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Session 7 - concurrent session 1
Wet environment: Coastal & Marine Issues

NURTURING THE EDGE, NATURALLY

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Aotearoa New Zealand is a land more edge than interior. With some 11,000 km of coastline it is surprisingly a third the length of Australia's. An island country, our coasts are where most of us live, where much of our identity is anchored, and whose proximity is ceaselessly sought for living, for recreation and for commerce.

"As island dwellers we are extremely fortunate: we share borders with no other country; the edge of the sea is our only boundary. Its problems are of our own creation, and in solving them we have a responsibility to the whole planet." (Wade Doak, 1983)

Sea level used to be 130 metres lower some 18,000 years ago at the time of the last glaciation. The coastline was where the outer continental shelf is. We were a continent (except for White Island in the Bay of Plenty, and perhaps the Chathams). There was no Hauraki Gulf or Cook Strait. Then sea level rose by 10 mm per year, stabilising some 6,500 years ago at current sea level. This left an intricate coastline separating us into islands, drowning valleys to create bays, harbours, inlets and sounds. Thus this land has a reduced area but an increased coastline.

Natural coastal processes have since smoothed, trimmed, filled and softened the coastline. Of our open coastline we now have 56% static, 25% is eroding and 19% is accreting (Gibb, 1983). Management must obviously allow for this fundamental dynamism, as well as with sea level rise.

Our coasts, their landforms and beaches, are representative of those of the world (Gibb). They are a microcosm of world diversity. A full suite of types is displayed. Assessment, management and protection need to recognise this diversity and its significance.

Patti Smith - fronting a Bob Dylan concert tour in New Zealand a few years ago - used her moment of rapt audience attention to plea for people here to value their coasts. She was in awe, considering such undeveloped and wild coastlines to now be a precious and increasingly scarce resource in the world. She pleaded for us to take care to protect their wildness. This protection need not be a vision of uneconomic lock-up, but a creative vision of nurturing, restoring and displaying our nature to the world.

Through our parliamentary process, we, as a nation, have decided that preservation of the natural character of the coastal environment is of national importance.

Yes, as a land focussed at the edge, edge management is a major resource management task.

NATURAL CHARACTER

Natural character, natural features and natural landscapes are addressed in Part II of the Resource Management Act 1991 and are all important in addressing the coast. "Natural"

has been interpreted by the Courts, practitioners and public as involving a continuum from the natural to the unnatural. "Natural" does not therefore equate merely with the pristine. The natural is most clearly defined by being not built and by being predominantly indigenous, with natural patterns, natural processes and natural elements clearly evident. Between the extremes of the continuum there is however a wide diversity of opinion as to relative naturalness.

ASSESSING NATURALNESS

A survey of public perceptions on Coromandel Peninsula (Fairweather and Swaffield, 1999) clearly demonstrated the diverse perceptions of naturalness. Whilst there is wide agreement as to what is the most natural and the least natural, opinions vary on the states between. Perception research and professional practice show that there is a range of perceptions. Everyone's landscape is different. It is impossible therefore for a professional alone to describe "the landscape" and the effects of an activity on this for "the public". However, information and experience will assist the professional to interpret probable perceptions. The particular perception will depend on a person's value system, their experience, their knowledge, their role and their expectations for that or a similar landscape, or seascape.

People value resources differently depending on their role, knowledge, experience and expectation. In undertaking resource planning, it is desirable to understand the widely shared values in a community of interest. I researched this task for vegetation change in my masters thesis to identify the common ground. However, the uncommon ground should not be dismissed as a consequence. The lone voice heard now may indeed be the majority opinion in a few years. (As someone who set up practice to encourage land managers to undertake more sustainable practices for landscape and natural resources, I am pleasantly surprised to hear that in a recent farmer survey 40% stated that they wish to farm organically. What a switch from such an approach being considered weird fringe to now being identified as an important preference.)

With native vegetation, the desire to revegetate, to nurture the natural ecosystems of streams is now widespread. Thus it is upsetting if responsible shifts in thinking are not supported by statutory frameworks, or conflicting messages are given. A recent example is sobering. This winter we were commissioned to prepare a booklet for stream care by the coalface section of a regional council concerned at the bare, grazed and eroding streams that proliferate on the plains. Focussing on riparian restoration, it was already drafted and designed by our office when the statutory planners sought to intercede. There is, it transpires, still a rule disallowing anyone from planting alongside a stream. It is not a permitted activity even to revegetate with eco-sourced local plants belonging in that habitat. Such anomalies and archaic approaches, intended to allow only a catchment authority to plant willows, need to be remedied quickly. The statutory authorities need to lead and support, not inhibit, responsible initiatives.

For assessing naturalness in terms of S.6(a) and (b), research suggests 4 broad groups of values as key trigger for determining the degree of naturalness:

- historic natural - evidence for underlying natural indigenous values, and their sustainability.
- ecosystem processes - involving recovery of indigenous biodiversity.
- status quo - pastoral, tidy and productive vegetation, picturesque values.
- unobtrusive (or historic) development - replicating and subordinate to natural patterns or elements.

I suggest they be recognised hierarchically. That remnant nature has greatest protection, and that the significance of the remnant be recognised, particularly with regard to representativeness, rarity and community significance.

Many people will respond to more than one of these value sets. Knowledge will often affect their perception. Knowledge of the scientific significance of a remnant, or the significance of processes in what may superficially appear rather scruffy, will often change people from a negative to a positive view. Thus I consider increasing knowledge of natural values to be a crucial mechanism in achieving the protection required by the act.

NATURAL SCIENCE AND NATURAL EXPERIENCE

Frameworks for any assessment, whether for a statutory document, a consent application, for environmental monitoring, or as a guide for management, natural character needs to be addressed both in terms of natural science values and natural experience values.

It is inadequate to merely assess the status quo lands and to say that they are pastoral or forestry. Whilst this vegetative cover certainly contributes substantially to their current character, it tells little of the underlying nature, or the natural potential, or of the natural experience of the place.

Through practice and research, I find assessments based on the existing broad land cover and land use to generally be inadequate. For the nature of the coast is not merely the status quo. Not enough to describe the natural character of a land unit as pastoral, or pasture-covered hills, or forestry. What is the nature of the hills or flats? What is their natural character, naturally? What was there before the grass or pines? What would there be if nature had been allowed a say? What did nature intend for each land unit?

LAND SYSTEMS/ ECOSYSTEMS FRAMEWORK

Lucas Associates has been involved in pattern analysis to develop frameworks, such as for Canterbury Region, Hurunui District, Marlborough Sounds, Waitakere City and Bay of Plenty Region. Each provides a land systems based ecosystems framework as a basis for planning, management, guidelines and monitoring. Their land type modelling provides an easy to understand interpretation of the various types of country that can be addressed at any scale of detail. It is a method able to recognise and articulate natural patterns, natural processes and natural elements in coastal lands and waters.

The Marlborough Sounds framework was specifically prepared as a natural character framework and has been included in the Marlborough Sounds Resource Management Plan (ref. McRae et.al.). This analysis is about the physical landscape, the land and landscape ecology, it does not address landscape experience. It is a separate task to identify the natural character experienced in each part of the Sounds landscape. This has not been undertaken, except in relation to specific sites with respect to resource consent applications or zone changes.

The land systems/ecosystems approach separates different types of country. Whilst the systems are identified by the differences in their content, cartography demands that this be interpreted by boundaries - lines on maps. Nature is often a continuum but, at present, planning mechanisms rarely allow for transition zones. Instead they demand a clear-cut boundary, so that a site is either in or out, not on a transition between.

Based on distinguishing natural land units, boundaries are generally easily definable in the field, being located at a land unit edge, or along a watershed to delineate a catchment. Whilst scientifically defined and defensible boundaries, of course there are natural processes that cross any boundary. Being boundaries based on the underlying land character, they are considered more defensible for resource management, and lasting, than boundaries based on land cover change, cadastral or constructed boundaries. It is of course important that the natural boundaries defined are also useful units as a planning and management tool.

NATURAL COASTAL PROCESSES - OR, PLANTS NEED FISH

The land and sea are closely connected in many ways. Inlands are connected to coasts, such as through fluvial processes and wildlife connections. One coast is connected to another. Often wildlife is dependent on several different habitats. In Marlborough Sounds, Forsyth Island is one possum-free island with regenerating native vegetation. The island increasingly provides important feeding grounds, such as kohekohe fruits for kereru. This connection has been recognised as a dimension of natural character.

That land needs fish is less obvious. Many terrestrial coastal habitats are closely connected to sea health and fish abundance. For example, on cliffs in outer Pelorus Sound, special plant species are completely dependent on bird guano being deposited to maintain the habitat conditions that exclude more aggressive plants from invading. For the birds to provide ongoing guano supply they are dependent on a good supply of fish in the seas below. Thus, the presence of the cliff plants is dependent on maintaining good fish stocks.

BEACHES CUE TO INLANDS

Half of our beaches are sand, the rest gravel. Many gravel beaches are supplied by rivers. They are dependent on being continually nourished by this supply on the longshore drift from river mouths. Dams upstream impede such nourishment. This is one clear expression of the relationship of inland to coast. There are many more. The coast cannot therefore be merely considered in planning and management as a land apart, a separate edge only. The coast is also an expression of our hinterlands.

BEACH CULTURE

Interestingly, of coastal lands, it is the beaches that are the least biologically rich. But it is the beaches that are most sought by people. Therefore beaches have probably had a public interest stake firmly planted in them. Their vulnerability to erosion has also been a protector in encouraging recognition as natural hazard zones. But these are property-oriented hazards. It is as hazards to nature that we now need to turn.

In contrast, estuaries and mudflats have the richest biota of the coast, but have had the least public appeal. Estuaries have often been relegated to and required for receiving waste, or have been infilled and confined.

LOVE THE MURK

Just as our central city residential areas undergo gentrifying, so too our coasts. Tidied up. Edges defined. Smartened. However the value of the coast is in the transitions. The gradation from salt to fresh, changing daily and seasonally. There are subtle shifts from wet to dry land, gradations from exposed to sheltered.

The Avon-Heathcote estuary is a major natural resource of Christchurch and an internationally important wetland for the diverse and prolific birdlife it supports. With development, the estuary edge was clearly defined and tidal-interface reduced to a walled edge.

The Bromley sewage ponds have long been a show-piece of Christchurch. Formerly an intricate landscape of sand dunes and wetlands, they were flattened and then excavated through the last century. Giant ponds were thus created on the edge of the estuary. Straight-edged and cut off from the tides, they exhibit little of the dynamics of the former dune system wetlands. However they are a major wildlife habitat in themselves, as well as an engineering and landscape feature.

Commissioned to redesign this green edge to Christchurch, we propose a re-vamp of the ponds, still as large ponds but to provide greater processing of wastewater through natural processes. We decide it is too late to restore the former dune and wetland system. But we do think it is time to bring the tidal interface back. Removing the inland walls to the lands adjoining the estuary will allow reconstruction of saline ecosystems. The tide will not slap against the gabion wall but again ebb and flow across a gentle slope.

The inanga will not be barricaded by tidegates and culverts, but invited in to tidal waterways kilometres up into the city. Our plan for restoring the Avoca Valley Stream - distributed by MFE to all local authorities as a community-based planning model - is another proposal in this area to re-instate tidal flows, salt meadows and saltmarshes.

Thus, we need to reverse the trend of the last century and a half which has hardened edges and encroached on the coastal edge. We need to push back. Let nature reclaim this most rich of landscapes, the coastal environment.

COASTAL PROCESSES - SEA LEVEL RISE

Coastal ecosystems will gradually migrate inland as sea level rises. Thus it is crucial that coastal assessment, protection and management recognise this transition and allow for the sequence to occur over time as the more saline ecosystems gradually migrate landwards.

With sea level rise anticipated, it is of concern to observe, even in the year 2000, consent granted on very vigorous coasts within reach of spring tides, such as a development requiring construction of a sea wall for a land-based accommodation complex.

The legislation requires protection of the natural character of the coast. Proposals to trade inland protection for coastal development I therefore consider contravene the intent of the act and I hope will not be taken up by consent authorities. For to protect an inland patch of bush is one thing, to therefore be allowed coastal development in lieu is quite another. Allowing any on-site trading also needs careful deliberation. The legislation requires coastal protection, allowing development only with less than significant effects. It does not seek the balancing of development and protection.

The direction therefore is to concentrate development where the natural character is already significantly compromised. Rather than spreading out and further compromising coastlines, it is time to re-develop and nurture those already compromised. Just because there is a lot of coast does not mean we continue to sprawl around it. As clearly directed by the act, the coast is the crucial resource given pre-eminence for protection.

Given the clear direction of the act, I find it alarming the grand schemes for development that the professions (legal, planning, engineering and landscape professionals, in particular) continue to process and put before decision making authorities.

Recognising the coastal protection mandate does not mean hands off the coast, instead it means careful site selection to avoid further compromise and to improve on existing compromise. We have been involved in a number of such projects.

MANIPULATING THE LAND-SEA INTERFACE - PORT HAVELOCK

Many sites are already hardened and of substantially reduced naturalness. Our harbours are perhaps the main focus of dramatic change from reclamation and sheer vertical interface constructed between land and sea.

As an example of a project planning to increase the natural interface, consider Port Havelock in the Marlborough Sounds. It is a site where there has been a crude harbour edge from previous reclamation works. It was permitted to further reclaim the estuary, and to extend this out into the path of the Kaituna River. In our plans for Port Marlborough we proposed this be varied to minimise the reclamation on the river-estuary interface, and maximise a re-naturalised edge from reclaimed land to estuary. Thus extended marina basin and reclamation are balanced by a re-naturalised edge from land to sea.

We assessed the natural patterns, processes and elements of the estuarine edge and the existing degraded situation, and re-designed the port development. Seeking to redress the interface with nature, this expanded port development was not challenged in the consent process. It was seen as a win-win for industry and for nature.

In addition, there are opportunities to re-instate natural character. We have prepared plans for re-instating coastal wetlands in areas where they were drained, infilled and wastelands, such as the Otipua wetland at Timaru south and alongside the lower Heathcote in Christchurch where saltmarsh and salt meadow is proposed rather than the industrial or residential future previously assumed would occur.

For Environment Waikato, I undertook an assessment of Coromandel Harbour of the natural character as experienced for the proposal to develop the 1.5 km. walled channel across the harbour mudflats, excavate a marina and "reclamation" for structures and extensive parking. From historic data I found that below MHWS it was largely intact. It was fascinating to find 100-year old photographs showing the harbour edge in the same natural state then as it is today. The proposed extensive reclamation, excavation, channelling and walling I assessed would very significantly reduce the natural character of Coromandel Harbour. I found the proposal would have very significant effects on natural character. It would not meet a no net loss criterion. For the applicant, a colleague assessed only the visibility of the proposal, rating specific views from town. He found the effects were not significant, and was critical of my more holistic approach. The proposal was not granted consents.

Some coastal development proposals involve merely an aesthetic of naturalness - for buildings to be unobtrusive and plantings of native species. We even see proposals to improve on nature, to disrupt natural processes, such as of shrubland regeneration or for well-vegetated wetlands to be tidied to make water features. The aesthetic needs to be addressed in terms of allowing and restoring natural processes.

We have undertaken a century and a half of simplifying our coastline and it is now time to re-nurture its complexity.

Being a land-rich nation, we have sprawled over countryside and along coastlines. Impacts have been diluted and dispersed. To achieve sustainable management, the need now is to learn to plan, design and manage for compactness.

I perceive a change of attitude in this nation. We have had more than a century of destruction of natural character. The desire of many for this century is for repair and recovery of nature. I have observed in several parts of Aotearoa New Zealand that restoration of coastal lands is now recognised as a significant potential employer. It is important that repair and recovery are recognised as an appropriate activity toward the task of coastal protection, but not necessarily a trade off for coastal development.

If as a nation we value our coasts, we need to nurture their natural character in every situation, even in a city context. What awareness of natural processes and natural elements is there in the re-development of the viaduct basin? These are a planning and design challenge that I trust will be taken up in this new decade.

CATCHMENT BASIS

Tangata whenua have a philosophy of lands and waters being considered in a mountains to sea system. Coastal process management and ecology supports such an approach. Catchment-based planning was in vogue and is again being recognised. Catchment and ecosystem continuity regardless of tenure must be addressed. Addressing only public lands, or only private lands, whilst perhaps politically expedient, is a narrow approach that cannot be justified.

When you walk on a cobble beach on the edge of soft mudstone country, the hard greywacke cobbles or marble tell of inshore country connected by longshore drift and rivers. Thus the beach is related to the substrates of inland areas rather than that adjoining the coast. The processes and connections need to be recognised to tell of the nature of a coastal environment. It is not adequate to assess in isolation only that that is evident on the immediate coast.

As part of Auckland City's Gulf Islands District Plan, the first notified in the country, the strategy for Waiheke Island involves a catchment management basis. This puts the fundamental structure of the plan at a functioning landscape level.

However, it is not enough to address natural character through planning for an ecologically functioning landscape. The experience of natural character must also be addressed. The perceived landscape requires that the visual dominance of landform features such as ridgelines, skylines and headlands be allowed to exhibit a dominant natural character. Therefore, to encourage buildings on flatter upper landforms whilst pastoral slopes below are revegetated is to address only part of the natural character - the functioning and not the experience. To produce vegetated slopes visually dominated by houses along the ridges above does not protect the natural character. For many, the experience of natural character is seriously reduced through this trade off .

THE LANDSCAPE RESOURCE

"Landscape" I interpret as our professional organisation has long defined it, the expression of natural and cultural processes It is not merely the visual expression.

Thus it has been encouraging that the distinction between “landscape” and “visual” cued in the 4th schedule is being recognised by the Courts and by practitioners. (Campbell & ors v. Southland District Council) I suggest it is now largely normal practice to distinguish whether an assessment is encompassing the wider “landscape” resource, or only the visual or visible portion.

THE GREATER LANDSCAPE

The RMA is about sustainable management of all natural and physical resources. Addressing landscapes is not confined to s.6(b), not just the outstanding of the natural landscapes. Landscape is a resource to be sustainably managed.

The criteria developed to address outstanding landscapes show the breadth of consideration of landscape. To consider landscapes that do not qualify as outstanding natural landscapes only in terms of their amenity value, is to reduce the realm of landscape - what of the natural science, legibility and transient values of landscape?

LANDSCAPE PROTECTION

The Resource Management Act requires (s.6(b)) protection of outstanding natural features and landscapes from inappropriate subdivision, use and development. In my landscape assessments, I have frequently applied six criteria as a basis for identifying outstanding landscapes. In this approach, a landscape does not need to be outstanding in all 6 to be recognised as outstanding at a district level. A landscape may be exceptional on several criteria but not on another and still be considered "outstanding". The criteria I have used were:

NATURAL SCIENCE

Natural features and landscapes of at least district importance for reasons of the rarity or representativeness of their particular landform and landcover. A natural feature may be a landscape feature or an element/component of the landscape. Under s. 6(b), geology and soils are elements of particular focus, as flora and fauna values are also considered elsewhere in the Act.

LEGIBILITY

The landscape (or natural feature) of district significance should clearly express past natural and /or cultural processes. Some may have strong historical connotations and a distinctive sense of place.

TRANSIENT

The natural feature or landscape of district significance providing predictable or regular experience of dimensions of nature other than landform or landcover e.g. concentrations of wildlife.

AESTHETIC

Landscapes (and natural features where applicable) that are of high aesthetic value determined on how memorable they are, on their naturalness, on their composition (coherence) and on other important aesthetic factors.

SHARED & RECOGNISED

There should be a substantial measure of agreement between professional and public opinion as to the value of natural features and landscapes, for example as reflected through writings and paintings or through favourite locations to cite or

visit. The presence of existing protected sites is also likely to reflect shared and recognised values.

TANGATA WHENUA

The natural feature or landscape identified as having particular district importance to tangata whenua.

The recent interim Environment Court decision (C 180/99 Wakatipu Environment Society Inc. vs. Queenstown Lakes District Council) upheld the community group's case that there are outstanding landscapes. The court identified seven "*aspects or criteria for assessing a landscape includes:*

- a) *the natural science factors - the geological, topographical, ecological and dynamic components of the landscape;*
- b) *its aesthetic values including memorability and naturalness;*
- c) *its expressiveness (legibility): how obviously the landscape demonstrates the formative processes leading to it;*
- d) *transient values: occasional presence of wildlife; or its values at certain times of the day or of the year;*
- e) *whether the values are shared and recognised;*
- f) *its value to tangata whenua;*
- g) *its historical associations.*" (refer paragraph 80).

LANDSCAPE AS INTEGRATOR

Based on underlying differences in land, landscape can be an integrating framework for managing effects of activities. Thus such a holistic landscape approach has been used in statutory planning to define permitted activities, etc.

Whilst not intended in as "zones" in a district plan, the landscapes distinguished in an overlay to a District Plan were not the superficial distinctions of land use or land cover which might occur in some planning documents defining landscape units. These landscape types had been delineated on a land systems as ecosystems basis, so that the underlying natural characteristics of geology, soils these landscape types recognised. As a scientifically sound and enduring basis, regardless of land cover or use, they were considered a useful and understandable approach for differentiating lands.

Coastal hills were distinguished from coastal plains. Inland, soft rock hills distinguished from hard rock hills. They have different characteristics. thus they provide different opportunities and have different vulnerability. Their interpretation will vary over time as technology, markets and fashions change. However, being based on the underlying characteristics of the land, the typology is timeless. It can be fine-tuned to recognise smaller land units where this is desirable and appropriate for the planning and management being undertaken.

However, landscape as integrator has perhaps not been well enough understood or articulated. With landscape as an integrative concept, I was disappointed in one judgment suggesting "erosion" would be a more appropriate basis for zoning than landscape. (Wilkinson v. Hurunui District Council). What is meant by "erosion" is however unclear. From practice over the last few decades, it has involved induced soil loss. In addressing induced erosion, it is seemingly an approach very oriented to traditional land uses of agriculture and forestry, I was disappointed . Soil erosion is only one resource

dimension. Vulnerability to erosion can be recognised in a landscape framework, as can many other potential effects.

SCALE OF APPLICATION

Although the Marlborough Sounds Resource Management Plan identifies Outstanding Natural Landscapes, specific assessment has shown that this may not be adequate. Judge Kenderdine found (W70/99 paragraphs 158-9) that, although not identified as such in the plan, from the evidence presented, a particular bay landscape was found to be outstanding. This was challenged in the High Court and upheld by Judge Doogue.

In terms of New Zealand as a whole, the entire Marlborough Sounds could be considered an outstanding natural feature. It is difficult for a district to adequately address outstanding landscapes at the various scales of interest. I suggest that identification at a national and regional level is important. Then at a local level, outstanding landscapes may be greater or lesser than is the bigger picture. With little interest shown by the Ministry for the Environment in addressing outstanding landscapes, and a number of regional councils having taken little action, there has been little guidance on the context for district implementation.

Other mechanisms could complement and support local authority efforts on landscape protection. The Reserves Act requires the protection of representative landscapes and ecosystems. The latter task has been pursued through the Protected Natural Areas Programme, identifying significant areas (RAPs), etc. However little work has yet been undertaken to address representative landscapes. With the potential to link such activity through the CMS to the RMA processes, there could be support for a more comprehensive approach nationally to landscape protection.

WHO'S PAINTING THE BIG PICTURE?

As with the difficulty of addressing the significance of natural landscapes and features at a greater scale, the bigger picture for biodiversity is often not addressed. The combination of land and sea ecosystem protection and restoration management to ensure corridors, swathes and intact ecosystems from mountains down and into the sea, is a task I see being overlooked. With international recognition that New Zealand is a significant player in the biodiversity crisis, mechanisms need to extend well beyond the protected patch to address private land, landscapes and habitats.

From my work in various roles, I consider we need a national policy statement (NPS) for s.6(c). The action toward this task, requested of the "Bio-What" committee established by the previous Minister for the Environment, has been disappointing.

A NPS is necessary to provide guidance, not only for scientific analysis of "significance" such as on representativeness and rarity criteria, but also on significance of indigenous biodiversity for landscaper, for community, for cultural values. From my understanding, there is not necessarily any preeminence for scientific values in this recognition of national importance of our biodiversity. An old stand of forest close to a town or highway may be known, be appreciated, be loved, much more than one not publicly known but which includes some rare micro-flora or fauna. It is important that not just science values, nor just community values, are recognised, but that both are appreciated as separate but often complementary.

I have chaired the Nature Heritage Fund, the Minister of Conservation's fund for voluntary protection of indigenous biodiversity on private land, since it was established in 1990. This is one mechanism for implementing s.6(c) in providing permanent protection for significant indigenous biodiversity. We have now put into protection management some 170,000 ha. of lands in some 600 sites through New Zealand. They are rural and urban, coastal and inland, large and small. The applicants have been landowners, community organisations, DOC and councils. Lands are protected as public or private reserves. Until I resigned in May 2000, I was also on the committee of the Nga Whenua Rahui fund which assists Maori landowners in the protection of their indigenous ecosystems. This fund has put already into protection some very large swathes of land with substantial areas secured under kawenata which have their terms and conditions reviewed every 25 years. These funds are a demonstration of a win-win mechanism for biodiversity conservation.

The Nature Heritage Fund has produced a number of strategic documents including one for the whole country, for the Waikato, for Southland, and, currently one is in draft for Northland. All of these strategies stress the importance of the coastal lowlands; of the big gap in protection in New Zealand being the ecosystems that abut the coast. This fund recognises there is an opportunity to have a national overview and to focus on the gaps in biodiversity protection, on vulnerable and scarce systems.

Being private land based, the Fund's role has not been to extend into the public space of the coast. However, we have purchased coastal lands that adjoin the coast to form public reserves. And, in one instance the Fund created a reserve adjoining a coast in conjunction with a marine reserve being established. Thus providing for land-sea protection of biodiversity.

For our most protected publicly accessible lands, National Parks, whilst many abut the coast, the park jurisdiction ceases at high tide. How much better if we had the practice of other countries where the parks extend to low tide. For this tidal zone is not merely beaches, but often huge tidal inlets and estuaries., the place of greatest biological activity, and a major edge to land and expression of land-sea interaction.

Documents prepared under the Resource Management Act are required to recognise Conservation Management Strategies which are the public's contracts for the undertakings of the Department of Conservation.

The New Zealand Coastal Policy Statement, Policy 1.1.5 recognises the value and practicability of reversing the compromised natural character of the coastal environment. It states that it is a national priority to restore and rehabilitate the natural character of the coastal environment.

The Resource Management Act provides for protection of outstanding natural features and landscapes from inappropriate activities. It does not involve protection of features and landscapes *per se*. There is a very real risk of the precious natural landscapes of New Zealand being nibbled away incrementally. Greater strategic planning and greater professional resolution is needed.

DEFINING THE WATERSIDE ENVIRONMENT

SALINE V. FRESH- SHOULD THE ENVIRONMENT BE NARROWED?

As well as some important progress in upholding their protection, there have been some disappointing decisions in RMA administration of the coast. In protecting natural character,

the “coastal environment” has been accepted (ref. Maplesden, 2000) as usually extending back to the top of the first ridge. This recognises the natural processes and experiences that are beyond MHWS but within a zone of influence. For freshwater bodies, the definition has been much more narrow. Along lakeshores and rivers, decisions seem to have accepted a very narrow zone of influence for protection of natural character. I suggest this zone is much narrower than the natural processes and experiences would indicate.

Wild and scenic rivers legislation has involved inclusion of the containing lands as part of assessment of the river and consideration for management. I have been disappointed that I have not yet observed such recognition for protection of freshwater bodies under s.6(a). For example, in C12/98, the Court held that the margin of a lake was the upper limit of wave action. Evident natural processes may also include lakeshore terraces above. The slopes back from the lake are crucial in setting the scene, they are the context for lake experience. The surrounds set much of the natural character of the lake as perceived.

If a “margin” is interpreted narrowly to only water level, then the natural character of a lake or river cannot depend on management constraints only within such limited shores. This interpretation is akin to confining a coast to MHWS. I doubt such a narrow margin can protect natural character. For the natural character of a water body, for the ecological and the experiential dimensions, a high water limit is too constraining and inadequate to enable any such protection as intended by s.6(a).

COMMUNITY-BASED PLANNING TO GUIDE CHANGE

On the north Canterbury coast, we have been involved in several coastal planning exercises. Commissioned by the Wai-Ora Trust, funded by Community Employment Grants (CEGs), with support from the councils, we undertook a community-based planning exercise for the coastal lands from the Rakahuri (Ashley) down to the Waimakariri. The project involved us holding public workshops at each of the settlements along the coast, and specifically also involving local runanga. People explored futures for the coastal lands that involved many different titles and public, iwi and private holdings.

The process was community-based and council supported information gathering and publication exercises to enable an articulation of community visions for coastal areas, for an understanding of the restoration options, and for information to assist them in resource management. (Lucas Associates 1998a). However, there is no support for the community’s widely-shared restoration vision in any of the statutory documents of the local authorities. Interestingly, with our coastal lowlands so depleted, restoration is now being seriously perceived as a future employer. Without statutory support for protection and restoration, council support of visioning exercises is seen as merely tokenism.

Lyttelton Harbour Basin information project on the nature of the coastal lands of the basin, instigated by the Governors Bay Garden Club, supported by Councils and other organisations. We were commissioned to develop and produce a booklet guide to the natural vegetation of the basin as a guide to planting (Lucas Associates 1998b). Identifying the various underlying land system based ecosystems, we produced a guide to the various plants that belong in each, and their food appeal to native wildlife. This helps get information put together, it informs not only the community but also the local authorities and professionals working in the area. Thus an informed culture emerges that has a much greater understanding and respect for the biodiversity that is the essence of these coastal lands. It shifts the understanding and the expectation to value protection efforts and to

enable restoration effort toward the natural ecology and the character to be seriously considered.

PROFESSIONALISM IN PLANNING & DESIGN INPUT

Since our first year of establishment - 1979 - Lucas Associates has declined commissions. Our policy has always been to ensure every project that we are involved in maintains and contributes to resource and landscape sustainability. Therefore, we will not accept commissions for projects where our task is to assist achieving consent for a project we consider has inappropriate effects that cannot be avoided or mitigated. I am therefore pleased with the lawyers who straight up ask, can you support this project? If you can't, there's little point in being involved as landscape planner for that project. We would be wasting everyone's time and money. Your reasons must be explained, and an opportunity provided for the project to be redirected accordingly.

As an expert witness we have to be allowed to present our opinions. Whilst we should be briefed and assisted by counsel, our evidence should not be constrained or sanitised by counsel for our client. As landscape planning experts, we are not advocates. This role can be difficult for people to distinguish/hold to. Getting involved in the planning of a project, which initially seems entirely appropriate, to find with more information on the vulnerability of the site, or the economic constraints or aspirations of the project developer. As a project planner, it is necessary to constantly review the situation. If a landscape planner ceases to be comfortable with the way, the extent, the understood effects, and cannot in all professional seriousness, support the project as it progresses through planning and design stages, then if the developer will not allow the project to be amended accordingly, then it is necessary to withdraw. I have observed and admired this occurring by other practices - we are not alone! I have also observed landscape expertise remaining involved even when it exceeds their comfort zone.

To assist inappropriate projects through the statutory process is not our role, as professional landscape planners and landscape architects, I find it unacceptable for us to appear as expert witnesses for projects with which we do not agree. It is important that we, as professionals, do not seek to phrase evidence to be acceptable to both client and our professional opinion. That is fudging the issue. I also find it unacceptable for experts to use the excuse that the democratic process will sort it out "Right will win through". This in my view is naïve and irresponsible. Of course it is different for the professional with the professional task of being project advocate, that is, the legal counsel. Nevertheless, there are ethical requirements to advise clients what it is inappropriate to pursue,

I find these ethical decisions abound, but are most evident in important landscapes and in relation to important natural features in particular water bodies - lakes, streams coasts.

FINALE

I come from as far inland as you can get in Aotearoa New Zealand - near Tarras in Central Otago. I live in the coastal city of Christchurch. However I write this within sound of the giant surf and the cheeky weka, the kereru and tui at my partner's place at Charleston, at the mouth of the Nile (Waitakere) on the wild West Coast of the south. Along the beach, rough, quaint whitebaiters' baches are prized places for time out and replenishing one's spirit. They tell much in their names, even "d'Nile Cottage". Generally no higher than a flax flower stalk, the baches here are low key.

On the native scrub-clad slopes above the granite-cobbled beach, and on the podocarp-clad scarp behind the back swamp, giant machines begin to notch. Slots, roads, drives and benches have begun to be carved for newer, bigger, and sometimes shinier and brasher dwellings, and accommodation places. Progress? Necessary growth? The vision for the area is unclear. Growth appears fragmented and ad hoc. As one of the few areas of private land in the country where some old podocarp still reaches to the coast, will adequate swathes of it remain to retain functioning ecosystems and distinctive natural character as it is nibbled at sporadically. Not just the effects of one development, but the cumulative effects. Whilst a mountains to coast concept, the adjoining Paparoa National Park scarcely reaches the sea anywhere. The dynamic edge to these lands is beyond the park boundary. What is the ecological and landscape vision for private lands with valued biota and ecosystems?

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