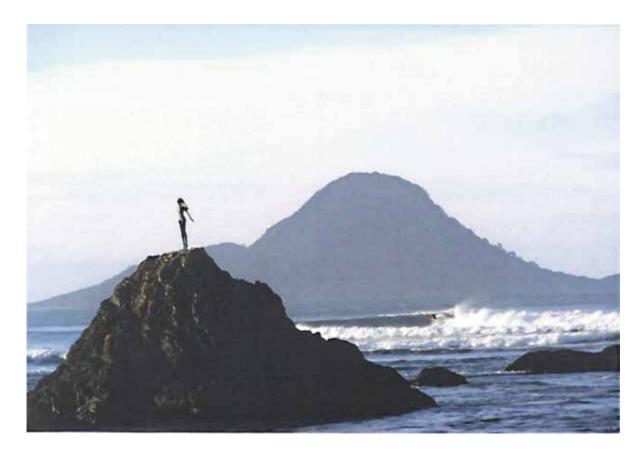
# Bay of Plenty Surf Break Study

April 2011



Prepared by Bailey Peryman, Lincoln University Planning Student

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An identification of significant surf breaks and development of associated evaluation criteria in the Bay of Plenty region

April 2011

Prepared by Bailey Peryman, with assistance from Bay of Plenty Regional Council

Cover Photo: Whakatāne Heads, photographer Tony Ogilvy

## Acknowledgements

The author would particularly like to thank the following for their involvement in the study:

David Phizacklea, Matt Skellern, Tony Ogilvy, the Whakatane-Ohope surfing community, Graham O'Rourke, Nassah Steed, Justine Brennan, Bev Hughes, Brie Sherow, Ned Nicely, James Frazerhurst, James Jacobs, the Hadfield Family/Whanaunga, Jonnie Mead, the Surfbreak Protection Society, Hamish Rennie, Mount Maunganui Surf Lifesaving Club, all the workshop attendees, and all the interviewees.



Figure 1 Papamoa Beach – image by Bailey Peryman.

### **Executive summary**

Surf breaks form unique areas in the natural character of the coastal environment. This study investigates criteria necessary to identify where surf breaks occur and rate their associated values in order to provide for their sustainable management under the Resource Management Act 1991.

Mandate for the recognition of surf breaks within the coastal environment comes under the New Zealand Coastal Policy Statement 2010, in what is a relatively new area of resource management in the New Zealand context. The report builds on existing approaches to surf break protection through public consultation and synthesis of a well-established knowledge base on the subject. The outcome is a robust methodology for identifying regionally significant surf breaks and the outstanding components of each break.

The response from community engagement was strongly in favour of continuing a positive and proactive approach to protecting surf breaks as regionally significant natural resources. Surf breaks provide for a healthy, recreational lifestyle with values that span the four wellbeings for coastal communities in the Bay of Plenty region. Respondents were generally supportive of a collaborative approach to further policy development and implementation; as opposed to relying on costly challenges to ad hoc decisions made through the consenting process.

The study presents a surf break assessment criteria developed through community engagement. The key criteria used are wave quality, consistency and break type (rarity). The report identifies regionally significant surf breaks in the Bay of Plenty region and evaluates each break against the criteria described in the study. This has enabled the identification of individual components contributing to the outstanding value of each regionally significant break. The criteria can be used to assist in developing policy to manage regionally significant surf breaks. The regionally significant surf breaks (ordered geographically from East to West) identified in the Bay of Plenty region are:

- 1 Orokawa Bay
- 2 Waihi Beach (North End)
- 3 Bowentown
- 4 North Matakana
- 5 Matakana Island (Puni's Farm)
- 6 North West Rock
- 7 Main Beach
- 8 Shark Alley
- 9 Mount Coast (east of Rabbit Island Omanu)
- 10 Arataki (off Girven Road)
- 11 Papamoa Beach ('the Domain')
- 12 Motiti Island (east side)
- 13 Kaituna Cut
- 14 Maketu
- 15 Newdicks Beach
- 16 Little Waihi
- 17 Pukehina Beach

- 18 Matata Straights
- 19 Tarawera Cut ('the Black Drain')
- 20 Walkers Access ('Walkers', Walkers Road)
- 21 Thornton Beach
- 22 Rangitaiki
- 23 Airports
- 24 Coastlands
- 25 Whakatane Heads
- 26 Ohope (Westend)
- 27 Opotiki
- 28 Torere
- 29 Hawai
- 30 Maraenui
- 31 Motu River Mouth
- 32 Hariki Beach
- 33 Waihau Bay

Based on the findings of this study, the report recommends the use of developed spatial planning techniques, including policies and methods in the Regional Policy Statement, as well as objectives, policies, methods and rules in regional and district plans. Investigation of non-statutory planning methods for developing suitable management approaches is also suggested. Monitoring of surf breaks is also essential to better understand how they function in the natural environment, which can be achieved through gathering baseline data of surf breaks.

It is hoped the findings and recommendations presented in this report will be developed to assist policy makers in providing for surf breaks through the current resource management framework.

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#### 1.1 **Purpose of the study**

The New Zealand Coastal Policy Statement (NZCPS) requires the protection of nationally significant surf breaks and enables the recognition of surf breaks to natural character and natural features and landscapes. This may be provided for in planning documents and decisions made under the Resource Management Act 1991 (RMA). However, to date there is no consistent way or agreed method by which policy makers and planners identify and provide for surf breaks in the New Zealand resource management context.

This study investigates what is necessary to identify surf breaks and their associated values to provide for their sustainable management in the coastal environment as a natural resource under the RMA. The study area for doing this is the Bay of Plenty Region (Appendix 1). The study builds on existing work by Councils, through the development of NZCPS surf break policy and presents findings on public consultation undertaken over the 2010/11 summer period.

The need for recognising surf breaks in policy is important in light of rapidly increasing demands influencing land and water (fresh and marine) usage and ultimately affecting the integrity of the coastal environment. Suggestions for the wording of policy provisions are included in Appendix 2. Surf breaks and their users provide a unique lens for viewing these competing interests given their location in the 'mixing zone', the confluence of both land and aquatic environments.

This report contains a background on surf breaks and surf-riding within the context of the Bay of Plenty. It then outlines existing knowledge and the mandate for surf break protection in New Zealand. A description of public consultation and its findings is included, along with a schedule and description of regionally significant surf breaks in the Bay of Plenty.

#### 1.2 What are surf breaks and why are they important?

Surf breaks are a finite natural resource and the source of recreation for a diverse and increasingly large range of participants. As a result, surf breaks provide a focal point for values that span the four well-beings (environmental, economic, social and cultural) and contribute to a healthy, community and family-based lifestyle. This lifestyle revolves around the dynamic natural phenomenon that is a surf break; developing respect amongst users, the environment and a sense of identity, ownership and responsibility for preserving the integrity of the coastal environment.

It is important to recognise surf breaks as more than the domain of a once underground and socially isolated surfing fraternity. Although still shared largely in the same spirit as modern surfing pioneers, surf-riding continues to evolve from its roots in traditional Hawaiian culture into a global community pursuing one of the world's most popular recreational activities.

Approximately 7% [310,000] of New Zealanders are estimated to "surf" on a regular basis<sup>1.</sup> Surf-riding makes a valuable contribution to the well-being of New Zealanders by promoting health and fitness, cross cultural and intergenerational camaraderie. All this is based on a very simple experience - riding a wave, in particular a wave with the right characteristics - a "surf break". It is said that "only a surfer knows the feeling".

<sup>1</sup> Figures sourced from Surfing New Zealand.

Internationally, surfing is recognised as one of the foremost lifestyle sports. The international surf industry was estimated to be worth \$8 billion in 2003. There are estimated to be around 20 million surfers world-wide. The sport and its lifestyle have experienced rapid growth over the last three decades with the advent of professional surfing and its popularity as a recreation. Surfing and use of surf breaks for recreation will only continue to grow. This is increasing the demand for the allocation of space for surf riding as a recreation.

#### 1.3 What are the threats?

Many surf breaks have come under threat from coastal activities in the past. There are many examples of this degradation in New Zealand and overseas. Most acutely, water quality has posed threats to breaks. Overseas, some cases have seen breaks become un-surfable due to the health hazard of pollutants being discharged into the mixing zones of surf breaks via land based point sources.

An example in New Zealand was during a flood event in Whangamata, in January 2011. This event saw waste water infrastructure fail. As a result, raw sewerage was discharged into the mixing zone of a nationally significant surf break, Whangamata Bar. Quality surfing days often coincide with storm events within the wave climate of New Zealand's north-east coast, and there were reports from the event of surfers suffering ill health including inflamed cuts, nausea and conjunctivitis. Below is a shot of the 'Chocolate Bar', as it was affectionately named that day.



Figure 2 'The Chocolate Bar'. Photo courtesy of COL/SURF2SURF.com.

While water quality poses an acute threat to the use and enjoyment of surf breaks, damage to wave quality and public access pose others. Coastal activities that are insensitive to the swell corridor, seabed morphology or hydrodynamics of a surf break can result in damage to wave quality or complete loss of a surfable wave.

Internationally, Mundaka in Spain is one of Europe's premier surf breaks. It was host to an Association of Surfing Professionals (ASP) World Tour event in 2005. However, the event was cancelled, due to the loss of wave quality resulting from dredging activity within the associated harbour. In New Zealand, there has been concern over the effect the Whangamata Marina may have on the performance of the Whangamata Bar. Whangamata Bar has an internationally renowned status as a surf break, affirmed by Hawaiian surfing legend, 'Mr Pipeline', Gerry Lopez. Lopez described the break as a "jewel in the South Pacific". The perceived threat to Whangamata has mobilised the surfing community to campaign for national level policy on the protection and preservation of surf breaks.

Private property rights have traditionally played a part in surfers gaining access to breaks. New Zealand has large tracts of rural land along its coastline. Although the Bay of Plenty has good road access along its coast, it is common for surfers to cross private property to access breaks. Many of these agreements have existed to benefit surfers. However, there are cases in the Bay of Plenty where access to breaks has been restricted causing conflicts between territorial authorities and land owners. Therefore, maintenance and enhancement of public access is required to ensure the continued use and enjoyment of surf breaks.

#### 1.4 Why are surf breaks provided for in planning?

Competition for space in the coastal marine area (CMA) coupled with conflict over coastal activities hindering surf breaks has prompted developments in the field of surfing science and social research on surf breaks. This has resulted in an understanding of the coastal dynamics of surf breaks and the social, cultural and economic values they have.

This knowledge base is especially strong in New Zealand. In the mid-nineties, Waikato University and the National Institute of Water and Atmospheric Research (NIWA) established the Artificial Surfing Reef Programme. The programme looked at combining the amenity of surfing with multi-purpose, soft engineering solutions for coastal management. The programme has produced multiple benefits in terms of science and understanding about the social and environmental dynamics of surfing. This understanding has assisted in creating resource management policy to preserve surf breaks in New Zealand.

During the Board of Inquiry (BOI) into the NZCPS, submitters produced evidence on the current understanding of surf breaks, along with many experiences from all over the country about the value of surfing to recreation. In doing so, the submitters were successful in having national level resource management policy approved by the Minister of Conservation. This knowledge and understanding has also been applied overseas in the preservation of surf breaks through surfing reserves, which is touched on later in the report.

#### 2.1 Maori mythology and heritage

Surf-riding is interwoven within ancient Polynesian culture and Māori cultural heritage.<sup>2</sup> In Māori mythology Te Wai Pounamu (the South Island) is the Great Maui's waka. In this waka, Maui fished up Te Ika a Maui (North Island). Kaikoura is Maui's foot thwart which busted out on the waka as he pulled the fish up. That indicates Maui was balancing his pressure on the waka on his feet, like a surfer.

The South Island was then (pre the year 500a.d.) referred to as Te Waka o nga Ariki (the waka of the Gods). It was once a double hulled waka which flipped and one hull was lost, the other surviving hull is Te Wai Pounamu (then named Aotearoa). The South Island (as can be seen by the ocean floor scaring) travelled the entire Oceanic rim (as an ocean vessel), before crashing on a reef where we presently are. So this indicates some of the earliest ocean uses, began here in Te Wai Pounamu.

In tracing history of Maori carrying out the practice of wave riding, articles and some informants describe early Maori riding waves for leisure, regularly having kaitiaki like whales or dolphins. The joint activity of using Waka Ama and Long (Oro/Orooro) or Short (Papa Ariki) surf riding equipment, was described as Whakarerere.

Te Papa Tongarewa Museum has written evidence on their website stating the use of Poha (blown up kelp bags) for recreational riding of waves. Two bags were tied together, placed over the shoulders so one is on each side, and then waves were ridden into shore in a bird like position. It is also believed this tradition may have originated from the South Island of New Zealand. These traditions are believed to have been practiced as early as 1200a.d. (the pre fleet period or earlier) up to the 1700's (1770a.d. Cooks arrival).

Surfing is part of New Zealand's cultural heritage, as the art of wave riding/surfing, was a necessary skill for all Waka navigation. Internal knowledge and skill is still shared among Polynesian ocean users, i.e. reading vibrations in the ocean (with a waka hoe/paddle) to determine where land is and ancient chants recalling the working physical and environmental working dynamics between ourselves and the natural world cycle, obtainable through the surfing experience.

Surf breaks play a major role for indigenous surfers in New Zealand today. National Māori competitions are held and Māori teams compete at international indigenous surfing events. There is also a notable resurgence in the practice of waka ama.

Section 6(e) of the RMA states that the relationship of Maori with their ancestral lands, water, sites, waahi tapu and other taonga shall be recognised and provided for as a matter of national importance. Under section 7(a) 'Other Matters', particular regard to kaitiakitanga shall be had in regard to natural resources (that include surf breaks), in achieving the purposes of the RMA. Therefore in providing for surf breaks the relationship of tangata whenua to surfing and surf breaks should be considered.

http://www.lincoln.ac.nz/Documents/LEaP/Final%20SPS%20Comments%20to%20Draft%20Canterbury%20RPS.pdf

<sup>2</sup> Taken largely from SPS Submission on Proposed Canterbury Regional Council RPS:

#### 2.2 Modern surf culture

The advent of modern day surfing was inspired by Duke Kahanamoku who visited New Zealand beaches between 1915-1920. The 'Duke', as he was known, was a Hawaiian Olympic Gold medallist in swimming. He was internationally recognised for breathing life back into the dying art of surfing, one of the favourite ancient past time of his Polynesian ancestors.

Modern surf-riding has developed out of this traditional form and continues to evolve as a culture in its own right and is well established in parts of the Bay of Plenty. Now a global community, surfing is a culture rich in diversity and the way it is expressed. This is evident through the growing range of surf craft in the water (longboards, shortboards, paddle boards, canoes, and kayaks). What is unique about this culture is the universal code of ethics that bind all users of surf breaks. The integrity of these ethics is widely acknowledged to engender positive relationships between individuals both in the water and on land. By this code, surf break users learn to share waves in a safe way, respect each other and the surrounding environment. Understanding this code develops in conjunction with the eco-literacy<sup>3</sup> of the individual where recreation doubles as outdoor education. This ethic has ensured the longevity of the unique experience of surf-riding. It is said that "only a surfer knows the feeling". Testament to this culture being alive and well in New Zealand is the recognition of surf breaks in the national level policy guiding the governance of our coastal environment.

<sup>3</sup> For more on this concept see: Kahn, R. (2010). Critical Pedagogy, Ecoliteracy and the Planetary Crisis: the ecopedagogy movement. Peter Lang Publishing: New York, USA.

#### 3.1 **Overview of surf breaks in the Bay of Plenty region**

The Bay of Plenty is a large, mainly sandy coastal area with a northerly aspect. There are a few rocky headlands that break up the long white sand beaches and it is around these headlands and harbours or river mouths that many of the Bay's best surf breaks are found (Bhana 1996; Brunskill & Morse 2004). Although an exposed coastal region, the Bay has a limited window for swell that is most consistent during summer and autumn, although is probably one of the less reliable east coast regions in terms of surf (Bhana 1996; Brunskill & Morse 2004). Its northerly outlook requires strong easterly or north to north-easterly swells to get in. The entire Bay of Plenty gets waves when the swell is up. The beaches are long and usually have plenty of surfable sand banks (Bhana, 1996; Brunskill & Morse 2004).

Throughout much of the Bay of Plenty, roads run next to the coast making access to breaks easy. During the summer months the Bay experiences a population explosion. In particular, Waihi, Mount Maunganui, Whakatāne and Ohope are popular summer holiday destinations for domestic and international tourists who come for surf, sand and sun. A number of towns offer a range of surf shops, surfboard and wetsuit manufacturers, surf schools and anything else a travelling surfer may need (Brunskill & Morse 2004).

Pockets of the region can be grouped around regionally distinctive geographical areas, largely as a reflection of the local recreational communities that frequent the breaks within these areas. This is also reflected in the allocation of criteria defining the outstanding features of each surf break and will provide a useful guide when focusing management options. For example, common landscape elements could assist in determining the spatial extent of breaks for mapping or groups of breaks significant to local communities could be considered together in community plans.

#### 3.2 Surf breaks in the Western Bay

Mount Maunganui is one of New Zealand's major seaside holiday destinations. The Mount caters for thousands of tourists and holiday-makers who travel here each year to enjoy the sunshine, golden beaches and recreational facilities. The Mount lies on the sandy isthmus that joins the 230 metre high volcanic promontory at Tauranga Harbour's entrance to the mainland to the east (Bhana, 1996). Matakana Island is inseparable from the Mount surfing community despite access being restricted to boats or other motorised water craft. Paddling across is now prohibited due to the busy shipping alley. Matakana's exposed northern coastline consists of a steep-profile golden sand beach that stretches from the Katikati entrance of the Tauranga Harbour in the west to the Tauranga entrance in the east (Bhana, 1996).

There is a distinct local surfing community focused around the surf breaks at or within close proximity to the areas scheduled as Kaituna Cut, Maketu, Newdicks, Little Waihi, Pukehina Beach.

#### 3.3 Surf breaks in the Eastern Bay

Whakatane and Ohope are situated at the base of a rocky headland that extends several hundred metres into the sea. The Whakatane River flows out on the western side of the headland and is a popular port for fishing and game fishing boats (Bhana, 1996). The township of Ohope is separated geographically from Whakatane, but shares the same popularity as a coastal community in its own right. This area is another of the Bay's popular coastal holiday destinations with a distinct local surfing community focused around the surf breaks in this area (generally from Matata out to the East Cape).

East of Opotiki and into the East Cape is a remote, rugged and largely undeveloped stretch of coastline that possess some legendary surf break setups (Brunskill & Morse 2004). They are bound especially by the landscape and seascape and the complete grass-roots, wilderness experience this offers surf break users. Tangata whenua extend significance far beyond recreational use of the surf breaks and resilient local hapu and iwi are reputed to be staunch guardians of these values. The area is also significant for 'outsiders' who have recreational ties to the area stretching several generations.

## Part 4: Mandate for surf break protection in New Zealand

Local authorities with jurisdiction over the coastal environment are required to provide for the protection of surf breaks of national significance under the New Zealand Coastal Policy Statement 2010 (NZCPS). This is in regard to functions under the Resource Management Act 1991 (the Act) relating to the sustainable management of the coastal environment. The section outlines the mandate under the Act for surf break protection in New Zealand.

#### 4.1 **Review of the New Zealand Coastal Policy Statement 1994**

Provision for surf breaks in the NZCPS came about by a public review of the previous New Zealand Coastal Policy Statement 1994. In 2004, the Department of Conservation initiated the 10-year review. This involved an independent review by Dr Johanna Rosier.<sup>4</sup> In broad terms, the independent review identified that more clarity, direction and specific policy was required in relation to the coastal environment to achieve the purposes of the Act.

The independent review resulted in a recommendation to the Minister of Conservation that a formal review of the New Zealand Coastal Policy Statement 1994 be undertaken. This recommendation was accepted and the review began.

#### 4.2 Proposed New Zealand Coastal Policy Statement 2008

The Proposed New Zealand Coastal Policy Statement 2008 (PNZCPS) included Policy 20 'Surf breaks of national significance' (bold emphasis added to highlight key wording through the BOI process):

The surf breaks at *Ahipara, Northland; Raglan, Waikato; Stent Road, Taranaki; White Rock, Wairarapa; Mangamaunu, Kaikoura; and Papatowai, Southland,* which are of national significance for surfing, shall be protected from inappropriate use and development, including by:

- (a) ensuring that activities in the coastal marine area do not adversely affect the surf breaks; and
- (b) avoiding, remedying or *mitigating* adverse effects of other activities on access to, and use and enjoyment of the surf breaks.

The above policy incited significant response from surfers and surfing organisations resulting in around 90 submissions, making it one of the most submitted on policies in the PNZCPS. A Board of Inquiry (BOI) was appointed to hear submissions and make recommendations to the Minister of Conservation on the PNZCPS. Many concerns were raised in submissions over the identification of the breaks in Policy 20. Subsequently, after hearing evidence, the BOI adopted evidence of the Surfbreak Protection Society, resulting in a new schedule of 17 breaks for protection. Policy 20 was also reworded and in recommendations to the Minister.

<sup>4</sup> Rosier, J 2004. An Independent Review of the New Zealand Coastal Policy Statement. Report to the Minister of Conservation. May 2004. Massey University, Palmerston North, New Zealand.

A new Policy 18 was put forward as follows:

All decision makers must recognise and protect surf breaks of national significance for surfing, **including those listed in Schedule 2**, 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.

#### 4.3 New Zealand Coastal Policy Statement 2010

The final Policy 16 'Surf breaks of national significance' in the NZCPS 2010 reads relatively the same as the BOI recommendation above:

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.

A 'surf break' is defined in the NZCPS 2010 glossary as:

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.

The 17 surf breaks of national significance in Schedule 1<sup>5</sup> are:

#### Northland

- Peaks Shipwreck Bay
- Peaks Super tubes Mukie 2 Mukie 1

#### Waikato

- Manu Bay Raglan
- Whale Bay Raglan
- Indicators Raglan

<sup>5</sup> The list was drawn from the Wavetrack New Zealand Surfing Guide. This was accepted by the Board of Inquiry as the most authoritative guide to New Zealand surf breaks and a legitimate proxy in the absence of any established assessment criteria for surf breaks.

#### Taranaki

- Waiwhakaiho
- Stent Road Backdoor Stent Farmhouse Stent

#### Gisborne

- Makorori Point Centres
- Wainui Stock Route Pines Whales
- The Island

#### Coromandel

• Whangamata Bar

#### Kaikoura

- Mangamaunu
- Meatworks

#### Otago

- The Spit
- Karitane
- Murdering Bay
- Papatowai

It should be noted that the breaks listed in the final schedule are primarily high performance waves by nature of the rating system applied in the Wavetrack Guide. They protect a group of breaks that are limited in the user groups they provide for. The breaks scheduled in Policy 16 remain the same as those listed in the BOI recommendation and must now be protected by the relevant local authorities.

The fundamental change in wording between Policy 18 and 16 was made by removing the word "including". This renders the list of breaks in Schedule 1 conclusive, removing the ability to identify any future nationally significant breaks without a variation to the NZCPS. The ability to add to this list was desired by key submitters. BOI recommendations accepted these submissions in support of a policy enabling additional (yet to be identified) breaks, hence the use of the term "including".

The ability to identify further breaks for protection, whether they be nationally significant or otherwise is provided for elsewhere in the NZCPS, which is discussed in Section 4.4.

#### 4.4 Natural character of the coastal environment

None of the 'nationally significant' breaks fall within the Bay of Plenty Region. However, scope for application of the NZCPS 2010 to further identify surf breaks (across all scales of significance or importance) is addressed within the BOI working papers. There is a mandate for such work in the NZCPS 2010, as a result of Policy 13 'Preservation of natural character' which recognises surf breaks contribute to natural character under part 13(2)(c) of the policy. Under part 13(1)(a) of the policy, local authorities exercising their functions under this policy are required to avoid adverse effects on areas of outstanding natural character. This can be done via methods of mapping or otherwise identifying sites in regional policy statements and plans.

Policy 13 – Preservation of natural character (directly relevant provisions bolded for emphasis):

- (i) 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.
- (ii) 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 matters listed in Policy 13 also include factors that contribute to the quality and integrity of the natural processes that create a surf break, such as 'the natural movement of water and sediment' (e.g. the case of the nationally significant Whangamata Bar surf break where dredging for a new marina within the coastal environment has altered sediment flows that shape 'the Bar'). This is also supported in the BOI working papers:

The quality of the wave can potentially be compromised by developments in the swell corridor seaward of the break, and the enjoyment of surf breaks by surfers compromised by discharges, limitations on access, and changes to natural character.

In achieving the purposes of Policy 13, it should also be noted that the preservation of the natural character of the coastal environment is a matter of national importance within section 6(a) of the RMA, which states:

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:

(e) 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....

It should also be acknowledged that 'avoidance' is the applicable provision in Policy 13, as remediation and mitigation of surf breaks is not applicable. While technology exists to replace a natural surf break (with a multipurpose surfing reef), this is not considered to be a feasible approach. This was tested in the BOI process through submissions on the matter<sup>6</sup>. Subsequent amendments to policy wording resulted in preference for 'avoidance' as part of Policy 16.

#### 4.5 Natural features and landscapes

Further mandate is also potentially provided by Policy 15 'Natural features and natural landscapes' which includes 'seascapes' (DoC, 2010). The working papers for the BOI recommendation also support further investigation into New Zealand's surf breaks through regional policy statements and plans.

We agree that the matters of national importance – particularly preserving the natural character of the coastal environment and outstanding natural features from inappropriate subdivision, use and development - involves more than protecting surf breaks of national significance. Surf breaks not identified and protected as nationally significant under policy 20 (now 16) are also likely to require consideration under other policies, such as natural character, outstanding natural features and landscapes, public open space and public access.

The natural character of an area includes surf breaks. This does not mean that surf breaks should only be considered in the context of their contribution to natural character. They are also a transiently legible part of the seascape, which includes the geological, topographical and hydrodynamic components. Seascapes are not simply the bit of water bounded by land, nor are outstanding features simply those that are permanently above water or on dry land. Consequently, the recognition and protection of nationally and regionally outstanding surf breaks as features in

<sup>6</sup> See evidence of Hamish Rennie, retrieved October 20, 2010 from http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-7-7.pdf

themselves or as features within landscape/seascape is another consideration for surf break policy development. These components are specifically reflected in Policy 15 of the NZCPS 2010 which states: (bold emphasis added)

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;
- 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.

#### 5.1 New Zealand

#### 5.1.1 Taranaki Regional Council

Taranaki Regional Council (TRC) was the first local authority to provide for surf break protection within RMA policy. This was achieved by the recognition of 81 surf breaks in the Regional Policy Statement published in 2009. TRC identified surf breaks that are important to the region using the council's inventory of Coastal Areas of Local or Regional Significance in the Taranaki Region (2004), the *Wavetrack New Zealand Surfing Guide* (Brunskill and Morse 2004) and through consultation with local board-riding clubs (TRC 2009).

The 81 breaks are mapped within the Regional Policy Statement, to show either the location of an individual surf break or by a line extending along the coast where there is a protected surf zone. 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 information is provided within the Taranaki RPS 2009 regarding the values of the different breaks or whether some are more significant than others.

Within their Regional Policy Statement, Taranaki Regional Council has opted to protect the scheduled breaks by referring to them in the policy explanations, rather than in objectives, policies or methods. This approach has both advantages and disadvantages. Explanations can provide useful context for policies by including examples and descriptions of what is meant by policies. In addition, having more general objectives and policies allows a more concise Regional Policy Statement than including a greater level of detail within the statutory provisions.

However, it is the objectives, policies and methods that actually have statutory weight and provide the statutory link between the wording of the policies and the surf breaks scheduled in the RPS maps (ARC 2010). Relying on explanations does not give any greater statutory recognition of surf breaks than was present before the amendments were made in response to submissions. This approach could result in a lack of recognition of surf breaks unless plan users continually refer back to the background sections of the RPS.

#### 5.1.2 Auckland Regional Council

The former Auckland Regional Council (ARC) prepared a 'Draft Auckland Regional Policy Statement Background Report – Surf Breaks' in March 2010 to inform their draft RPS. This report has not resulted in any public policy to date.

The ARC report was conducted by experts in the field of coastal science and coastal planning, with knowledge and experience in surfing and surf breaks within the Auckland region. It was an in-house, background report for policy development that did not go out for public consultation.

The report came up with a list of criteria for rating (numerically) a range of factors specific to the unique characteristics of surf breaks. Once aggregated, the individual ratings for each criterion gave the break an overall rating.

#### 5.2 International

#### 5.2.1 Surfing Reserves

The environmental movement is growing within the surfing community and is perhaps exemplified by the World Surfing Reserves initiative.<sup>7</sup> These reserves are symbolic, however their strength arguably lies in the education and celebration of unique surf breaks. This is important as it enables locals to feel that their special places are recognised as such. The vision involved in surfing reserves is essentially to dedicate and respect iconic surfing areas for future generations.

Surfing reserves are well established in Australia through the National Surfing Reserves programme recognised by the BOI during the NZCPS process (DoC, 2009a). These reserves are protected by law, with coastal waters gazetted under legislation. There are currently eleven reserves in Australia, with many more planned. Hawaii has also passed legislation creating surfing reserves of similar status in Waikiki and the North Shore.

Reserves can have wider functional benefits informing visiting surfers of the important cultural aspects of an area. They also can also serve as a reminder of the universal surf riders code of ethics which promotes an enjoyable surfing experience for all (Appendix 3). It is important to note this 'code' has largely remained unwritten and regardless of how it is recognised, will be enforced by surfers according to their localised interpretation. Enshrining such a code in statute is potentially the most abhorrent, insensitive recognition of surf culture local authorities could achieve. There are also a number of concerns surrounding the influence of the surfing 'industry' (i.e. commercial interests) in the wording of policy derived from the values embodied in surfing reserves (see Appendix 4).

#### 5.3 Lessons for developing surf break policy

Overall, analysis of the NZCPS Board of Inquiry recommendations and existing approaches to surf break protection policy display a number of key learnings:

- (a) The need for a robust methodology for identifying and rating a representative range of surf breaks.
- (b) The requirement for explicit recognition of surf breaks within relevant statutory provisions rather than relying on consideration of general values/issues (e.g. water quality, access, natural character).

General values (e.g. water quality, access, natural character) are important but there is a need to recognise where natural processes create an important recreational resource that has social, cultural and economic benefits for the wider community – i.e. as a greater/additional value created by the unique feature that is a surf break.

(c) General values associated with surf breaks should not be limited to the predominantly high performance breaks identified as nationally significant in Policy 16. Local breaks that foster surfing communities and cater for all levels of surfers is also important at a regional level. These could include 'nursery' breaks that have high recreation value for a variety of reasons (e.g. 'regionally significant' breaks may also include popular town beaches).

<sup>7</sup> For more see the following websites: http://www.surfingreserves.org/ http://www.savethewaves.org/WSR fag

- (d) Specific aspects of the definition of 'surf break' are important concepts to include in policy development. Swell, currents, water levels, seabed morphology, and wind are all components of surf breaks and any activities that impact these physical processes could adversely affect surfing wave quality and consistency.
- (e) The definition of a surf break can cover a large spatial extent, beyond the location of water riding. The swell corridor of a surfing break could extend far out to sea (beyond the 12 nautical mile mark), and activities such as aquaculture, dredge spoil disposal and wave energy infrastructure at certain scales could block or modify waves travelling through the swell corridor.
- (f) Avoidance of effects is appropriate for policy making, as mitigation or remediation of a surf break is impracticable. Further to this, the precautionary approach should be taken toward management of breaks when considering threats because there is a lack of scientific information about surf breaks.
- (g) Activities beyond the CMA can potentially effect surf breaks such as land based discharges effecting water quality and sedimentation, and restriction of public access to a break.

#### 6.1 Methodology

The purpose of public consultation was to develop existing knowledge of surf break protection methods and techniques by testing them in consultation with local communities. Engagement included the following methods:

- 1 Two public workshops held at Mount Maunganui and Whakatane.
- 2 Targeted interviews with surfers that have extensive experience surfing in the Bay of Plenty region.
- 3 Formal correspondence with other interested parties (emails, phone calls, meetings).

The complete methodology for public consultation is laid out in the 'community engagement plan' drafted in the scoping stage of the project (see Appendix 5). A consultation record is included in Appendix 6. This includes a summary of all the consultation undertaken throughout the study. Material used during public consultation to gather input and promote the study are included in Appendix 7. It is noted here that material for the workshops were the same, in both Mount Maunganui and Whakatāne.

#### 6.2 Summary of findings

#### 6.2.1 Surf break assessment criteria

Justification for developing a more robust methodology and set of criteria for identifying breaks is addressed in the BOI working papers:

We conclude that there should be no criteria in the policy [NZCPS 2010] for selecting further surf breaks of national significance given that there could be developments in the methodology in identifying and rating natural surf breaks. For example, we note the strong plea by many submitters for ensuring diversity of surf breaks so that all surfing skill levels are provided for (DoC 2009b).

'Surf Break Assessment Criteria' were developed through consultation with the public and amongst coastal experts involved with surf break protection. The assessment criteria "headings" developed through consultation are included below.

See Appendix 8 for further details of the criteria.

#### **Compulsory Criteria**

- 1 Wave Quality
- 2 Break type
- 3 Consistency of surfable waves

#### **Optional Criteria**

- 4 Size or diversity of break area.
- 5 Naturalness/Scenery.

- 6 Level of use.
- 7 Amenity value and access..
- 8 Local community and competition.
- 9 Value as a national/internationally recognised break.
- 10 Cultural values.

Assessment criteria have been developed as a guide for identifying the outstanding values, features and characteristics of a surf break. Criteria consider these aspects for surf breaks as part of the natural character and as natural features and landscapes (including seascapes) of the coastal environment.

The ARC report first came up with criteria because it is preferable to explicitly recognise surf breaks within policies, rather than relying on general values as adequate provisions. Surf breaks should be recognised as unique locations where natural processes create an important recreational resource that has social, economic and cultural benefits for the wider community (ARC 2010).

Criteria are important as a robust tool in the development of the methodology for protecting surf breaks. They are best applied at the identification stage in developing surf break policy through consultation with users and local interests connected with each break. This process of identification through consultation is important for a number of reasons:

- Surf breaks have different importance for different users. The value of a break is largely in the eye of the beholder. A learner break would be highly valued by a beginner, but less valued by an experienced surfer looking for high quality waves.
- Local knowledge is currently the most authoritative source of information on the various values of surf breaks in terms of access to, use and enjoyment of a surf break.

Therefore a break may be outstanding for a diverse range of reasons. The assessment criteria in Appendix 8 are designed to capture this.

Surf break users tend to frequent a select range of breaks within a localised region, at times venturing farther afield to breaks which are favoured. Commenting on breaks they have not surfed, or do not surf regularly, is considered by surfers to be beyond the rights of that individual. Surf break assessments are not likely to be credible or accurate if conducted without input from persons with some prior experience or observation of the break. This is because they are the people who frequently access the breaks, know their history, understand the inherent qualities and how they contribute to the fabric of the local surfing community and surf industry.

Respondents highlighted the need to separate the evaluation of overall wave quality, wave consistency and rarity as the most important aspects in assessing a break. They are less subjective values and consultation shows they are generally able to be rated numerically. The same applies for break type which can be easily recognised and categorised in terms of rarity (Scarfe 2008). In general, respondents felt there was a need to weigh and distinguish certain criteria as more important than others. This element is important for future considerations of how to establish the relative importance, significance or 'level of outstandingness' for a break (or for any part of Policy 13 and 15 for that matter).

Respondents also highlighted the need for qualitative analysis in the assessment of a break beyond simply assigning numerical values. This suits the identification of all the other aspects of a surf break that provide values associated with access, use and enjoyment. In light of this, criteria are worded to reflect the different aspects of the NZCPS policies directing the mandate to provide for surf breaks. For example, criteria No.5 directly addresses Policy 15 (c)(iv) *aesthetic values including memorability and naturalness* and (c)(x) *wild or scenic values* (DoC 2010).

Given the variation in perception of values by users and the different attributes surf breaks have, comparing the quality or significance of different surf breaks presents difficulties. This issue was raised in consultation using the ARC approach to assessing surf breaks, it would be arbitrary to rate an attribute that is not applicable to a surf break. This may undermine the 'outstandingness' of an important attribute, therefore may not result in a robust assessment of that break. However, it was acknowledged in consultation that there are some assessment criteria that can be attributed to all surf breaks; namely wave quality, consistency and rarity.

Therefore in response to the issues raised, the study has developed an assessment criteria model that enables the individual merits of each break to be assessed. This assessment criteria includes the important standardised criteria of wave quality, consistency and rarity to be factored into the assessment of any surf break, and then provides for other optional criteria to be attributed to a break on a case by case basis.

Consultation established the legitimacy of the *Wavetrack Guide* as a starting point to develop a clear enough understanding of surf breaks and their associated use. The guide also proved useful in its application for supporting other values or definitions, such as rating wave quality for criteria No.1, or identifying the break type in criteria No.2. It should be noted here that the final ratings for surf breaks in Appendix 9, in terms of wave quality do not correlate to those in the Wave Track Guide. This is because Wavetrack is a national guide that rates breaks on this basis. Regionally significant surf breaks should be assessed in respect to the context of the Council's jurisdiction. This will ensure that a wave is rated in respect to how good it is in Bay of Plenty surfing terms, not in comparison to the rest of the country.

Finally, it is important to distinguish between use of the criteria as a guidance tool for identifying the values, characteristics and features of a break and its associated use; as opposed to application for the purposes of conducting an environmental impact assessment. Although criteria may evolve or be malleable to suit this purpose, this has not been explored within this study.

In summary, criteria have been designed to identify the components of outstanding value of regionally significant surf breaks and their contribution to natural character of the coastal environment. For the experienced surfer it is undoubtedly the quality of the waves, the type of break and the consistency of high quality surfable waves. For the wider recreational community, surf breaks possess many other values. Overall, the criteria represent the varying aspects of why a break is outstanding.

#### 6.2.2 Key themes underlying the significance of surf breaks

The following are the key themes arising from consultation and a synthesis of the existing knowledge of coastal experts and key entities involved in the subject.

#### 6.2.3 Local significance and the culture of surfing

Even though waves break everywhere along a coast, good surf spots are rare (Scarfe 2008). A surf break that forms great surfable waves may easily become a prized resource, especially if the wave lacks consistently surfable conditions. If this break is near a population centre, particularly a large area with many surfers, territorialism often arises. A form of tribalism amongst frequent surf break users is a fairly well recognised part of surf culture and is reflected in a number of ways.

Throughout all forms of consultation, respondents consistently stated they could only comment on breaks they frequent regularly in their local area, or spots they travel to based on a memorable experience formed during previous use. Speaking beyond familiar places and experiences is considered to be beyond the rights of that individual. This may be similar to the way tangata whenua who generally reserve detailed comment on issues beyond their tribal area (rohe).

The culture also enters the spiritual realm for many. For example, one respondent described their local break as "our church for our religion". This form of spirituality has attracted academic attention and is generally considered "a religious form in which a specific sensual practice constitutes its sacred centre, and the corresponding experiences are constructed in a way that leads to a belief in nature as powerful, transformative, healing, and sacred" (Taylor 2007, p 923).

Surf breaks can be considered as sacred treasures, taonga and waahi tapu because of their historical link to Māori. Be it a form of culture or religion, surf-riding and its associated activities are the practice of that form. The culture and the place are inextricably linked. A unique aspect of surfing is the universal code that defines the practice and etiquette involved in the access to, use and enjoyment of a surf break. This is adapted to local conditions but will always take the same form regardless of the characteristics of the place. The same concept applies to the formation of surfable waves which are shaped by highly localised conditions, although the recognisable form surf-riders look for will always be apparent.

#### 6.2.4 Social values

The surfing community is large, and has a strong place in the community. This is recognised at national level by stand-alone policy for surf breaks of national significance, as well as direct recognition of surf breaks as forming part of the natural character of the coast. There are very few recreational activities reliant on natural features that have been specifically provided for in such a way within resource management.

Users of surf breaks share them in many different forms of recreation with many positive qualities for the physical and mental health for people of all ages and walks of life<sup>8</sup>. At the grass-roots level, a mixture of formal and informal measures is required to mitigate the increasing pressures on surf breaks. At the core of this issue, there appears to be a need for a broad, well-rounded vision for what surf break protection is aiming to achieve. This is especially so given the subject (surf breaks and our very precious coastal environment) is likely to become popular and exposed to wider media coverage. This attention was experienced first-hand in the media coverage afforded this to study.

This cohesion is crucial in order to maintain both the integrity of the natural coastal environment; but also the integrity of the 'vibe' within a line-up (see Glossary for definition). This 'vibe' is critical to enjoyment of a surf break. If the local etiquette is increasingly being disrespected then the situation can turn into a nasty case of 'surf

8 N. Nicely, personal communication, January 14, 2011

rage'. Social capital is integral to this, through the relationships that are built in the surf, on the beach, in the car park and beyond. Surf breaks are the gathering points for surfers to participate, catch up, encourage young learner surfers, hold contests, and hang out<sup>9</sup>. In the words of one respondent, "they provide a kind of loom from which the social fabric and culture of surfing and surfers is woven".

As much as surf-riding is perceived as an individualistic pursuit there is a lot of camaraderie as a grass-roots activity that remains largely unknown to the general public. Despite this, surf-riding has a massive influence on our social constructs, behaviours and consumer choices. From a non-surfer's perspective, surf culture is perhaps largely misunderstood through the distortion or hyperinflation of the core values and culture that surf-riders truly appreciate.

In light of this, there is also what appears to be a common discrepancy for who this social construct represents. One respondent presented evidence of social marketing efforts by non-surfing companies aimed at changing behaviour, commodity sales and enhanced product meaning through association with 'cool' or healthy lifestyles. This often employs imagery from very visual action sports of which surfing is a highly respected discipline. This image of surfing differs substantially from exposure focused on surfing professionals to the reality of its practice for the average recreationalist.

An important point of difference for this subject was made by another respondent who sought to clarify the difference between the surfing industry and the surfing *community*. The 'industry' being more the competitive and commercial sector of surfriders indicated as perhaps only 5-10% of known 'surfers'; and, the surfing community as the general recreational users of surf breaks largely removed from 'the cool image'. The underlying issue here is the potential for capture of surf break protection by well-organised interests (i.e. 'key stakeholders') for commercial purposes, versus the values of the wider coastal recreation community interested in family, friends and fun.

The uniquely positive thing about surf-riding culture is its broader reach socially beyond the realm of exploitive use of 'cool constructs' – seeing as a wide range of ages take part in using surf breaks (J. Mead, personal communication, 8 February, 2011). Again, this identifies with surf breaks and their use that relies on natural characteristics preserved for many generations. A coherent recognition across all user-groups is fundamental to maintaining the integrity of the social values derived from the access to, use and enjoyment of surf breaks.

#### 6.2.5 Economic values

Surf breaks have wider benefits in terms of economic activity in the local area. International research demonstrates that surf breaks have significant economic value (Lazarow et al. 2007; Nelson et al. 2007). This was recognised by the Board of Inquiry in the drafting of the NZCPS 2010 which stated, "The economic value of surfing to tourism and the social benefits should not be underestimated" (DoC, 2009a). Consultation also identifies the significance of surf breaks as a finite natural resource providing for the economic well-being of local communities throughout the Bay of Plenty region.

<sup>9</sup> J. Mead, personal communication, 8 February, 2011

Waihi, Mount Maunganui and Whakatane, for example, are popular summer holiday destinations for New Zealanders and tourists who come for surf, sand and fun in the sun (Brunskill and Morse, 2004). Each of those towns and a good deal more offer a range of manufacturers and retail outlets selling all forms of water craft and accessories, surf schools, and just about anything else both the resident and travelling surf break user need. This is as far-reaching as the humble, yet legendary, Maketu Pie that even gets a mention in the *Wavetrack Guide* (Brunskill and Morse, 2004).

Surf break users come from all walks of life and thus contribute to the region's labour force. Many respondents spoke of their employment purely as a means to support the lifestyle afforded by living in an area with a good surf break. Matakana Island and Ohope's Westend are examples of surf breaks that underpin lifestyles where employment is secondary to the presence of good surfable waves. Therefore, surf breaks contribute directly to the economy by providing a labour force of surfers who choose to locate to the Bay and attract businesses that cater for surf riding needs. Surfing also brings tourism to the Bay from people travelling from outside of the region or from overseas. Lessons of the economic importance of surf breaks have been proven overseas and many examples of this were given to the BOI.

With a rapidly expanding market demand for products associated with surfing, the potential for economic gain in the surfing industry is vast. As established there are multiple positive values pinned to the use of surf breaks. Therefore, the relationship between commercial interests, surf breaks users and local government authorities possesses significant economic values.

#### 6.2.6 Environmental values

#### Natural processes

Surf breaks rely on the quality and integrity of the natural processes that create them, such as the 'the natural movement of water and sediment'. For example, sediment flows are critical to shaping the river mouth bar that creates the high quality break at the Whakatane Heads. Another prime example of this is the Tauranga harbour delta. This is responsible for creating the legendary waves at Matakana Island (Puni's Farm) through the process of offshore wave-focussing. These are processes commonly understood by locals who have an intimate understanding of the fickle nature of coastal dynamics and who are dependent on them for producing surfable waves.

#### Amenity values

The amenity values of surf breaks are also significant to users, onlookers and general beach-goers. The value of this visual amenity is again exemplified by the Whakatane Heads. Facilities at this location enable easy access for surf-riders and onlookers alike to join in or simply enjoy the spectacle of the wave breaking during optimum conditions. All of this is seated within the natural beauty of the surrounding landscape and seascape. These values can to be considered in a different light altogether, using the Motu River Mouth break as example. The raw, undeveloped natural land and seascape contributes to a wilderness experience that is not only unique to the region, but iconic at a national level. In general, surf breaks are interconnected to wider landscape and seascape values that, across the region, represent and provide for a diverse range of coastal amenity values. Scenic and naturalness values were consistently identified as outstanding features of surf breaks identified in the region. The transient and memorable nature of these experiences ought to be considered in conjunction with their dynamic natural components.

#### **Catchment management**

The wider catchment of a surf break is an important environmental issue for the quality of use and enjoyment of a surf break. For example, water quality in the Whakatane River commonly impacts on the surfing experience at the Whakatane Heads. Storm events observed during the study highlighted the downstream effect of particular land uses within river catchment. Surf riders are different to most ocean users. They commonly surf during rainfall/storm events that generally create optimal swell conditions. Therefore swollen rivers and discharges commonly coincide with optimum surf conditions. This presents health risks to surf users in catchments with large amounts of contaminants flushed into the mixing zone where surfers generally locate.

Finally, again referencing Whakatane Heads, respondents also identified new subdivision (Coastlands) and waahi tapu (Opihi Urupa) both before and on the Piripai Spit as examples of issues to consider for access to a break.

These are general issues that need to be provided for by land use controls in regional and district plans, as well as using management areas in regional coastal plans. Respondents recognised the general threats to surf breaks, 'upstream' effects and the potential for flow-on impacts from decisions made concerning surf breaks.

The BOI recommendations also highlight this as follows: "the quality of the wave can potentially be compromised by developments in the swell corridor seaward of the break, and the enjoyment of surf breaks by surfers compromised by discharges, limitations on access, and changes to natural character" (DoC 2009b). These are physical attributes of a surf break specifically provided for in the definition included within the NZCPS 2010. Swell, currents, water levels, seabed morphology and wind are all components of surf breaks and any activities that impact these physical processes could adversely affect the quality and consistency of surfable waves – and therefore the overall surf-riding experience. For example, the swell corridor (including its seabed morphology) of a surf break could be affected by dumping of dredging spoil. While the exact sciences of these effects require further investigation; the impact on a surf break must be considered to an extent that reaches beyond the specific location of surf-riding.

Ensuring a diversity of representative range of surf breaks is provided for in the NZCPS. This provision was included in response to the submissions from surf break users all around the country. The BOI are stated as saying, "we note the strong plea ... for ensuring diversity of surf breaks so that all surfing skill levels are provided for" (DoC 2009b).

#### 6.2.7 **Progressing surf break policy provisions**

Implementation of surf break policy requires a greater understanding of the factors that determine the spatial extent of a break. For the overall purpose of implementing surf break policy, accurate spatial mapping also requires the ability for definitions to address a high level of variation both within a region *and* each surf break location i.e. different characteristics will require varying responses that are site specific.

Trying to do too much at the RPS level, particularly with a lack of expert information, is potentially a futile exercise. The details of surf break provisions ought to emerge at the Regional, Coastal, District and Community plan levels. In this sense, understanding and effectively integrating the planning hierarchy within the RMA framework is important.

Scarfe *et al.* (2009) emphasised the need for consideration of surf breaks in strategic planning and in baseline environmental monitoring, as well as in one-off assessments of environmental effects for particular developments near a surfing break. The RPS is an important means of requiring such consideration as it can influence planning for the land and the coastal marine area, and guide decision making in resource consents and other processes.

There are questions over where the responsibility for monitoring falls including, resourcing and appropriate methods for establishing baselines. In light of this, respondents all spoke passionately how the topic of the study resonated as important and something they ought to take some ownership, responsibility and involvement in.

Local authorities have the ability to mandate combined management. Where policy implementation is often restricted and lacking effectiveness is the ability to fund management strategies. Given an existing level of community ownership inherent in the cultural connection between users and their natural resource, there is an existing incentive for enabling community-based co-management.

## Part 7: Identification of significant breaks in the region

This study develops the 'wavetrack method' into a more robust model for identifying regionally significant surf breaks. Consultation established the Wavetrack NZ Surfing Guide as a legitimate starting point for identifying regionally significant surf breaks. The original wavetrack method was limited through the absence of any established criteria beyond the 'stoke rating'. This rating only measures the quality of the wave in optimum conditions.

#### 7.1 Schedule of regionally significant surf breaks

The schedule of regionally significant breaks identified in Appendix 9 is made up of breaks in the Wavetrack NZ Surfing Guide with some additional breaks being identified through targeted consultation with local surfers. This schedule of surf breaks is not exhaustive. Although the schedule is a comprehensive list of surf breaks that are well-known in the region, there are other breaks that are not identified. This may be for two reasons:

- 1 Other surf breaks in the region may have been overlooked by the Wavetrack guide and by those consulted; or
- 2 Breaks have intentionally not been identified as they are 'secret spots'.

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. In consultation with surfers it was established that secret spots do fall within the areas identified in this schedule, however specific reference to their geographical location is reserved. For the management of surf breaks in policy, the notion of secret spots should be eluded to. Or alternatively, there should be provisions for future identification of surf breaks, so that regionally significant breaks are not restricted from being identified in the future.

#### 7.2 **Description of regionally significant surf breaks**

Appendix 9 includes a description of the regionally significant surf breaks. The Surf Break Assessment Criteria (Appendix 8) were used by respondents to guide the description and identify the outstanding components of each break. Criteria were integral in developing descriptions beyond the limited information in the Wavetrack Guide.

#### 7.3 Map series of regionally significant surf breaks

A map series indicating the approximate location of the surf breaks was developed during the study for reference purposes (Appendix 11). This map series enables a basic understanding of the general location of breaks and their surrounding environment. However, more accurate mapping would be required for identification in any statutory plans. This should include GPS co-ordinates afforded to map series attributes to define the location of regionally significant surf breaks.

Further detailed mapping would assist in providing for the effective management of surf breaks at this level. These maps need to show the spatial extent of breaks, natural factors (like swell windows, sediment paths, tidal flows in an out of estuaries and other hydrodynamic features of surf breaks). This requires detailed work and expert input not within the parameters of this study.

It is noted that work has been undertaken by ASR Ltd in Raglan to provide mapping for the effective management of surf breaks at a regional and local level.

Below is a summary of the key findings from the study and recommendations for developing management tools for the protection of surf breaks for planning purposes.

#### 8.1 Giving effect to the New Zealand Coastal Policy Statement

The study has identified 33 regionally significant surf breaks in the Bay of Plenty that contribute to natural character elements under Policy 13 of the New Zealand Coastal Policy Statement 2010.

In order to recognise and protect surf breaks effectively, an understanding of the values, features and characteristics of surf breaks is required. This is achieved through consultation with experts familiar with the natural qualities of surf breaks and consulting people with experience and knowledge about surf breaks. This process has been illustrated through this study.

#### 8.2 Outcomes of the study

Consultation was mainly carried out within the surfing fraternity. However, it also included input from recreation professionals, tangata whenua, economic development interests and surf life saving. Regional Council staff were informed about the study through presentations and discussions. Key findings were:

- Thirty three surf breaks are identified as significant at a regional level, for the reasons provided in the descriptions in Appendix 9. These reasons have been attributed from the assessment criteria in Appendix 8 through consultation and research.
- Regionally significant surf breaks are based mainly on the Wavetrack guide, which is the most well accepted guide in the country. This was justified through consultation with the surfing community who accepted the guide as a legitimate proxy for identifying regionally significant breaks in the region. Further to this, other breaks, not identified in the guide were identified through consultation. Through consultation and the use of the assessment criteria, these breaks are also considered to be regionally significant.
- The response from stakeholders identified the importance of protecting surf breaks as regionally significant natural resources, particularly for local communities in the Bay of Plenty region. Some surfers were cautious about protection due to media exposure of surf breaks and for what purposes surf breaks were being protected.
- A diversity of surf breaks needs to be recognised.
- The interests of a wide range of activities that use surf breaks need to be recognised in providing for surf breaks. This includes, but is not limited to, surfing, surf life saving, paddle boards, body surfing and kite surfing.
- Surf breaks provide amenity value for passive on-lookers who often watch activities in the surf or the waves for their aesthetic value.

• Respondents supported a collaborative approach with the community for further policy development and implementation. This is as opposed to maintaining the status quo that relies on costly challenges to ad hoc decisions made through the consenting process where surf breaks are not provided for in plans.

#### 8.3 **Recommendations**

As a result of these findings, the following recommendations are made to the Regional Council:

- The spatial extent of surf breaks should be mapped using GPS references by incorporating a number of attributes including swell corridor, sediment paths, access points, seabed features, and hydrological features.
- Surf breaks could be managed through spatial planning, including policies and methods in statutory plans.
- Surf breaks could also be managed using spatially allocated coastal marine zones, with controls over activities using rules. This may present a robust, approach for policy makers to ensure surf breaks are adequately provided for through the current resource management framework.
- Community based plans may be a good way for the community to actively manage and take ownership of their surf breaks.

#### 8.4 Adoption of surf break provisions into planning documents

Should policy be included to protect the surf breaks identified as regionally significant then appropriate policy could be included in the Regional Policy Statement or Regional Coastal Environment Plan. Suggestions for the wording of such provisions are included in Appendix 2.

#### 8.5 Mapping

The map series (Appendix 11) developed for this report is *indicative only* and should only be used for the purposes of this study to show the location of surf breaks identified in the study.

- For any statutory purposes, mapping is required to accurately plot the location of a surf break with GPS co-ordinates.
- At Coastal Plan level, mapping would need to include the spatial extent of surf breaks, along with natural physical components that contribute to their functioning including swell corridors, access points, sediment paths, seabed features and hydrological features.
- Catchment mapping in regional plans need to highlight locations where discharges and waterways exit into the mixing zones of regionally significant surf breaks.

- Auckland Regional Council, March 2010. Draft Auckland Regional Policy Statement, Background Report – Surf Breaks, Prepared by Kath Coombes and Brad Scarfe, Environmental Policy and Planning.
- Department of Conservation. (2008). Proposed New Zealand Coastal Policy Statement 2008. Retrieved October 21, 2010 from <u>http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/proposed-nzcps-2008-high-res.pdf</u>
- Department of Conservation. (2009a). Proposed New Zealand Coastal Policy Statement 2008: Board of Inquiry Report and Recommendations. Volume 1: Findings, Recommendations and Recommended New Zealand Coastal Policy Statement 2009. Retrieved October 21, 2010 from <u>http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closedconsultations/nzcps/NZCPS-2008-board-of-inquiry-vol-1.pdf</u>
- Department of Conservation. (2009b). Proposed New Zealand Coastal Policy Statement 2008: Board of Inquiry Report and Recommendations. Volume 2: Working Papers. Retrieved October 21, 2010 from <u>http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closed-consultations/nzcps/NZCPS-2008-board-of-inquiry-vol-2.pdf</u>
- Department of Conservation. (2010). New Zealand Coastal Policy Statement 2010. Retrieved November 21, 2010 from <u>http://www.doc.govt.nz/upload/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf</u>
- Lazarow, N., 2007. The value of coastal recreational resources: a case study approach to examine the value of recreational surfing to specific locales. Journal of Coastal Research, Special Issue No. 50, pages 12–20.
- Morse, P. B. and Brunskill, P. (2004). Wavetrack New Zealand Surfing Guide. Greenroom Surf Media Limited: New Zealand.
- Nelsen, C., Pendleton, L., and Vaughn, R., 2007. A socioeconomic study of surfers at Trestles Beach. Shore and Beach, 75: 4: 32–37.
- Scarfe, 2008. Oceanographic considerations for the management and protection of surfing breaks. PhD thesis, University of Waikato, 308p.
- Scarfe, B. E., Healy, T. R., Rennie, H. G., and Mead, S. T. (2009). Sustainable Management of Surfing Breaks: case studies and recommendations. Journal of Coastal Management, 25: 3: 684-703.
- Taranaki Regional Council. (2009). Regional Policy Statement for Taranaki. Retrieved October 21, 2010 from <u>http://www.trc.govt.nz/assets/Publications/policies-plans-</u> <u>strategies/regional-policy-statement/rps-full.PDF</u>
- Taylor, B. (2007). Surfing into Spirituality and New, Aquatic Nature Religion. Journal of the American Academy of Religion, 75: 4, 923-951.
- Young, N. (2000). Surf Rage: A surfers guide to turning negatives into positives. Nymboida Press, Australia.