

SUSTAINABILITY BY DESIGN – **COASTAL DEVELOPMENT PERSPECTIVES**

THIS PAPER WAS PRESENTED AT THE NEW ZEALAND PLANNING INSTITUTE CONFERENCE, HAMILTON, 2003. THE AUTHOR, BRIAN PUTT, B.A. DIP.T.P., DIP AF, IS A TOWN PLANNER AND RESOURCE MANAGEMENT CONSULTANT WITH 30 YEARS EXPERIENCE IN NEW ZEALAND AND THE UK. BRIAN'S PRACTICE HAS IN RECENT YEARS SPECIALIZED IN COASTAL AND RURAL SETTLEMENT DEVELOPMENTS. HE HAS PREVIOUSLY WORKED IN LOCAL AND CENTRAL GOVERNMENT PLANNING AGENCIES INCLUDING A TWO YEAR SECONDMENT TO THE PRIME MINISTER'S OFFICE.

The coastline of New Zealand is a fundamentally important natural resource. It is a *taonga* – a treasure which provides life, wealth, beauty, opportunity and biodiversity. In keeping with the theme of the New Zealand Planning Institute conference 2003, the paper reflects on historical perspectives and connections that arise in the management and use of the coastline through the resource management and planning processes of the past, of the present and into the future. The paper is complementary to the papers of Richard Brabant, environmental barrister and Dennis Scott, landscape architect.

The theme of the paper examines how the future use and management of the coastline will depend on an understanding of the design process in order to achieve sustainability. Whether the coastal environment is urban, industrial/port, recreational, holiday town, forest plantation, pastoral or wild – the management of the coastal environment will need to be placed in a framework that reflects societal expectations as well as conservation objectives. Only by understanding the opportunities for good design outcomes and recognising the current biodiversity failings in plan controls will the authors of the second generation of district plans be able to offer innovation and opportunity as well as sustainability in the coastal environment.

The Reality of Coastal Development

This historical growth of New Zealand has been linked to the coastline. Within the social, economic and physical aspects of our development over the last 200 years, the coastline has been a focus, an integral element and the conduit to wealth.

The dynamic growth of the last three decades in that area of coastal land stretching from the Bay of Plenty to the Bay of Islands is the manifestation of those historical connections to the coast. This coastal stretch nicknamed “The Big Banana” is the focus of economic and population growth that is in effect the powerhouse of the New Zealand economy. The Big Banana incorporates the Auckland region and the coastal growth centres of Tauranga and Whangarei. It is influenced and supported by the inland growth nodes of Hamilton and Rotorua.

The Big Banana contains about half the population of New Zealand but in area, makes up less than 10% of New Zealand. This coastal stretch is symbolic of our intrinsic link to the coastal environment for most aspects of our lives – economic, social, cultural, recreational and physical.

But none of this is surprising. We are an island nation. We are descended from ethnic groups with strong maritime histories. Our tupuna/descendants – Polynesian, Celts, Scots, English, Dutch and so on – roamed coastlines and oceans for centuries. They lived and developed in coastal environments. They recognised the dynamics of the sea and the land as economic, social and cultural forces that provided food, life and opportunity. Above all the relationship between the sea and the land was seen as a fundamental physical relationship within which man was an integral part – sometimes a bit player, but other times a major influence.

We have developed strong psychological connections to this place – the coast. We understand and are integrated to the spatial arrangement of the coastal edge and the land. This spatial understanding influences the way in which we can work and live near or in the coastal environment. Who could be surprised therefore that the coastline has an attractiveness or a magnetic pull that draws the population towards it. Whether we call it urban drift or northern drift in terms of the demographic move of the population

within New Zealand, it is in fact the manifestation of a natural attraction to the living environment of the coastline. This attraction has become a fundamental foundation of our environmental psychopathology as a nation.

Past Settlement Patterns

Applying sustainability by design might have helped to avoid the recurring the pattern of failure in our earlier choices of settlement locations. It is notable that between 1920 and 1953 some two thirds of settlements containing more than a thousand people in New Zealand (136 settlements) experienced more than one flood. The most frequent flooding occurred in metropolitan areas of Auckland, Hutt Valley, Wellington and Christchurch as well as the West Coast towns of Greymouth and Hokitika. We often failed to evaluate the dynamics of river patterns and their confluence with the coast.

The attractiveness of the coastline for development also creates the risk that settlements will be placed in locations where they will be subject to coastal erosion and potential inundation. These risks are often exacerbated as site works and land modification are undertaken that actually increase the risk of inundation by failing to recognise the dynamic functioning of the natural and physical coastal features. In recent times the holiday settlement at the Omaha Spit, Rodney, and smaller isolated settlements on the Wairarapa Coast provide examples of this decision-making and the unfortunate and costly consequences of inundation or shoreline regression.

The development dynamic on the New Zealand coastline commenced with the first immigrants. Waves of Maori migration settled on and developed the coastal environment. The record of the significant changes that Maori coastal settlement brought about, can be assessed from archaeological records and myths and legends. The observations of Captain James Cook and his travelling guests through sketches and notes, described for us the locations of intensive coastal settlements of *pa* and *papakaiinga*. The records describe the cleared and burnt off coastal cliffs and hills and the intensely farmed river flats and beach hinterlands that were visible to the first Europeans. Strategic importance and survival drove these actions along with the appreciation of the convenience of the coast for transport and a pleasurable lifestyle.

The arrival of early settlers by courtesy of Mr Wakefield or the Church Missionary Society, placed a new emphasis on the coastline. By contrast to the open pasture and spacious, airy woodlands of England, the New Zealand bush presented an impenetrable, dark, fiercesome and mysterious place. The coast provided the openness, warmth and safety that fitted the colonist's expectation. For the settler, the choice was easy. It was a choice between dark versus light; fear versus safety; openness versus enclosure; or freedom versus constraint.

A cultural pattern of settlement arises from these psychodynamic influences. The adopted pattern reflected the old world and was implanted on the new world with all of the social and cultural expectations intact. It was a truly colonial approach that located settlements, cleared land and undertook rural activities without the analysis or consideration of the natural and physical constraints of this new land.

A specific aspect of the colonial settlement patterns that influenced the coastline was the Edwardian view of the "seaside". The attractiveness of the coast as a seaside recreational space gave a trendy and fashionable edge to the already existing psychological attachment described above. So the coastline not only enjoyed the characteristics of safety, openness and brightness in its attractions, but also, it was now fashionable and a place of fun and recreation. In New Zealand, the seaside culture was readily replicated and enjoyed.

The growth of individual freedoms through the 19th and early 20th century provided the social and economic impetus to transform the seaside culture into the desire for a place of escape from worldly and work day pressures. Retreating from the city to the beach became an affordable and desirable social activity. In New Zealand, the growing economic freedom of the early 20th century extended this recreational opportunity not only to the middle class but to working people. The pressure was on for the chance to locate a bach or a crib on some coastal edge or lakeside within an easy drive of a city or town.

In summary these colonial influences are still strongly reflected in our perceptions, in our settlement patterns and in our land use administrations. Interestingly, our society has made several overt attempts to cast off colonial constraints in the past. In our social

and political life, the constraints began to be released in the 1890's through the social welfare legislative programme of the Liberal-Labour government under Premier Richard Seddon. Under that regime, we created votes for women and universal suffrage, employment legislation to avoid the exploitation of workers and provide clean, safe working conditions, and the old age pension. This social programme was continued by the first Labour Government in 1935, where the social constraints of colonialism were virtually removed from the order of our society. The egalitarian society emerged.

The economic constraints of colonialism were effectively removed under the third Labour Government from 1984 on to the present day. Our economy and our economic decision-making now stand independently from the colonial constraints of the past.

It remains remarkable that the only aspect of colonial constraint that persists is in our physical environment. We are yet to move forward to a post-colonial thought process of how to manage our physical environment and how to repair that environment from unfortunate earlier land clearing practices, the planting of dominating rampant exotic species and unsustainable decision-making in resource allocations.

How was the Coast Locked Away?

Freedom to access the coastline became somewhat of a myth and an illusion by the late 19th century. The imaginary "Queen's Chain" rarely appeared in reality. The coastline outside of the village and town settlements became locked away through the ownership patterns of pastoral farms and the riparian rights that went with them. While the hinterland may have been ravaged and cleared for pastoral farming, the stunning coastal localities attached to the pastoral enterprise simply could not be reached by public access.

Pastoral production was linked to the food consumption needs of distant populations – their demands were to be satisfied by production on our lands without concern or connection to effects on the producing environment. This emerging land management pattern truly entrenched the colonial regime by 1950 and was supported and reinforced

by the planning legislation. Those intensely debated words – *the preservation of the natural character of the coastal environment and the protection of them from unnecessary subdivision and development* – first appeared in s.2B of the Town and Country Planning Act 1953 and were restated in s.3 of the Town and Country Planning Act 1977.

The debate raged and the decisions of the Appeal Board and Planning Tribunal flowed, describing and expanding on what was *preservation*, or *natural character*, or *the coastal environment*, or *unnecessary*. On reflection and by examining the decisions under that legislation, it is apparent that the colonial cultural answer was generally accepted as the implementation of the contentious words – *preservation*, *natural character*, *coastal environment*, and *unnecessary*.

Coastal developments in the form of new holiday home and recreational subdivisions were generally the accepted answer to the demand for coastal habitation and occupancy. These forms mimicked the expanding suburbs of the urban centres which in turn reflected the colonial settlement pattern. The examples stretch around the coastline wherever population pressure and market desire for coastal recreation space could be matched with that iconic coastal environment – the broad sandy beach, the flat hinterland and usually but not always, an existing coastal village. Examples range from Omaha, Orewa, Matarangi, Tairua, Pauanui, Whangamata, Waihi, Mt Maunganui, Ohope and so on. But these settlements gave coastal access and helped to satisfy the ever growing demand for recreational coastal living from a society with growing affluence throughout the 1960's and 70's. It was their physical implementation that usually challenged the coastal dynamic forces rather than the land use itself.

In the meantime, the market began to attach a growing financial value to riparian ownership. The value added elements of exclusivity and privacy attached to the coastline, now represented another dynamic in the coastal development framework. The resulting market force desirous of these elements is well supported by existing district plans with subdivision practices that are dependent on minimum lot sizes of large dimensions, irrespective of the physical environment over which the subdivision controls reign. This practice offers reinforcement to the old town planning adage that zoning controls are the handmaiden of land value.

More often than not the techniques and practices in district plans aimed at locking away the coast from development opportunity are simply reinforcing unsustainable land practices. Objectives and policies that loosely state concepts of preservation, protecting natural character, identifying outstanding landscapes and resisting inappropriate land use and development are sadly the very instruments that lock away land into a regime of land use activity that is not sustainable or where it suffers neglect and abandonment.

Alternatively, a design process which relies on an analysis of the physical environment and assesses the catchments and land use capabilities is a methodology that would assist objectives and policies in achieving sustainable coastal development. The outcome is not only the release of the coastline for the enjoyment of the public as settlers or visitors, but also the repair of the past maladapted land use practices.

Sustainability by design takes us another step forward towards a post-colonial outlook and a new cultural landscape in the coastal environment.

Observing and Managing Demands for Coastal Development

The manner in which planners perceive the demand for coastal development is captured within the framework of the district plan methods for managing coastal development. The perceptions are pre-determined by the conventional wisdom exhibited in the district plan. More often than not that conventional wisdom reflects the colonial constraints of land use practices inherited and involved from our past.

Take for example, the typical arrangement whereby a rural zoning regime extends from hill country out to the coastline. It allows as permitted activities, a wide range of land use practices such as pastoral farming or forestry over land which is highly sensitive and integral to the catchments supporting and surrounding the coastal edge. The land has been cleared of the indigenous cover more than half a century before, leaving a shallow mantle of soil that will readily, as if in protest, let go and flow to fill a streambed or beach. The zoning regime reflects the colonial perception that the agricultural activity is inherently good whereas a proposed settlement pattern allowing

some form of development in the same locality would be inherently bad irrespective of the environmental enhancement that could occur.

More recently it is notable how often a nostalgic filter further clouds this perception by attaching to the degraded, eroding grassland slopes in the coastal environment, a landscape value based entirely on a subjective visual appreciation.

The psychopathology of our history of land use practices has subtly convinced us that this nostalgic agrarian view in the coastal environment is the preferred option to some form, in fact any form, of other development opportunities, even in some cases where the development option has completely restored the degraded landscape with indigenous revegetation.

The planning profession more than any other profession is obliged to challenge, review and synthesise the objective and the subjective, the empirical and the myth, the pragmatic and the fantastic. Conventional wisdom must be recognised and put aside for this process to occur in a valued way. Good environmental outcomes should be recognised for their value in the same way as one must challenge accepted activities to reveal and quantify their adverse effects. With an open mind which recognises colonial nostalgias and is prepared to value and embrace post-colonial opportunities and remedies, we can move from our current maladapted behaviours to land use practices properly adapted to the specific receiving environments.

Understanding the true physical and environmental outputs of the rules we write in support of loose or meaningless objectives and policies, is important. The idea of sustainability by design requires the planner to face the reality that writing a rule is a design action. The rule will manifest itself sometime in a physical form or land use activity. Understanding how the rule can assist in landscape repair, the enhancement of water quality or a biodiversity advantage, must be part of the background thinking.

In the coastal environment where the pressures mount for more and more public access and settlement, the opportunity emerges for large scale environmental enhancement on the back of development energy. In this way the promotional and enabling purpose of the RMA can be achieved within a framework of sustainability and positive

biodiversity. The revisionist and reductionist approach to development at the hands of controls that pre-determine and constrain, needs to be set aside in favour of innovation and the encouragement of opportunity.

Sustainable Management v Sustainable Development – The Coastal Context

The debate that remains in the background of the RMA is whether the s.5 preference for the *sustainable management* purposely constrained or accidentally overlooked the global concern for *sustainable development*. Juxtaposed within s.5 is the relationship of natural resources to physical resources. In land use planning terms this is often interpreted as a struggle with urban, rural and coastal development activities competing with conservation interests. The resulting internal friction has become the essence of the RMA purpose that has led in turn to the balancing and weighing required to resolve the allocation of resources within the framework of sustainability.

This tension is heightened in the coastal environment but interestingly, in a recent line of decisions¹ from the Environment Court, the opportunities for innovative coastal developments with high environmental outcomes have been supported. In all of these cases, sustainable design has been the basis of the accepted environmental outcome. These decisions demonstrate the value of the design process. They signal and foreshadow methods for the second generation of district plans. They represent in fact the acceptable move from the colonial nostalgia to a post-colonial, new cultural landscape.

The opportunity of using sustainable design in the coastal environment provides a refreshing future for the consideration of matters of national importance in s.6 RMA. When the development opportunity has clearly demonstrated that it preserves the natural character of the coastal environment, that it has protected some outstanding natural coastal feature or landscape and that it has provided public access to that

¹ Refer to –

- Russell Protection Society Inc. v Far North District Council, A125/98 (Pompallier Heights)
- Paykel v Northland Regional Council, 4 NZED 325 (Oyster Cove Ltd)
- Di' André Estates Ltd v Rodney District Council, 2 NZED 134
- Arrigato Investments Ltd v Rodney District Council 4 NZED 283

environment, then it must have demonstrated that it is an appropriate form of land use or development. At that point sustainable management can be seen as being accepting of the sustainable development within which the social, economic and cultural well-being of the community is properly served.

The task ahead is to be brave enough to challenge conventional wisdoms and colonial nostalgias about the coastal environment as the profession steps up to the challenge of preparing the second generation of district plans.

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