# **TRANSCRIPT OF PROCEEDINGS**

| TOPIC  | Proposed New Zealand Coastal Policy Statement 2008<br>Board of Inquiry Hearings |   |
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| BEFORE | Chair:<br>Board Member 1:<br>Board Member 2:<br>Board Member 3:                 | Judge Shonagh KENDERDINE<br>Ms Kathryn EDMONDS<br>Mr Philip WOOLLASTON<br>Mr Rikirangi GAGE |
| VENUE  | Auckland  |   |
| DATE   | 10 October 2008   |   |

## RESUMED

MADAM CHAIR: Good morning, ladies and gentlemen. It is a relief to see some unadulterated coast and some sea. We have been seeing a lot of other things this week and it is very nice to view the coast line again without encumbrances.

You have given us a lot of new material and it is a matter of how we deal with that but maybe we will revisit that after we have heard submissions from counsel. Thank you.

- MR MAKGILL: Thank you, your Honour.
- MADAM CHAIR: I see that you have identified some of the questions that we asked further back in the process of your people.
- MR MAKGILL: Yes, your Honour, we have and I have sought to address some of them in submissions and they are all addressed in Mr Rennie's evidence.

MADAM CHAIR: Thank you.

MR MAKGILL: Good morning. I appear on behalf of the Surf break Protection Society Incorporated which made a submission on the proposed New Zealand Coastal Policy Statement 2008.

As the name of the society suggests it is dedicated to the conservation of the treasures of the New Zealand surfing community, those being surf breaks. Through the preservation of their natural characteristics, water quality, marine ecosystems and low impact access for all.

The society on the whole is happy with the proposed policy statement because it marks a significant step towards improving policy guidance to decision makers on the sustainable management of rare, finite and threatened geographical features. Nevertheless the society seeks a few amendments to the coastal policy statement to ensure that surf breaks are fully protected.

I will just skip that bit, your Honour, because we have already identified that we are addressing some of the issues that were raised in respect of the Christchurch hearing.

## MADAM CHAIR: Thank you.

MR MAKGILL: For the panels ease of reference I note that these submissions are set out under the following headings.

The evidence that will be called, Background to the society, The meaning of natural and physical resources, The meaning of social, cultural and economic wellbeing, A discussion of surf breaks of national importance, Why surf breaks need specific coastal management policies, Policy 20 – Surf breaks of national importance, Policy 20 – Reference to the coastal environment, A new policy to identify regionally significant surf breaks, Other means of protecting surf breaks, Policy 30 and the term "hydrodynamic processes", Policy 36 and the assessment and protection of natural

character, The definition of natural of character, Submissions against Policy 20 and The conclusion.

The following witnesses have prepared evidence for the society and I will introduce them each in turn as they come to give their evidence.

Mr Winston Pond – a member of the society on the background of the society, Mr Paul Shanks – the president of the society and a surf industry representative on the importance of the surfing industry to surfing towns throughout New Zealand, Dr Shaw Mead – coastal scientist on the factors that contribute to the physical make up of surf breaks and the waves that approach those breaks, Dr Brad Scarfe – a coastal scientist on why surf break management needs to be included in coastal management, Mr Matt Skellern – a coastal planner on appropriate mechanisms for identifying nationally and regionally important surf breaks, and Dr Hamish Rennie – a coastal planner on why surf breaks should be protected under the proposed policy statement.

# [9.37 am]

I note that Dr Shaw Mead will present evidence for the society as well as in support of his own submissions that he filed in his own name although it is recorded on the Department of Conservation website as having been filed in the name of ASR. His evidence on Policy 20 is for the society and the remainder of his evidence is in support of his own submission

MADAM CHAIR: Are you acting for the New Plymouth Surf Riders Club as well?

- MR MAKGILL: I did receive an email from them to the effect that they support the submissions and the evidence that we are presenting to you today.
- MADAM CHAIR: So there are no representatives here of that?
- MR MAKGILL: I don't believe there are.
- MADAM CHAIR: Right. Thank you very much.
- MR MAKGILL: Turning to the society, you will hear from Mr Pond who is a member of the national executive of the society on why the society was formed and what it is have achieved.

The society has a current membership of 120 people, this number being boosted by associate memberships of board rider clubs. The society has email and membership networks that link it to over 8000 surfers. The size of the society and its links to other groups demonstrates that the protection of surf breaks is not an insignificant issue but one that potentially affects a large number of people.

Turning to A discussion of natural and physical resources, I have been advised by Dr Rennie that the board questioned legal counsel for seas during the Christchurch hearing on the definition of a surf break. It is submitted that surf breaks are natural and physical resources which are able to be sustainably managed pursuant to section 5 of the Resource Management Act. I have set out the definition of Section of 5.2 there but I won't read it.

The definition of natural and physical resources is provided in Section 2 of the RMA and includes land, water, air and soil. You will hear from Dr Rennie that the term "surf break" can be defined as meaning "an ephemeral, natural feature comprising in varying proportions a combination of swell, seabed morphology, currents and wind in a particular place over a particular period of time such that the hydrodynamic character of the swell is of a shape that enables it to be surfed."

Dr Rennie considers that surf breaks are perhaps best understood as a three dimensional combination of seabed, water column and air space. Clearly the water column and air space components of surf breaks come within the definition of natural and physical resources.

What is not immediately clear from the definition of natural and physical resources is whether it includes the seabed component of surf breaks. "Seabed" is not defined under the RMA.

The foreshore and seabed are collectively defined under Section 5 of the Foreshore and Seabed Act 2005 and I will just read the relevant parts of that.

"Foreshore and seabed means the marine area that includes E, the subsoil and bedrock below those areas that exist between the territorial sea and mean high water springs."

It is of passing interest to note that "foreshore" and "seabed" are defined in a similar way to the coastal marine environment under Section 2 of the RMA. The important point to note for the purposes of interpreting seabed however is that it is defined as including subsoil. This is because natural and physical resources under Section 2 of the RMA include soil.

While this is helpful in so far it indicates that at least part of the seabed is included within natural and physical resources it is not definitive. It is submitted that a more definitive approach is to treat the seabed as being included within the broader definition of land. This approach is supported by the New Zealand Oxford Dictionary which defines land and seabed as respectively meaning "The solid part of the earths surface, opposite to sea, water and air, and the ground under the sea or the ocean floor."

# [9.42 am]

The word is further defined in Section 2 of the RMA as including "land covered by water". The word "water" is defined as including "coastal water". The word "bed" is defined as meaning "In relation to the sea. The sub marine areas covered by the internal waters in the territorial sea."

Finally, Section 3.5.5A of the RMA makes provision for the vesting of land that is reclaimed from the foreshore and seabed. It is submitted that a purpose of reading of the RMA indicates that excluding the seabed from the definition of land is not appropriate.

Looking at the aforementioned definitions and provisions together it is plain that the seabed can be described as land covered by water and that Section 5 of the RMA requires the sustainable management of the seabed along with all other natural and physical resources.

Turning to Social, cultural and economic wellbeing, Section 5 of the RMA requires us to consider whether surf breaks enable people to provide for their social, economic and cultural wellbeing and for their health safety.

The evidence of Mr Shanks illustrates the importance of surfing and surf breaks and emphasises the contribution surfing makes to peoples social, cultural and economic wellbeing as well as to their health and safety.

Mr Shanks lives in Whangamata and has lived there since 1975. He uses Whangamata as an example of what surfing can contribute to the township. Examples provided by Mr Shanks include – there are 4,500 residents during the week, increasing to 10,000 at weekends and further increasing to 70,000 during peak times. The Whangamata Bar has produced over 10 surfing champions. The Whangamata Bar has featured in three movies and there are three surfboard makers, three surfboard shops and numerous related surf fashion retailers located within Whangamata.

It is clear from Mr Shanks evidence that surfing is a substantial industry not just in Whangamata but in New Zealand. Mr Shanks will show that it is essential that important surf breaks are protected so as to enable people to continue to provide for their social, cultural and economic wellbeing.

The importance of surfing and surf breaks to people and communities is also addressed in Dr Scarfe's evidence. In particular he states that "Surf breaks have coastal communities, are scarce and are also vulnerable to development. Value can be social and economic. Although the economic impacts of surfing have not been as extensively researched as the oceanographic processes there is ample evidence to demonstrate the associated economic benefits of surfing breaks to coastal communities and surfing has been identified as a key tourist attraction in many locations."

Dr Rennie supports the view of Mr Shanks and Dr Scarfe in his evidence, concluding that "In summary, the existence of surf breaks enables peoples and communities to provide for their social, economic and cultural wellbeing and for their health and safety. The issue then becomes is there a need for the sustainable management of surf breaks. If so, how should it be achieved?".

Dr Rennie goes on to answer the question as to whether there is a need to sustainably manage surf breaks by pointing to the evidence of Drs Scarfe and Mead. "Natural surf breaks are a finite resource and naturally occurring breaks help constitute the natural character of the coastal environment. They can be severely damaged and sometimes destroyed."

The definition of "environment" includes amenity values and consequently the adverse effects of activities on the amenity values of a surfing reef are to be avoided,

remedied or mitigated. Amenity values mean those natural physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes.

#### [9.47 am]

Clearly the natural or physical qualities that comprise a surf break contribute to people's appreciation of it. And consequently, a surf break falls within the ambit of the general direction to avoid remedy or mitigate the adverse effects of activities that might affect it.

This includes positive or negative effects, temporary or permanent effects, past, present and future effects and the cumulative effects, which arise over time or in combination with other effects, regardless of scale, intensity, duration or the frequency of the effect. And includes potential effects of high probability and those of low probability but high potential impact.

Turning to surf breaks of national importance. I have been advised by Mr Rennie that the Board asked legal counsel for seas the following question. What class of things does a surf break fall into? Would surf breaks be within the definition of outstanding natural features and landscapes under section 6(b) of the RMA?

It is submitted that surf breaks fall into two main classes of national importance under section 6(a), section 6 of the RMA. These are section 6(a), the preservation of the natural character of the coastal environment and section 6(b), the protection of outstanding natural features and landscapes.

Section 6(a) requires the preservation of the natural character of the coastal environment. The planning tribunal defines natural under the old Town and Planning Country Act – that should be not 1997, 1977 – as that which is created by nature as distinct from that which is created by man.

Now aside from the overly sexist language, the predecessors to this Board of Enquiry endorsed that definition.

The Board went on to state that in requiring preservation of natural character, the Act is calling for the preservation of those qualities and features in coastal environments which have been brought into being by nature, ie the preservation of coastal environments in their natural states.

It is clear from the evidence of Drs Scarfe and Mead that naturally occurring surf breaks are finite resources, that they can be damaged and destroyed. It is submitted that these attributes mean that surf breaks clearly come within the class of thing that is to be preserved under section 6(a).

Dr Rennie supports this view, stating that the preservation of the natural character of the coastal environment implies that sufficiently representative breaks in their natural context should be protected. Those breaks that are rare should be given a greater level of importance that those that are common.

Section 6(b) requires a protection of outstanding natural features and landscapes. The Environment Court has established that outstanding natural features are part of a landscape. However, to suggest that outstanding natural features are only present as part of landscapes, would be too narrower a construction.

It is submitted that outstanding natural features may be an element of a landscape or a seascape. Hence, it is possible to consider surf breaks of appropriate character to be outstanding features in their own right and outstanding features of a seascape or of a landscape.

Dr Rennie supports this view, stating that the protection of outstanding features requires the identification of outstanding surf breaks.

Turning to why surf breaks need specific coastal management policies. Dr Scarfe's evidence shows that surf breaks have value to coastal communities, are scarce and are also vulnerable to development. He considers that it is critical that any coastal activities that alter waves and a surf break swell corridor provide an assessment of the effects of the activity on that surf break.

## [9.52 am]

Drs Scarfe and Mead both provide examples of such activities. These include placement of artificial nourishment on a beach, building of a seawall at a surf break, the development of coastal property, near shore sand mining and breakwater ports and marinas.

Dr Scarfe's evidence shows that changes to land catchment around a surf break has the potential to adversely affect a surf break. His reviews – he reviews the effects of development on four surf breaks in New Zealand. Namely Manu Bay boat ramp in Raglan, the main beach at Mt Maunganui, Aramoana Beach in Dunedin, and the Whangamata Bar.

Dr Mead also supports the protection of surf breaks of national significance from inappropriate use and development. He further considers that the protection of surf breaks of national significance from inappropriate use and development cannot only focus on the breaks themselves, but must also take into account the other factors, which make them nationally significant.

He states, "Such factors would be integrated with local authority monitoring, while additional and/or separate investigations would be required to determine the factors that would need monitoring and protection and determine nationally significant surfing breaks".

Dr Rennie is of the view that natural surf breaks are a finite and physical resource. And naturally occurring breaks help constitute the natural character of the coastal environment. He considers that increasing pressures in the life of the New Zealand Coastal Policy Statement will lead to damage and destruction of surf breaks. There is, therefore, a need to consider a level of protection if the natural character is to be preserved. Policy 20 – Surf breaks of National Importance. Policy 20 has been proposed to ensure surf breaks of national importance are protected through the means proposed under the policy in order to achieve the relevant objectives of the proposed policy statement, in particular objectives 1 and 2.

In his evidence, Mr Skellern points – supports the intention of policy 20 to achieve the objectives of the proposed policy statement. He states, "Policy 20 recognises that surf breaks are a finite resource that can be adversely affected by inappropriate use and development. And surf breaks contribute to the social, economic and cultural wellbeing of New Zealand."

I agree with the evidence of Hamish Rennie, that important surf breaks provide a significant contribution in this country in terms of social, economic and cultural wellbeing of people in communities.

This has been demonstrated to the Board by a number of submitters during the enquiry, which have all described elements of surfing such as its popularity, the heritage of surf breaks, the health and safety benefits of surfing, the value of surf culture based communities and the thriving surf industry that are all relevant factors contributing to social, economic and cultural wellbeing.

Mr Shanks states that the society strongly supports policy 20 because it gives us a confidence in the future of our playgrounds. Nevertheless, the society considers that there are locations not currently named in policy 20 that contain surf breaks of national significance.

The society seeks the addition of Whangamata, Piha and Dunedin to the surf breaks listed in the policy.

In his evidence, Mr Shanks produces extensive evidence on the importance of the Whangamata Bar. Mr Shanks is of the view that the Whangamata Bar is an iconic geographical feature in the coastal landscape that radiates out to the rest of New Zealand.

Dr Rennie provides evidence on the importance of considering a hierarchy of surf breaks and recommends a process to achieve that based on wave track 10 out of 10 stoke rating.

Turning to policy 20 and reference to the coastal environment. At present, policy 20 refers to protecting surf breaks by ensuring that activities in the coastal marine area do not adversely affect the surf breaks. Dr Mead's and Dr Scarfe's evidence demonstrates that activities in the coastal marine area can adversely affect surf breaks.

It is submitted, however, that there are activities landward of the coastal marine area that may also have adverse affects in surf breaks. Some of these have also been identified by Dr Mead and Dr Scarfe.

It is also submitted that the coastal environment extends outside the coastal marine area beyond the 12-mile limit. In his evidence, Mr Skellern states that the swell

corridor of a surf break is a significant factor beyond the 12 nautical mile boundary as disruption to the swell corridor may adversely affect the quality and consistency of surf breaks in the CMA. To ensure that the use and development avoids adverse affects in surf breaks it is necessary to include factors outside the 12 mile limit. Accordingly the Society requests the words "coast marine area" in policy 20 be amended to "coastal environment". It is submitted that such amendment would achieve the objectives of the proposed policy statement and the purposes of the RMA.

#### [9.57 am]

Turning to regionally significant surf breaks, Mr Skellern, Dr Mead and Dr Scarf consider that the proposed policy statement needs to protect different surf breaks because different breaks are suitable for surfers of varying skill levels. Both also provide evidence of different types of breaks. For example point, reef, sandbar and beach breaks which produce high quality surfing waves. Dr Mead and Mr Skellern support the Society's view that the proposed policy statement should identify regional significant surf breaks. Mr Skellern states: "Therefore I consider it is necessary to insert a new policy into the policy statement that provides for the protection of surf breaks of regional significance as these breaks contribute significantly towards the social, economic and cultural wellbeing of surfers and the surfing community, and form a key component of the infrastructure of surfing in this country. As has been demonstrated by the expert witnesses with whom I concur".

It is submitted that the public change process at regional council level could be used by regional councils to identify surf breaks of regional significance. Mr Skellern outlines this process in his evidence and provides examples of how similar issues have been dealt with in other regional plans. Dr Rennie concurs with Mr Skellern and states in his evidence that: "In summary I consider there is a hierarchy of reefs, from international to national, to regional significance. Determining which category a break falls within is difficult without an agreed system of ranking". Breaks of national significance have been addressed in the policy statement and my evidence are essentially those considered of international significance. There remains a need to identify regionally significant breaks but I consider that it is beyond the scope of the New Zealand coastal policy statement. Rather the New Zealand coastal policy statement should identify the need for regional councils to identify regionally significant surf breaks. A method by regional breaks could be identifying regionally significant surf breaks. A method by regional breaks could be identified is addressed in Mr Skellern's evidence.

Other means for protecting surf breaks. Dr Rennie provides evidence on means other than those currently in the policy statement to protect surf breaks. Namely by identifying them as areas of significant conservation values and the potential use of the restricted coastal activities mechanism. Both of these mechanisms do not rely on identifying surf breaks. Dr Rennie concludes that he does not see how a natural surf could be a restricted coastal activity. He acknowledges, however, that applications for resource consents for activities in the coastal marine area that might have effects on natural surf breaks of national significance could be made restricted coastal activities. He considers that this would be achieved through classifying surf breaks including the swell corridor, wind, sedimentary and hydrodynamic catchments as being within areas of significant conservation value. Dr Rennie concludes that: "In summary I support the requiring of the regional councils to include in their plans the mapping of ASCVs in such a manner as to include the full catchment of surf breaks".

Turning to policy 20. Hydrodynamic processes. Dr Rennie, Dr Mead and Dr Scarf have identified factors within the coastal environment which need to be considered to ensure that adverse effects in surf breaks from use and development are avoided.

# [10.02 am]

Many of these factors include hydrodynamic processes in the coastal environment such as sediment movement and swell corridor. It is submitted that policy 20 does not sufficiently protect the integrity and functioning of surf breaks as hydrodynamic processes form a significant component of what determines the quality or performance of a surf break. As such, the Society seeks that the phrase "dynamic processes and features" in policy 30(c) be amended to include "hydrodynamic processes and features". This will ensure that the natural movement of sediment, water and air are provided for as part of the natural character of the coastal environment and will ensure that surf breaks are recognised as a feature.

Turning to policy 36. Policy 36 requires local authorities to provide for certain proposed coastal policy statement policies in their policy statements and plans. The Society has sought that policy 36 specifically include reference to policy 20. This is consistent with Mr Skellern and Dr Rennie's evidence that surf breaks of national and regional importance should be provided for in regional planning documents. Dr Rennie will address policy 36 further in his evidence.

Turning to the definition of natural character. The Society has sought that the term "natural character" be defined in the glossary to identify the full essential range of values that make up "natural character" accordingly. Natural character includes the landscape, seascape, soundscape, and odourscape. The natural ambient levels of soundscape and odourscape should be included in any consideration of the effects of proposed activities on the natural character of an area. Dr Rennie will provide evidence on the proposed definition and he considers such a definition will be useful and efficient.

Briefly dealing with submissions against policy 20. A number of submitters have stated that policy 20 is not required as those matters are covered by other policies. Dr Rennie will provide evidence rebutting the arguments against inclusion of policy 20 in the proposed policy statement. Dr Rennie is of the view that policy 20 should be retained because it marks a significant step towards improving policy guidance to decision-makers on the sustainable management of rare, finite and threatened geographical features. From a planning perspective there is an issue. The finite nature and vulnerability of surf breaks is of national significant importance. Addressing this through the New Zealand coastal policy statement is appropriate to achieve the purpose of the RMA. Policy 20 is a necessary and useful step and addresses the objectives intended to provide for the preservation of the natural character of the coastal environment, the protection of outstanding features and

landscapes, and the protection of our heritage while enabling the maintenance and improvement of amenity values.

In conclusion it is submitted that the evidence that will be presented to you today clearly supports a decision that accepts the relief sought by the Society. The relief sought by the Society satisfies the sustainable management purpose of the RMA and part 2 of the Act. Accordingly, it is respectfully submitted, that the Board should make a decision to uphold and accept policy 20 for nationally important surf breaks, a new policy for regionally important surf breaks and any other amendments necessary to protect important surf breaks. Thank you.

MADAM CHAIR: Thank you very much Mr Makgill.

MR MAKGILL: With your leave I would like to call my first witness.

MADAM CHAIR: Thank you.

MR MAKGILL: Mr Winston Pond.

MR WOOLLASTON: I am sorry, which witness is that?

MR MAKGILL: Mr Winston Pond.

MR WOOLLASTON: Thank you.

MR POND: My name is Winston Pond and I am a member of the national executive of the Surf Break Protection Society. It is a Society that has been in existence since September 2006.

## [10.07 am]

It came into being as a result of a number of meetings, informal discussions and grew out of a concern that surf breaks in several locations were under threat and the catalyst for that was the marine development at Whangamata. There is an interesting little story behind there. In one of the early rounds of submissions the word went out amongst the surfing community that it would be helpful if people expressed their concern about what was happening and basically the submission process was inundated with a very large number of responses. That I think was a wake call for a lot of the surfing community that there are a lot of people who are very interested in what is happening that led to the hui, led to these discussions and it led in September 2006 to the establishment of our Surf Break Society.

Our formal mission statement is as follows: "The society is dedicated to the protection and enhancement of New Zealand surf breaks for the benefit of the New Zealand surfing community and all New Zealanders". The Society is open to all surfers and those concerned about the impacts on coastal environment and we work in with a number of other groups in that. Board riders clubs are part of that and then informal contact with individuals are another part of it. One of the challenges of a surfing community is to take the free spirit that often draws people into being surfers, the individual nature of the sport, and get that into an organised form. Surf break protection societies work to do that.

You will see in the evidence some rules, or how our rules cover, sorry, the importance of surfing and surf breaks. I will not read through that but I will draw out that there is unrecognised cultural and economic value in what happens in a surfing activity. There is the word "climate" (**PH 2.08**) in there which I think is fairly significant. We see these as very important treasures. And the other thing I would draw to your attention in that section is that a part of our work, a good part of our work, is looking to protect what we have for future generations.

You will find in the surfing community there are two or three generations at the moment. Those who started in the late 50s, early 60s perhaps and their children and their children. What has happened is that as the surfing community matured a realisation of this need to protect things for the future has grown. Currently our membership is 120 financial members but that is kind of the tip of the iceberg because through associations, through memberships of people such as or groups such as the New Plymouth Surf Riders Club we have lots of connections with a lot of people. We believe that 8,000 plus surfers are in our network and I go back to the earlier example of what happened at the early submissions on the Whangamata marina. We found that there was a very large level of quiet support.

We fund ourselves and our operations. We have been involved in a number of different activities to get the necessary seed funding to get moving and we have had some very generous benefactors, surfers who are willing to put some money into the process even if they are not able to put in time. But there have been a lot of people involved in getting the Surf Break Protection Society to where it is two years on. People have put in time, money and knowledge. You are going to pick up on quite a bit of that knowledge today I would think.

We have many experts in our group: environmental scientists, biologists, archaeologists, IT professionals, lawyers and the wonderful thing is they are all keen to assist the Society in achieving its objectives. We also have an international network that is growing. This year we had a person on secondment from Patagonia, a large international boat and surfing firm. They assisted us by putting that person in and he helped us get our information systems into good order. He was with us for a period of several weeks. We also have other links with other like organisations in other parts of the world and within New Zealand, other links as well. You will see those there. The ECO, environment and conservation organisations of New Zealand would be a good one.

I should point out there we are also registered as a charitable organisation. Our elected executive committee is 10 people. The aim is to have these people represent all regions of surfing interest in New Zealand and to cover a range of surfing interests.

## [10.12 am]

The current membership is a widely experience group; both in terms of surfing experience and professional expertise.

Our president, Mr Paul Shanks will demonstrate and cover a lot of the points that we are touching on just now, but he would be one of our leading experts in terms of the experienced surfer who has put a lot of time an effort into developing this awareness we have now.

Our objectives are stated there; can I summarise those in saying that we intend to keep natural breaks as they are. You have heard some definition discussion there and there is more to come.

The water quality is another issue; it is often seen as a simple thing, if the water is clear or the water is not clear, there is a lot more to it than that. You have the freshwater layers on top of saltwater and so forth. You will hear about that.

Marine ecosystems is another area that the society has worked to protect and promote awareness of the value of.

Access is another interesting one. A lot of surfers will tell you the stories of having easy access to places in the past and then finding that they were locked up. I am sure you have heard the location White Rock earlier in your process. I could tell you about Omaha Beach where it used to be very easy to walk onto the beach, it is a little harder now.

And the value of surf breaks, just what they bring to the communities around them is another thing that we are trying to promote and make people more aware of.

Our activities. It is the modification, the compromising of surf breaks that has got us anxious to see the work you are doing carried through and for policies such as policy 20 established.

The little examples I give you - I have already talked about Omaha, but Omaha bar was a wonderful surfing spot once, you can now see a long groyne running out and people do surf at it still, but it is not what it was.

Sewerage outfalls near the reef at Westshore in Napier have caused health issues for surfers in the past. My first experience as a young surfer was paddling out there and not knowing quite what I was paddling into.

With two metre fences recently erected across regular walkways down to the beach, restriction of access is an issue at the Mangahumi in South Taranaki. Another iconic surf break that suddenly, for various reasons, we don't have access to.

The proposal to build a ferry wharf at the north end of Takapuna Beach has been run across the media recently. Interesting, because that is a lovely surf break and there is a good strong north swell coming in. It has raised concerns about the future surfing viability of that reef.

A catalyst though has been Whangamata bar; we are concerned there that the work on the marina and the associated dredging that will come through to give large boats access to the marina will damage the bar. Mr Shanks will talk to you about that as we go. Since our establishment just over two years ago, we have had leadership activity on three fronts. The national exec and the society through the national exec are supporting local surf break protection initiatives. This builds on a key point that we think is quite important in our operating philosophy. We have national support for local action. The history of surf breaks are beach modification, damage to beach front in the past has often been local action where local people haven't had the resources to stand up to more organise enterprises. National support for local action, we believe, will help there.

Examples we can give you, Gisborne's Wainui Beach – a good success story recently. The stormwater disposal was an issue and we put in a submission into the process, we helped the local surfing group there and it came to a successful conclusion with the modification of the plan.

Compton Beach in Greymouth, there was potential sand extraction. I would imagine you have heard about that earlier in your work.

Titahi Bay, there was joint access and use issues. Once again, just people standing firm and having some facts and figures has helped come up with a far more acceptable solution.

Te Arai Beach, a potential subdivision with access restrictions. This is another one that is sitting in empty space at the moment because the actual action has been slowed because of other factors.

# [10.17 am]

The Taranaki Surf Highway Project is a lovely, positive example of where people have worked together to promote surfing destinations as a tourist venue. Unfortunately, if you look at the map at the moment, Mangahumi is a stop on that surf highway but we can't access it right now.

And finally, the Whangamata bar redevelopment and the related dredging I have talked about.

So that is one area, it is supporting the local surf break protection initiative.

The second area, addressing surf break issues at a national level, our work here today is a good example, the best example of that in action. We are very keen to see that the Coastal Policy Statement comes up with the recognition that we feel is deserved for surf breaks. We also interact with a range of regional councils and that is of mixed result at the moment, but there are some good things happening.

And finally, the third area of activity, building a national infrastructure and a resourced expertise; we now have an active representation in all recognised surfing areas and relationships with a number of national and international organisations who share our goals. That has come by having a place where people can go and talk – the Surf break Protection Society.

So in conclusion, by providing the setting here, I could bring it to a conclusion saying that our goal is to see that surf breaks are formally recognised as important natural recreational facilities that must be taken into account in any coastal development planning strategy. We believe policy review can help us.

Thank you.

MADAM CHAIR: Thank you very much Mr Pond, it has been very interesting to see it set in its proper setting, this surf break movement. We must say to you that we have been very impressed at the witnesses we have heard from the surfing community, they have been lively, to point, professional, amusing and also tell some pretty sad stories of how you have lost surf breaks in the past.

Altogether, the community of Surf break Protection Society members have been very impressive indeed, so thank you.

MR POND: Thank you.

- MR MAKGILL: Your Honour, I would like to now call Mr Paul Shanks, the president of the society and a surf industry representative who will present some evidence on the importance of the surfing industry throughout New Zealand.
- MR SHANKS: Morning all. I would like to thank the New Zealand Government for initiating policy 20 and I thank you to receive it.

Before I started on this I didn't need glasses, but now I have made my presentation, I do need glasses.

Do you mind if I sit?

MADAM CHAIR: Not at all.

MR SHANKS: Thank you very much.

I have just got some still photographs at the back of my submission. Maybe after I have read my written submission, I want to just briefly go through why I have put those photos in, and I have got a little DVD CD, not to play here today, but I would like you to view it because it relates to what I have said in here to do with water quality. And some of the people that helped do that 20 minute DVD CD have passed on, and I think it would be prudent to note, please, that they would be representing here today.

MADAM CHAIR: Yes.

MR SHANKS: Even though they are not here physically.

MADAM CHAIR: Well you can be assured we will certainly look at it.

MR SHANKS: Thank you very much.

My name is Paul Shanks. I am aged 55 years. I am a surfer.

A surfer must have a reasonable grounding in geography, geology, meteorology, hydrology, microbiology, chemistry, aerodynamics, environment law and adherence to the principles of kaitiakitanga to and of a surf break.

## [10.22 am]

A surfer must know the history of surfing in his hometown, in New Zealand and also the rest of the world, because these disciplines have had a major impact on surf breaks and surfing over the last century.

The (**INDISTINCT 00.12**) Olympic swimming gold medallist introduced modern surfing to New Zealand at Lyall Bay, Wellington, in 1912.

I am a surfer, there is no formal qualification to be a surfer. Bob Charles is a golfer, there is no formal qualification for a golfer, but Bob Charles is an expert in golf. Likewise, Sir Richard Hadley is a cricketer above all else and he was knighted for his expertise in his chosen discipline.

Who am I to claim to be a surfer? I represented New Zealand Surfing three times in international events between 1972 and 1977. In 1990 I became the New Zealand Senior Champion. Assistant coach twice to the New Zealand Junior Teams to the World Titles in Bali in 1993 and 1995.

I am the husband of Jan Shanks, life member of surfing New Zealand, and that was because of the work she put into the junior surfing over a decade. I am the brother of Mark Shanks, two times New Zealand finalist at National Surfing Champs, and coaching coordinator for Surfing New Zealand. I am the father of New Zealand Junior Women's Reps, Amber and Heidi. I am the father of Heidi, twice the New Zealand Junior Champion and in 1994 Open Women's Champion. I am also the father of Samara who is a surf shop manager. I am the brother of probably the most iconic surfer in New Zealand, Jeanie(**PH**) who was 10 times Open Women's Champion.

I have been in the surfing business-industry since 1971, owning and operating businesses in Auckland and Whangamata; retailing, manufacturing, wholesaling and exporting.

Surfers dream of perfect set ups and perfect waves, but we realise there is no perfection only perfect intention. So I ask you to embrace policy 20 so we can treasure this new wave of consciousness.

It has been written "Whether from ignorance, from oversight or from lack of judgment, many of today's worst mistakes in the coastal development stem from a failure to evaluate properly the coastal geology and geography" and this is why I am here today, to impress on you the importance of the unique geographical features in coastal landscapes, known as surf breaks.

They deserve to be preserved and protected, and protected and preserved. Be it from inappropriate structures built on surf breaks, for example North Reef Kapa(**PH**) at Takapuna, Town Reef in Napier, the wall at Lyall Bay, Wellington, or the dredging of or near surf breaks, eg, Mangawhai, Pakiri, Pauanui, and the threat of the contamination of all surf breaks. This consideration is not just for their own beauty but for their biodiversity above and below the waterline and the impact they have on the social and economic fabric of over 250,000 New Zealanders know as surfers, and on the wider community.

My brief is to represent surfers of Surf break Protection Society, highlighting these features and influences affecting surfers, surfing and the wider community.

I wish to highlight the negative effect of human effluent by urban sewerage, urban stormwater, on surf breaks. We do not share the same belief as Metrowater, as in their submission to the New Zealand Coastal Policy Statement review 08 that it is in the economic good of the ratepayer to mix sewerage with stormwater and flush the concoction onto our beaches because they have a weird belief there is such a thing as a mixing zone. We call them surf breaks. This already happens in places such as propellers(**PH**) at Moa Point, Wellington; Tomahawk Bay, Dunedin, The Pipe at Gisborne, Shipwreck Bay at Ahipara and in our Mairangi Bay, Auckland and on the bars of Pauanui and Whangamata in the Coromandel Peninsula.

## [10.27 am]

Discharges are not only human viruses and bacteria but excess amounts of phosphorous and nitrogen promoting algae growths such as micro critters like cyan bacteria. The huge slime maps and red tides resulting in fish kills (PH 39.7) and recently and still are ailments (PH 41.7) in humans.

Metrowater is no different to any other large engineering company contracted to other councils who believe the ocean has vast purifying capacities. We have condemned this mindset - this is the 21st century. Putting signs up on beaches and saying that bathing water is contaminated is not a form of mitigation. To avoid or prevent National Coastal Policy Statement should read, "no contaminated water should be discharged into the ocean".

I have seen the growth of the industry and culture and how it has permeated through New Zealand society as corporations, Hyundai and Lion Nathan have. Surfings' national sporting body is supported by SPARC.

In 2006, I received the Ministry of the Environment's Green Ribbon Award, not just for myself for all the other surfers of Whangamata for highlighting the degradation of the waterways and the coasts of the Eastern Coromandel Peninsula.

Our endeavours to obtain clean waters for surfing also gained interest of the Parliamentary Commissioner for the Environment who investigated under the Local Government Act 2002 to its non implementation of the Whangamata Community Plan. This plan was the first such plan under the act. The surfers of Whangamata were active players in the development of that plan. The report called turning hopes

and dreams into actions and results. Whangamata - a case study of community planning from the coastal area – that was a tongue twister.

Whangamata is popular and this is quoted from Morgan Williams (**PH**). Whangamata is popular for any recreational activities, for example swimming and fishing but especially surfing. Surfers are attracted to the long breaks offered by the Whangamata bar just outside the harbour entrance. It is known as one of the best surfing spots in New Zealand. The water quality of the Whangamata Ahipara has degraded. Some areas are probably unsafe for swimming and shellfish gathering at most times.

The Commissioner considers the past and proposed physical changes to the harbour structure will have a long-term adverse environmental effect on the harbour. Is it all right if I stop and have a drink and water?

## MADAM CHAIR: (INDISTINCT 3.23.9).

MR SHANKS: Thank you. Thus stressing the bar is a unique, geographic feature in the coastal landscape. Before and after (**INDISTINCT 3.50.2**) his report, Whangamata surfers participated in two navigational by-law consultations. Councils wanted to outlaw surfers from the bar by way of invoking an interim ski lane and giving preference to jet skis on the bar and making the shared access channel a navigational channel, banning swimming, diving and fishing and then classifying surf boards as a swimming aid.

Local surfers have been involved in wastewater consents three times. For Pauanui, twice for the wastewater consents in the Whangamata and visiting the Environment Court three times, twice as an expert witnesses and once as appellants. We feel that this is not the path to travel for such an important section of the community.

I welcome policy 20 and that councils have to give effect to this policy. We do not want our bar to go the way that parts of Whangamata as it is happening at Te Matatui (**PH 4.56.2**) today which was or is an area of significant conservation value under the Regional Policy Statement.

#### [10.32 am]

Policy 20 will give us confidence in the future of our playgrounds if this policy is adopted. The six surf breaks that have highlighted are unique but not dissimilar to one another. That is that the way to peel over (**PH 21.5**), rock bottom into the ocean floor and I have put in 'or' along a rock shoreline.

The seventh break that is not included but should be in Whangamata - it is unique as it peels over sand and along the sand's shore – user friendly. So I must convince the panel of the value of the surf breaks by using Whangamata as an example.

My submission is based on 10 years study as observation of the terminal low (**PH 55.5**) of the ebb tidal delta of the Whangamata Harbour commonly known as The Bar.

So the submission will double for the positive of the wider debate on policy 20 but also to have Whangamata included into the NZCPS as an iconic, unique, geographic feature in the coastal landscape and how the bar radiates out to the rest of New Zealand.

The bar sustains life – the gulls, the molly-hawks, gannets, shags, penguins, oyster catchers, dotterel, tuatua, crabs, flounder, snapper, kahawai, shark and on the fringe frequent pods of dolphins, orca and surfers.

So once needs to know what maintains its dynamic equilibrium and all facets of its existence from the finest grain of sand to the government cabinet table.

The entrance to the Whangamata Harbour is dominated a relatively large tidal delta with an associated offshore bar merged into the eastern fringe known as the Whanga Bar.

The bar is located at the northern end of the Whangamata Beach and the eastern tip of the outflow of the Whangamata Harbour. The bar dissipates wave energy and in doing so significantly effects the physical state of Whangamata Beach by trapping sediment on both the flood and the ebb tides providing a sediment store for dive pathic and parapathic (**PH 2.37.6**) sediment flow.

In doing so, the bar has formed one of the most pristine surf breaks in New Zealand if not south of the equator. The bar breaks today exactly how it did in 1965 – perfect rides and lets that peel for over 500 metres and described by one of the world's foremost surfer's, Mr Jerry Lopez (**PH**), "as a gem of the South Pacific".

The bar was recognised from the late 50's as a premier surf location, attracting surfers nationally and internationally, not only to visit but to stay to create work or to work for, so that they could indulge in their pleasure all year round – any time of the day, or day of the week - working hours ruled by time of tide.

This resident migration exploded in the mid 70's. I arrived in 1975 with my young family to a town of only 375 residents. Currently there are 4,500 residents during the week, increasing at weekends of up to 10,000 people, reaching 70,000 on peak events.

This growth was built on the back of surfers. They were and are the majority of the tradesmen and are now adjoined by the professionals who are also there because of their love of surfing, ability to make money, raise families and have input into our vibrant community.

Many of New Zealand top surf board shapers and now Australia's and the world's top surf board shapers have homed their skills on Whangamata – why because of the bar.

The Whangamata bar has produced over 10 New Zealand champions, some multiple winners and many more New Zealand representatives. Ninety five percent of the Coromandel Peninsula Scholastic Surf Teams over the previous 18 years have come from Whangamata Area School – not bad for a school of only 400 pupils. Taking home the National Team Title twice, one year the local students made up one third of the New Zealand Junior Surfing Team.

Whangamata hosts two prestige professional surf contests each year, the Billabong Pro and Billabong Junior Pro. Such is the confidence of this multinational company that the waves and infrastructure are of a calibre to hold such events and they usually go for a duration of anything from three to four days.

## [10.37 am]

The bar has featured in three movies - "Out of the Blue", "Children of the Sun", "A Beautiful Day" and in numerous magazines and videos since 1965. Even rating a mention in the in-flight Air New Zealand Magazine. Whangamata was chosen because of the bar and its dominant surf history.

One of those moments in our surf history was in 2005 when 2,000 people signed a petition to save the bar. This petition was handed to the Minister of Conservation who was also inundated with emails, many from overseas in support of the petition. That is the most significant here.

I met my wife surfing the bar, and have since surfed there with my three daughters and many families are similar. Life-time friendships are made on the bar. It is a melting point of personalities. The bar adds to the physical wellbeing of the youth of the town, be the age four to 84 years old.

Surfing in Whangamata permeates the lifestyle and fashion, giving the town a unique flavour, which has been then exported to other towns as feature culture. Surf tourism and the surfing industry are a major influence in the economy of Whangamata. The industrial and retail cluster with a unique character has been developed around the surf - three surf board makers, three surf shops, plus numerous related surf fashion retailers, and once was an isolated rural community.

Whangamata is one of the few towns in the world like Huntington and (**INDISTINCT**) beaches in California, New Quay, Cornwall, UK, Hossegor in France, and the Gold Coast in Australia, that created the lifestyle and image and envy factor that has promoted the growth of the world surf industry as a multi-billion dollar business.

"Riding High", the surfers who built an eight billion Australian dollar business was, with a recent article in the financial magazine "The Bulletin" about the surf industry and about the money that has been generated within the global surf industry.

"We recognise surfing as the number one lifestyle sport in the world today", says Richard Scott of TW Productions. Why all of a sudden has the surf industry become interesting to the mainstream public? It comes down to the bottom line - the growth of the industry has been phenomenal, i.e. Billabong has turned over more than 350 million per year since 2000. It floated on the Stock Exchange and raised 295 million with a market capitalisation of over 1.4 billion, and similar stories with the other two big players in the world market - Quick Silver and Rip Curl. The Bulletin quoted "The global surf industry as being valued at 7.4 billion". Why? All this because of the unique natural features in their coastal landscape.

Internationally Costa Rica has realised that their biggest tourist earner is surfing, with over 400 million US per year, and now they are gearing up to catch more of the surfing dollar. The island of Bali has been tapping into the surf tourism since the late 1970s. There are now surf camps in Fiji, Tonga, Samoa, New Guinea, Caroline Islands, Philippines and The Maldives and there are many more. All of which are adding new money streams for their people, broadening their horizons as they get surfers from Australia, New Zealand, USA, Brazil, Japan and Europe visiting their countries. Why? Because of the unique natural features in their coastal landscapes, and what are we doing? We are damaging these potential money streams.

I will give two examples, although there is many - White Rock, closed by DOC and the private landowner, whose property bordered the world-class surf breaks **seconds** and the spit.

MADAM CHAIR: Whereabouts is that?

MR SHANKS: White Rock, it is the south-eastern tip of the North Island. So if you move east from Wellington, Cape Palliser, so there is actually numerous fantastic surf spots there, the two highlight ones.

# [10.42 am]

The other twist is Maungamanu, the closest surf break to State Highway 1, it is only 10 metres. It has all the nationalities mentioned above visiting the surf. Some times up to 100 people camping at the top of the point, known as "Meet Works", day after day, and has done for decades, and no descent public toilets or clean running water are provided. Bacteria and viruses are buried 150 mm beneath the surface of the sand or down a third-world long drop in prime beach parameters. Yet both these surf breaks are contenders under policy 20.

If we look at the international example, we are not getting a breath the potential that the social economic value of these God given assets. It is time to wake up, paddle out and tune our government regional and district councils that by recognising and giving effect to makes good financial sense.

There are over 90 hard-core businesses, i.e. surfboard makers, surf shops, commercial websites, surf accessory manufacturers, surf clothes manufacturers, wet suit manufacturers and a number of importers of surf accessories and surfboards and then there are three big brands - Rip Curl, Billabong and Quick Silver.

On the shelves in our bookstores there are over 15 monthly surf publications (INDISTINCT). And on our more popular beaches there are a growing number of surf coaching clinics, and an extension of that is the surf academy at Raglan Area School and a further extension of that is the Science Faculty of Waikato University.

I would estimate these enterprises to turn over many millions of dollars per annum and growing. Surfers generally have to travel, that is drive to the surf, not because they are lazy or can afford a large car, it is to do with swell size and direction and what **court** of the wind is it. Surfers will on weekends travel up to four hours from home base to get a **barrel** or two. So when you factor in petrol, motels, fast food outlets, restaurant, air fares, let alone the antibiotics after getting ill from the degraded water we sometimes have to surf in, and the list goes on. So in reality who knows the value? We should as it is a positive economic flow that is moving up the graph.

The only way to sustain the surf business is the sustainability of these unique features in the coastal landscape and clean water. Surfing the gap - skateboarding, surfing and skateboarding the gap - snowboarding. Now these three extreme sports are interwoven both socially and economically and together are a great international tourist attraction.

So the pot of gold could be bigger than we could anticipate. Recently the Lonely Planet has just said that "New Zealand is one of the best places for participating in adventure and extreme sports in the natural environment", which in turn relies on the unique features in the natural landscape, be it coastal or mountain.

Yes, I know I would be hard pressed to convince the Tribunal that (**INDISTINCT**) is a unique natural feature in the landscape. So I will leave that to the next generation and the review in a decade of time.

What is a Wave? The Webster Dictionary describes a "wave" as "a disturbance or as variations that transfers energy progressively from point to point in a medium". Waves are everywhere, they form a part of an everyday life - sound, micro, heat, etc. As surfers we are able to use ocean waves in a very special way. The (**INDISTINCT**) reaching the earth as electro-magnetic and then through a series of links form a clean rideable swell. We boost ourselves along using a fraction of that energy and we dedicate our lives to more of that with energy.

To us ocean waves are even more important than they are for the rest of the population, and this is what we need to communicate to this Tribunal, as in the past we have had "No" for many for consultation with the organisations that have to give effect to.

At first the problem was the language that we used, i.e. "it jacked up out the back then just sucked as the bottom dropped out. You should have seen the pit it was filthy, but I held edge because my stick had carved fins with less twang - it got spat out. It was wicked", in other words "I had a good ride on the bar".

As surfers, to communicate more successfully we need to learn the academic and scientific language and (INDISTINCT) speak - the signs, the planning, the law and even standing for council's. We are moving forward. There is at least one enlightened Regional Council, Taranaki, and even the Head Planner for the Thames-Coromandel District Council, Mr Wishart acknowledged the bar in his submission to the review and thought it should be on the surfer's wish list.

So I ask you to look into the future of this sport and culture - what would it be without these unique features in the coastal landscape surf breaks? It would not be sustainable.

## [10.47 am]

So please endorse policy 20 and please put Whangamata in as one of their iconic surf breaks of New Zealand as it well deserves to be in the line up

Please also encourage the use of water standards rather than water guidelines, as councils tend to blur the limits, and the minimum standard would be that which is required for shellfish.

There needs to be more time and money put into the monitoring of their aquatic environment, especially around surf breaks, and taking the advice of two modern visionaries of our generation who are unfortunately not here - "Good water, good life. Poor water, poor life", "No water, no life". The greatest gift we can give our grandchildren is clean water.

So before I say thank you, I will just go through my attachments just to highlight what I was going to say.

- MADAM CHAIR: We have constrained the time. So we will take it as read and we will certainly give it attention.
- MR SHANKS: Thank you very much.
- MADAM CHAIR: Thank you very much indeed.
- MR SHANKS: No, thank you.
- MADAM CHAIR: I think I will ask the Board if they have any questions of the various witnesses as we go.
- MR WOOLLASTON: No, it is all pretty clear to me.
- MADAM CHAIR: No, thank you. It was a very interesting overview and scene setting. Why do think Whangamata has been left out of policy 20?
- MR SHANKS: I have got no idea. I thought it would have been as you will see in the photographs that I showed you, 30 of the top surfers of New Zealand named the five best breaks in New Zealand and Whangamata was rated number 2, although I still think it is number 1, so maybe and I still think the person who dreamt up policy 20 just I have got no explanation for it, I do not know if it was because of the controversy over the mariner issue that it was best to be left out, but I think the Board should reflect on the 30 best surfers in New Zealand choosing it as the second best surf spot in New Zealand. But it is unique. I read some of other submissions where people have talked about nurseries of surfing, and this is where Whangamata is really unique when it is only about the height of this table, as most of us elder gentleman probably would not go surfing in it is perfect for the children because it does break for the 500 metres and it is on sand and it is only up to your waist so parents can be very comfortable for their children to go out. So not only is it an excellent nursery, which is reflected in the results of the scholastic surfing, that it is an excellent high quality international break. So once it gets to two metres it gets really exciting and

stimulating and when you come out of the water your legs are like jelly, your neck is really sore, you do not want to talk to anybody, you just want to have a beer. So that is how good it is.

#### [10.52 am]

MR WOOLLASTON: That's good.

MR SHANKS: Thank you very much.

MADAM CHAIR: Thank you very much.

MR ..... I would like to now call Dr Shaw-Mead, a Coastal Scientist who will present evidence on the physical characteristics of surf breaks.

MADAM CHAIR: Welcome.

DR MEAD: I have got a Powerpoint as well. I guess most of it are just single ones, but then a little further down near the end there is about four or five slides that come in a row that I will be talking about, so I am not sure whether you would come back here so you can see that or how it works, but I will let you know when it comes up.

MADAM CHAIR: All right. Thank you.

DR MEAD: My name is Shaw Mead. I hold a BSc and MSc Honours Degree from the University of Auckland, School of Biological Sciences, and a PhD from the University of Waikato, Earth Sciences. I am currently an Environmental Scientist and Director of ASL Limited, which is a marine consulting and research organisation.

I have 14 years experience in marine research and consulting. I have 34 **period reviewed** scientific papers and have solely or jointly produced over 110 reports pertaining to coastal oceanography, marine ecology and aquaculture. I have undertaken hundreds of research scuba dives around the coast of New Zealand and led many comprehensive field investigations that have addressed mid-ocean, biological and chemical components of the coastal environment.

I am affiliated with the New Zealand Coastal Society **HIPENZ** and the New Zealand Marine Science Society. I have a background in coastal oceanography, marine ecology and aquaculture. I studied for my MSc degree at the University of Auckland's Marine Lab undertaking sub-tidal research there from 1994 to 1996 directed at the fertilisation success of sea urchins as a basis for sustainable management and development of the commercial market.

Many ecological components of my doctorate were directed towards sub-tidal habitat enhancement and marine structures, while the physical oceanography component was focused on understanding the effects of coastal bathymetry on wave breaking characteristics using film measurements and hydrodynamic numeric modelling included in the development of a database in mostly world-class surfing breaks around the Pacific and Indonesia. More recently I have been involved in the design of functional and impact assessments and monitoring of physical and ecological effects of marine construction, coastal erosion control, marine reserves, dredging, all industry in aquaculture ventures.

I live and work at one of New Zealand's premier surfing breaks, Raglan. I have surfed 26 years, and during this time I have travelled to certain destinations for business, research and pleasure all around the world, including Hawaii, North and South America, Europe, South Africa, Indonesia, Australia and the Pacific Islands. Some 70 percent of my work is conducted overseas which allows a global perspective on how development impacts on the coast.

The specific provisions in the Proposed New Zealand Coastal Statement that my submission relates to are policies 12, 20, 25 and 54 and glossary definitions.

Policy 12 - The Local Authority Monitoring, policy 20 - Surf Breaks of National Significance, 25 - Public and Multiple Use Structures in the CMA, 54- Protection Structures and Definitions of Hard Protections Structures in the Glossary.

While I made my submission and then presented my evidence as an individual, it must be noted that I am Director of company that helped develop and applies multipurpose reef technology which forms part of my submission, that is policy 54 and 25, will respect to address in other coastal management needs, i.e. policy 6, 19 and sustainability in general.

My evidence with respect to policy 20 is in support of the Surf Break Protection Society, my evidence with respect to policies 12, 25 and 54 does not directly concern surfing breaks rather classification of the environmentally sensitive coast protection solutions and multiple use structures.

Policy 20. I strongly support the protection of surfing breaks of national significance from inappropriate use and development. However, I believe although the list of surfing breaks provided include some of New Zealand's national surfing break treasures all score 10/10 in the New Zealand Surf Guide, with the exception of Papatowai which is 8/10, and that is big wave spot, there are other internationally and nationally significant surfing breaks that are more vulnerable than this list of reef breaks, i.e. surfing breaks that are natural sand features and thus more sustainable to damage than hard rock breaks. Indeed there are a variety of factors that effect both the physical make up of breaks and waves that approach the breaks, thus protection of the surfing breaks of national significance from inappropriate use and development cannot only focus on the breaks themselves, but more also take into account the other factors which make them nationally significant.

## [10.57 am]

Such factors could be integrated with local authority monitoring, Policy 12, or additional and/or separate investigations would be required to determine the factors that would need monitoring and protection to determine nationally significant surfing breaks.

Not all waves are good for surfing. Specific types of waves and conditions are required for surfing. High quality surfing waves must peel at a surfable rate, have a steep plunging wave face (that is the breaking intensity) to generate high board speeds and provide the tubular edge which really is outstanding for high quality surfing breaks.

Just behind you I have just kind of pointed that out on a slide and it is the bottom statement which really is an important one I was getting at there that these factors that make a high quality surfing break are really controlled by the shape of the seabed at that break.

I won't go into that detail, it was a detailed part of my PHD thesis and what I work with these days. That is already part of what we are looking at here in the policy, that local area. I want to look at the other factors that can influence that local seabed or the waves that reach the break themselves.

As Dr Scarfe will also point out, high quality surfing breaks are not common. It is rare that various physical factors naturally come together to create them. In general point, reef, ledge and sandbar breaks – the latter usually due to an estuary mouth or other coastal feature –are known for producing high quality surfing waves while beach breaks are generally of lower quality, although very common, unless an offshore feature has a positive influence

For example between Raglan headland and Cape Reinga which I have got behind you on the picture there, some 400 kilometers of coast where the two big black arrows are there is only really two high quality surfing breaks that are consistent – Raglan and Ahipara – and a couple of high quality reef breaks and a handful of high quality bar breaks, and hundreds of kilometers of beach breaks which are of poor quality and unsurfed for the majority of the time. They all have their day of course, but most of the time.

As with other rare natural features, high quality nationally significant surfing breaks need to be protected. Other submitters have and will describe the huge social and economic benefits that surfing breaks provide to the local area. Many cases have been well documented in the past decade.

Here I will describe some other factors that must be recognised in the protection of nationally important surfing breaks. As well as advocate a second tier of importance to be incorporated into the proposed New Zealand Coastal Policy Statement that is the identification of regionally significant surfing breaks.

Many of New Zealand's high quality surfing breaks are not rocky bottomed and rely on sand, either directly i.e. by a constant supply of sand to the beach, or indirectly e.g. an offshore deposit or shaped by water currents such as ebb tidal inlets and outlets of an estuary.

I am also using the Whangamata Bar as a good example of a high quality and nationally significant surfing break that relies on sand. Whangamata Bar is New Zealand's most famous sand bar break. It also rates 10/10 in the New Zealand Surfing Guide. With rides of up to 500 metres long the left hand break was named

"The Jewel of the Pacific" by Hawaiian surfing legend Jerry Lopez as Paul has already pointed out.

Whangamata Bar is formed by the tidal delta or the bar where the estuary channel is located adjacent to the northern headland, and I have put an aerial photograph just above there showing where that is. The double ended arrow is showing really one of the major factors that causes that bar and that is the current that comes in and out of that estuary is a huge factor on grooming that bar.

The shape of the bar is governed to a great extent by the velocity of the tidal currents moving in and out of the estuary which also move the sand. Any changes in the sediment supply and/or the tidal currents would likely have a detrimental impact on the sprag which is one of the issues in the controversy over the marina in the Whangamata estuary.

The Minister of Conservation's decision to decline the resource consent for this development was overturned even though there was no appropriate impact assessment of the effects of the new marina on the nationally significant Whangamata Bar. In addition, the monitoring of conditions are focused on the ebb tidal delta, that is the break itself, rather than the physical processes that create the break e.g. the tidal currents and sediment transport and changes into the sediment supply and current velocities at the mouth of the estuary both due to the land, coastal and estuarine activities could negatively impact on this world class break and would need to be taken into consideration in order to protect it form inappropriate use and development.

# [11.02 am]

That is the whole catchment and all the inside of that estuary, if you change the tidal prism we are going to change what happens at the mouth of that estuary.

MADAM CHAIR: Does this sort of evidence given to the Environment Court?

- DR MEAD: Not in terms of a specific environmental impact assessment which would include at the very least measurements out there of the tidal velocities and that, but these days would include a numerical model to model it as is and then model it with the marina in and look at the differences between the two. That would give us an idea of the impact on the tidal currents out there in the estuary on currents.
- MADAM CHAIR: Do you know if the Whangamata people were able to glean any evidence like you are giving us here?
- DR MEAD: In terms of how the impacts would change? There were numbers and they were disagreed with with various people on how the volume of the tidal principle of the change. Paul is probably far more up on what happened in terms of what went through but I went through that actually me and my associates went through it and put a letter to the Minister of Conservation to that effect.

From our point of view and using it as an example here, it was more that it hadn't been looked at at all or hadn't been considered. A nationally significant surfing break and the impacts on it hadn't been considered in appropriate detail.

## MADAM CHAIR: Thank you.

DR MEAD: Another example of the importance of sediment supply to a surfing break with quite different processes involved is the world class surfing headland of Ahipara which is classified as nationally significant in the proposed New Zealand Coastal Policy statement. It is worth noting that the various breaks down this headland and the southern end of Ninety Mile Beach in the far north all score 10/10 in the New Zealand Surfing Guide are mostly sand bottomed against a shallow rocky headland.

I have again shown a slide up there. On the top of the slide is where the break is, the waves come from the south western, wrap all around the headland and there is a serious of six or seven breaks down that northern almost north easterly facing headland there.

The majority of the sand feed in these breaks comes from those massive transverse dune systems where the windblown sand moves across the headland in the bay and you can see those tones of sand going right over the top. Rather than sand being pushed around that rocky headland by waves, as a lot of sand moves upper coast in that process, it's windblown transport that really delivers the sand into Ahipara and downwards up through Ninety Mile Beach.

Any disruption to the sand supply would very likely have detriment on the effects of the surfing quality along the headland. The degradation of one of South Africa's best surfing breaks, Bruce's Beauties at Cape St Francis is a very example of a transverse dune system. I have been lucky enough to have been involved in the work there for the last three years and again up behind you, Cape St Francis was known internationally for the location of the perfect wave. It was discovered by two wandering surfers in Bruce Brown's seminal 1966 film, The Endless Summer.

In the film the surfers literally stumble upon the surf break once they crashed a serious of massive sand dunes. Ironically the popular exposure Cape St Francis received from the widely successful movie may have hastened the demise of the beach amenity.

The sand dunes shown in the field and which we have got here form the 1942 – the surfing break is in this corner down here where you can see the guys, there are some clips out of the photo – here the wind was coming from the bottom left hand side of the picture. Dominant very strong winds from the south west feeding sand into that bay.

The sand dunes shown, they were the very dunes that were stabilized to prevent the shifting sands from blowing over housing developments. These dunes also provided the life blood, the sand to the beaches that resulted in loss of the sediment supply from the windblown sand and has very likely contributed to the beach erosion and resulted in the great reduction in the number of days of surfing at the break.

There is just an animation here just taking through how the development has changed over the years. This is '61, so five years before they came through. The first housing development started in '75and they started to plant out that whole transverse dune

system with Australian plants that were brought in. The dune is get smaller and so do the photos for a second, it is fast disappearing.

## [11.07 am]

The last one there though shows how it is today and 2000 and you can see that there is no transverse dune system there at all. The beach itself is eroded back some 150 metres, there are rock revetments along the whole 2.4 kilometres and now in most places there are no dry beach at high tide.

The follow up film in 1994, The End of Summer II, was played to a huge international audience. The traveling surfers returned to Cape St Francis and were dismayed to find the dunes had vanished and replaced with housing developments and the break that was once there was gone.

While Bruce's Beauties, the clean mean green jaw of South Africa still occasionally breaks some larger swells, this breaks decline is a legacy St Francis Bay has to the outside world. This case presents an important lesson for the management of nationally significant surfing breaks.

There are many other examples of how introduction to sediment supply and pathways has an impact on the seabed and the shape of a coast and consequently surfing breaks. Dr Scarfe will describe the down coastal erosion due to the construction of the Manu Bay boat ramp. Interestingly the pre boat ramp Manu Bay also featured in the original End of Summer movie.

Similar impacts can be expected due to the development of breakwater ports, marinas and various forms of coastal protection structures. The in shore sand mining has also been attributed with the demise of surfing breaks. Sand mining has been attributed to the destruction of the Mangawhai Bar and is a contributing factor, along with inappropriate development of the sand dunes, to the demise of Omaha Bar.

At present there are proposals for massive sand mining activities, hundreds of millions of cubic metres per year on the North Island's west coast. The impacts of sand mining on the surfing breaks in the area, including the nationally significant Raglan breaks, need to be considered as part of any applications to extract such large volumes of sands in these areas.

The area of the sea off shore of nationally significant surfing breaks must also be considered in order to protect them from inappropriate use and development. Long period waves start to feel the seabed at the edge of the continental shelf e.g. 16 second period waves feel the seabed at about 200 metres deep which means that features on the seabed influence and condition the waves for a break well before the waves interact with the local seabed at the break.

The phenomenon of wave focusing is a well known principle where refraction of waves causes them to build in height over submerged ridges and reduce in height where there are trenches. In basic terms, because waves move slower in shallower water, the energy is piled up high where it is shallower and disperse where it is deeper, relative to the surrounding seabed.

There have been a number of investigations into wave focusing of surfing breaks at a range of scales around the world that provides examples of the types and sizes of seabed features that create high quality surfing breaks prior to the waves reaching the breaks themselves.

Focus breaks generally break with a heavy hollow peak, an A-frame, due to the height gradient established by the offshore features. Ocean ridges and canyons such as Mavericks in the centre island of New Zealand, Blacks in Southern California and Harbour Deltas Ocean Beach in San Francisco, South Stradbroke Island, Australia and Matakana Island in New Zealand are the largest features and can result in large height increases e.g. the around 3 kilometre ridge of (**INDISTINCT 3.45.0**) Island in New Zealand increases wave heights by four to five times.

Medium scale focuses such as Pipeline in Hawaii can be the enter break, the Pipeline focus extends some 20 metres deep. Off shore systems that suddenly increase wave height and result in higher peaks and rip (**INDISTINCT 4.02.2**) conducive to good surfing.

A good example of a mid sized focus break in New Zealand is Midway pipe Beach in Gisborne where the submerged ridge through the centre of the bay – the foul grounds – creates peaky waves of greater height than are generally present in the rest of Poverty Bay. Midway is an extremely popular surfing break in the centre of Gisborne.

Small scale focuses can represent the take off of fast sections of surfing breaks e.g. Lovers Cove in California or Breaker Bay in Wellington, New Zealand. Scarfe 2002 detailed the ephemeral focus at Raglan's Manu Bay which formed due to a low reef patch on the seabed - it was often washed away and how it impacted on the wave quality and maneuvers that could be formed. Most good surfing breaks have some focusing elements in them.

Recent studied of a large pulse of sand that moved down the Raglan headland between 2004 and 2006 demonstrated the huge impact of changes the offshore bathymetry can have on nationally significant surfing breaks.

## [11.12 am]

The presence of the sandbank had large negative impacts on two adjacent Raglan Point breaks indicators and outsides, with impacts on both breaks being more severe in 2005 and the changes in the surfing conditions receiving comment in New Zealand surfing magazine, Kiwi Surf.

This study highlights how extractions of massive volumes of sand in the near shore zone could impact on nationally significant surfing breaks.

MADAM CHAIR: Has that stopped now?

DR MEAD: Um.

## MADAM CHAIR: Sand extraction?

DR MEAD: No, there is still some – there are two outstanding applications for exploration rights off the West Coast for the iron sand. Chinese (**INDISTINCT 00.42**) companies I believe.

Flooding structures can also affect the – have potential affect or waves before they reach the surfing break. An example of this is the proposed mussel farm offshore Pegasus Bay. A very large mussel farm has been proposed off Pegasus Bay, directly offshore of the Christchurch city beaches when the waves are from an east and northeast direction.

During the winter months long period waves mostly originate from the south. However, during the summer months shorter period waves originate from the northeasterly quarter.

What is known is that very short waves, eg like wind chop, are attenuated by mussel farms. There is little, if any knowledge, of the attenuation due to mussel farms on longer period swells that surfers utilise.

In the case of Pegasus Bay, in the absence of any information, a monitoring strategy has been developed to determine the extents of wave attenuation and I have attached a brief outline of that that was developed between myself and Craig Stevens at NIWA to look at that.

The results of this investigation, should it go ahead, will be very useful to apply to other areas of New Zealand as there are presently several very large open sea aquaculture ventures planned.

The above brief description of some of the factors that combine to create world class surfing breaks illustrate that the successful protection of surfing breaks of national significance from inappropriate use and development must include not only the immediate vicinity of the surfing break itself, but the surfing break parameters of the **(INDISTINCT 2.18 – sounds like peelambrum)** breaking intensity controlled by the seabed at the break as well though as the influences of off-shore of the break, which can be both on the seabed with the shape of it, as well as structures such as mussel farms.

It is very encouraging to see surfing breaks given national significance. And, like other aspects of national policies, I support development of a second tier of importance being incorporated into the policy statement. That is the identification of regionally significant breaks. For example, Whangaparaoa could be included in the Auckland regionally significant surf breaks.

Whangaparaoa Okiwi on the east-coast of Great Barrier Island there is a world class surf break, 9/10 in the New Zealand surfing guide, at the mouth of the Whangaparaoa Estuary.

Like the Whangamata Bar, changes to sediment supply would likely have a detrimental impact on this break.

Protection of any level of surfing breaks from inappropriate use and development will require a structure to identify both the importance of the break and the factors that influence the existence of the break in order to be successful.

Policy 12 – Local Authority Monitoring. I strongly support the need for local authority monitoring to apply procedures and methods that allow for comparison and collation to provide a national perspective. Indeed I have recently worked on such cross boundary issues in the coastal marine area of Kaipara Harbour.

However, I believe that a more proactive work and to understanding coastal processes is required to successfully apply many of the policies in the proposed New Zealand Coastal Policy Statement and should be undertaken by local authorities rather than other sources such as (**INDISTINCT 4.01** – **sounds like 'public good'**) signs and studies undertaken for resource consent applications.

Monitoring provides information on what is happening on the coast but very little on what is causing it. There is a need to be proactive and understand the processes of operating around our coast in order to promote sustainable management of our coastal environment, policy 1; to be able to apply a precautionary approach, policy 5; to ensure that (**INDISTINCT** 4.24 – sounds like 'amenge') valleys are maintained and enhanced, policy 19; to consider accumulative effects, policy 21; to preserve the natural character of the coastal environment, policies 30 and 32; and many of the policies directed at maintaining water quality and ensuring environmental affects are no more than minor.

While resource consent applications for particular developments in the marine coastal area require assessment of environmental affects to determine the various impacts on many of the policies, continuing to increase in the understanding of how our coast operate.

# [11.17 am]

There are also many examples of local authorities undertaking studies to understand coastal processes around the country. A strategic program that applies procedures and methods that allow for comparison and coalition to provide a national perspective of coastal processes will be of great benefit to the managers of the environment.

There is an obvious link between understanding the coastal processes that make a surfing break nationally significant and what factors should be monitored in order to ensure the breaks protection from inappropriate use and development.

Policy 54 and 25. I strongly support discouraging the use of hard coastal protection structures, especially those that have a detrimental impact on public amenity and natural character.

At present, hard protection structures such as seawalls are being built in the CMA for the advantage of relatively few homeowners at the expense of public amenity, eg the sandy beach. The Waihi beach 1.1 kilometre seawall is a very good example of this. However, I strongly believe that artificial or multi-purpose reefs should not be lumped in hard protection structure category with seawalls, rock (**INDISTINCT 1.13**), groynes, retaining walls and so on.

Artificial or multi-purpose reefs were developed as a response to the need for environmentally sensitive solutions for coastal protection, driven by the RMA.

The artificial reefs programme, the ARP, was started at the centre of excellence in coastal oceanography and marine geology at Waikato University and NIWA in 1995. The objective of the ARP as defined in 1995 was as follows. The artificial reef programme is a response to the need for positive development and environmentally sensitive solutions to coastal protection and to the continued growth in recreational use of our beaches by unifying the senior scientists and experienced industrial partners.

A programme operating jointly within the earth sciences department of the University of Waikato and the National Institute of Water and Atmospheric Research aims to enhance the coastal amenity value of the New Zealand shoreline by valuating multiple use options, surfing, diving, recreational and commercial fishing, navigation and swimming safely, for incorporation into coastal constructions.

Focus and further develop expertise within the research community and within industry while providing a sound basis for senior student education. This objective is strongly associated with policy 6, 19, 25 and sustainability in general.

More than a decade since its instigation, the primary aim of the ARP has been achieved. Indeed, in addition to numerous research theses, individual journal and conference papers and consulting reports, special issue number 29 of the Journal of Coastal Research, winter 2001, natural and artificial reefs for surfing and coastal protection includes more than a dozen scientific papers on design impacts and construction of multi purpose reefs.

A second multi purpose reef, JCR special issue, is currently in press.

The public's demand for beaches for recreation, combined with the increase in value society places on natural environment, has led to a dramatic increase in the development of submerged reef projects worldwide. And more recently, independent research is strongly supporting the findings of our initial ARP.

Policy 54 and 25 are linked through the definition of hard protection structure in the glossary, which includes artificial reefs as a hard protection structure which is incorrect and contradictory to policy 25.

Artificial or multi purpose reefs are located offshore of the beach and are submerged. Unlike hard protection structures, they are not built on the beach and they are designed and built to address the causes of erosion rather than the effects.

Another important distinction is that they can and are usually built from sand filled geotextile containers, which can easily be emptied and removed if needed. Unlike rock or concrete structures, they are not hard.

Indeed, in the state of Florida sand filled structures on the beach for coastal protection have recently been classified as soft protection structures and are the only type of structure that can be applied on the beach by homeowners.

Some of the basic principles and examples of multi purpose reefs are shown in figures 6 to 12. There are just a few in a row here and I am not sure if you are alright to just spin around there or you would like to come back a bit, but I just can go through just to give some background on what these kind of structures are.

The artificial reefs programme started looking at these structures – started looking at what naturally protects the coast and, from small islands out in the middle of the Pacific with fringing in barrier reefs to this very nice example here where we have a reef offshore and under water because it knocks wave energy out and changes circulation pattern, we get this lovely widened beach in behind it.

# [11.22 am]

Once you move that coastal protection offshore and underwater the best thing that protects a coast, of course, is a wide sandy beach. If we get that we have the opportunity to do things like incorporate surfing and of course ecological enhancement and I'll show you a couple of things about that.

Really these things came from natural examples and there's a whole bunch, a lot of these came out of Colin Andrews' work looking at aerial photographs around Australia and New Zealand. I think he digitised some 360 cases. The thing that is important on these structures is that you don't have downstream impacts. You have widened the beach rather than push your problem down the coast and that is because you are offshore and underwater, and you've got a big gap between the structures and sand and sediment. Although it is modified and you have added a control point, it can still move backwards and forwards along the coast.

They work in two ways. One is by dissipating energy and the other is rotating. This planning is quite obvious. You knock that energy out offshore by breaking a wave on a submerged. There's not as much energy that can come to the beach and stir up the sand and move it away and cause erosion. The other way is by rotating waves. A lot of erosion is caused by waves driving sand along a beach and for whatever reason there may be a loss of sediment supply. By rotating the wave direction so it is more shore normal, we can reduce those currents in behind the structure and also lead to the settlement of sand and the build of a widened coast or salient.

I will just grab some of these slides out of different talks. This is from the Dune Protection Society. It was just looking at if this was a beach that needed protection. By putting a structure properly designed at the appropriate distance offshore you can build up a new area, a new dune area. The thing with offshore structures, about 7 or 8 times the width of the structure is how much they influence the coast, so it is quite effective in that sense. Bringing it into, I guess it is policy 25, the integrated management so working when we get the sand on the beach and it is also then using things like dune stabilisation through the planting of appropriate species like spinifix

and pinau. Again you would be putting in, it is a hybrid solution which we are seeing all over the world now utilising renourishment, structures to stabilise the sand and then dune restoration. That last one is the recommendation for one end of St Francis Bay that we were looking at and that will have dune preservation and stabilisation and it also needs a source of sand.

MADAM CHAIR: That is obviously very significant for coastal hazard zones.

DR MEAD: Yes.

- MADAM CHAIR: And how to protect the adjacent development from sea level rise and coastal inundation.
- DR MEAD: Yes that is a wish or nature's (**PH 3.23**) an interesting case where because they were able to say that there is sustainable source of sand by mining it from the other side of the port and bringing it to the beach, all the coastal hazard zones were able to be moved back along way and houses moved out of them. Haumoana is looking at similar stuff but possibly putting offshore structures there too, to bring that beach forward and you know I guess a lot of it is driven by the cost of houses or the value of the property behind it and that kind of thing.

One more slide quickly here just to demonstrate an actual working case rather than the natural cases. Narrowneck reef from the Gold Coast. It was the first project that we were involved with. We did the design work for this still back at the university. It is called Narrowneck. There is only a road separating the seaway and they wanted to make sure that didn't get eroded and break through as it had done three times last century. The major aim was to widen the beach and dunes there. The secondary aspect was to improve the surfing climate. Interestingly the project was driven by a socioeconomic study from the Griffith University that showed that every dollar that was spent on making your beaches better, you'd get 60 to 80 return. Of course it is a very big tourist area so you can see why – we always worked on the principle of understand, innovate and sustain.

## [11.27 am]

Understanding – find out what are the coastal processes? Get your feet wet. So there was a lot of field work, understanding what was going on out there, lots of instruments, then moving into designing and functional assessment. We used a lot of numerical modelling for that and finally sediment transport modelling before the structure was applied. The finished design was a huge structure. It is greatly enhanced in the vertical. The structure itself is about 450 metres offshore to the offshore tow in 10 and a half metres of water. The beach is up to the top of the picture of course. So that whole thing is submerged half a metre under water. Sorry, one metre under water at low tide. Here we can see it was fabricated out of these big containers. These containers are 20 metres long so you get an idea of the scale of this. The modelling showed that because the sand comes this way up the coast, up to 500 cubic metres a year, the salient would stretch all the way down to nearly Burleigh Heads, although like the other ones it is a hybrid solution. There was a lot of

nourishment went on. Nowadays the dunes come right out here and there's a lot of planting been done on that.

I guess the only thing to point out from here, this is partway through construction. We get the wider beach. They have already started planting out. The wider beach here because the sand, as I've said, has swung around now, the sand moves north. Because we have this gap, sand can move backwards and forwards and the most encouraging thing to me there is that little note "stable beach". These notations come from the city engineer at the Gold Coast. We don't get those downstream impacts that we have on a lot of the hard coastal protections that are just dealing with the effects rather than the cause of erosion which is the waves.

Similar results. This one here shows it before construction started in August '99 and this is March 2003. The same place. The view from the water. Anything that you put underwater that is hard and stable compared to a mobile seabed is quickly colonised and I will show a very quick video on that to give you an idea. This is after a 6 metre high storm. You can still see the salient in behind it. The sea wave is only just behind there so that is the area they are protecting. Those surfers, that's at the same time, they are all out the back on that.

This just shows you some of the 270 species that have been identified and are associated and living on and around the reef on the Gold Coast. While we are watching this, we go underwater now. I would to state clearly and I don't know if it comes out in my evidence. I definitely do not advocate the use of artificial reef structures to replace surfing breaks and really I advocate sustainable development and environmentally sensitive development. These days we are using much better planning, looking at setbacks so that we don't have to protect our coast. Unfortunately there are still many cases where erosion is evident because of past planning and so forth and offshore artificial reefs aren't the be all and end all but they can be applied in some areas to provide an environmentally sensitive solution.

You will see it -I will show the other one. In the past three applications for resource consent in New Zealand for artificial reef structures have been granted and all of them had the support of DOC due to the environmental enhancement and the increased biodiversity locally around them. I will leave that there.

MR WOOLLASTON: That growth is actually on the artificial reef structure is it?

DR MEAD: Yes, the geotextile bags. From the day they are out there. The sea is basically a big soup of spores and larvae waiting to find somewhere to land and what we find is that more times out of 10 there's a limitation of actual habitat so this area is now the most popular fishing site because it is very close to the seaway. The rest of it is all mobile sand and a very hard habitat for organisms to live on.

And the other little video is a very quick – well, you can't, I suppose it is very big up there. This is showing, it wasn't the most perfect swell, but showing how the amenity of surfing has been enhanced there. Both from the reef and due to the banks around it. These surfers, you can kind of see the patterns and the wind patterns in the water behind that reef is almost straight offshore. They are coming straight in towards the

beach and this last guy he hits the beach and he's sinking now and races across on the inside sandbars.

#### [11.32 am]

And that's just, as I said the summary of all those multiple components that we can put in. That last slide there just showing from the amenity and the ecological and the low aesthetic impact. Okay I will just find where I am up to.

- COMMISSIONER EDMONDS: So where are the three consented ones in New Zealand that you have referred to?
- DR MEAD: Mt Maunganui, Opunake and Lyall Bay.
- COMMISSIONER EDMONDS: Are they in yet or are some of them still going in?
- DR MEAD: Yes, Opunake will be Mt Maunganui everything that is down there has been done. There's still work that can be done on that one. At Opunake all the containers are down. We actually earlier this year started our own construction team so we could have some control over what went on the seabed. Our construction team last night put the second section of the Boskon (**PH 1.01**) reef in the UK in the water and they will be coming back in November and they can get back onto the Opunake reef before heading over to India. And yesterday resource consent application was just lodged for twelve structures on Orewa beach, primarily to hold sand in place. They have had erosion problems there for a long long time. Historic. Everything from moving the entrance to their estuary and sand mining went on and all sorts of things. So they're in as well.

COMMISSIONER EDMONDS: So how do you anchor them to the seabed?

- DR MEAD: As you see, we are actually using bigger bags than these nowadays. Those bags were 20 metres by 5 metres in diameter, weighing some 300 to 400 tons. They are just gravity structures. Normally on your port walls we are looking at anywhere between 6 and 10 ton dolows (**PH 1.51**) or rocks. You know they can get thrown around a bit in a big storm. These things are underwater, the waves break over the top of them. They just don't go anywhere. Gravity structures is what we call them. Some of the biggest ones we have filled are weighing up to 200,000 tons. They just don't go anywhere.
- MADAM CHAIR: What are they made from?
- DR MEAD: They are made from geotextile the material we are using is called soft rock. It is one of the only ones we'd recommend in the surf zone. It is a hole punch material, a bit like if you think of your scouring pads, those green things you use. Much denser and thicker and sand coloured. Made of PET which is an inert material so there is no leaching (PH 2.36). PET is the plastic that most of your food packaging, you know most of your food comes in. Just extremely scour resistant and as you've seen and as I might as well put up now, that is the mount reef early on as well. Nowadays there's a lot more flora and fauna all over it. They just love that fluffy material. They are straight on to it. Lots of seaweeds and even sponges,

ascidians and there's resident octopus chasing the crays around and so forth. It is a very good material for settlement. Okay, a couple more pages and I'll just get through those.

Policy 25 encourages the climate for multiple use for public benefit of structures in the land environment. Artificial and multipurpose reefs are designed to be multiple use structures that incorporate coastal protection through the widening of the beach, an amenity unlike the loss the beach caused by a sea wall which results in the loss of public amenity.

Surfing breaks. The 1998 Hilary Commission study indicated that surfing, body boarding was the 14<sup>th</sup> ranked sport and leisure activity for people over the age of 18 in New Zealand. Higher than rugby, netball and cricket. In the last 10 years that number is likely to have increased significantly. And fishing, diving, snorkelling opportunities. Structures offshore and underwater quickly become colonised by marine organisms unlike structures on the beach. By lumping artificial and multipurpose reefs in with hard protection structures there are less opportunities for policy 25 to be implemented.

Further reasons why multipurpose reefs should not be categorised as hard protection structure include the interactions of policy 6, policy 19 and sustainability. Policy 6 calls for integrated management of natural and physical coastal resources. Multipurpose reefs are part of the integrated management of beaches which includes the combination of new nourishment and intention of the renourishment by offshore multiple reefs and stabilisation of the beach through the planting of native dune species, such as spinifix and pinau. Multipurpose reefs are an integrated beach solution that support policy 19, the maintenance and enhancement of coastal amenity values, unlike many hard protection structures that are aimed at protecting the land and infrastructure, reefs are aimed at enhancing the beach and the best form of coast protection if a healthy beach.

## [11.37 am]

Beach nourishment is applied more and more often in order to protect the coast of a wide, healthy beach while providing the beach amenity. However renourishment is designed to fail, ie the sand will be washed away, a time which leads to the issue of sustainability of continually finding new sources of sand as well as the environmental impacts where sand is taken from.

More and more these days, beach renourishment has been implemented with coastal structures to maintain sand on the beach for a longer period of time to make it more cost effective and sustainable. Using multi purpose reefs for this also provides added multi use benefits and appendix 2 just has a summary of what I talked about on the Gold Coast there.

Internationally submerged structures, i.e. artificial or multi purpose reefs are being held up as environmentally sensitive solutions to coastal protection. In the last decade, the research and application of submerged reefs that it is environmentally sensitive solutions for coastal protection increased. For example, environmentally friendly coastal protection, proceedings of Varna (PH 1.04.5) advanced research workshop and environmentally friendly coastal protection structures of Varna, Bulgaria, 25 to 27 May 2004, includes the description of the application for a variety of reef structures. For example, the performance of submerged break waters - -

MADAM CHAIR: You do not need to read that - - -

MR MEADS: Okay – cool. As I said before, DOC has supported the New Zealand applications for these structure mostly due to the positive impacts and of course, the local enhancement of bio diversity. I agree with artificial and multi purpose reefs and environmentally sensitive coastal protection methods (**PH 1.43.4**) in higher protection category. The proposed New Zealand Coastal Policy Statement has taken a step back ways.

Multi purpose structures support policy 6, 19 and 25 and are contradictory to high protection solutions. I can only assume that a list of higher protection structures would develop without coastal dynamics or understanding the application of submerged multi purpose reef structures. The glossary provides a list of higher coastal protection structures but not soft protection structures, which I refer to in policy 54. A glossary list of soft protection structures, which includes offshore multi purpose reefs should be included in the New Zealand Coastal Policy Statement.

In summary, I strongly support the protection of surfing breaks of national significant from inappropriate use and development and point out the facts, as they need to be considered.

And must also include the variety of factors that influence the break and the waves that approach it. I also advocate that the second tier of surf and break protection and believe that the framework will need to developed to both identify and monitor significant surfing breaks.

In policy 20, Wairarapa should be amended to the spit and Wairarapa and Whangamata via Coromandel on Whangapoua/Okiwi Great Barrier should be added to the list of breaks of national significance.

I strongly support the need for local authority monitoring to apply procedures and methods that allow for comparison and collation to provide a national perspective. In addition, policy 12 should include the collection of data that leads to a better understanding of coastal processes and the causes of the change that monitoring measures.

I strongly support discouraging the use of hard coastal protection structures especially those that have detrimental impacts to public amenity and natural character. However artificial multi purpose reefs are not hard coastal protection structures and should be removed from the glossary definition of hard protection structures and from section 1.3. A new category of soft engineering options, eg renourishment, multi purpose offshore reefs, dune stabilisation, sand by passing and back passing et cetera should be incorporated in the proposed New Zealand Coastal Policy Statement – thank you.

MADAM CHAIR: Thank you very much. That was really fascinating and very helpful for a whole pile of reasons – thank you. We will resume questions until after the break. We are running late, so we will take a 10 minute adjournment, which you have got coffee at the back and return and I wonder if those who are still to give evidence - - -

#### **RECORDING STOPPED**

MADAM CHAIR: - - - we can read your qualifications and documents and if you can condense them, that would be very helpful. Thank you.

## ADJOURNED

[11.42 am]

#### **RESUMED**

[11.58 am]

MADAM CHAIR: Yes, Mr Gage, have you any question?

MR GAGE: No. I think the submission was very good.

MADAM CHAIR: Mrs Edmonds?

COMMISSIONER EDMONDS: No, I don't, thank you.

MADAM CHAIR: Mr Woollaston?

MR WOOLLASTON: There is one small one, it is not on the technical matter, I found that fascinating.

You pointed to the difficulty of definition of the surf breaks I think twice in your evidence and I just wondered whether you had a view given that and given the dynamic nature of some of the processes, whether it is better to have a very clearly defined set of criteria there rather than to try and produce the definitive list?

DR MEAD: Yes, and I guess I have been looking at the physical side of things. There is also, as everyone has been pointing out how important they are, the economical and social sides of things.

The thing is that each type of break can have different things that make it that break, not just what is right there. So yes, I think that was what I was trying to point out, that there is some kind of way or whether there is a set of criteria to select them then also another set of criteria to find out what it is that makes that break in terms of physical processes.

MR MAKGILL: I am just wondering, Dr Rennie has suggested a definition that I don't think Dr Mead has had an opportunity to look at yet. Would it be possible just to get him to provide you with his feedback on that quickly?

MR WOOLLASTON: Well, we will wait until - - -

MR MAKGILL: Dr Mead has to leave after this presentation.

MADAM CHAIR: By all means.

DR MEAD: Can you tell me which paragraph you are referring to?

MR MAKGILL: 18 to 19 and 20 of Dr Rennie's evidence.

DR MEAD: I guess what Hamish's point of view is that again the break itself, when you are talking about the water above the reef and the air above the reef, the particular characteristics of how it breaks – that seabed there at that point. I guess we are talking about if we are trying to protect them there is a much wider mark, yes, the sell corridor.

The term "the swell corridor" I haven't heard it yet so that is, from the Surf break Society, is looking at the swell corridor around New Zealand so that areas are protected or at least acknowledged that the swell that comes through here reaches a significant break.

I guess it is a little like we were talking about Pegasus Bay there, putting a very large – I think it is 10 kilometres by kilometres - - -

- MR WOOLLASTON: We had quite a lot evidence on that in Christchurch.
- DR MEAD: Yes, so that is something that is in the swell corridor and not just the break in itself, so I definitely think Dr Scarfe's done a lot of that of what makes up a break and how to sustain it and manage a break that the criteria could be put together as well as the criteria to look at what influences that break itself outside the immediate area.
- DR RENNIE: As a general definition though would that be a good starting point?
- DR MEAD: Yes. The word "ephemeral" Hamish, if it is a rocky reef structure it is not moving and - -
- DR RENNIE: But the break itself might not be there if you don't have the waves as well is what I am saying. So you have to have the combination of the rocky reef and the waves there at the same time, otherwise it's not there.

DR MEAD: Yes, it is definitely - - -

DR RENNIE: I remember people saying to me Raglan doesn't exist to surfers when there are no swells.

DR MEAD: No, there no waves. No.

MR WOOLLASTON: We can look at the definition of material in there.

DR MEAD: Thank you.

MADAM CHAIR: We might come back to you on that. If we don't feel we have got it right we will come back to you, if we may because you are the only ones who have made a submission on just this.

We are going to Dunedin next week on one of our site visits and we have had very few site visits, but we are being taken to St Clair Beach to have a look at the issues there and they are issues. Are you involved in trying to sort out that?

## [12.03 pm]

DR MEAD: In the first study that was done for that we were asked to give an indication of the coastal processes and options for protection there. I mean I think it a lot more complicated than what went on but the problem there is to do with sand supplies coming around the headland. Where the project went from there that was ignored still.

The actual coastal erosion problem in that corner of the beach was not taken into account at all. It went straight into building a new sea wall and it very clearly says the work we did became an appendix of the first report that without understanding and addressing the causes of this erosion building a bigger and better sea wall will just make it erode much, much faster and that is what happened and the stairs have fallen off several times and all the rest of it.

So the sea doesn't care that you have put a bigger sea wall there, it carries on doing its thing. We had some information but there is not a lot of - definitely no quantative information for that area. What are the causes of erosion and how could we best address them? That is the way we would have approached that site.

MADAM CHAIR: Thank you. One of the sayings of Dr Lovelock, who is of course involved in climate change issues and a very elderly scientist now who as looked at and identified the ozone layer hole and so on and so forth – he has pronounced, aged 83, that we are in the middle of climate change now.

It is irreversible and the only we are going to offset it is methodology and planning and it seems to me we've had a little bit of planning but the sort of kinds of issues you have brought up and the methodologies you are applying will be very helpful to offsetting some of the coastal inundation and coastal erosion issues. So, thank you.

DR MEAD: Thanks very much.

MR MAKGILL: Your Honour, if I may, I would like to now call Dr Brad Scarfe, the coastal scientist who will provide evidence on why surf break management needs to be included in the coastal management.

MADAM CHAIR: Thank you.

MR SCARFE: My name is Bradley Scarfe and I will take the qualifications and extra information as read.

I have got a diverse range of skills and experiences which I will also take as read. I was also involved in the preparation of the Surf break Protection Society submission on this proposed coastal policy statement.

I have surfed since I was seven and I have been interested in protecting surfing breaks since finding out in 1999 about the St Clair at Dunedin surfing break and its failing sea wall when I was a student down there at Otago University.

Since then I have published an honours dissertation, a masters thesis, a PHD thesis, international conference and journal papers on surf break protection, surfing science and the development of artificial surfing breaks. I will just take paragraph 5 as read as well, thanks.

My evidence is based on a recently completed PHD thesis that investigates the science behind the management and protection of surfing breaks. I have the thesis here if anyone wants to have a look at it and I can also provide an electronic PDF print quality resolution and there is also a download link to Australian digital thesis at the bottom of the page there. That comprised six peer review papers devoted to the topic.

The evidence will cover the following issues – A discussion of why surfing break management needs to be included in coastal management, A discussion of existing literature and knowledge on surfing science and surfing in coastal management, A discussion of case studies from peer reviewed coastal research on the effect of the coastal engineering and surfing breaks, baseline and environmental data collection around surfing breaks and surfing enhancement projects and completing those.

#### [12.08 pm]

So wide surfing breaks need specific coastal management policies. Almost any wave can propel a person towards a beach but with the sport of surfing a special type of wave is required. Surfers need waves that propel them laterally along the wave crest at the head of the pealing wave and break point. The difference between an ordinary beach with a surf zone and a surfing break is the unique combination of what a seabed effect is, beaches and their interaction with winds, tides and waves.

Surfing breaks are dynamic and the processes occurring around them changes easily at longer time scales due to weather patterns such as El Nino and La Nino, and through human engineering of the coastal environment, the swell corridor, the land attachment and rivers. There is a significant body of scientific evidence now available to be applied to the management to manage issues around surfing breaks using scientific methods. For example the processes occurring around certain breaks have most recently been reviewed by chapter 2 of my PhD which has been peer reviewed, passed and it is going through the final process of being published in the Journal of Coastal Research and that is referred to at the bottom of the page. That would be the most significant literature review of the topic today.

Surf breaks have value to coastal communities, are scarce and are also vulnerable to development. Value can be social and economic. Both these types of value have been investigated in academic research and peer review journals. The following

extract from Scarfe 2008, which is the PhD summarises the economic value of surfing breaks related to the most recent international peer review literature on surfing numbers and surfing economics, as well as economic research from consulting reports in New Zealand for surfing enhancement projects. Would you like me to read that?

- MADAM CHAIR: No, that is fine. We will put that in conjunction with the original witness' economic evidence. Thank you.
- MR SCARFE: Scarfe 2008 estimated that New Zealand has only one surfing break every 39 to 58 kilometres. Considering that many of these surfing breaks are only able to be surfed a few days per month or year when the tide, wind and waves conditions are suitable, surfing breaks are scarce. On a geomorphic scale, surfing breaks are reasonably resilient to natural coastal forces such as waves and tides. However, it is probable that many of the changes at time scales of 5, 10 or 20 years are influenced by human activity making surfing breaks vulnerable.

Incorporating recreational surfing into coastal management practices is required to protect the seabed features and oceanographic processes that create surfing waves. National and regional policy is required to guide the inclusion of surfing and coastal management. Although studies such as my PhD provide tools on the scientific study of surfing breaks there is little research into incorporating surfing into New Zealand effects-based planning regime. The inclusion of policy 20 in the New Zealand coastal policy statement could help drive the development of effects-based resource management practices for surfing at a national and regional level. Without the inclusion of a national policy on surfing, the Taranaki regional council appears to be the only region to have voluntarily incorporated surfing into their regional plans. Not including surfing in the policy statement puts nationally and regionally significant surfing breaks under threat.

There has already been some discussion of the importance of offshore waves processes on the land and I will extend this here with some international land catchments. Offshore wave processes, including focussing, sheltering and non-linear wave wave interactions and the impacts of local winds are just as important for surfing wave quality as the niche (**PH 4.20**) or coastal processes occurring in the immediate vicinity of a surfing break. This is demonstrated in my thesis and in various other publications that are summarised in the literature review. In fact in some surfing breaks such as Aramoana beach in Dunedin, the high quality waves are completely created by offshore processes because the surf zone weather waves are breaking and are void of features to create curling surfing waves.

Thus it is critical that any coastal activities that alter waves in the surf breaks swell corridor consider any impacts to inshore surfing breaks.

# [12.13 pm]

Because surfing waves in New Zealand begin to be affected by several features in anywhere between 150 to 300 metres deep, the alteration of natural wave patterns far out to sea can impact on surfing breaks. Changes to the land catchment around a surfing break can potentially impact on a surfing break. This can be positive or negative depending on many factors including the type and scale of the activities. Most of these activities that can affect a surfing break will be in the immediate proximity of the surfing break. For example, placement of artificial nourishment or sand on the beach where people surf will build the seawalls at a surfing break. Then modify the natural beach processes and these are reasonably obvious and that they can have an effect.

Another less obvious land base activity is the development of coastal property with the changes to the natural water and sediment pathways. Large-scale river damming in places like California has significantly modified the sediment supply to the southern California beaches which will have impacted on the surfing breaks in the region. And this to a lesser degree may have happened on the Clutha river with the 300 (**PH 1.14**) dams and with effects possibly to the St Clair beach as well. Although there is not a lot of science to prove either way what has happened at the moment.

MADAM CHAIR: Yes, we have heard anecdotal evidence to that effect.

MR SCARFE: The effect of activities in remote locations out to sea or in the far reaches of the catchment can potentially impact a surfing break by changing the hydrodynamics or sediment transport patterns. Especially when impacts are cumulative from multiple activities. It is critical that the coastal policy statement promotes integrated coastal zone management around surfing breaks and that impacts of historic fragmented coastal management and the cumulative impacts of multiple activities on surfing is quantified.

Without specific provisions in the policy statement it is unlikely that developers and council will quickly and wholeheartedly give much weighting to issues relating to surfing in the short term. And this is the based on what has happened historically.

I can also provide probably the next peer review paper on surfing that is to be published, entitled "Sustainable management of surfing breaks: case studies and recommendations" to be published in the Journal of Coastal Research. Here I draw from some of those case studies. In a leading American surfing magazine, Towards (PH 2.42) 2004 discussed the alteration of the country's coastline and there are more than 60 coastal projects, coastal engineering projects, in the United States that have inadvertently improved the quality of surfing breaks or indeed created a surfing break where one did not previously exist. It is likely that with a few more engineering design modifications many more of the coastal engineering projects could have improved surfing amenities. It is also very probably that a similar number of surfing breaks have been destroyed. This is likely because historically the USA has had a single issue or single receptor coastal engineering approach and they have overengineered the coastlines with hard rock structures leading to negative impacts to a range of coastal issues. This is well documented in the coastal engineering literature including one of the foremost works by Hookie (PH 3.31) and Dixon which is a book from 1986.

Before the completion of my PhD there was little academic literature that proved surfing breaks have been impacted on by coastal activities. The research identified the range of physical effects the coastal engineering activities can have on different types of surfing breaks and proposes methods to manage the oceanographic aspects of surfing breaks. Many of the findings have been peer reviewed and are published in this paper here. Including the scientific analysis of the effect of different engineering activities to surfing breaks. This includes four surfing breaks in New Zealand.

So these are just brief summaries of what four case studies outline. Manu Bay boat ramp in Raglan. A boat ramp and break water was constructed at the end of the Manu Bay surfing break during the 1960s. Waves were more sheltered at the boat ramp than the rest of the Raglan coast making the boat ramp position a seemingly sensible location. However the breakwater construction directly affects the end of the surfing ride during summer high tide conditions with further impacts to the natural currents, sediment morphology and consequentially the surfing road. The loss of ride, length and wave shape was caused by two engineering activities. First discussions with local residents and council revealed that the shoreline reef was dredged, damaged or both. No actual records of the construction were found to exist.

## [12.18 pm]

The second activity was the breakwater construction. There is a continual conflict internationally and nationally between boating infrastructure and surfing amenities and this has mostly recently been highlighted by the proposed Whangamata marina project which has been processed during the current New Zealand coastal policy statement which omits certain reefs.

The main beach at Mt Maunganui is the next case study and is an example of a surfing break that is currently subject to artificial nourishment. The nourishment is placed immediately offshore of the beach in 5 to 10 metres water depth and it is the dredge spoil site for the port of Tauranga. This spoil ground also offsets the loss of (**INDISTINCT 0.45**) sediment trapped in the dredged navigation channel. So just to clarify that, they've deepened the channel and that acts as a sink for the sediment moving passed which starves some sediment to the down drift beaches, including the main beach.

Although this surfing break may not be as iconic as some of those listed in policy 20, such a surf break is of enormous regional significance should be protected under policy 20 or in any other manner deemed suitable in the policy statement. Such beginner to intermediate surfing breaks are surfing nurseries for people to gain the skills required to surf the more iconic breaks of national importance and this flows on from what (**INDISTINCT 1.30**) in his evidence. Such beach nourishment projects have been permitted without considering impact to surfing and without collecting baseline information and surfing conditions. This coastal policy review provides an opportunity to encourage impact assessment and baseline data collection around surfing breaks.

Aramoana beach in Dunedin is an example of an artificially nourished beach combined with a large engineering structure around a surfing break. The surf break is adjacent to a 1350 metre long jetty that stabilises the Otago harbour entrance. The surf break is considered amongst the top beach breaks in New Zealand. The tidal harbour is 4,600 hectares in size which creates a large ebb tidal delta that has a dramatic impact on wave focussing and modelling of this is included in my thesis paper. The navigation channel is dredged by the port of Otago and one of the spoil grounds is immediately offshore at Aramoana surfing break. Currently this surfing

break shoals and rises to about 6 metres below the surface which further reinforces wave heights through wave focussing as Dr Neate discussed, improving the quality of the surfing waves.

However, it is likely that the jetty construction, the dredging activity and spoil grounds have been permitted without serious consideration to surfing. The primary evidence of this is that the tools and knowledge to perform a surfing environmental impact assessment have only been developed in the last 10 years. After these structures were developed and activities undertaken - - -

- MADAM CHAIR: Can I just talk to you there? Have you researched the consent for that activity?
- MR SCARFE: No, I haven't.
- MADAM CHAIR: Just considering it, I wondered if there might be an opportunity when these permits for dredging and resource consents are revisited as they will have a term of consent on them.
- MR SCARFE: Yes.
- MADAM CHAIR: And you might be able to intervene and get them to perhaps do things slightly differently to restore this surf break.
- MR SCARFE: I guess from the Surf Break Protection Society's point of view, we would like this to be sort of an automatic process and if I just fast forwarded a couple of pages, there is a list of activities that if they are undertaken near a surfing break could have an impact and I guess they should come under some sort of automatic process through regional councils.
- MADAM CHAIR: Yes, I am not sure that that necessarily happens without parties being representative which is why I am raising it with you.
- MR SCARFE: Yes, well I guess now that the Society has been formed that sort of gives a system - -
- MADAM CHAIR: And the fact that you have got an environmental impact assessment that has been developed would be very helpful to the authorities.
- MR SCARFE: So although the (**INDISTINCT 4.51**) has improved surfing conditions, further dumping of sediment or reduction in dumping of sediment could be detrimental if not undertaken in a manner that integrates surfing. The draft policy statement needs to give guidance on the management of surfing breaks within mixed user coastal environment.

#### [12.23 pm]

if not undertaken in a manner that integrates surfing and the draft policy statement needs to give guidance on the management of surfing breaks

Whangamata Bar, which we have already heard of - it, differs to the different beach surfing locations at Whangamata because it breaks on a ebb tidal delta. The ebb tidal delta transforms ordinary waves into surfing waves through a series of processes including high focussing, wide rotation and wave breaking.

The Whangamata catchment, beaches and harbour have had a long history of modification. This includes modification to the natural dune systems, the land catchment, and the land use changes under steep and erosive catchment. A causeway construction that changes sediment transport and holding on that pattern inside the harbour and subdivision.

The harbour is one of many rapidly (**INDISTINCT 57.3**) industries in the area. The inflow is naturally accelerated by human activities and I am basing that on published literature.

The continued modification and engineering activities in the catchment and the coastal environment, in areas such as Whangamata, it threats to the sustainability of the recreational surfing amenities that surfing breaks also provide.

These threats need to be managed in a strategic and logical manner. So, now I am going to take about the diversity of the surfing breaks. So maintaining the diversity of different types of surfing breaks is important and the policy statement should encourage this.

Surf breaks – the surf break diversity should be considered in a similar way to bio diversity. Surfing breaks are individually unique although Dr Mead in a report in 1998 and others defined five G (**PH 1.59.2**) with a (**INDISTINCT 1.57.3**) category of surfing breaks and I have adapted those in my thesis for (**INDISTINCT 2.03.2**) and I will read those out now.

The headland or point break – waves refract from the headland or point break before breaking further around the headland or point. The wave refraction of the waves around point or the headland filters out high frequency waves leaving long period waves which are more likely to be surfable.

The wave direction or surfer take off zone is usually significantly different to the offshore wave direction. Examples include New Zealand's Murdering Bay in Dunedin, Raglan Headland, California's Malibu and new (**INDISTINCT 2.8.5**) surfing breaks and Kirra on the Gold Coast of Australia, which is the location of one of the top surfing competitions in the world.

Beach breaks – at a beach waves break in peaks along the beach caused by offshore wave focussing and breaking on the near shore sand bars and reefs. Successive waves will break in different locations depending on the current beach state, off shore wave direction, height period and wave peakings. Often good beach breaks have control features offshore or in shore that stabilise the position of sand bars or dictate the wave focussing. Examples of beach breaks include the Gold Coast's D (PH 3.22.8) bar and New Zealand's Ta aroa (PH 3.26.3), Aramoana beaches and I might add Wainui Beach in Gisborne.

The next category of surfing breaks is river or estuary bar entrance. So interesting seabed features and ocean graphic processes are required to create curling waves and river and estuary entrances often create good surfing spots. The tidal delta and out flowing river sediment and tidal current all interact to sometime make surf able waves.

Tidal inlets are influenced by processes such as wave energy, tidal range, tidal prism(Ph **3.59.9**), direction and rates of long shore sediment transport, sediment supply, near shore slope and are subject to change.

Changes to any of these factors can affect – naturally or artificially can affect surfing conditions for better or worse. In many locations around the world, rivers that have been jetted can also create surfing rings (**PH 4.25.1**). Whangamata is an example of a high quality estuary entrance bar.

The next category is reef breaks. Many of the world's best surfing breaks are reef breaks because a reef provides a more consistent wave breaking pattern and allows steeper flowing profiles – the steepness of the seabed and sandy beach features. Famous reefs and breaks include the (**INDISTINCT 4.9.3**) in the Pipeline in Hawaii although there is probably hundreds of those.

### [12.28 pm]

Beach breaks – the next category and steep rock ledges interrupt wave propagation and create a surfing wave that breaks with the highest intensity. The waves come from relatively deep water into very shallow water, modifying the way that the waves break.

(**PH**) has ledge surfing break, and ledge surfing breaks are difficult to surf and some of the ones are actually unsuitable by surfers and only can be surfed by body boards.

So these are broad definition categories of surfing breaks, and they are a sort of a spectrum that happens between normally some beach breaks that have some reef and combination characteristics.

Different surfing breaks are suitable for surfers of varying skill levels, also depending on hydro-dynamic conditions, including waves, tides, currents and winds. An individual surfing break can be easier or more difficult to surf on any given day.

Diversity of skill levels within the range of surfing breaks needs to be encouraged by the New Zealand Coastal Policy Statement. It would not be possible for New Zealand to produce top level surfing athletes or skilled body boarders are not provided for by New Zealand surf breaks. There is existing research on the topic that could be applied during the management of this issue.

Surfing breaks are made up of features of various scales and the features are often superimposed on each other. Some features will be robust to coastal activity and development while others will be very sensitive. Some beaches will be dynamic while some will be unchanged. There is a need for national and regional policies to provide how those features will be protected from negative environmental **harm**.

There is very little work that has been done specifically on how to take in the environmental practices around the surfing break and I could not completely resolve this issue within a (**INDISTINCT**) and I focus on the oceanographic aspects on this, and there is a lot of work that needs to be done on the policy side and also more of the social sites that account in the demographics and the like.

But I have compiled a list of coastal activities that can impact on the surfing break. It is not an exhaustive list and it does not include all activities that can impact on wave transformations over the swell corridor or on land and further up the catchment. However, it provides some direction on the topic of highlighting when an activity should require an assessment of the environment effects, and I will just take those as read.

- MR WOOLLASTON: Could I just ask a question on terminology? You have mentioned jetties a couple of times and I see they do not appear here. When you talk that are you talking solid structures or pier piled structures?
- MR SCARFE: The coastal engineering definition of the jetty is on a let's to maintain (INDISTINCT).
- MR WOOLLASTON: Like a mould or is it you are not talking about something on piles?
- MR SCARFE: No. Sometimes sort of like a pier or something like that, what you call a jetty.
- MR WOOLLASTON: But is the hard structure that sold interruption to?
- MR SCARFE: Yes. New Zealand has been lucky to develop the coastline lots at a later date than a lot of other countries, and so we have learnt from their lessons and so we have a lot less jetties in New Zealand.

MR WOOLLASTON: No, it was just the use of the definition and term. Thank you.

MR SCARFE: Then the following list of surfing and oceanographic factors was identified in my research for use when preparing an assessment of environmental effects of any activity on surfing or during monitoring of the effects of an activity, and I will take those as read as well.

The following list of environmental data types was also identified, and it can be used during the assessment of environmental effects of an activity, and I will take that as read as well.

The key effects of assessing environmental effects proposed in my research was to manage issues around surfing breaks is the analysis of measured and hydrodynamically modelled environmental data. The premise behind this theory is that transparent and scientific analysis of physical processes is import to effectively manage coastal activities that modify natural processes. Examples of state of art coastal science analysis is included in my research and other consulting reports, University pieces and (**INDISTINCT** - mic noise).

## [12.33 pm]

Key technological innovation includes computer hardware and other sorts of information management.

GIS has already utilised as a core tool by regional and district councils in carrying out there functions, and my research shows some other ways that this can be applied to the management of surfing breaks.

The tools to effectively manage the issues around surfing breaks including environmental impacts of the seas and how they exist. However, without proper direction and the top level planning of documents these tools may not be applied. When they are, history has shown us that is the result of the environmental lobbying rather than strategic planning and a genuine concern for (**INDISTINCT**) surfing breaks.

This next section deals with baseline information. Collecting baseline information about the principle processes is important in order to assess the impacts of activities on surfing breaks. An example of such an effect applied to bathymetry, which is the shape of the seabed, is presented in chapter six of my thesis, which was also published in **Peer** Review Conference. This monitoring programme was not required as part of the resource consent process that came out of (**INDISTINCT**) and I propose that this the policy statement and other planning processes should drive for the collection of such information.

A prime example of the current policy statement not directing regional councils to collect such baseline data or requiring resource consent applicants to collect baseline information is the high profile Whangamata marine proposal. The only bathymetric wave or current data of the harbour or beach and delta surfing break has been collected by the Coastal Marine group of University of Waikato, and I just have to amend that here to say within the last year as the mariner has began to prepare for construction they have started collecting some information, but my point is that as soon the idea of the mariner came up people should have started studying the coastal environment to understand what (**INDISTINCT** - mic noise).

- MADAM CHAIR: Because we do not direct regional councils to do this sort of thing. We are very general in what we can suggest, and that is a legal issue.
- MR SCARFE: So the data collection has been undertaken completely independently of the consenting authorities or the marine developer. Considering that the project has been through the Environment Court and even been subject to ministerial interventions, it is surprising that the analysis of baseline sedimentary and hydro-dynamic conditions has not been undertaken as part of the diligent resource consent process. After all two primary impacts of building a mariner are changing the sediment and hydro-dynamic conditions.

Although multiple coastal experts believe that the remoteness of the mariner and the scale of dredging is too small to impact on the surfing break, the process and lack of science behind the assessment of environmental impacts still makes local (INDISTINCT).

Nelson & Howard 1996. Chad Nelson is the Environmental Officer for Surfrider International, which is the largest organisation pertaining to protection of surf breaks, and described a project in Southern California where a surfing break was under threat from beach protection works for a waterfront Chevron Oil Refinery. Several experts on coastal processes predicted no effects to surfing with the possibility of improving its surfing conditions. Surfrider Foundation acted on behalf of the local surfers and raised concerns with the (**INDISTINCT**) construction despite of expert's assessment. This resulted in the Californian Coastal Commission permitting development but with a unique condition that if initial assessment of the environment effects was incorrect and there was adverse impacts to the surfing conditions its funds had to be provided by Chevron to mitigate with an artificial surfing break.

Unfortunately for the **Arsenia** (**PH**) surfers the reef never seemed to **give true surfing** conditions because the construction budget provided by Chevron was too small and there was limited existing knowledge of surfing load transformations and surfing break development techniques in the 1990s.

The detailed assessment of environmental effects with alternative design considerations that address various coastal users including surfers, **biophysical body lines**, could have resulted in a better outline for surfers and the industry associated with the (INDISTINCT).

Although projects such as **Montown (PH)** mariner may not impact surfing breaks, this is not guaranteed and history shows us as in the Nelson & Howard case, the impact predictions can be wrong and mitigation methods can fail.

#### [12.38 pm]

The Coastal Policy Statement needs to provide guidance for the monitoring of the impacts to surfing breaks because under the current policy statement the monitoring plan for Whangamata has been approved, even though it is inadequate to achieve its objectives.

The first problem is that the resource consent conditions are not specific, they do not specify explicitly that the sand bar needed to be monitored (**INDISTINCT**) surfing. The second problem is that the monitoring plan fails to meet the activity which is the mariner basing construction and dredging, two, the monitoring of that delta surf bar.

Although the consent condition only required monitoring of the sand bar it cannot be monitored in isolation of features and processes of the inlet and harbour. This monitoring, put simply is required to determine changes in the bathymetric shape of the harbour's delta. This has been interpreted by the developer and Environment Waikato to mean only the ebb delta. However, the delta sand bar is actually a dynamic system which includes the ebb and flood delta inlet channel and beach around the delta and sediments will migrate between sedimentary features of the delta, thus the monitoring only monitors the absolute minimum area and does not collect enough information to resolve the real question which "does the mariner effect the surfing break?".

The largest bathymetric impacts of the mariner will be around the mariner itself and proposed dredge channel. This bathymetric impact would need to be traced as a **lesson** from the mariner and to the main channel and the flood delta. If it was clear that the mariner was affecting these preceding features then it is more likely that the ebb delta would be affected also. If these features were stable then it would be unlikely that the ebb delta has been affected by the mariner.

Sediment transport over the ebb delta is (**INDISTINCT**) and therefore it is actually incredible difficult to separate nature wave induced changes from engineering of the harbour and that is why there needs to be indicators within the harbour to help too many impacts to that delta, with the flood delta morphology as a major indicator of any affects. So their monitoring plan consists of surveying only under water ebb delta, it does not even survey the beach which is where the main exchange happens between the beach. So just in my opinion they could been more diligent there.

So in conclusion, surfing breaks are important enough to New Zealanders for social, health, sport - it is there (**INDISTINCT**) to be given individual policy guidance in the policy statement. It is important that both nationally and regionally significant rates are given protection under the RMA.

Historically coastal management decision makers have not given much weight to matters of surfing, but there is a slowly changing tide of consciousness in recent times. There needs to be national and regional policies and plans to regulate the activities around surfing breaks, to support (**INDISTINCT**) that surfing breaks are vulnerable to development and important environmental assets. Thank you.

#### MR WOOLLASTON: (INDISTINCT)

- MADAM CHAIR: And I do not either, thank you very much indeed, thank you. A very valuable researcher.
- MR ..... I would like to call Mr Matt Skellern, the Coastal Planner, who will provide evidence on the appropriate mechanisms for identifying nationally and regionally for the surf breaks.
- MR SKELLERN: Under the qualification and experience we will take most of it as read.

My name is Matthew Cooper Skellern. I am a Planner and surfer. I would just like to highlight point 2 there, and my submission to the New Zealand Coastal Policy Statement was submitted while at Auckland City Council, under their employment, and that I have not worked on the submission lodged by the Auckland Regional Council who I currently worked for.

I appear today as a witness on behalf of the Surf Break Protection Society to provide planning evidence. I would just like to highlight, although I lodged a submission in my own name, the submission I filed addressed some additional issues which I will not address in this evidence and no longer attend to pursue. The following statement evidence relates only to the (**INDISTINCT**) Surf Break Society.

The scope of my evidence will include the following issues: policy 20 - Surf Breaks of National Significance, the new policy xxx - Surf Breaks of Regional Significance Proposed by the Surf Break Protection Society in submission, policy 30 - The Inclusion of the Words "Hydro-dynamic Processes" followed by a Conclusion.

MADAM CHAIR: I wonder if you can go straight to page 4 please?

MR SKELLERN: Certainly.

- MADAM CHAIR: And I think that we know all of what is contained in 14, 15, 16, 17. If you can go straight to policy 20. Thank you.
- MR SKELLERN: Policy 20a, in reference to coastal environment. The current wording in policy 20 with emphasise added the surf breaks at Opara in Northland, Raglan-Waikato, Stent Road, Taranaki, Wairarapa, Maungamanu, Kaikoura and Papatowai in 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 surf breaks and b) avoiding remedying or mitigating adverse effects of other activities on access to and use and enjoyment of the surf breaks".

It is acknowledged that activities in the coastal marine area can adversely affect surf breaks, which has been demonstrated in the evidence of Dr Sharfe and Dr Mead. However, there are some activities landward of the coastal marine area in the coastal environment that may have adverse effects on surf breaks of national significance, some of which have been identified in the evidence of Dr Sharfe and Dr Mead. A good example of the adverse effects that development of land within the coastal marine area has on our surf break has been documented in well known surfing documentaries by Bruce Brown, "Endless Summer" article 66, and "Endless Summer II" 1994. In this case the quality of the famous right hand point break of Cape St Francis in South Africa has been reduced because of coastal subdivision.

- MADAM CHAIR: I think that we know enough about that issue. Thank you. I really want to get to the heart of what you are about.
- MR SKELLERN: Okay. I will leave out also the presentation which I had intended. If possible I could perhaps prepare a movie and pass it on to the Board.

MADAM CHAIR: You could have a look at 25 for us, thank you.

MR SKELLERN: I will start there if you do not mind, number 24. Thank you.

Land base activities that result in the reduction of water quality through discharge of contaminated stormwater or sewerage into the coastal marine area within the vicinity

of surf breaks can adversely affect the amenity of a break, which has also been highlighted by Mr Shanks today.

Surfers regularly surf during storms which produce these favourable swell conditions. This will usually coincide with heavy rainfall. This makes surfers more susceptible to the adverse effects of poor water quality, than for example a normal swimmer or other marine enthusiasts not reliant on storm conditions, who would often select calm fine days to pursue their activities. A good example of this is on the inner city beaches of Auckland's North Shore. These beaches most commonly break during storm swells created by deep fast tracking lows from the north, also mentioned by Mr Pond earlier on. Like those experienced in July this year, which resulted in extreme wind and rain.

## [12.48 pm]

However, these conditions exposed surfers to health risk because of the unsanitary water quality during these events. Discharge from contaminated run-off in the city catchments and overflow often by sewers into the coastal marine area, 12 nautical boundary of the CMA.

I would just like to note here that I have read the evidence of Mr Rennie who will be followed. I concur with the evidence of Dr Rennie, who identifies or will identify that the coastal environment extends outside the CMA beyond the 12 nautical mile mark.

The swell corridor of the surf break is a significant factor beyond the 12 nautical mile boundary as disruption to the swell corridor may adversely affect the quality and consistency of surf breaks in the CMA, which has been demonstrated by a number of experts today.

Therefore, I support the inclusion of factors outside the 12 nautical mile mark such as the swell corridor, within the definition of coastal environment as this is required to ensure the use and (**INDISTINCT 1.23**) such as aquaculture, avoids adverse affects on surf breaks of national significance should proposed 20 be put forward.

For the reasons set out above, without inserting coastal environment in policy 20, there is no specific direction for authorities to have regard to activities landward or seaward beyond the 12 nautical mile mark of the CMA.

However, it has been shown by expert witnesses, Dr Mead and Dr Scarfe, this is required to ensure that adverse affects on surf breaks of national significance are managed sustainably.

Therefore, in order to achieve the objectives of the proposed New Zealand Coastal Policy Statement and the purposes of the Act, I recommend that policy 20(a) should be amended to replace words 'coastal marine area' with the words 'coastal environment' as follows.

"Ensuring the activities of the coastal environment do not adversely affect the surf breaks."

Areas where surf breaks of national significance are located. I support the identification of surf breaks of national significance and their locations under proposed 20. However, I wish to highlight that there are inconsistencies in the naming of specific breaks and places where the breaks are located. For example, Ragland and the Waikato as a surf destination, has several surf breaks, as does Ahipara in Northland.

The variety of breaks in these locations are shown below in the maps extracted from the website <u>www.surf2surf.com</u> that has a link to another website marine weather. Now these websites are commonly used by surfers to guide them to specific conditions at a certain break at a certain time all over the country.

So as you will see noted on map 1, there are several surf breaks, which are located in Ahipara, that being the main break at Ninety Mile Beach, Shipwreck Bay, Super Tubes, Fox, Tanutanu, Herekino. All are a variety of different surfing breaks. Much like at Raglan listed breaks, Te Akau, Mussell Rock, Wainui Beach, Manu Bay, indicators in Ruapuki.

However, as shown in the map below, Papatowai is noted as a specific break, not an area where surf breaks are located, highlighting and inconsistency.

Note on the map, surf breaks are located in the Catlins or Owaka, noting Papatowai as a specific surf break.

Surf break Protection Society seek that policy 20 is amended to identify places where the surf breaks of national significance are located. I consider that there are other locations in New Zealand that contain surf breaks of national significance for a variety of reasons. The evaluation under Section 32 of the Act carried out for the purposes of the New Zealand Coastal Policy Statement states the following.

## [12.53 pm]

"In achieving objectives 1 and 2 particular guidance should be provided on the protection of the surf breaks that are nationally significant taking account of their national and international reputations for their use for international competition and their particular contribution to the variety of surfing opportunities available in New Zealand.

Based on these criteria relief is sought to amend the wording in Policy 20 to provide for the protection of further surf breaks of national importance in all areas of New Zealand beyond those currently proposed in Policy 20.

Based on this criteria I consider that it should be acknowledged that other surf breaks of national significance are located in New Zealand the wording should be extended to provide for the earth, which includes such breaks as follows.

"The surf breaks at Ahipara, Piha, Raglan, Taranaki Surf Highway 45, Gisborne, Whangamata, White Rock, Kaikoura, Dunedin and Papatoe (**PH 1.19.8**) which are of

national significance. Surfing shall be protected from inappropriate use and development" et cetera.

By naming the areas of the locations where surf breaks of national significance are found as stated above the policy will provide the means for more accurate identification of these breaks and enable them to be more effectively sustainably managed by local authorities.

There are then different means for the actual identification of surf breaks of national significance. Mr Rennie will suggested scheduling these breaks, which we will hear from him shortly, which is one option. Another option is through a plan change process based on community input and expert opinion to identify nationally significant surf breaks in these areas in regional plans.

As will be suggested by Mr Rennie in his evidence, the Wave Track (**PH 2.19.1**) Guide to 10/10 (**INDISTINCT 2.21.1**) surf breaks in New Zealand is one avenue to identify surf breaks of national significance.

The public process where each break is assessed on a case by case basis considering a range of inherent qualities relevant to the proposed New Zealand Coastal Policy Statement to determine if it meets the criteria of a nationally significant surf break or not is another means suggested to the Board for implementing relief sought by the Surf break Protection Society.

Once all nationally significant surf breaks are identified they could be plotted on regional coastal plan maps for a public plan change process with a relevant planning framework drafted in coastal plans to prescribe the appropriate sustainable management of these breaks to enable authorities to achieve the purposes Policy 20 and the proposals in the proposed policy statement.

I rely on and support the evidence in suggesting that identifying these breaks as areas of significant conservation value in the New Zealand Coastal Policy Statement is again another alternative to effectively achieve protection.

MADAM CHAIR: What is to stop us using Section 55?

MR SKELLERN: Section 55? Can I please refer to that?

Thanks for that, I just read over those areas of the Act.

I guess it is up to the Board to establish that. There is nothing stopping you from doing that. I guess it is just the accurate way of identifying those surf breaks which you would then insert into the relevant plans and the way you would go about establishing which ones would be appropriate.

#### [12.58 pm]

I guess it is seen today with a number of experts there are in Dr Mead's evidence and Dr Scarfe's evidence those correct ways of identifying factors which make up

significant surf breaks which then could be taken on board perhaps and then inserted under the provision of the Act.

- MADAM CHAIR: Do you realize that what you are suggesting will involve your society in extensive appearances before all regional coastal authorities, leading extensive evidence on every surf break?
- MR SKELLERN: Correct. That could be the situation.
- MADAM CHAIR: Have you thought about the implications of that for your society for your members?
- MR SKELLERN: I haven't discussed it directly with the society. I am not part of the society myself.
- MADAM CHAIR: But you have been called to give them support.
- MR SKELLERN: Correct, yes.
- MADAM CHAIR: Yes. You might like to think about that over the break and I have got a legal question to put to you about that. We had Professor Palmer here yesterday, but I will talk to you about that later.
- MR SKELLERN: Thank you.
- MADAM CHAIR: We are nearly at lunch time. How do you wish to proceed? Do you want to finish before lunch?
- MR SKELLERN: Yes, if possible. It shouldn't take too long.

Once all nationally significant surf breaks are identified they could be plotted on regional coastal plans, maps etc cetera as I have discussed.

I will start here in the new proposed policy surf breaks of regional significance. Overview – the support of witnesses for surbreaks of regional significance. While it is vitally important to identify surf breaks of national significance I consider it also necessary to protect a range of surf breaks that provide for a range of skills levels.

As described by the other experts and witnesses for the Surf break Protection Society, surfing contributes to a very significant component for New Zealander's enjoyment of the coast with the 2,900 surfers, including body boards, identified in the country in 2006.

Of this large proportion of New Zealanders that partake in the pass time of surfing as a coastal activity there are a range of skill levels in this population many of which may enjoy a popular local surf beach to improve their skill level before tackling the higher performance breaks currently listed in Policy 20.

From my experience as a surfer, for example, I have made sure my level of surfing ability was adequate enough to surf the Raglans and the Ahipara's. I did this by

practicing on the popular surfing cost of Mt Maunganui until my skill level was competent enough to safety surf these high performance waves.

In this regard there are many very popular nursing grounds for young surfers and those new to the sport that are easily accessible and safe to surf at. Some examples of these are Fitzroy Beach New Plymouth, the Mt Maunganui main beach and coast, Wainui and Waikanae Beach in Gisborne, Lyall Bay Wellington, St Clair Beach Dunedin.

Therefore I consider it is necessary to insert a new policy into the proposed new coastal policy statement that provides for the protection of surf breaks of regional significance as these breaks contribute significantly towards the social, economic and cultural wellbeing of surfers and the surfing community and form a key component of the infrastructure of surfing in this country as has been demonstrated by the expert witnesses with whom I concur.

The proposed New Zealand Coastal Policy Statement has acknowledged surfing is a significant component of accessing and enjoying our coastline with zoning Policy 20. However in order to better achieve the objectives of the proposed New Zealand Coastal Policy Statement I do consider the new policy as proposed stated in the submission of Surf break Protection Society needs to be inserted to ensure the social, economic and cultural wellbeing of all surfers and surfing communities are provided for under the Act.

MADAM CHAIR: Now the identification of surf breaks of regional significance occurs through the regional coastal plans and that is not necessarily disputed except that I think Section 6 has some implications and impact on all of that. But I do not really want to hear about this here because we are dealing with nationally significant issues.

[1.03 pm]

MR MAKGILL: If I might answer that?

MADAM CHAIR: Yes.

- MR MAKGILL: When you talk about nationally significant issues or nationally significant matters, the case law does indicate that a collection of environmental features together can be of national importance.
- MADAM CHAIR: Absolutely. I couldn't agree with you more. But my problem is that the section, section 6, says "in achieving the purpose of this Act all persons exercising functions, advice, in relation to managing the use, development, protection of natural and physical, shall recognise and provide for the matters of national importance".

MR MAKGILL: Mm'hm.

MADAM CHAIR: And then it names them, including "outstanding natural features" which I think we all agree that surf breaks are.

MR MAKGILL: Yes.

MADAM CHAIR: It does not say national, local or regional surf breaks. It is a matter of national importance that these things and this Act, as named, have to be recognised and provided for, as a matter of national importance, if you see what I mean. There is no gradation or scale in here and I think that people are actually missing the point. We are getting quite a lot of this local or regional importance. In fact, those little breaks are just as important in the overall scale - - -

MR MAKGILL: Yes, in the overall scale.

MADAM CHAIR: - - - accumulative maps you are talking about.

MR MAKGILL: Yes.

MADAM CHAIR: And it is a legal question we are going to have to sort out because it is I think a mistake that has been made in a number of areas.

MR MAKGILL: Not just in surf reefs?

MADAM CHAIR: Yes, like landscapes.

MR MAKGILL: Yes.

- MADAM CHAIR: We are getting the same sort of issue.
- MR WOOLLASTON: Through you, Madam Chair, would it perhaps meet your point if the Board were to acknowledge your submission, that it is a matter of national importance that regional surf breaks are identified within the region?

MADAM CHAIR: Yes.

MR WOOLLASTON: But then pass over paragraphs 45 to 53 that refer to the processes that regions should be using to identify them?

MR MAKGILL: I think that would be an appropriate call, sir.

- MADAM CHAIR: I hope you do not mind but we have to have some rigour in this.
- MR SKELLERN: Yes, no I understand and I do understand the far reaching implication of this here, and it is good discussion.
- MADAM CHAIR: And I think the same applies for engaging experts. The society is going to have to, if it takes the route that you suggest, engage experts to do this work for them.

MR SKELLERN: Okay.

MR SKELLERN: Sure, okay.

MADAM CHAIR: So if you like to talk about policy 30, that would be helpful to us?

So policy 30, inclusion of the words 'hydrodynamic processes'. As explained above, I submit that to provide for the sustainable management of surf breaks of national significance and for surf breaks of regional significance factors within the coastal environment, both within the CMA and outside that make up the coastal environment, need to be considered to ensure that adverse effects in surf breaks use and development are avoided.

These factors have been explained by Dr Rennie, Dr Mead and Dr Scarfe in their evidence. Many of these factors include hydrodynamic processes in the coastal environment such as sediment movement in the swell corridor.

Currently it is considered that the proposed wording of policy 20 does not give the – or wide enough to protect the integrity and functioning of surf breaks as hydrodynamic processes form a significant component of what determines the quality or performance of a surf break.

Therefore, I seek that the phrase 'dynamic processes and features' under policy 30(c) is amended to include 'hydrodynamic processes and features'.

By including the term hydrodynamic in policy 30(c) will ensure that the natural movement of sediment, water and air, which are important for the maturity and functioning of surf breaks, are provided for as part of the natural character of the coastal environment and will ensure that surf breaks are provided for as part of the natural character of the coastal environment and will ensure that surf breaks are provided for as part of the recognised as a feature.

## [1.08 pm]

In conclusion. The New Zealand Coastal Policy Statement has recognised the need to protect surf breaks in New Zealand as they are fine resources that contribute to the social, economic and cultural wellbeing of people and communities. The proposed policy currently recognises that inappropriate use and development can adversely affect surf breaks. These types of effects have been described in scientific terms by the expert witnesses who have established to the Board that the scientific concept of surf breaks is understood. However this understanding is not complete and ongoing development of this field of understanding is required to ensure that surf breaks are sustainably managed effectively. It is for this reason that a precautionary approach is advised at this time in providing for sustainable management of surf breaks in the proposed New Zealand Coastal Policy Statement as they are a finite resource. In this regard, avoidance of inappropriate use and development that may adversely affect surf breaks is emphasised, as remedying and mitigating the effects of use and development where adverse effects may arise is not complete in its understanding which will be discussed by Mr Rennie for example in relation to artificial surfing breaks, with whom I concur.

To enable the ongoing development in the field of research on surf breaks, I support the submissions of Dr Mead and Dr Scarfe to establish monitoring programmes at local authority level. I rely on and support the evidence of Mr Shanks and Dr Rennie that demonstrates the significance of the surfing culture within our communities and the significance of the surfing industry to our economy. It must be emphasised that surf breaks are a finite resource here and mistakes in the past have cost communities, both in New Zealand and overseas, as has been demonstrated to the Board in the examples made by submitters and which have been presented to the Board here today in regard to the Cape St Francis.

While I support the intention of policy 20 in protecting some unique surf breaks in New Zealand I consider the policy does not go far or wide enough to provide for the socioeconomic cultural wellbeing of all surfers as currently it is limited to a handful of New Zealand's well known breaks. It is, however, acknowledged that surf breaks of national significance are rare and only exist in certain parts of the country.

In achieving the purpose of the Act and the objectives of the proposed New Zealand Coastal Policy Statement I support the Surf Break Protection Society's recommendation that the new policy regional surf breaks of significance be inserted. The new policy XXX(**PH 3.05**) will provide for the interests of all surfing communities nationwide, not just benefit those areas stated in policy 20. This mechanism will provide for the recognition of all surf breaks that form a significant part of the use and enjoyment of the CMA which will enable the objectives of the proposed New Zealand Coastal Policy Statement and subsequently for the purposes and principles of the RMA to be achieved.

My evidence and the evidence of Dr Rennie which will show that there are a variety of ways under the Act to provide for the relief sought in submission by the Surf Break Protection Society is a good proposal for the New Zealand Coastal Policy Statement. It is timely that the relief sought by the Surf Break Protection Society be included in the statement. The demand for occupation and use of the coastal marine area is ongoing and the development of large scale marine activities such as aquaculture and commercial tide and wave generated energy is occurring. These are both factors that have threatened surf breaks. This is combined with increase in numbers of surfers that is ever increasing as the sport continues to become popular through population growth.

Also the awareness of potential and adverse effects from use and development on surf breaks is increasing which is highlighted in particular with the recent case of the Whangamata marina development and its impacts on the Whangamata Bar. For the reasons discussed this evidence has recommended that relief sought by the Surf Break Protection Society be approved and included within the New Zealand Coastal Policy Statement. Thank you.

MADAM CHAIR: Thank you very much. Any questions? Mr Gage? Mrs Edmonds?

#### [1.13 pm]

COMMISSIONER EDMONDS: I have just one question and really it spins out of your comment on 62 and some of the interchange that has been had. I suppose what I am really wondering about is, given the recognition of there being a variety of surf breaks of different values, whether in fact actually naming just a few as being nationally significant is actually a bit of a disservice and whether a broader approach might not actually be better. Have you got any comment on that?

- MR SKELLERN: I think overall that that was the intention of looking at other ways of going wider because it is considered that this is a narrow approach in terms of naming just a handful of breaks. You know, as discussed earlier with some of my colleagues, trying to get a group of surfers that are well experienced in a room to try between them to decide which ones are the most appropriate for protection and of national significance is a difficult thing to achieve. I think that if there are means that the Board can consider and that we can assist the Board on, going wider to achieve that, would be recommended.
- COMMISSIONER EDMONDS: I guess that comes back a bit to the criteria of the figures you are trying to achieve in terms of part 2 and those sorts of things.
- MR SKELLERN: And I think Mr Rennie, in his evidence can assist further.
- COMMISSIONER EDMONDS: Okay. Thank you.
- MR WOOLLASTON: Thank you, Madam Chair. Just one small point of clarification. In 56 you offer us some words to insert in our policy 30(c). "Hydrodynamic processes and features." I was not quite sure where they would go in. Were you suggesting they should be "the dynamic processes (including hydrodynamic processes)" or are you wanting them to be stuck on the end somewhere?
- MR SKELLERN: I believe we were to maintain the word "dynamic".
- MR WOOLLASTON: Yes, I understand that. But you wanted the addition of "hydrodynamic".
- MR SKELLERN: Correct.
- MR WOOLLASTON: As a subclass of dynamic processes.
- MR SKELLERN: Correct.
- MR WOOLLASTON: But was it were you suggesting, because you did not offer us the full drafting, the "dynamic processes (including hydrodynamic processes)". Was that the point you were trying to make or did you want a further reference somewhere else?

MR SKELLERN: No, the brackets - - -

- MR MAKGILL: If I could refer to our submission. Have you seen this?
- MR WOOLLASTON: Yes, I have.

MR MAKGILL: Okay.

MR WOOLLASTON: It is an important word, yes.

[1.17 pm]

[1.55 pm]

- MADAM CHAIR: Were you, the surfing community, interviewed by DOC to form the section 32 report in naming the particular sites?
- MR SKELLERN: I am not aware of any consultation with the community. I don't know if anybody here does.
- MADAM CHAIR: Everyone is shaking their head.
- MR ...... I just do not think we know where it came from (INDISTINCT 3.10)
- MADAM CHAIR: So none of the surfing community were interviewed?
- MR SHANKS: As far as I know there was no we have wondered where those quotes came from. They are all of national significance and we were shocked that a few were left out and keep reiterating that. I do not know if that is an oversight or if that could be an advantage for us. I am not sure. For me myself, I am just happy to be to express the opportunity that we have been given.
- MADAM CHAIR: I think that is taken as read. We will talk again, I think. It is time we went to lunch and so we have got one more witness after this?
- MR MAKGILL: One more witness.
- MADAM CHAIR: Yes, one more witness and then we can ask some more questions of you both. Thank you.

MR MAKGILL: Thank you.

#### ADJOURNED

#### RESUMED

MADAM CHAIR: Thank you.

- MR MAKGILL: Thank you, your Honour, I'd now like to call the Society's final witness, Dr Hamish Rennie, Coastal Planner, who will provide evidence on why surf breaks should be protected under the Proposed Coastal Policy Statement.
- MADAM CHAIR: Thank you, Dr Rennie. Now I would you to focus on the really essential messages you want us to learn from your submission.
- DR RENNIE: Can I just make comment early on that I just want to make it clear that I am not a surfer, have not got any involvement with surfing et cetera so I cannot sort of speak, in any sense and terms, of what it is actually like to ride a wave. It is all completely - -

MADAM CHAIR: We have had lots of evidence - - -

COMMISSIONER EDMONDS: Lots of passion on that subject.

- DR RENNIE: Would you like me to start with the definition of the surf break on page 18 or do you feel we could come back to that later?
- MADAM CHAIR: Well, I think it has already been looked at by one of your experts. Was there any change on that for discussion?
- DR RENNIE: Not over that. I would just like to make the comment that in shaping that definition, I was trying to find something that sort of defined the surf break. It is rather hard to define because it is a manifestation if you like of a number of dynamic processes that come together in one place and it is rather hard to nail that down into a specific type definition.
- MADAM CHAIR: If we did an inclusive definition rather than an exclusive that might be the way of treating it.
- MR MAKGILL: Your Honour, I would be perfectly happy to get the experts together and see if we could agree on some wording for your consideration if that was helpful.
- MADAM CHAIR: Yes it would be, thank you, and if you would let us know within a fortnight through Ms London and the Department of Conservation. Thank you.
- MR MAKGILL: Yes, your Honour, thank you.
- DR RENNIE: I was proposing to take all the stuff on the enabling people and communities to meet their social, cultural and economic wellbeing and health and safety as read.
- MADAM CHAIR: Yes, thank you.
- DR RENNIE: I have one small correction to my evidence on paragraph 32. Last sentence. It should read: "This is a rise of over 30 per cent in numbers of overseas surfers over the period of the year ending June 2005 to June 2008.
- MR WOOLLASTON: June '05 to June '08.
- DR RENNIE: Yes, it is a rise of 30 per cent in numbers in that period.
- MADAM CHAIR: I think the need to preserve breaks and the damage, from the new technologies, certainly we agree with the poor quality of current information on them; preserving the natural character of the coastal environment. We have had a lot of evidence on this. Is there anything particular then that you want to draw out of this particular chapter beginning at page 10?
- DR RENNIE: I've blown up my evidence to a size that I can read it easier so I've got to go back to the original. I would just say one thing before that, my main point in relation to the new technology, and I think it is a point that is often overlooked by planners and policy makers, is that we often make policies in terms of what we know is happening now or recently. We are not often looking far enough ahead and I would – suffice to say, back in, when we were doing the first New Zealand Coastal Policy Statement, the number of things like artificial reefs were not in our sort of frame so - -

MADAM CHAIR: Yes, I see the point you make about Raglan, for instance.

# [2.00 pm]

- DR RENNIE: And there are policies in there supporting other particular things so we are trying to get a re-balancing here in particular, by having emphasis some national policy statement on coastal surfing. The main point I make in terms of natural character comes through in terms of paragraph 55, 56, and 57, and that is, that the research we have been undertaking shows that people are still dominated by the visual appearance of natural character. The Courts have added a more scientific concept of looking at the physical processes and so on, but contact of odour-scapes and sound-scapes are still tending to be overlooked in the planning process.
- MADAM CHAIR: That is the smell of the sea, the surf, the seaweed; those kinds of things?
- DR RENNIE: That is right. Exactly. All those sort of things you feel, the tang of the salt air and the sound of the waves.

COMMISSIONER EDMONDS: So is that research publicly available?

DR RENNIE: Most of it has not been - some of it – it was done by students on summer contracts for Environment Waikato who did not publish it but just used it as helping them to inform them in their decision making. The dissertation by – a 590 research paper by Liz Bell, available at Waikato University Geography Department, not in their main library.

MADAM CHAIR: Just a research paper?

DR RENNIE: A research paper, yes.

But if you go right back to Southland Regional Council they actually talk about it, in the old Southland United Council days their coastal plan - they actually went out to 12 nautical miles, actually included all these sorts of things about the sounds of the beach, the various things you just mentioned about the seaweed and the smell and all that sort of stuff was there. So it has been around before, it has just disappeared into – in this sort of new era of plan making.

MADAM CHAIR: Right, okay, thank you.

COMMISSIONER EDMONDS: We were just saying we might find it pretty difficult to get the United Council Plan but we may be having Environment Waikato, are we?

DR RENNIE: I am not sure that this - - -

COMMISSIONER EDMONDS: Are we having Environment Waikato.

MS ..... I could not say.

COMMISSIONER EDMONDS: Because like we might - it is a question to perhaps ask them too.

- DR RENNIE: I am not sure if the staff that were there then are there now. In fact I am sure they are not. We could possibly get hold of that document from the Geography Department. I am going to be in Waikato on Monday. I will get onto that.
- COMMISSIONER EDMONDS: Well if you could I think that would be very helpful, thank you.
- MR MAKGILL: Shall we supply that at the same time as we supply the definition?
- MADAM CHAIR: Yes, thank you. That is the section 32 analysis seems to be slightly awry and where they got their information.
- DR RENNIE: I think they concerning the hierarchy of surf breaks, because I think that is an issue that I would like to revisit in terms of your discussions about what can be done from a national perspective and I think this is quite important. And rather than reading through all the evidence, I know that you appreciate there is a diversity of surf breaks, and there is a diversity of quality of surf breaks, different types of surf breaks, nurseries and so on.

Possibly I will start with a - if I go onto the key bit I want to get to. I might start at paragraph 68 - - -

MR MAKGILL: Page 12.

DR RENNIE: --- and just remind that although there has been considerable advances in the technology of creating artificial surf breaks, it is not practicable in the life of the New Zealand Coastal Policy Statement, the one that you are preparing, to expect artificial breaks to be able to repair or restore the original quality and characteristics of a natural surf break of national or regional significance.

Damage to a surf break may consequently be considered an irreversible loss of the natural character of the break and the significance of such an irreversible loss depends on the significance of the break and the degree of damage to it. The reason I want to make that point is because I am aware that there are situations where people are proposing to mitigate the loss of a natural surf break by creating an artificial one on the assumption that they can recreate the same sort of thing and the technology is not there yet and, sure, it is very clear that he does not see the existing of artificial breaks as being any sort of substitute for having the original thing.

### [2.05 pm]

So that then led to the focus on being the need to identify breaks in terms of their different levels of significance and noting that Policy 20 correctly sets out to identify a set of breaks of national significance. I think that is important. Going on with paragraph 70 - the section 32 report describes a basis for selecting the particular breaks listed in Policy 20 of the proposed Policy Statement as being taking account of their national and international reputations for the use of for international competition and their particular contribution to the variety of surfing opportunities available in New Zealand.

We had some discussion over lunch over where the list that is actually there came from and it seems most probable that at the time of the Department put out it's Issues and Options paper and submissions were made on that, the Surf Break Protection Society made a submission and in it they said "protected national surf breaks, for example", and gave some examples.

We understand that Jonathon McArthur from Surfers SPS Christchurch also put in a list and so we think that what probably happened was that they fused the examples that were put in by the Surf Break Protection Society with, we suspect that is where Papatoa came from, from that list down there. So that is the best understanding that we have been able to put together of how it could have come about.

MADAM CHAIR: I see somebody nodding in the back of the room.

DR RENNIE: So, the evidential base that they have given in the section 32 report has only been specified for breaks at Ahipara, Shipwreck Bay, Raglan and Stent Road. And the selection of these was based on their identifications among the top 80 breaks in the world in an international publication, and that is the second footnote on page 46 of the section 32 report.

In other words the basis for selecting those three was that they are considered of international significance. The basis for inclusion of the remaining breaks, as I have just said, not stated but they do provide a wider representation.

I jump down to paragraph 74. My understanding is that although the SPS supports the retention of the main breaks as of national significance it has found it difficult to determine why these particular breaks were included and others which it considers are of equal national significance were not and the SPS has identified additional places to be listed in Policy 20.

From a planning perspective it is desirable to establish a process and criteria on which to rationally determine the significance of the different breaks. In this regard, Policy 20 is deficient in that it identifies a mixture of breaks and areas in which it indicates there are breaks of national significance. It does not specify which of the breaks in the areas identified are of national significance and which are not, and Mr Skellern has usefully demonstrated to you that at Raglan there are half a dozen breaks. But I could see an argument being made by a potential developer that this one is of national significance but this one is not. They are all in Raglan but the policy refers to which is of national significance. So it says, if you are reading the wording of the policy, it says, "Raglan" – and I have not got it in front of me, which is bad – but it does leave it open to define within that area which is the breaks of national significance at the time, and that is a weakness in that particular approach.

MADAM CHAIR: Well I think that one of the things being overlooked in here apart from the way section 6 is interpreted is section 58. And that talks about the national priorities for the preservation of the natural character of the coastal environment including protection from inappropriate subdivision use and development and of course the natural character of the coastal environment will scoop up some of the issues or the breaks that you are talking about. And then you are looking at section 58 which says "The matters to be included in any or all Regional Coastal Plans in regard to the preservation of the natural character of the coastal environment" etc, "the implementation of New Zealand's international obligations that are affecting the coastal environment" and then down the bottom "any other matter relating to the purpose of the New Zealand Coastal Policy Statement". Now that is what governs what goes into this NZCPS so there is sort of a mishmash of hierarchies and all sorts of things in here that we have to address and it will come back to section 6.

# [2.10 pm]

DR RENNIE: Yes entirely in agreement.

- MADAM CHAIR: But whether we should be doing, as I said to you, regional, national, local - -
- DR RENNIE: I think that is what I am about to go on to address - -

MADAM CHAIR: It is a worry.

- DR RENNIE: This is why I think this is an important section to do.
- MADAM CHAIR: Maybe they are all as important as each other because they go to make a composite hold, whether it is of natural character or something or rather else.
- DR RENNIE: I will come to that in a moment. So the point I then take from that is that it is difficult, based on descriptive place names when they are mixed with the names of particular breaks and I accept your point that there are composites and the point that my colleague, Mr Makgill, made and refers to the composites of particular aspects brought together and of breaks in a particular area.

What I think is that there is a need to consider how best to prioritise between the surf breaks that must be protected and those of lesser significance and Mr Makgill has already talked in terms of the outstanding features which is a section 6(b) matter and of the preservation of natural character which is a section 6(a) matter. So we are looking at both those. We are not saying "this is only related to section 6(a)", we are not saying "it is only related to section 6(b)".

So those can be taken from the RMA. It requires – section 6 that the preservation of natural character of the coastal environment, the protection of outstanding natural features, the relationship of Maori with their ancestral lands, water sites, Wahi Tapu and other taonga and the protection of historic heritage be recognised and provided for. Those are the ones I have picked out specifically in relation to Policy 20.

The preservation of the natural character of the coastal environment implies that sufficiently representative breaks in their natural context should be protected. This requires an understanding of the diversity of breaks to ensure that representation is complete. Those breaks that are rare should have a greater level of significance and priority for protection than those that are common. In short, there is no point in making a National Policy Statement to set out priorities, if those priorities are not actually set in some way or another, some process is set. The protection of outstanding features requires the identification of outstanding surf breaks. I am not aware of any objective or robust assessment of New Zealand surf breaks in terms of the concept of outstanding features.

MADAM CHAIR: Well one of the problems with this kind of approach is that we have had every council in the country before us saying that what the NZCPS is doing is requiring us to spend money on identifying outstanding landscapes, outstanding natural character features, you name it. And they have got a real issue with this unless they are going to get implementation packages from government; particularly the small councils who do not have sufficient ratepayer base.

It is all very well talking about this in a place like Auckland where you have sufficient support from your ratepayer base to apply money to some of these things but in the West Coast for instance they have 7,000 ratepayers for one of those councils and I think it is the one we heard the evidence from, a really amazing presentation from surfers, around what was the - - -

MR WOOLLASTON: Cobden Beach.

MADAM CHAIR: Yes Cobden Beach. And you have already identified the complexities of what goes into assessments like this and one of the things we constantly struggle with on the Court is – and we now have High Court protection at least; that while we are on the run with cases we can practically identify, on the ground, what is an outstanding feature from the factual evidence that is presented to the Court. We can say "yes" that is an outstanding feature and it does not have to be identified in the plan.

It would be very nice if it was identified in the plan but we have some practical issues about lists and something particularly which is in the National Policy Statement when you have got such an uneven gradation throughout New Zealand on how these things are managed and identified.

## [2.15 pm]

- DR RENNIE: So you are looking at knocking out all the policies like the ones on aquaculture and energy and those or are you - -
- MADAM CHAIR: Well I mean we have not gone down that road yet and we are certainly not thinking of knocking out a policy on surf breaks at this point.
- DR RENNIE: So, it is more the method of - -
- MADAM CHAIR: It is the method and the process it is - -
- DR RENNIE: --- so that is exactly what I am getting to here in terms of this evidence. I am trying to give you a method and if I can work through it and I also deal later on in my evidence with the arguments put forward by councils in terms of the costs.

MADAM CHAIR: Yes. I will come back to you on some of those things.

DR RENNIE: Okay. I am similarly unaware of any list of breaks of particular importance to Maori and they may have reasons for not wishing to identify some or all of these as I am sure you will hear more from them on that.

I am also unaware of any attempt to ascertain the heritage value of any surf breaks but it would seem that from the impact that the movie Endless Summer has had, the break at Raglan might be identified as of heritage value. Lyall Bay might be so identified for being the place that surfing was introduced to New Zealand as described by Mr Shanks and I anticipate that in time the site of the first artificial surfing break at Tay Street, Mount Maunganui may come to be seen as of significant heritage value for a completely different reason.

And it could very well be that Whangamata ends up as being iconic for the fact that it kicked off so many things on surfing. So I can see a number of areas where they could come about but at the moment there is no list of that that I am aware of. So in the absence of task specific assessment systems is it appropriate to consider whether there is a suitable proxy that might be used and in this regard I rely on Dr Scarfe's and Dr Mead's views that the most authoritative guide to New Zealand surf breaks is the New Zealand Surfing Guide which is published by Wave Track.

This lists 470 known and frequented breaks. It also indicates that there are potentially many more breaks that are not frequented on a regular basis due to remote access. The guide identifies 16 of the 470 listed breaks as having a 10 out of 10 Stoke or Surf Quality rating. This rating signifies that these surf breaks are of international importance, that is not even regional that is still working at international importance so that is not national, that is international importance.

Such surf breaks typically attract large crowds of surfers and spectators when conditions are suitable. They are of importance to both local and visiting surfers from within New Zealand and overseas. In my opinion it is highly probable that the 10 Stoke rating would provide a useful proxy for identifying outstanding natural surf break features.

It is probable that it also covers breaks of significance for Maori and breaks of high heritage value. It may not include them all especially as the 10 rating is reserved for those breaks of international importance rather than the lower level of national importance. In this regard SPS has identified Piha, Dunedin and Papatowai which do not have 10 stoke ratings and SPS has therefore sought relief by changing the current list in Policy 20 to that that Mr Skellern advanced.

- MR WOOLLASTON: Sorry could I just ask a question on that. Is that 10 stoke rating does that itself have some objective criteria or is it purely and simply on a sort of polling basis or - -
- DR RENNIE: It is purely and simply on a subjective basis based on a review undertaken, as I understand it, by approximately 50 surfers who are sort of very familiar with the breaks throughout the country.

- MR WOOLLASTON: Is there any risk that the actual rating process might become polluted by the fact that you could achieve a greater level of protection if something gets shunted up towards the 10?
- DR RENNIE: Well I think the list is out there at the moment, I am looking at what is there at the moment and at is this particular time that was not the factor that they were developing it for.

MR WOOLLASTON: Because obviously it is an ongoing process then?

- DR RENNIE: No, I am seeing it as a first stab at a situation where you do not have an alternative proxy of the same level other than people submitting to the Issues and Options paper.
- MADAM CHAIR: So it would not include any nursery breaks then?
- DR RENNIE: Some of the ones listed include I think Whangamata is listed in the 10 stoke. They are actually on 89 and I mean I am at a bit of a loss here because I am not a surfer.

MR WOOLLASTON: Does that list include any nursery breaks?

MR SHANKS: No, well, Whangamata is a main nursery break but - - -

MADAM CHAIR: Whanganui?

DR RENNIE: No.

## [2.20 pm]

MR SHANKS: Piha is – I grew up at Piha as well as Whangamata.

- MR RENNIE: Manea Bay is a bit of a nursery break now, is it not?
- MR SHANKS: And inside Manea Bay. Yes, where the waves are softened from the geography under the ocean, like in Piha you could have a 10 foot swell out the back where you would have the experienced surfers where the waves crash and the white water comes towards the beach and at the south end of the beach there is a hole so then the white water reforms and creates a little nursery one and that is where I learnt to surf as well as Whangamata.

I grew up in West Auckland so during the weekends I was out at the little nursery break at Piha and then in the holidays my parents took me to Whangamata and because Whangamata is, I do not like to mention it, but it is that type of wave, it is a fantastic nursery and it is a fantastic exceptional surf break. It is hard to explain surfing to non-surfers.

MADAM CHAIR: Well, not that hard.

MR SHANKS: Oh thank you, we are getting through.

DR RENNIE: I think, as Mr Makgill has just reminded me, it is not entirely subjective. Any list done by experts is subjective in some sense or another whether they are geomorphologists or hydrologists or whatever, any list is going to have some degree of subjectivity.

In the area of surf breaks I do not think there is a course in New Zealand on teaching people how to assess surf breaks using objective techniques or anything else. Your best source of expertise is the – and I think going back to Mr Shanks' evidence at the start where he outlined the sort of skills and knowledge that you develop as a surfer, this is – you know, these are highly experienced surfers who have identified these as the internationally important ones. So I have gone for an international level rather than a lower level so in that sense I think that they are as objective an assessment as you are likely to get from any other tool.

- MR WOOLLASTON: Yes it is accepted and it is not based on measurement of weight, height or frequency but it is measured on the expert assessment.
- DR RENNIE: Expert assessment, expert opinion. Where was I?
- MR WOOLLASTON: 86.
- DR RENNIE: 86 thank you. Mr Skellern has set down a process that could be used to identify the significant breaks in these places although I note that the problems he has noted of differentiating between the specific recognised surf break and to places is not resolved in the particular approach that he is taking.

Also, the places are on land and rather broad. The names of the places Raglan and so on are land based places they are not mapped out. It is hard to say where the Raglan area is, what does it include. On the other hand the process proposed does have merit in enabling a broad range of views to be canvassed to identify which breaks are of national significance but it is being done at a regional level and I take your point on that.

The alternative method of using the Wave Track stoke rating in my view probably overstates the importance of some of these reefs. The number of visitors coming to New Zealand for surfing and the range of international events held at each are not of sufficient importance to rate all these breaks as internationally significant. The method of assessing its breaks is also not entirely transparent as we have just discussed.

However the identification of the 16 surf breaks given a 10 stoke rating could provide a consistent and robust means of identifying nationally significant breaks through using expert – I should have had that in there, based on expert opinion. And in my mind it reflects the minimum precautionary approach necessary for ensuring the identification and preservation of nationally significant breaks until such time as a more considered mechanism existed.

It also resolves the inconsistencies noted in the current Policy 20 and removes any doubt as to which of the breaks at Raglan are rated of national significance, for example. So you know about the reef sort by SPS and my alternative is set out in 89.

If I go, have I got two 89s I have got two paragraphs 89, so going to after the list of breaks to the second paragraph 89. In my opinion the second option, the one with the list is preferable to the first. The inclusion of a schedule is a familiar tool for planners and provides greater specificity and certainty for effective implementation. For instance it removes the difficulty of identifying which of the breaks in the Raglan area are of national significance.

#### [2.25 pm]

Superficially it appears to significantly increase the number of breaks that are covered by Policy 20 however part of that increase is due to the greater level of specificity. There are two difficulties I have with this option. The first is that the location of these breaks has not, as far as I am aware, been authoritatively mapped and recorded on official charts. I will return to that shortly.

My second concern is that the list is inconsistent with the relief sought by SPS. It does not include Papatowai or breaks in Dunedin and perhaps identifies breaks in particular areas that would not be rated as important by SPS as other breaks in the same more broadly defined places.

The emphasis on stoke rating also undermines the importance of smaller nursery breaks but, as you have just heard, I have probably underestimated that. As I say, I did not know enough about the breaks to know what is a nursery break and what is not. To me they all look pretty daunting.

Papatowai, which has been included in the Proposed New Zealand Coastal Policy Statement, it has been included, its omission from the list derived from the 10 stoke rating has been noted by Dr Mead in his evidence and it appears to reflect the relatively recent emergence of Papatowai as big wave surfing, its limited accessibility and the relatively elite level of skills required to ride it.

Given the sheer magnitude of the break and the level of recognition that it has gained in a relatively brief period, I consider it has high existence value and would meet the criteria of being an outstanding feature. It should be retained in Policy 20 and this could be achieved by adding it to the stoke rated list of South Island breaks set out above. This would address this inconsistency in the relief sought by SPS and reflects the tenor of evidence presented to the Board.

And I think in that regard, as you have indicated, the Environment Court is able to make decisions on the go, based on evidence before it. I believe that the Board has received a considerable amount of evidence on breaks and is equally in a position to take that initiative and put the breaks that it feels minded to into this National Policy Statement.

COMMISSIONER EDMONDS: How often is this Wave Track rating changed? I mean these sorts of rating schemes tend to grow and develop, we have seen that ourselves in

lots of the Resource Management Act – sort of concepts. Presumably it is not stuck in

- MR MAKGILL: I think they might change but the change would be relative. I mean a surf break is not likely to get worse or better in relation to another unless there is some kind of environmental impact.
- COMMISSIONER EDMONDS: Just often that people do get better developed criteria, more objective criteria, some things become more important, some things less, like the types of technology with the boards and things like that. Not that I know anything about surfing, but things come and go, don't they?
- DR RENNIE: My feeling on that is that as Rob has just said they may go due to damage to them but I do not think any of the ones that we have identified here, the internationally significant ones, are likely to go unless it is through damage. The possible addition of future ones I think is a process thing. No one is going to be able to do a complete and comprehensive list at any one time. I am seeing this as a first step in the process and as you have indicated the Courts are quite able to identify additional ones on the run as they get picked up in future processes. So it may be that others will emerge as significant over the course of even your hearings now.

MADAM CHAIR: There is a scientist at the back of the room.

- MR .....: That is a published book so that is a snapshot in time at the time of publication and that is where that list comes from and they might need to develop that but at the moment we have been able to (INDISTINCT 4.13) at the time of publication. There is another (INDISTINCT) rating, a website, wavesurf.com and that has got – anyone can load to the site – (INDISTINCT) they can put up photos and then kind of rate it (INDISTINCT4.31) surfing breaks. So there is an alternative for measurements as well but - -
- MR WOOLLASTON: Can I just ask while you pause, on your scheduling,, your scheduling proposal which is your preferred option, would you see that as perhaps introducing through section 55(2)(a)(b) a transitional measure that these will be included in statements and plans by that mechanism but then that the normal process of evaluation and research, submission and the normal schedule one changes would happen after that if it were deemed desirable.

[2.30 pm]

DR RENNIE: Absolutely I had not actually considered the section 55 - - -

MR WOOLLASTON: 2(a)(b).

DR RENNIE: --- until you raised it this morning in that context. I had not thought of it in that particular way. I had actually been concerned, I do not remember if I actually put it in here in the end or not, but I had been concerned that leaving everything to be developed through the regional plans could mean five years before they actually, well to me it is not entirely clear by the wording of the Act, whether they have to have

started the process within five years or whether they actually have to have completed the process within five years.

I am still trying to get my head around that particular part of the Act. But it struck me that putting a list up as soon as possible would at least provide a clear indication because there is a proposed New Zealand Coastal Policy Statement, we have gone a step further through the process it will have added weight and any subsequent debates at lower levels. So my feeling was that whatever means to get this out fast would be good and certainly using that mechanism to get a list in there, at least as an interim step, while they then go ahead and develop, possibly confirm these, and expand or add additional ones, would be quite appropriate.

- MADAM CHAIR: Well I guess it is about time I introduced a spanner into the works because yesterday we had Professor Palmer here from Auckland University. As you know, I think he is an emeritus professor now. I cannot remember.
- DR RENNIE: He actually supervised me 10 years ago on my dissertation on surfing waves so I know him well.
- MADAM CHAIR: Right well he says and it may be of interest to you to know, "the innovation including six identified surf breaks is noted as giving some certainty to their protection". He was acting for the New Zealand Law Society yesterday. He said "however a question can be asked whether these particular surf breaks have an undisputed special status as the protection required will be the equivalent of a water conservation order".

Now I do not know if any of you have been through water conservation order processes but they are exhaustive. "A WCO must first be approved under a rigorous procedure, sections 199-217, with public participation to reflect all viewpoints. Many other surf breaks may be important.

A better approach could be to not identify any of the six surf breaks expressly but to state a policy recommending that regional councils identify outstanding surf breaks for protection. It should further be noted, as in the Whangamata case, that the location of a marina may not necessarily be incompatible with the continued enjoyment of a nearby surf break."

Now that is his opinion for the Law Society and quite - - -

- DR RENNIE: Well he has sort of ventured into evidence there a little bit I think.
- MADAM CHAIR: Yes, well we had thought the same but on maybe Whangamata, but that is another knot in the conundrum we are faced with.
- MR MAKGILL: I would like to think that the evidence that we have put before you so far has indicated that there is common acceptance not just between the experts but between surfers that there are surf breaks that are of indisputed international and national significance and that might not be immediately apparent to people who are not surfers or who are not involved in the industry, with all due respect, like Professor Palmer, but it is to surfers.

I think that the other thing that I would add to that is that we have many national parks upon which skifields are located and duly protected. I think that what we are trying to do is, we are trying to get some kind of equivalent recognition for the importance of surf breaks. There are more surfers, I think, which has been brought out in the evidence in New Zealand than there are people who ski and it maybe that surfing is more important to New Zealand than skiing is and yet all the high country stations and the skifields are on protected land.

So that would be my response to those points that he has made.

[2.35 pm]

MADAM CHAIR: Thank you.

MR WOOLLASTON: Only the North Island and in the national parks I think.

- MR MAKGILL: Are they.
- MR WOOLLASTON: A lot of the South Island ones are not.
- MR MAKGILL: They are conservation land though. Sorry. I actually practise between Queenstown and Auckland so I am quite familiar with - -
- MR WOOLLASTON: That was your reference to national parks, though, I think only the two North Island fields are in national parks.

MR MAKGILL: They are, yes.

MR WOOLLASTON: And possibly Taranaki.

DR RENNIE: I guess I would say there is not a similar mechanism in the Resource Management Act to establish a surf break in the same way that you can establish a water conservation order, as I understand it. That is a particular status, a particular tool and a mechanism that does not exist for a surf break, so I think his argument the water conservation order process was developed from its own history which predates the Resource Management Act pretty much, it has been modified slightly by the Resource Management Act but I do not think it is an appropriate analogy to consider that in the same light.

MADAM CHAIR: Thank you.

- DR RENNIE: Where was I up to, I have turned my page over accidentally, was I on paragraph 93?
- MADAM CHAIR: I think you were. I think go through and identify the most important things you want to make Dr Rennie.

- DR RENNIE: Well I think this is the area that is really important and I think the questions we have already had on the points I have raised in this paragraph highlight this as a really important area. Okay I will jump that bit - -
- MADAM CHAIR: Some of the Society's presentation has got bogged into a whole lot of factors that we either know already or - -
- DR RENNIE: Yes I appreciate that.
- MADAM CHAIR: --- do not really focus on the points identified in your submission.
- DR RENNIE: I think I am concerned that it might not be possible to complete a robust process of identifying the nationally significant surf breaks in the places identified in the relief sought by SPS by using regional processes within the five year timeframe required by the PNZCPS and that is the point I was making before.

I am also concerned of the vacuum that such broad definitions will provide during the time it takes to reach agreement on the specific breaks of national significance. The failure to identify them more specifically in the NZCPS will result in a less efficient, more ad hoc and arbitrary identification of nationally significant surf breaks through individual Environment Court cases and my understanding was that the Environment Court was seeking greater guidance to assist it so it was not having to make decisions on the run and it seems to me that this is the process by which to provide that guidance.

In my view it is preferable to include the approach of using a stoke rating to identify the breaks of national importance – and the list as identified, as opposed to the more consultative approach that Mr Skellern indicated. I think Mr Skellern's approach would be used then after you have identified the nationally important one to identify breaks of regional significance to implement the proposed new policy which I am about to come to. So you have got my recommendation there in 94.

Perhaps if I jump now to the need to consider regionally significant surf breaks, and I appreciate that you have some difficulties with that so I want to try and take this opportunity to present my argument in favour of the inclusion of a policy as a method not too dissimilar from a method policy in Regional Policy Statements. I note you are shaking your head, Madam Chair. Can I run the argument and - - -

MR WOOLLASTON: Well, 103 sums it up quite nicely.

DR RENNIE: Sorry which page?

MR WOOLLASTON: I said, paragraph 103 seems to sum it up quite nicely.

DR RENNIE: Yes. So we could jump straight to that actually. That would be fine. Mr Aaron Luck, in evidence for the SEIS, described how the South Island Surfing Association used the same six surf breaks each year because of their reliability and quality.

MADAM CHAIR: No, no, no 103 - - -

DR RENNIE: 103, oh 101 sorry.

MADAM CHAIR: - - - in the evidence says "There remains a need to identify regionally significant breaks but I consider that that is beyond the scope of the NZCPS" - - -

DR RENNIE: Absolutely.

MADAM CHAIR: --- which is what I have been saying.

DR RENNIE: Yes and that is what I am saying too I am totally in agreement with you.

MR WOOLLASTON: Excellent.

DR RENNIE: Okay, But - the next line, I actually had that thumb tagged after your earlier comments. The next part of that sentence is "rather, the NZCPS should specify the need for regional councils to identify regionally significant surf breaks and may go further to identify the method for identifying regionally significant surf breaks and you may see it on evidence presented by Mr Skellern in suggesting that or you may decide that they should just identify them and leave it up to them how to do it and they could then be guided by say a guidance spokesperson for the Ministry for the Environment.

# [2.40 pm]

I think the point that is possible there is that regional council should – you can put forward a policy to preserve the diversity of the natural character – the coast – at that next tier by having regional councils look at it and directing them to do so. The extent to which they do that – the amount of money they put in – will of course depend on the amount of money they have available and money they are able to get central government. You can always put in a "as practicable" for the regional policy statement as well if you wanted to go that far.

I recall in regards to this that the last New Zealand Coastal Policy Statement had a fairly specific and prescriptive provision in relation to sewerage plants and the same issues were raised there, that places like Gisborne and the West Coast couldn't afford to improve their sewerage systems and the policy remained in with an "as practicable" which did some leeway for Gisborne to take some time to develop their response to it.

So it is not unprecedented to put these things forward and to recognize that there will be some councils that may take some time, but to give them a steer as to where they should be heading.

MADAM CHAIR: From memory that pipe went straight out into the surfing area and has actually not provided a very good environment for surfing.

MR SHANKS: Again, I am not a surfer and I don't surf at Gisborne.

MR SHANKS.: This is correct, it dissipates out in the bay (**INDISTINCT 1.54.0**) south easterly so it just brings the effluent straight back to the beach.

- MR RENNIE: Moving to the next paragraph, 106 and I am not sure to what extent you have evidence on these matters.
- MADAM CHAIR: I do not to hear objection by means other than the RMA.
- MR RENNIE: What I am saying is there aren't methods and I think that is the key point to make.
- MADAM CHAIR: Oh, well that is simple then.
- MR RENNIE: That is why it is so important for the New Zealand Coastal Policy Statement to take its actions. I know you heard a lot on costal reserves and things like that and there has been suggestions that there should be legislation developed.

The Marine Reserves Act does not provide a mechanism at the moment because the purpose is completely different. So there is no actual existing mechanism at the moment other than customized special legislation and that I think it is something this Board should of course not be considering, they should be moving to deal with what they can address and I am sure you fully appreciate that.

The efficacy of the mechanism – so if you look at it from the point of view of what the New Zealand Coastal Policy Statement can do – possibly I will start on paragraph – Mr Skellern in his evidence does indicate how he can identify the boundaries and so on and put them into a map.

I note in paragraph 112 it is quite possible to identify on a map the swell corridor and the area of the surf break which could include the shoreward area that has risen and the access routes to the break that lie within the CMA, and this may be best achieved by identifying them as areas of significant conservation value, a matter which I will return to shortly.

The definition of the coastal environment – I believe the point has been well made by Mr Skellern and Dr Mead and Mr Scarfe. I have laid out the more full argument there which Mr Skellern has referred to and I am quite happy to leave that with you to read at your leisure if you wish.

Basically the argument is that the coastal environment is often seen only in terms of the shoreward extent of the coastal environment. I would suggest that you could also argue that the coastal environment of the coastal marine area includes the area marineward or seaward, or oceanward of the 12 nautical mile limit.

- MR WOOLLASTON: Leaving the desirability or otherwise of doing that, I mean is there any jurisdiction that allows effect to be given to that? It is outside New Zealand's territorial waters.
- MR RENNIE: It is outside New Zealand's territorial waters. There have been changes in the recent identification of the United Nations recognition of the argument for the seabed the continental shelf and there is a bill that is in the tramlines to sort of extend the management out over that area.

My thought on this is that it is a - I have said at the bottom paragraph 115 that this is in an effect an advocacy policy. It is something that I think it is preferable for this Board to consider now rather than have it put in in some ad hoc way or not done at all in the future.

# [2.45 pm]

We are already having proposals for marine farms that are right on the boundary of 12 nautical miles – you know, if they just hop over the edge – it's more than an advocacy thing although I appreciate that it is hard to give it - - -

MR WOOLLASTON: Advocacy is possibly is not a jurisdiction. Thank you.

MR RENNIE: So with that I will jump through to paragraph 118 and I noted that during your discussions with the SEAS (**PH 0.58.3**) in Christchurch that RCA's were raised. During that discussion it seemed to me that I think the point was raised that, you know, could a natural surf break be an RCA? And I think it is quite clear that you can't have a natural surf break as an RCA because no-one is apply for a coastal permit to establish a natural surf break. It is just definitionally impossibly.

I can see how applications for resource consent for activities in the coastal marine area that might have effects on a natural surf break of national significance could be considered as RCA's and this would be achieved through classifying surf breaks, including their swell corridor, wind, sedimentary and hydro dynamic catchments as being within areas of significant conservation value. This I think is very much a definitional matter.

The Minister is able to require that particular areas are made ASCV's. Decisions on activities that might have effects on the values for ASCV's are treated as RCA's. The significance of this process is procedural, as I am sure you are well aware.

The RCA procedure requires an application that has been identified as such as publicly notified, that the Minister appoint a member of the RCA hearing committee and that the committee makes a recommendation to the Minister. The Environment Court may be requested to enquire into the recommendation of the hearing committee and report to the Minister.

The Minister of Conservation considers the report and the evidence and makes the decision. The criteria for the Minister's decision are no different from those that the regional council's hearing committee or the Environment Court have to consider but the Minister may well give different weight to particular matters than do these advisory levels of the process.

History shows that the Minister has only made one that went against the advice received from these bodies and that was subsequently overturned, revisited and changed by a different Minister.

I might add that the decision was different and I could very - as I was involved and have studied the Whangamata decision very closed - if there were matters where you

wanted clarification on that I could highlight the particular factors that went into the outcome there.

MADAM CHAIR: No, thank you.

MR RENNIE: I didn't think you would. The offer is there.

This does not mean that the process was and is not valuable for matters of national significance and it has often led to improved conditions being attached to consents. In the case of the Whangamata marina these have included conditions relating to monitoring for the effects of the surf break although, as you have heard, the monitoring may not assist in protecting the Whangamata break.

The RCA category also allows the Minister to ensure that the national community of interest and the interests of the Crown are given adequate weight in matters of national significance. It would seem appropriate that surf breaks of national significance be supported by a requirement to establish ASCV's in regional coastal plans to provide a safeguard befitting of their status.

The creation of ASCV's for nationally significant surf breaks was not a matter addressed explicitly in the relief sought in the SPSS's original submission. Seeking specific relief was an oversight in our original submission and is effectively a consequential relief implied by the protection that we sought.

I don't think I need to continue on that particular one. I will go straight to paragraph 124.

It is therefore appropriate that the Board specifically consider the matter. You will know from the Section 42A report that a provision for ASCV's was included in the 1994 Proposed Coastal Policy Statement but was deleted by that Board due to inadequacies in the wording. This has resulted in a variety of interpretations as to what should an ACB in regional coastal plans.

The Section 42A report indicates that it sought not to disrupt such interpretations by including a policy in relation to these ASCV's in this New Zealand Coastal Policy Statement.

## [2.50 pm]

As I have indicated, I have the pleasure of being on a regional council hearing panel considering changes to an ASCV in its regional coastal plan. The value of an ASCV and clear guidance to lower level decision makers is quite apparent to me from that experience. That experience was, of course, the Whangamata Marina.

The Section 42A report gave the reason for not including policies on ASCV's as being practical to avoid disruption to practices and methodologies developed since 1994 and maintain the regime established by the earlier policy statement.

I have two responses to this. First, the regime established without a clear policy statement has been peace meal and hard to implement. It was brought about more by

accident than by design and therefore does not adequately address ASCV's at a level reflecting that which warrants the Minister of Conservation to have a role in the decision making process.

By contrast identifying surf breaks as ASCV's is a very appropriate way in which to ensure that those activities that might adversely affect nationally significant surf breaks have the final decision made by the Minister of Conservation.

Secondly, the approach does not involve a disruption to practices and methodologies developed since 1994 as these have not been developed for surf breaks. There are no ASCV's for surf breaks or for surf break areas.

There is a clear distinction between the development of methodologies for establishing ASCV's, for surf breaks and those for establishing ASCV's for multi purposes that primarily address other aspects of significant conservation value.

An ASCV's for a surf break at Whangamata is likely to be quite different from that developed for the ambiguous eco system and landscape character purposes in part of the Whangamata estuary, which relates to the Whangamata Marina case. The limitation on ASCV's is that they are restricted to the CMA and the matters that give concern extend into the coastal environment more widely.

I therefore see the categorization of particular surf breaks as being within the ASCV's and the definition of such through the NZCPS as problematic given the current state of knowledge. However it would be appropriate to include a policy in the NZCPS that regional plans are required to delineate ASCV's of adequate scale to encompass their sediment and hydrodynamic catchments and swell corridors within the CMA that support and give rise to nationally significant surf breaks.

An alternative would be to include a policy to the effect that the Minister of Conservation, during the preparation of regional plans that give effect to the changes necessary from the NZCPS shall issue a requirement for ASCV's of adequate scale to encompass the sediment and hydrodynamic catchments and swell corridors within the CMA that support and give rise to nationally significant surf breaks.

The difference between the two policies is the onus for funding the work as I see it. Departments and perhaps their Ministers in general do not like to promote or have their government promulgate policies that bind or require them or their successors to take particular future actions. I would therefore favour the first option as best able to survive this particular process.

I have an additional Section 1.3.1A paragraph. This was inadvertently – I think I have deleted this accidentally somewhere when I was doing this.

- MADAM CHAIR: This surely is within the jurisdiction of the regional coastal policy people, the regional councils.
- MR RENNIE: No, the jurisdiction here is that the Minister is the person who has responsibility for requiring an ASCV in a regional coastal plan. So what I am saying is that there are two ways the Minister can achieve this. Either through requiring it

through the New Zealand Coastal Policy Statement or requiring it using other methods for requiring ASCV's to be inserted.

You have set out in the schedule of this already a list of activities for RCA's. Now I am saying that you can require that regional coastal plans – and that is basically what it does. That list that you have set out for restricted coastal activities – sorry, you did not set out, that was put in the proposed Coastal Policy Statement – that list and the one before it for activities specifies various thresholds upon which activities get defined as being of national significance.

The second half of the section 58 I think it is from memory, relating to areas of significant conservation value and that is the bit where the Minister has not issued requirements as I understand it for those to go in. It has been left to an ad hoc process by the regions. Now to my mind it is not appropriate for regions to be left to decide what is of a nationally significant area.

#### [2.55 pm]

So in this sense where I am suggesting that there be a policy requiring an ASCV to be put into the plans to deal with surf breaks I am following that up with Section 1.3.1A that in either case, whichever particular mechanism you use from those two suggested – the two alternatives suggested – the policy should be accompanied by a further policy stating that an application for a coastal permit for any activity that occurs or is likely to occur in such an area of significant conservation value and that involves any of the effects specified in Section 12.1, 12.2 or 12A1 is a restricted coastal activity.

I note that such a policy would still enable regional councils, if they so wished, to specific certain activities as prohibited activities within these ASCV's.

In a sense I am providing the councils with the ability to put even stronger protection in than the ASCV's by prohibiting activities that would affect surf breaks, but I am providing a mechanism that if they don't do that that those do come through - any activities that would affect the surf breaks come through to the Minister for final decision as these are areas of national significance.

That is not a regional policy statement issue, that is not a regional council job to do. That is your job in my understanding. It is probably the Minister's job, on your advice.

I have noted it would be of interest to hear the Department of Conservation's views and I would hope that this is a matter that it will address when it makes its final representations to the Board if such a representation is intended. In any case if the wording is deemed inadequate by this Board I would hope that it might replace the wording with wording that it considered would be effective as opposed to following the path of the last Board that when it deemed it inadequate didn't actually come up with an alternative solution.

MADAM CHAIR: Mr Rennie, we are running right out of time. We have planes to catch. I wonder if you would look at your rebuttal please and just pick out from that the key points and just highlight them.

- MR RENNIE: I am sorry, I had understood that we had this day. I didn't realize that you were leaving earlier in the day so my apologies for that.
- MADAM CHAIR: Well we have been sitting for a very long time since 9.30 and going late into the evening and we had a lot of information on surf breaks throughout the country. We are very appreciative of what you have all done today.
- MR RENNIE: I guess you could read them for yourself. We could take them all as read. I have set out the key points that the arguments that are put forward and I guess the key point I would make that councils who argue that there is no need to have a special policy on surf breaks are really saying they don't want to be directed as to what are national priorities for them to work on.

If they though these were national priorities then they would already be allocating the money towards them and it strikes me as odd that councils consistently ask for national guidance and then when it is offered to them so "oh, it's going to cost us too much". The funding of these matters is in my mind not something that is necessarily of great significance in this because in theory they should be dealing with these, funding these already to address them.

- MADAM CHAIR: But as I said to you before you have got a 7,000 ratepayer base and you are expected to do a whole lot of a things as a result of the NZCPS. When are you going to do them and how are you going to do them if a national government doesn't step in somewhere and provide an implementation package, and this goes round and round and we haven't found the answer.
- MR RENNIE: Absolutely. It goes round and round and my approach to that is that is a matter for the politicians to resolve and they will resolve it, as they always have when they have put forward. As I said before, the same issue arose with the sewerage systems and funding was provided to help deal with the sewerage issues.
- MR .....: It seems to me to be a bit of spurious reason to use, not to actually implement the policies and good planning in respect of environmental issues that required to be addressed.
- MADAM CHAIR: Well that may be so but we have had absolute costings from some of the councils on some of the issues that are required to be implemented as a result of this and they go into hundreds of thousands of dollars. The councils just don't have the money.

## [3.00 pm]

MR RENNIE: I think my argument there is that the councils are prioritising where they spend their money in other ways and that is the key issue with all of these matters.

I appreciate the whole of he implementation of the Resource Management Act has brought costs on councils and by giving them clear guidance as to which are the national priorities – and this is one of the ways of doing it – then you are actually providing them with a clear argument that they can give for prioritising this ahead of

some things that they might do as pet projects which are not necessarily of national importance.

We are only asking them here for the things that are of national importance and that is appropriate for a national policy statement. If we were telling them what to do of district importance then yes, it would be totally inappropriate as you've made.

MR WOOLLASTON: Madam Chair, I was just wondering if Dr Rennie might like to comment on the proposal that he put before us at some length earlier and (**INDISTINCT 1.10.7**) repeat that for identification either through ASCV or through scheduling of those significant (**INDISTINCT 1.18.1**).

That presumably would reduce the costs on the regional council. Is that your understanding?

MR RENNIE: That was my expectation, yes. And there is the cost that also has to be recognised in terms of the community and I know you raised a concern about the Surf Protection Society possibly having to fight these cases around the country. They are having to fight them at the moment without any clear national policy statement to support them.

There will be other policies in here relating to things that could very well impact negatively on surfing breaks and so leaving those policies in here, not giving sufficient weight to specific policies, identifying specific breaks as of national importance, which actually encumber councils with a whole process of fighting through that, communities with fighting through it. It is much easier if it is clearly set out as a national priority, these are the breaks of national importance.

It just seems to me this is a far more efficient way than leaving it open for ad hoc solutions down the path.

I recall classically the example of a recent hearing on aquaculture where a district council's argument for why they didn't want an oyster farm in their bay was because it would mean they would have to improve the quality of the subdivisions that went in there and stormwater supplies and the stormwater drainage. So they were objecting to allow for an aquaculture management area in that particular bay.

This is the same bay that was used by swimmers, by kids and all those sorts of things. The only reason they knew there had actually been outbreaks of fecal coliform contamination in the bay was because the existing oyster farmer, who had demonished them onto the quality of the water.

There is a tendency, especially on land, to avoid doing things unless it is actually identified of a national priority and given that sort of requirement to put into force some of these policies. I think this is a good way – you know, the surf break is a really good technique of doing that in certain places – giving them added protection, giving some clarify to the councils as to what are priorities for them.

I have provided with towards the end some information on the coastal reserves over in Australia just because I know they have been raised a number times. It was more for information than for any other reason.

- MR .....: Although they are well outside our mandate, they are very interesting.
- MADAM CHAIR: Yes, and not as perhaps good as they had been painted earlier I would say.
- MR RENNIE: I think there was quite a bit of misunderstanding about what actually powers there are so I thought I would clarify that.
- MADAM CHAIR: Sure.
- MR RENNIE: The only other thing I would really highlight there is in relation to paragraphs 175 and 176. I know there is an impression amongst one or two people that having policies in there specifically for surfing and surfing breaks is sort of picking winners over other potential users of the coast and I have seen this in some of the submissions from some of the councils.

# [3.05 pm]

It struck me that it is not actually picking the surfers as winners. Surfers enjoy these surf breaks but what we are actually trying to protect are the breaks as part of preserving the natural character of the coastal environment.

MADAM CHAIR: But I think the difference between aquaculture for instance and renewable energy is that both of those issues are supported by very extensive provisions in the RMA giving them promotion and protection and process provisions which you do not have. That is why there may be a very special case for picking out surf breaks, particularly as they are clearly outstanding features in some area.

The Minister, as we understand the Minister's role, has the opportunity and the discretion to look at any other matter relating to the purpose of the New Zealand Coastal Policy Statement which your activity or the surf breaks clearly come within, and all the associated activity around them.

So I think that there may well be a case for picking this out and making it quite special, and it is clear that the authors of the proposed New Zealand Coastal Policy Statement thought so too.

- MR RENNIE: That completes my evidence. I assume that you will read the bits I have said please take as read.
- MADAM CHAIR: Yes. Coming back to this whole question of the identification of surf breaks you say here "The methodology used to identify the surf breaks is unclear and has not produced a comprehensive list." This is the sort of issue that has been bothering us because it has changed and quite how we deal with it is a problem that we need to sort ourselves.

MR RENNIE: I appreciate that.

MADAM CHAIR: Yes. Thank you very much. You have put an enormous amount of work into this, Dr Rennie, and the society generally has put an enormous amount of work into it and we are very appreciative as I said.

That some of this really could have been cut down a little is of course of particular issue for the particular witness concerned and we realise this is the first time you have had outside Christchurch to give us a full presentation and you have picked up some important points that we needed to know about, and we are grateful for those.

- MR MAKGILL: I would like to apologise if it has been a little bit more length than it needed to be but I would just point out that everybody here today has put their time into this hearing free and so we have all tried to run this in amongst our normal businesses.
- MADAM CHAIR: Yes, we appreciate that very much.

MR RENNIE: Thank you.

## MADAM CHAIR: (INDISTINCT 4.08.8)

MR ..... No, I have asked my questions as I went through and I don't have any more questions of Mr Makgill either.

MR MAKGILL: Thank you.

MR WOOLLASTON: It was very enlightening, thank you.

MR MAKGILL: Thank you.

MADAM CHAIR: Mrs Edmonds?

COMMISSIONER EDMONDS: Thank you, very helpful.

MADAM CHAIR: Thank you very much indeed and good luck.

## MATTER ADJOURNED AT 3.09 PM UNTIL TUESDAY, 14 OCTOBER 2008