test of the effectiveness of surfing reserves in terms of protecting them from impacts generated beyond the reserve itself will still occur within a litigious environment, although in NSW there are formal measures for involving local surfing communities in the planning and decision-making process. The level of protection it offers is limited to the immediate extent of the surf break itself, and this is only formally recognised within the State of NSW. It does not include the swell corridor or any direct potential to stipulate rules for land-based activities in adjacent areas.

The main impact of the Surfing Reserves model is the coming together of a broad range of people in the local community, not just surfers alone. This has the effect of increasing the level of awareness about the significant value of the site for the culture and practice of surfing. The general feeling is that if a local community is aware of, or made aware of a development proposal that could affect the surf break, a dedicated surfing reserve amounts to the recognition of the local surfing community as a legitimate stakeholder within the planning and decision-making process.

The resources available for mobilising in the case of a threat are limited to the fundraising and organisational capacity of a largely voluntary network and 'the wisdom of the crowd'. In terms of the ongoing functionality of the NSR steering committee, other than simple maintenance, the groups tend to be active and respond to issues on a needs basis and adopt the attitude of 'stewardship' for the local area. To varying degrees, this also includes social and fundraising activities. However, the Cronulla NSR committee has begun using social media, Facebook in particular; in response to a feeling there was a need to maintain a public profile within their local community⁵².

There is also a desire noted by all Australian respondents to further the reach of the NSR system by establishing the values of surfing reserves and local communities within the relevant planning

⁵² This was setup by the Sutherland Shire Council and is 'liked' by 2,374 people:
<http://www.facebook.com/CronullaNationalSurfingReserve/info>

documents, as the opportunities to do so arise. The capability for these groups to effectively engage with the formal planning process and the channels available to them are not well known, and in some situations, the planning landscape appears complex and fragmented (at least compared to the Resource Management Act in New Zealand), and dependent on the legislative framework in each state.

In evidence given to the NZCPS Board of Inquiry, Rennie (2008, p. 33) describes the Surfing Reserves committees as “similar to management boards found in New Zealand for marine reserves”. This is also reflected in the World Surfing Reserves that are all symbolic, except for the Hawai’ian surfing reserves legislation that amounts to a similar form of formal recognition as a gazetted reserve in Australia. As Short and Farmer (2012, p. 13) conclude in their recent article:

It is anticipated over the following decades many surf breaks throughout the world will gain increasing levels of formal recognition and protection as they are declared surfing reserves.

It should be noted that these models are not without contention, given the potential for adverse effects on the local surfing community from increased tourism promotion. Commonly described as the ‘vibe’ of a place, the sense of community amongst people who frequent a particular surf break is an essential element to the nature of the surfing experience and its connection to the integrity of a local surfing culture.

Inclusion of clauses that provide for exclusive use of a surf break for Surf Industry run competitions has also attracted criticism in surfing magazines. In an extreme example, a World Surfing Reserve in Portugal was subject to what appears to be a misappropriation of the reserve for a development purpose that negates the core purpose of the Reserve⁵³. These examples highlight the need to understand the political characteristics of different cultures and therefore the likely effectiveness of a model created within a different political context.

In summary, the Surfing Reserves model is no doubt effective in beginning to elevate surf breaks and local surfing communities into decision-making arenas. Broad and credible representation of the communities associated with local surf breaks is vital to the success of these emerging entities. Their recognition of historic and heritage values would, if adopted in New Zealand, add a new dimension to the NZCPS provisions for surf breaks in relation to the RMA s6(f)⁵⁴ – protection of historic heritage.

However, the NSR model has yet to influence the nation-wide policy framework for resource management in New Zealand, and this may relate to the unique status of current policy provisions for surf breaks within the integrated approach of the RMA. The core weakness of these reserves is that in any case, they are considered “inadequate to meet the needs of protecting a surf break” (Rennie, 2008, p. 32) and that they struggle to attract the resources required to fund the committee management and further policy development. However, there are also potential benefits as summarised by Lazarow (2009):

⁵³ See the following retrieved January 25, 2013 from: <http://www.savethewaves.org/news/ribeira-dilhas-statement>

⁵⁴ See section 6(f) of the RMA in full here, retrieved January 25, 2013: <http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231907.html>

There is no doubt that surfing interests have seldom been considered in the grand scheme of things when it came to coastal planning and management and surfing is poorer for this. In whatever form it takes, the concept of a surfing reserve or sanctuary, whether its linked to recreation, conservation or culture has much to offer the surfer both today and for tomorrow and is worth exploring in more detail.

9.1.2 Campaigns and Advocacy

Surfrider International and Surfers Against Sewage (SAS) demonstrate the effectiveness of a well-established network and the impact of good communication through advocacy campaigns. Some good examples of the impact these groups can have include:

- Successful litigation against coastal development and support for the creation of a marine reserve incorporating surf breaks in Puerto Rico;
- A campaign to begin the removal of a dam on the Ventura River, California (USA);
- £12billion in changes to sewage and stormwater overflow systems to prevent raw sewage entering the coastal environment.

The success of these initiatives is based on the credibility of their organisations that have been purposefully developed over time using robust information and strategic positioning in the media. This is coupled with the intention of bringing supporters along and offering opportunities to be involved, either directly through protest actions or through educative programmes which generally have high levels of participation.

The key weaknesses of these approaches is that they rely on energy and resource intensive litigation and campaigns that respondents agree to as being predominantly reactive rather than proactive, and with a relatively low success rate. For example, one respondent felt that SAS was ‘chasing its tail’ with the largely reactionary response to issues, but this was something of a cultural response for the general public in the UK who respond well to calls to challenge authority and stand up for basic human rights. The rhetoric of more recent campaigns led by SAS suggests a shift towards a more proactive and holistic approach⁵⁵.

In New Zealand, the core drive behind securing national level policy to protect surf breaks came from grassroots NGOs⁵⁶, however these overseas organisations demonstrate the broad range of activities required outside of the legislative framework to continue affecting coastal management decisions in local areas. This is particularly relevant in situations where the jurisdiction of the RMA loses influence (e.g. beyond the CMA), although the NZCPS offers a significant focal point for future action.

There is a definite need for New Zealand communities interested in surf break protection to secure resources for preservation strategies beyond the funding for Council work programmes. Arguably,

⁵⁵ For example see the following retrieved January 25, 2013 from: <http://protectourwaves.org.uk/>; and, <http://jerseyshore.surfrider.org/2012/12/21/dont-let-the-corps-steamroll-sandy-recovery-efforts/>

⁵⁶ Notably the Surfers Environmental Advocacy Service in Canterbury and the Whangamata-originated Surf Break Protection Society.

this funding seldom finds its way to support for building the capabilities of local communities to participate in local protection strategies and celebrate their surfing culture.

9.1.3 General considerations for advocacy in New Zealand

More established cultural connections to places where surf breaks give rise to multiple layers of information and vital stories to tell in the process of developing a credible basis for protection. The results of this research identified two important themes; the need for a sustainable strategy, and for approaches to advocacy to be based on key principles.

In New Zealand, we have seen a shift in the level of recognition for surf break interests within decision-making processes. This is identifiable in the policy provisions emerging at a regional level and numerous regional council staff members who suggested that engagement with stakeholders will be important in the policy development process. Surfbreak Protection Society was consistently identified as such but there is a gap in the capacity for surfing community stakeholders to provide this input at the local and regional level. Further, there is yet to be a significant engagement with local surfing communities through any form of extensive research on or advocacy for the cultural, social and historical value of surf breaks in a resource management context.

As much of the community NGO sector will understand, relying on voluntary commitments can be overly burdensome and a strain to personal and social circumstances that leads to 'burnout' (e.g. a symptom of this in resource management circles is 'submission fatigue'). This is not sustainable, and therefore any approach to surf break protection that involves the input of local stakeholders must also consider the capacity for the local communities of interest to be comfortably involved.

There is a clear need for strategy that brings the right people together and focuses them on the same goals, including both short term and long term solutions. SAS is a good example of how this can be sustainable in relation to improving water quality standards and seeing their campaign requests being recognised over time. Their short term goal was to provide real-time information on raw sewage discharges and this is now available via a free text alert service with 2000 unique users. And, over 23 years, SAS have secured £12 billion in changes to stormwater and wastewater treatment systems.

It is worth noting that Ostrom (1998) presented three principles for collective action: *trust*, *reputation* and *reciprocity* that arise in common-pool resource institutions such that admittedly self-interested individuals are able to cooperate and act altruistically (Ostrom 1998, p. 14):

The individual attributes that are particularly important in explaining behaviour in social dilemmas include the expectations individuals have about others' behaviour (trust), the norms individuals learn from socialization and life's experiences (reciprocity), and the identities individuals create that project their intentions and norms (reputation).

The following are four key principles identified by two respondents that underpin the collective action taken by SAS:

1. Demonstrate a problem using objective science and impartial language;
2. Offer common-sense solutions based on credible understanding to act on for the good of people;

3. Communicate in relevant terms and bring people on the journey;
4. Be a trend-setter for broader change.

9.2 Giving effect to the NZCPS provisions

Securing surf break policies within the RMA gives rise to the need for practical mechanisms to achieve protection and strategic management objectives. The challenge is now to identify the best tools for each local context.

9.2.1.1 NZCPS Policies: 13, 14 and 16

Participants in this study generally felt that the NZCPS definition of surf break does well to capture the physical processes and terminology for protection. It is acknowledged as the starting point and should guide preservation strategies for identifying the integral features, pre-conditions and natural characteristics for surfable waves. Participants also identified the broad scope of this as a starting point and the challenges this presents:

Identification in the NZCPS is enough to spark policy-making – it gives surfing interests a credible footing... [the NZCPS] is a broad document, anything could be enabled... there is a lack of knowledge and guidance for future steps and interpretation.

Regarding surf breaks, Policy 13(2) establishes that natural character is not the same as natural features and landscapes or amenity values, and may include matters such as surf breaks and other natural landforms. However, unlike Policy 16, the protection requirements of Policy 13 differ depending on whether the location involves ‘outstanding’ natural character. As a consequence the outcomes supported by the policy depend on an assessment of the degree of natural character present in each region.

There is no direct obligation for local government to provide a determination of which locations have “outstanding natural character”, leaving Councils free to make these decisions on a case by case basis. However Councils do have to map or otherwise identify “at least areas of high natural character”. This is also an evolving policy topic and the way in which Councils choose to address natural character is largely yet to be seen. Since there is no established methodological requirement for the determination of “outstanding” and “high” natural character these topics are likely to be especially contentious and a range of possible outcomes exist.

9.2.1.2 Development of regional and local level policy

The approaches of local authorities to surf break policy will be important in future reviews and other amendments to regional and local level policies and plans. A very important element of the current policy context is that local authorities are in various stages of developing their second generation policies and plans under the RMA. Another aspect is that the NZCPS 2010 took immediate effect upon release and so Councils were required to begin giving effect to those policies without delay, using the full range of mechanisms and methods at their disposal. Consequently, most Councils are working through a full review of their statutory plans and policies against the NZCPS 2010 and preparing for consultation on proposed changes as necessary.

The development of the next generation of policies and plans is a key point of input for all organisations and individuals interested in surf break management. There are many options open to Councils to address NZCPS policies within the development of their own planning frameworks. These range from hands-on approaches such as prescribing when and where certain activities can occur, to more hands-off approaches that may leave determination of the relevant issues to resource consent processes and other case-by-case decisions. With respect to the latter, an option available to Councils is to simply reiterate NZCPS policy within their own policy frameworks and largely leave other aspects of their coastal planning framework unchanged with the expectation that adverse effects will be picked up by the existing effects-based processes. The prior identification of surf breaks might also be seen as unnecessary on the assumption that where relevant, the presence of surf breaks (and impacts on them) would be determined by participants in resource management processes.

However, there is also a range of more proactive approaches available. This is signalled within the NZCPS itself through the inclusion of policy on surf breaks of “national significance” and comments made by the Board of Inquiry that other advances in the use of significance concepts might occur (Board of Inquiry, 2009). An obvious possible area of development is the use of “regionally significant” surf break concepts. When used in this context, significance assessment is used as a focus for specific planning provisions aimed at achieving greater protection of those sites. A downside is that defining significance can be problematic and the values of surf breaks missing out on identification may be more likely to be degraded unless other methods are also employed within the policy mix (Peryman & Orchard, 2013).

This illustrates that the various approaches available all have pros and cons related to their ability to reliably produce desirable outcomes for surf breaks, whilst retaining the flexibility that is also needed to support an integrated approach with respect to other coastal issues. Consequently, a mixture of methods underpinned by a proactive education and information based approach complemented by a mixture of other methods is likely to be the next step in developing the management framework for surf breaks in New Zealand. Irrespective of whether the identification of higher priority surf breaks is utilized as a tool within the planning framework, improved information on the nature of values associated with surf breaks would seem to be a necessary starting point. Such information is needed to underpin the design of any proactive protection measures, and the robust treatment of surf breaks within assessments used to support decision making in resource management processes.

9.2.1.3 Regional policy statements and plans

Regional Policy Statements are a powerful component of the planning framework through identifying the key issues for each region, and some of the methods for addressing them. These methods can be both statutory in the form of plans that must address specific aspects of these issues, and also non-statutory in terms of the collaborative and strategic processes that could inform the resulting planning rules, standards and regulations. It is important that RPSs are not overly prescriptive, particularly through mapping or compartmentalising issues. If so, the framework can create arbitrary separations in management priorities and capabilities. This is perceived by some as having denigrated the potential of Māori resource management and planning activities (including Iwi Management Plans and Hapū Environmental Management Plans). Increasingly, second generation

plans are showing more signs of integrated catchment management approaches. For example, the Horizons One Plan discusses some of these issues:

[RPS] advantages is that it is integrated management that must be given effect to at [the] plan level by providing a planning framework. It is effective in a different way, it can't directly control activities, but shapes the planning framework...

...better to have robust policy framework and strong scientific or technical data before it, then assess each application on a case by case basis, rather than try to give all the answers before the planning framework is prepared and reflect these on a map.

Regional Coastal Plans and Regional Coastal Environment Plans are considered the most effective for addressing surf breaks with a meaningful level of control in the CMA, and avoiding impacts on the immediate surf break environment, along with the swell corridor out to the seaward limit of the CMA. Regional plans for freshwater management are considered the most effective level of control for managing impacts on water quality as it enters the coastal environment.

Regional and District plans concerning land-use activities primarily have an impact on access provisions, but also on appropriate subdivision, use and development, in particular, the impact of urban areas. The use of energy resources and the treatment of waste are important points also and participants encouraged low-impact design and development along with the need for District Councils to take responsibility in leading this.

9.2.1.4 Annual Plans and Long Term Plans

As a result of the NZCPS, there is a strong legal basis and formal channels for ensuring enforcement of policies for surf breaks through Council-funded work programmes identified in Long Term Plans and Annual Plans. These can be initiated internally and by community submissions.

RMA plans can specify methods that Council will advocate for protection of surf breaks... or to set aside funds in Council work programmes. Alternatively the community can submit to set aside plans... internally Councils can draft initiatives for surf breaks.

LTPs and Annual Plans are a robust, accountable form of funding allocation, given communities can submit on these plans, and there are provisions for reporting on progress made by Councils in achieving targeted community outcomes. Staff who are aware of their responsibilities to give effect to surf break provisions can integrate the community's needs into proposals for funding allocation and methods within plans.

9.2.1.5 Resource consents and environmental impact assessments

Case by case decision making processes, such as for resource consents, are likely to be very important to surf break management outcomes. Because resource consent processes require the consideration of effects, understanding effects on surf break values is a key necessity. A downside to hands-off planning approaches to surf breaks is that the content and robustness of effects assessments is, in the first instance, the responsibility of the applicant to determine. In the absence of information or awareness of surf break values, environmental impact assessment practices may not be reliable.

The content and robustness of applicant driven assessments is substantially influenced by the perceived sensitivity of the proposal. This is often informed by the level of concern or opposition from interest groups. However, where the proposed activity is not required to be notified to the public because of its classification in the relevant regional and local level plans, stakeholders may not be aware that it is occurring. Even when interest groups are aware and have an opportunity to submit, there are many difficulties for poorly resourced groups preparing a case to require better consideration of effects and issues. The need to prevent poor outcomes from these situations is a key reason behind the argument for a more proactive approach by Councils.

One means by which this can occur is through promoting greater awareness of the relevant values and issues and ensuring that they are taken into account. This was discussed by Peryman & Orchard (2012) who presented the results of research on the attributes of surf breaks that underlie their values. This research showed that surf break resources provide a range of values for NZ communities and this set of values may be similar at larger scales, such as when comparing one region to another. However, at the site specific level it was found that individual surf breaks each contribute uniquely to the overall surf break resource. It is therefore important that the values of each surf break are specifically considered, and that the attributes of the surf break important to those values are identified for the proper consideration of impacts. Because many values have a social component this requires engagement with the communities of interest associated with that surf break. Accomplishing this could be done up front (e.g. by Councils) or left to applicants to attend to (e.g. at the time of preparing consent applications), though a mix of both is likely required.

The above context also illustrates that early engagement with affected communities is likely to be advantageous to all parties with an interest in surf break management. Examples include relationship building with groups with interests in the coastal environment and particularly those deriving values from surf break environments. Pre-application meetings and other early consultation activities can play an important role in planning processes and lead to better outcomes. Early engagement is advantageous for applicants as it will help inform their proposals and improve the robustness of their assessments of effects. Early engagement also assists local interest groups to become better acquainted with planning and development proposals, to participate in the identification of effects, and to contribute to finding solutions to avoid, remedy, or mitigate effects where these are possible.

9.2.1.6 Participation of interested communities and professionals

The need for broad representation and credibility that contributes to the early success of surfing reserves and overseas campaigns reviewed earlier in this study is also applicable to the data, knowledge and information that enters a decision-making process. Section 32 (RMA) reports and public consultation processes are considered the general test of policies in New Zealand. However, a section 32 report has no specific requirement to involve interested communities in the identification of issues and options from the outset of policy design.

This shifts the onus for participation to the awareness of planning frameworks held by local communities that typically have limited resources and capacity to engage consistently with decision-making processes at a meaningful level. To date, surfer engagement has been ad hoc and the levels of information and opportunity available to the community are highly variable, subject to political prioritisation of Council workflow, and display significant gaps in the uptake of appropriate

knowledge for surf break protection. This means substantiating protection requirements (including interventions where current impacts on a surf break are said to be occurring) is significantly constrained by the lack of knowledge around monitoring and the resourcing of baseline environmental assessments and conditions for surf breaks.

The practical nature of the implementation of the RMA to date means that second generation plans being prepared by Councils are well-advanced, often with specific timeframes for resourcing further work that are mapped out up to 10 years ahead. The potential to significantly influence the policy framework in each region now largely exists at the bottom-end where RPS and subsequent planning methods can specify the allocation of resources to build local capacities.

9.2.1.7 Assessment Methods

The methodologies being applied to assess natural character and natural landscapes are subject to ongoing debate (Froude et al, 2010) and in light of the NZCPS 2010, the Department of Conservation have facilitated discussion amongst experienced practitioners in an attempt to reach a consensus on best practice approaches. The ability for these assessment tools to incorporate surf breaks is not well understood and was beyond the scope of this study. A brief search of assessments that are publicly available identified a range of methods being applied with minimal recognition to date of surf breaks as outstanding or high natural character.

In New Zealand, under the Conservation Act (1987), the functions of the Department of Conservation (DoC) are, under section 6(b), “to advocate the conservation of natural and historic resources generally”. One of the key responsibilities for DoC staff and the Minister of Conservation in relation to coastal management is to prepare, oversee and assess the implementation of the NZCPS, and to approve all Regional Coastal Plans and any changes to them. It is important, however, to appreciate that these are functions given to the Minister and DoC by the RMA and do not provide an opportunity to advocate in terms of section 6(b) of the Conservation Act. DoC does, however, often make submissions in terms of the RMA on local authority policies and plans and given their responsibility for the NZCPS they may be expected to take a strong interest in ensuring its policies, including those relating to surf breaks, are given effect. This does not mean that they will be any more or less successful than other submitters in the policy and plan-making process and it would be unwise to leave it to DoC to ensure surf breaks are adequately protected, especially when it is having to prioritise its responsibilities in the face of shrinking budgets and ‘whole of government’⁵⁷ submission pressures.

There is significant potential for neglect of surf break issues through the lack of guidance currently available to practitioners. The non-linear relationship between the cause and effects of impacts on surf breaks and the complexity of their dynamic characteristics means there is an imperative to apply the precautionary principle that favours protection. Greater dialogue on this topic and more rigorous research on the use of appropriate assessment methods for surf breaks are required at all levels.

⁵⁷ Whole of Government submissions have become increasingly common as the Government seeks to ensure there is only one government view presented to hearings. This means that DoC might not be able to have its voice heard with the same strength as in the past.

What is more preferable therefore is a planning framework that requires a Surfing Impact Assessment as part of an application for a marine activity in a swell corridor.

9.2.1.8 Limitations of the RMA

One of the key limitations of the RMA policy framework to consider is that its jurisdiction does not cover anywhere near the full extent of swell corridors for significant surf breaks. The *Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012* (EEZCSEEA) includes directions for RPS and Regional Plans to be consistent with regulations made under the EEZCSEE Act 2012 (s176). It may be necessary for advocacy by surf break interests to the Environmental Protection Agency to establish the significance of swell corridors for surf breaks and the relationship to the NZCPS 2010. In general, there is a profound need for integrated catchment, coastal, and oceans management to give full effect to the NZCPS 2010.



Surfing and surf events have considerable economic value for local communities. Here a large crowd watches the Vodafone Surf Sessions event at Piha Beach. Photo: PhotoCPL

10 Significant aspects for further exploration

10.1 Developing new approaches

Participants in this study referred to surf breaks themselves and the surfing community cultures as symbols of the lifestyle choices we are gifted as a result of the natural coastal environment and the challenges we face in preserving that for future generations. They are part of what is essential to our identity as New Zealanders as an island nation, at least for surfing communities, and are gifts that require dutiful care.

Through the NZCPS provisions we are in a position of leadership with a rising global movement for surf break protection watching keenly on how we progress. With the RMA we have an innovative framework for achieving integrated approaches to sustaining surf breaks, our life-giving resources and the natural assets of this country. It is also important to acknowledge the place of surf break protection within a wider challenge of restoring the health of our life-supporting resources that afford us our wellbeing.

To be holistic in our approach requires attention to what sustains us as individuals, families and communities within our habitual environments. The results also demonstrate there is a clear need for policy based on science and robust information. To achieve this in an inclusive manner means starting with two feet firmly in the Treaty of Waitangi, and therefore an established partnership with Maori and a principled way to engage all people about our stewardship responsibilities. The following is an exploration of some potentially useful approaches for achieving this and some of the mechanisms available to support these.

10.2 Incorporating a diverse range of knowledge

There are two key issues concerning the limitations of technical knowledge and the inability of management systems to incorporate such knowledge. The information systems supporting the development of management approaches for surf breaks are lacking robust mechanisms for the uptake of information within decision-making processes.

These issues are as much about people being able to access and participate in decision-making as it is their capability to contribute robust information. They also concern the role of the planner and the identification of appropriate information and its translation into a policy framework.

There is a need to discuss how local and indigenous knowledge is treated in the design of a policy framework. For example, a policy framework may necessarily reflect Mātauranga Māori as well as information provided by 'technical experts'. One potential solution is to facilitate the input of a broad range of perspectives to get a representative range of information within any given policy-making process.

10.3 Planning support and supporting planners

There are likely to be many different people from a range of disciplinary backgrounds that will need to be involved in making decisions concerning surf break environments. This is to ensure that resource management is based on robust information provided by people with suitable experience,

some of which may come from people and disciplines who are not traditionally engaged in formal planning processes.

This means that management approaches for surf breaks are a profoundly interdisciplinary pursuit requiring a more developed form of planning infrastructure – referred to in literature as Planning Support Systems. Some of the tools mentioned in the course of this research include:

- Participatory GIS (e.g. web-based mapping of significant places/values)
- NVivo (qualitative analysis software)
- Databases and Information Portals ('a storehouse of knowledge')

There is a need for a robust advisory board that wraps around the people on the ground and gives them support as well as providing mechanisms for raising awareness. A reserve for example, has the ability to penetrate people's awareness on entry, whereas a policy is high-level and generally not visible beyond those who are heavily involved in resource management and planning.

Resourcing of information gathering is political and there is a clear gap in the planning support systems for building a bank of otherwise openly accessible knowledge and the methods for processing it on a case-by-case basis. The key point is that if there is to be genuine inclusiveness, access to information supporting decisions must be open. If the forums for participation are 'nested' – activated on a case-by-case basis – in theory this gives an opportunity for everyone to relate information when the time comes, or in their own time if an adequate database or storehouse is setup. In this way, policy planners can at the very least be *aware* of the issues relating to a particular place. The shift therefore is away from a contest of ideas towards cooperation and greater transparency for the methods and rationale for making decisions that affect the wider public and the places that are important to us.

10.4 Further Research

In general, there needs to be a coherent purpose for why research might be done on this topic and in what areas it could focus. This is important when considering the current context of needing to 'add value' to the knowledge we have and how it can be applied for the benefit of current and future generations. Some general topics arising throughout the research include:

- The economics of surfing in New Zealand: values and impact
- Surf break environment assessments: concepts and methods
- Implementation of surf break policies and their corresponding policy framework
- Holistic and integrated concepts for sustainability across a range of disciplines as they apply to planning practice in New Zealand
- The use of planning support systems to better monitor and incorporate historical, relevant and important information about surf break environments in the New Zealand resource management and planning context

10.5 Recommendations

Suggested strategic actions, in order of priority:

I. Professionally facilitated forums

Forums could focus on the topics of sustainable management of surf breaks as part of an integrated planning framework, and developing agendas for research and monitoring. They could be initiated at a local or regional level, and expand as appropriate to include all manner of interested parties.

II. A monitoring and research agenda

This agenda should be specific to sustainable management of surf break environments, particularly at a national level, and not necessarily limited to the surf breaks of national significance identified in the NZCPS 2010 – the Department of Conservation is a good starting point for seeking guidance and resources to support this action. Priority should be given to those surf breaks with existing threats impacting on their integrity.

III. Initiation of an information platform

This platform could be designed to host and catalogue visual, artistic, and oral expressions of surf break environments, as well as scientific, academic and student research – this could be as part of a local, regional or nationwide campaign promoting surfing culture and the preservation of surf break environments;

IV. Capacity building

A schedule for building relationships and strategic partnerships (e.g. between local surf break protection groups and local iwi/hapū), as well as enhancing the organisational capacity of community interests in the management surf break environments – this support is critical to the ongoing presence of ‘a voice for surf breaks and surfing communities’.

V. International Liaison

SPS could liaise further with NSR, WSR, SAS and Surfrider regarding a formal partnership structure at an International level. This exists to a certain extent, but could have a more strategic focus on establishing and furthering planning capabilities for leading holistic, integrated and sustainable approaches to surf break management.

11 Conclusions

This study has canvassed a wide range of knowledge relevant to surf break management, including the natural characteristics that create these environments and the culture that is inextricably linked to their existence. This information provides important considerations for assessing the potential and existing impacts of human activities, identifying solutions to coastal resource issues, and developing policy and planning responses.

Currently, this information has not been consistently translated into actions within the policy and planning arena as indicated by the variable provisions for surf break management across New Zealand. As noted in Chapter 6 (Current Management Approaches in New Zealand), of the 27 surf breaks identified in the NZCPS 2010:

- 7 of the 27 surf breaks have statutory provisions in place for their protection at a regional level;
- 17 of the 27 surf breaks are acknowledged in regional planning frameworks, but have no specific policy provisions in place;
- 4 of the 27 surf breaks have specific provisions in territorial planning documents; and
- 4 of the 27 surf breaks are included in community-led management strategies.

Of the 470 surf breaks identified in the Wavetrack New Zealand Surfing Guide (Morse & Brunskill, 2004), 120 are identified in statutory policy and planning documents. Six out of 12 regional councils are in the process of gathering background information on surf breaks in anticipation of preparing specific policy provisions for their respective regional planning framework. Only one of the 10 territorial authorities with responsibilities for surf breaks of national significance is in the process of preparing policy provisions for surf breaks in its district planning framework. However, correspondence with practitioners confirmed widespread acknowledgement of the new NZCPS 2010 policies that provide for surf breaks. Many practitioners also noted the level of public submissions and interest in protection coming from coastal communities in their area.

There was also evidence of constraints affecting the development of surf break management provisions. These include inadequate information on the resource within planning authorities, a lack of methodological guidance, and recent political pressure to prioritise other resource management topics such as freshwater management, in many areas. Research results also indicated that local government agencies must be mindful of the political palatability of their approaches to new topics and issues lest they become subject to costly litigation or ad hoc intervention from central Government.

On the other hand, many coastal communities are struggling to deal with land-use intensification and increasing development in coastal areas. For community organisations reliant on volunteers, the capacity to effectively engage in contemporary resource management is a core issue. This capacity constraint has a direct bearing on the effectiveness of case by case decision making as a process for consistently producing good coastal management decisions. As a consequence it is very important that local authorities take precautionary and future-focussed steps to pro-actively protect coastal resources such as surf breaks. This is a matter of some urgency and is an important consideration for the next generation of coastal plans.

Due to their location at the mixing zone of land-based, coastal, and marine systems, surf break management requires attention to many wider issues for sustainable resource management and an integrated approach is required. This produces challenges for planners and decision makers with responsibilities for addressing resource use, development, and changing settlement patterns in a manner which will minimise impacts on important coastal features such as surf breaks. There are also opportunities to enhance degraded surf break environments through sound coastal planning. However, since the management setting is far from static, all of the above must take into account the natural dynamics of coastal environments including provisions for the potential effects of sea level rise.

In advancing this area of resource management there is also a need to enact management approaches that allow coastal communities and groups to participate. This may include assuming greater responsibility for governing and determining sustainable outcomes for surf breaks. The Resource Management Act and other relevant legislation is capable of supporting such approaches through providing a strategic planning framework, and enabling mechanisms for public participation and effects-based considerations. There is also much that local communities can proactively pursue to help recognise, maintain, and protect surf breaks whilst the regulatory environment continues to evolve. Collectively, these responses will help shape the future of the coastal environment and a future-focussed and well informed approach is required that is cognisant of the values of surf breaks. Surf breaks are important contributors to our unique coastal environment and their protection is an essential aspect of sustainable and contemporary resource management in New Zealand.



*One of New Zealand's nationally significant surf breaks; Karitane at the entrance to Waikouaiti Harbour
Photo: S. Orchard*

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13 Appendices

1. Sections 6-8 of the RMA
2. NZCPS 2010 Schedule of Surf Breaks of National Significance
3. Map of Local Authorities in New Zealand
4. Mechanisms Identified During Research
5. Table of Current Management Approaches in New Zealand

13.1 Appendix 1: Sections 6-8 of the RMA⁵⁸

Section 6: Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

Section 7. Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to -

(a) Kaitiakitanga:

(b) The efficient use and development of natural and physical resources:

(c) The maintenance and enhancement of amenity values:

(d) Intrinsic values of ecosystems:

(e) Recognition and protection of the heritage values of sites, buildings, places, or areas:

(f) Maintenance and enhancement of the quality of the environment:

(g) Any finite characteristics of natural and physical resources:

(h) The protection of the habitat of trout and salmon.

Section 8. Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

⁵⁸ Retrieved July 7, 2013 from: <http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231907.html>

13.2 Appendix 2: Schedule 1 – Surf breaks of national significance

Northland

Peaks – Shipwreck Bay

Pines – Super tubes – Mukie 2 – Mukie 1

Waikato

Manu Bay – Raglan

Whale Bay – Raglan

Indicators – Raglan

Taranaki

Waiwhakaiho

Stent Road – Backdoor Stent – Farmhouse Stent

Gisborne

Makorori: Makorori Point – Centres

Wainui Beach: Stock Route – Pines – Whales

Tuamotu Island ('the Island')

Coromandel

Whangamata Bar

Kaikoura

Mangamaunu

Meatworks

Otago

The Spit (Aramoana)

Karitane

Murdering Bay

Papatowai

13.3 Appendix 3: Map of Territorial Local Authorities⁵⁹



⁵⁹ Retrieved January 23, 2013 from: http://www.creativenz.govt.nz/assets/paperclip/publication_documents/documents/164/original/local_authority_map-opt.pdf?1328045270

13.4 Appendix 4: Planning mechanisms identified

Identifies all the different planning mechanisms identified during this research, either in use or potentially applicable to NZ.

Statutory Policies and Plans	EPA; NPS; NES; NZCPS; Unitary Plans; Combined Plans; Regional Policy Statement; Regional Plans; Regional Coastal/Coastal Environment Plans; District Plans; Reserve Management Plans; Marine Reserves (Act); Marine Protected Areas; Reserves (Act); Conservation Management Plans; Long Term Plans (LGA); Annual Plans (LGA); Outline Development Plans; Hapū Environmental Management Plans; Iwi Management Plans; Mataitai, Taiapure and Moana Rohe;
Statutory Mechanisms	Objectives; Policies; Rules; Standards; Methods; Anticipated Environmental Results; Overlays; Monitoring; Consents; Conditions on consents; statutory plan reviews and reporting; proposed plans; Section 32 reports (RMA); Consultation; public notification; submissions; Section 42A reports; requests for further information; pre-hearing meetings; mediation; hearings; appeals; Environment Court; High Court; Judicial Review; Case law; Principles of the Treaty of Waitangi; esplanade reserves; bylaws; implementation plans and guidance;
Non-Statutory	(Marine) Spatial Plans; strategic documents; community management plans; Surfing Reserves (World, National, Regional); Standards (e.g. Earthcheck; ISO); UNESCO Reserves
Concepts, Approaches and Supporting Elements	Integrated catchment, coastal and oceans management; Adaptive management; precautionary approach; precautionary principle; collaboration, dialogue and cooperation; co-management; community trust committees; stakeholder engagement; strategic environmental assessment; implementation plans and guidance; assessments (e.g. natural character); impact assessments (social, environmental, economic, regulatory, surfing); Limits of Acceptable Change (LAC); staff work programmes; Planning Support Systems (GIS, NVivo, databases); background studies/gathering information; Maori ethics and principles: Whakapapa, Mauri, Tikanga, Kawa, Kaitiakitanga; Ki uta ki tai; professional discourse (e.g. Coastal Special Interests Group); Technical Advisory Groups; Conferences; University and Student Research; Policy Champions; Artistic installations, information displays and general literature; public ceremony and dedications; Boardriders clubs;
General	Campaigns; education and awareness; grassroots advocacy; quantitative (e.g. physical sciences) and qualitative (e.g. social and cultural studies) methods; surveys (physical and social); social media; identifying priorities; real-time information (e.g. water quality and sewage discharges);
Legislation	Resource Management Act, Local Government Act, Local Government (Auckland Council) Act, Reserves Act; Marine Reserves Act; Hauraki Gulf Park Act; Marine and Coastal Areas (Takutai Moana) Act; Environment Canterbury (Temporary Commissioners and Improved Water Management) Act; Canterbury Earthquake Recovery Act; Conservation Act; Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act;

13.5 Appendix 5: Table of current management approaches in New Zealand

The following is a list of acronyms used in the table below:

- NZCPS: New Zealand Coastal Policy Statement (2010)
- RPS: Regional Policy Statement
- RCEP: Regional Coastal Environment Plan
- RCP: Regional Coastal Plan
- DP: District Plan
- LTP: Long Term Plan

Northland	
Northland Regional Council	
Context	Six Surf Breaks of national significance located near Ahipara: Peaks, Shipwreck Bay, Pines, Supertubes, Mukie 1, Mukie 2. 59 breaks identified in Wavetrack Guide (including Mangawhai).
Surf break policy status	Proposed RPS publicly notified in October 2012; does not include any provisions for surf breaks; received 3 submissions on draft RPS relating to surf breaks; awaiting RCP review in 2013 to give effect to policy 16 – expecting resource consents and a case-by-case approach to pick up issues affecting surf breaks; mapping of natural landscapes and natural character does not specifically identify surf breaks but staff feel overlays would capture surf breaks that could be considered as ‘regionally significant’.
Far North District Council	
Context	Manages planning and activities on land adjacent to nationally significant surf break identified at Peaks, Shipwreck Bay, Pines, Supertubes, Mukie 1, Mukie 2.
Surf break policy status	No specific provisions in current planning documents.
Auckland	
Auckland Council (Unitary)	
Context	See Case Study 1 (Chap. 6)
Surf break policy status	
Waikato	
Waikato Regional Council (WRC)	
Context	Contains provisions for 4 nationally significant surf breaks at Raglan (3) and Whangamata (1). Morse and Brunskill (2004) identify 31 surf breaks in the Waikato region. WRC have undertaken information gathering exercise to identify and map surf breaks and swell corridors in the region; results from this exercise will be consulted on (informally) to identify priorities and gather a layer of qualitative data; this information will ultimately feed into the Hauraki Gulf Marine Spatial Plan and an RCP review beginning 2014; Advocacy groups for surfing interests well known as a result of ongoing challenges concerning Whangamata Bar surf break (nationally significant); partially funding doctoral research in partnership with Waikato University and eCoast Ltd. to conduct modelling of hydrodynamic character of Whangamata Bar to better understand wave characteristics and improve scientific information base for ongoing decision-making.
Surf break policy	Proposed RPS has been through hearings and is now subject to appeals which are

status	closed; specific Proposed RPS provisions relate to coastal access, preserving natural character and in the assessment criteria for natural character of the coastal environment; glossary definition of surf break contained, taken in part from the NZCPS 2010 (does not include definition of 'surfable wave'); Harbour and Catchment Management Plans also considering the impacts of freshwater management on the coastal environment, especially water quality (e.g. sediment, E. coli).
Waikato District Council	
Context	Manages planning and activities on land adjacent to three nationally significant surf breaks identified at Manu Bay, Whale Bay and Indicators
Surf break policy status	Review of DP to assess consistency with NZCPS, in particular, looking at zoning, land-use, maintaining access and reserve provisions – confident that existing DP maps, rules and standards for coastal and landscape policy areas concerning Raglan surf breaks would currently give effect to the NZCPS provisions for surf breaks; identified need to balance access provisions without 'developing the area' and negating NZCPS Policy 13 requirements to preserve natural character; suggest review of DP could identify access strips (e.g. proposed Esplanade Reserve) where future subdivision may impact on access to coastal environment and surf breaks; Manu Bay (Waikeri) Recreation Reserve Management Plan 1996 recognises access to 'exceptionally high quality left hand break surf' and state that any works 'will not in significant adverse effects on... surf conditions and the natural character of the area', also includes measures for consultation with surf-riders as a reserve user group, informal co-management options for the local community for maintaining and enhancing the amenity of the reserve, and identifies a local boardriders club to form part of a reserve advisory committee; the adjacent Wainui Reserve also has a new management plan (2012) which also identifies surfing activities of local through to international significance and the proximity to the Manu Bay surf break.
Thames-Coromandel District Council	
Context	Manages planning and activities on land adjacent to the nationally significant surf break identified at Whangamata Bar.
Surf break policy status	Draft DP (released for consultation purposes – due for formal public notification in September 2013) includes one specific provision in Part Four, Section 20: <i>Policy 5e... subdivision, use and development in the Coastal area shall demonstrate that they will not have adverse effects on the function, access to, use and enjoyment of the Whangamata surf bar</i> ; DP review addresses NZCPS and expect assessment criteria for a resource consent to capture issues concerning surf breaks – there are no specific provisions for surf breaks as part of natural character, based on assessment conducted by Brown NZ Ltd; significant studies have been done on community planning and public participation processes in the area ⁶⁰
Bay of Plenty	
Bay of Plenty Regional Council	
Context	See Case Study 2 (Chap. 6)
Surf break policy status	
Gisborne	
Gisborne District Council (Unitary)	
Context	See Case Study 3 (Chap. 6)
Surf break policy status	
Hawkes Bay	
Hawkes Bay Regional Council	

⁶⁰ Parliamentary Commissioner for the Environment (2005). Working Together in Thames-Coromandel: Guidelines for community planning. Retrieved January 15, 2013 from: http://www.pce.parliament.nz/assets/Uploads/Reports/pdf/Thames_report.pdf

Context	Morse and Brunskill (2004) identify 35 surf breaks in the region, including this description of the Mahia Peninsula: “if you could design the perfect geographic setup for a surf area it would closely resemble the Mahia Peninsula”
Surf break policy status	No specific provisions in place; Staff identified the priority is freshwater management; no statutory process has begun for giving effect to the NZCPS; LTP 2012-2022 identifies a work programme and timeline for plan changes to give effect to the NZCPS by 2015 – gap analysis for 2 nd generation RCEP that pre-dates NZCPS 2010.
Taranaki	
Taranaki Regional Council	
Context	See Case Study 4 (Chap. 6)
Surf break policy status	
New Plymouth District Council	
Context	Manages planning and activities on land adjacent to the nationally significant surf break identified at Waiwhakaiho; Taranaki RPS also identifies 81 regionally significant surf breaks.
Surf break policy status	No specific provisions in place; preparing a Recreation and Open Space Strategy; awaiting consultation from the Taranaki Regional Council regarding the TRC giving effect to the NZCPS2010 with respect to the RPS2009 and RCP.
South Taranaki District Council	
Context	Manages planning and activities on land adjacent to the nationally significant surf break identified at Waiwhakaiho; Taranaki RPS also identifies 81 regionally significant surf breaks.
Surf break policy status	No specific provisions in place; consider general provisions and overlays as adequate for maintaining access – pending review for consistency with NZCPS.
Manawatu-Wanganui	
Horizons Regional Council	
Context	A working group is convening in early 2013 to begin analysis of NZCPS requirements and coastal issues in consultation with key stakeholders within the wider ‘One Plan’ implementation. Morse and Brunskill (2004) identify six surf breaks on the west coast of the region, with the east coast a largely unknown area for surfing, although including parts of the Wairarapa Coast which is known to contain high quality waves.
Surf break policy status	No specific provision for surf breaks within the integrated ‘One Plan’. A coastal management forum is proposed as a method for managing protection activities.
Wellington	
Greater Wellington Regional Council	
Context	No nationally significant surf breaks, but a region with large coast and a broad range of surf breaks including highly rated breaks along the Wairarapa Coast; White Rock has historical issues concerning access; popular town beaches have over-crowding and water quality issues. Morse and Brunskill (2004) identify 55 surf breaks in the region.
Surf break policy status	RPS about to become operative with no specific provisions – aims to take an integrated management approach and catchment-based focus and contains a specific coastal chapter; expecting surf breaks to fall under considerations for coastal natural character and landscapes in RPS; Currently reviewing RCP with a draft scheduled for release to gather public comments before publicly notifying a proposed RCP in 2014; intend to include a policy to protect surf breaks and may identify regionally significant breaks – methodology not established but intend to engage key stakeholders during draft stage.
Tasman	
Tasman District Council (Unitary)	
Context	RCP became operative in 2011, policy programmes will reflect NZCPS but no review scheduled for RPS or RCP; Morse and Brunskill (2004) identify 5 surf breaks in the region.

Surf break policy status	No specific provisions in current planning documents; Expect general CMA controls to capture surf break issues; Issues have not been raised about surf breaks within public consultation for current planning framework.
Nelson	
Nelson City Council (Unitary)	
Context	Combined Plan with a review process for coastal issues beginning no sooner than July 2013; Surf breaks are known although have a narrow swell corridor which affects their consistency; Morse and Brunskill (2004) identify 8 surf breaks in the region.
Surf break policy status	No specific provisions in current planning documents.
Marlborough	
Marlborough District Council (Unitary)	
Context	Review of RPS in draft form, due to be notified for public discussion in late 2013; mapping of natural landscape and natural character by Boffa Miskell pre-dates NZCPS 2010 ⁶¹ ; Morse and Brunskill (2004) identify 2 surf breaks in the region.
Surf break policy status	No specific provisions in current planning documents; expect general CMA controls and resource consent processes to capture surf break issues.
West Coast	
West Coast Regional Council	
Context	RCP being reviewed and a draft will be publicly notified in 2013 – includes mapping of natural character and natural landscapes undertaken by Brown NZ Ltd.; RPS review on hold in light of pending National Policy Statements relating to freshwater management; Morse and Brunskill (2004) identify 23 surf breaks in the region, guide does not include area south of Greymouth described as a rugged coastline that features “breaks of superb quality and consistency... an awesome sight... river bars, hollow beach breaks, reefs and several cranking left-hand point breaks... most of the breaks are isolated and miles from the highway” (p. 412).
Surf break policy status	No specific provisions in current planning documents.
Canterbury	
Canterbury Regional Council	
Context	See Case Study 5 (Chap. 6)
Surf break policy status	
Kaikoura District Council	
Context	Manages planning and activities on land adjacent to two nationally significant surf breaks identified at Maungamanu and Meatworks;
Surf break policy status	Gap analysis of DP compliance with NZCPS is being conducted and due for completion in February 2013, landscape overlays also being reviewed; KDC is seeking to develop a management plan for the Maungamanu area with community input on reserves, roading safety and access issues to be sought; toilet installed at Meatworks surf break is maintained by Kaikoura Boardriders Club and considered a good outcome in terms of a community partnership; KDC a major partner in the Te Korowai Strategy ⁶² released in October 2012 – this identifies NZCPS 2010 surf breaks of national significance and identifies eight breaks of regional significance in the wider Kaikoura area – this strategy is focused on marine biology and is viewed as a platform for boosting the prioritisation of coastal issues at a regional level.
Otago	
Otago Regional Council	

⁶¹ See *Marlborough Landscape Study 2009: Landscape Characterisation and Evaluation Final Report*, obtained from Marlborough District Council.

⁶² For more information, see website retrieved Jan 15, 2013: www.fishnet.co.nz/teamkorowai/

Context	Region contains 4 nationally significant surf breaks at Karitane, Whareakeake (Murdering Bay), Aramoana ('The Spit') and Papatowai. Advocacy groups for surfing interests well known as a result of on-going issues concerning Aramoana surf break. Morse and Brunskill (2004) identify 32 surf breaks in the region.
Surf break policy status	No specific provisions in place, expect surfing issues to be incorporated into RPS review beginning in February 2013.
Dunedin City Council	
Context	Manages planning and activities on land adjacent to three nationally significant surf breaks identified at Karitane, Whareakeake (Murdering Bay) and Aramoana ('The Spit'). Will meet with Otago Regional Council in 2013 to consider issues as part of RPS review.
Surf break policy status	No specific provisions in place.
Clutha District Council	
Context	Manages planning and activities on land adjacent to nationally significant surf break identified at Papatowai (for its importance to big wave surfing); area is remote and surrounded by lots of park land, considered by planning staff to be low risk of impacts.
Surf break policy status	No specific provisions in place; Rolling review of DP yet to cover coastal provisions – due to do so within next couple of years; consider freedom camping as a potential issue to manage; expect broader integrated catchment management planning approach to control potential impacts from land-based activities.
Southland	
Southland Regional Council	
Context	Morse and Brunskill (2004) identify 10 surf breaks in the region.
Surf break policy status	Conducting a gap analysis due to be completed in June 2013 for giving effect to NZCPS 2010 in RCP (became operative in 2008); Proposed RPS contains no specific provisions for surf breaks (review begun in 2008). General recognition of importance of surf breaks to communities in Southland but yet to conduct identification and assessment as part of natural character; people are pictured surfing in a photo on the opening page of the proposed RPS chapter on the coast; resourcing constraints mean workflow priority is on freshwater and water quality management.

13.6 Appendix 6: A note on the identification of surf breaks

Beyond the schedule of surf breaks of national significance identified in the NZCPS 2010, surf breaks are identified using the *WaveTrack New Zealand Surfing Guide* produced by Morse and Brunskill (2004). It should be noted that in the short descriptions of each region, there are often comments found about the number of surf breaks and unexplored areas that are not identified in the guide. For example, in the Dunedin section, the following comment is made (p. 496):

If you have an appetite for adventure you'll find a hundred more quality breaks which are not mentioned in this guide

There are also a number of spots in this guide that are labelled as 'Spot X' which signifies a locally known spot which is intentionally unidentified. This general concept of a 'secret spot' is acknowledged in the regional studies conducted by Peryman (e.g. 2011b, p. 27):

Secret spots are breaks where their location is removed from public exposure. This concept is of cultural significance for surf-riding communities. This tradition in surfing is intended to preserve the existing values of a unique break to ensure the integrity of its access, use and enjoyment is not detracted from. In resource management practice, the concept may have similar parallels to waahi tapu sites, where the location of some sites remain intentionally undisclosed for cultural purposes.



*Secret and little known breaks provide an extra dimension to New Zealand's surfing culture
Photo: S. Orchard*