

**MATAKANA ISLAND WHOLE OF ISLAND REVIEW
PRELIMINARY ASSESSMENT OF ECONOMIC EFFECTS**

**Prepared for
TKC Holdings Limited**

**By
Brown, Copeland & Co Ltd**

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1. INTRODUCTION

1.1 I am a consulting economist of Wellington, and currently managing director of Brown, Copeland and Company Limited, a firm of consulting economists which has undertaken a wide range of studies for public and private sector clients in New Zealand and overseas. During the period July 1990 to July 1994, I was also a member of the Commerce Commission and subsequently a lay member of the High Court under the Commerce Act 1986. Prior to establishing Brown, Copeland and Company Limited in 1982, I spent six years at the New Zealand Institute of Economic Research, and three years at the Confederation of British Industry.

1.2 I hold a Bachelor of Science degree in mathematics and a Master of Commerce degree in economics from the University of Canterbury. A summary of my curriculum vitae is attached as Appendix 1.

2 BACKGROUND

2.1 The Bay of Plenty Regional Council's Operative Regional Policy Statement provides that the Western Bay of Plenty District Council will:

"Investigate a future land use and subdivision pattern for Matakana Island, including papakainga development, through a comprehensive whole of island study which addresses amongst other matters cultural values, land which should be protected from development because of natural or cultural values and constraints, and areas which may be suitable for small scale rural settlement, lifestyle purposed or limited Urban Activities."

3 PURPOSE

3.1 The purpose of this report is to assist the Western Bay of Plenty District Council's investigation into the future land use pattern for Matakana Island.

3.2 The assessment of economic (and non economic) effects will be a two staged process:

- a. An initial scoping assessment in headline form to be completed by 31 October, 2012; and
- b. A full assessment following the presentation of the Cultural, Landscape and Hapu Management Plan and when a framework of potential land use options are more certain in the planning process.

3.3 This report, which concentrates largely (but not solely) on the land holding of TKC Holdings Ltd, is the initial scoping assessment of economic effects arising from potential land use changes.

3.4 Matakana Island lacks the economies of scale and critical mass to maintain acceptable levels of service, and self-sufficiency for its community. A change in the pattern of land use can help overcome this lack of scale and critical mass.

4. SCOPE

4.1 The remainder of this report is in four parts:

- a. Economics and the Resource Management Act (RMA);

- b. Economic benefits of proposed development;
- c. Potential economic costs of proposed development;
- d. Conclusions.

5. ECONOMICS AND THE RMA

5.1 Community economic wellbeing

- a. Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the Resource Management Act (RMA). In particular, Part 2 section 5(2) refers to enabling “*people and communities to provide for their ... economic ... well being*” as part of the meaning of “*sustainable management*”, the promotion of which is the purpose of the RMA.

5.2 Economic efficiency

- a. Part 2 section 7(b) of the RMA directs that in achieving the purpose of the Act, all persons “*shall have particular regard to ... the efficient use and development of natural and physical resources*” which includes the concept of economic efficiency.

5.3 Viewpoint for economic assessment

- a. An essential first step in carrying out an evaluation of the positive and negative economic effects of development is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a district (city) or wider regional viewpoint is adopted and sometimes a nationwide viewpoint might be considered appropriate.
- b. For an assessment of the economic effects of developing a range of potential land use changes on Matakana Island, the relevant viewpoint or community of interest is that of the Western Bay of Plenty District. In addition a focus on the Western Bay of Plenty sub-region (i.e. Tauranga City and Western Bay of Plenty District) is also relevant, since the proposed development on Matakana Island may also impacts on the residents and businesses of Tauranga City.
- c. The efficient use of resources and non-use economic values, which are discussed later in this report, also require a broader national perspective to be taken.

5.4 Intangible or non-monetarized effects

- a. In economics, ‘intangible’ costs and benefits are defined as those which cannot be quantified in monetary terms. For any project such effects may include amenity effects, landscape effects, ecological effects, Māori cultural and relationship effects and recreational effects. Such effects may be positive or negative – i.e. a benefit or a cost for a particular community of interest.

- b. Sometimes attempts can be made to estimate monetary values for so called 'intangibles' using techniques such as willingness to pay surveys or inferring values on the basis of differences in property values. However these techniques are frequently subject to uncertainty and criticism.
- c. It is generally better to not attempt to estimate monetary values for these effects but to leave them to be part of the overall judgement under s 5 of the RMA. This also avoids the danger of 'double-counting' – i.e. including them within a quantified measure of economic wellbeing or efficiency and treating them as a separate consideration in the overall judgement under s 5.
- d. However later in this report non-use economic benefits are discussed in general terms to highlight that ecological benefits are valued by a wider population than just the Island inhabitants and visitors to the Island. These relate to benefits from improvement in or retention of ecological values of Matakana Island and that may be facilitated by particular changes in land use.

6. ECONOMIC BENEFITS OF PROPOSED DEVELOPMENT

6.1 Economies of scale

- a. Matakana Island has an existing population of around 300 persons.
- b. The island is divided into two quite distinct economic areas:
 - i. The core area, consisting of approximately 1,680 hectares of pastoral farming, cropping and horticulture and limited residential development. This area is serviced by a sea barge linking this part of the Island to Omakoroa on the mainland; public roads of which only parts are sealed; and reticulated electricity but no public water or wastewater reticulation. There is a specialised primary school and supporting facilities around the Marae. Apart from the occupants of a small group of houses previously part of a timber mill settlement, all the Island's residents live on this core area of the Island.
 - ii. The ocean sand barrier, on which production forestry (*pinus radiata*) occupies nearly all its 4,360 hectare area. Roading on this part of the Island is limited to private right of ways, whilst the only electricity supply is to the old timber mill area via a cable under the harbour. The Western Bay of Plenty District Council own the southern end of the Island and it is from here that a sea barge link's the sand barrier part of the Island to Tauranga City. This barge services the Island's forestry industry providing transport for logs to the Port and limited passenger services to the city. The general freight service barge that was part of this service has recently ceased operations, and has been moored pending the outcome of the Whole of Island Review.

- c. Increasing economies of scale and critical mass for the Island is required through an increase in its population and from improvements in the ownership structure of land. Land use changes facilitating these outcomes would help to underpin the financial viability of the Island's existing services and possibly provide enhanced service levels.

6.2 Improved forestry economics

- a. Forestry is the predominant land use on the Island and as previously mentioned is solely on the sand barrier area. The Island's history was founded on this industry and there is a strong linkage between forestry and farming sectors on the Island. These two sectors alone provide on Island employment and incomes and underpinned the provision of services for the local population.
- b. The ownership structure of the Island's forestry industry needs to be considered as part of the Whole of Island Review. Land ownership does not have to be the sole domain of the forester. The ownership of the land can be separated from the forest operator via different forms of instruments such as forestry rights.
- c. This division of risks and capital requirements will assist in underpinning a sustainable forest industry on the Island, as long as the model chosen can integrate new (possibly multiple) ownership of the land and the conservation of the land.

6.3 Employment

- a. Although the existing employment opportunities on the Island are limited to off Island contractors and farm employees, they are of considerable importance to the Island community.
- b. Increasing and broadening employment opportunities on the Island through development arising from appropriate land use changes will enhance the economic and social wellbeing of the Island community.

6.4 Economic infrastructure

- a. Ferry services between the Island and the mainland need to run to a regular timetable and be affordable. This is more likely with land use changes which enable greater economic development on the Island.
- b. Fuel and electricity supply service levels are critical to the economic and social requirements of the Island community. Again these are likely to be maintained and possibly enhanced if land use changes enabling increased economic development are permitted.
- c. Stagnant or reducing population and less economic activity on the Island will cause the prices for services to rise and levels of service reduced. This may hinder the development of future tourism activities on the Island.

6.5 Community services

- a. Schooling and community services, including emergency services, will benefit from increased population and economic activity on the Island.

6.6 District level economic benefits

- a. The creation of new land titles on the Island will increase the rates income from the Island and broaden the Council's rating base. This should enable an increase in the level of Council provided services. Note, this need not cause rate increases for existing property owners on the Island.
- b. Also increased development on the Island is likely to lead to a net increase in the District's population and economic activity. Economic impacts such as increased expenditure and employment within the local economy are not in themselves measures of improvements in economic welfare or economic wellbeing. However there are economic welfare enhancing benefits associated with increased levels of economic activity relating to increased economies of scale, increased competition, reduced unemployment or underemployment of labour and other resources and enhancement of central government provided services.

6.7 The establishment of ecological reserve areas

- a. Development brings with it the opportunity for land to be set aside for ecological purposes and for coastal reserves to be made available for recreational use. In terms of economic effects such areas will provide benefits not just to inhabitants of, and visitors to, Matakana Island but also to the wider population of the District, region and nation via "non-use economic values".
- b. Non-use economic values relate to:
 - i. Existence values – although persons may not live on or visit the Island they derive value in knowing that the Island's ecological attributes are preserved or enhanced;
 - ii. Bequest values – although persons may not live on or visit the Island they derive value from the Island's ecological attributes being preserved or enhanced so that they can be used by future generations; and
 - iii. Option values – although persons may not live on or visit the Island they derive value from the Island's ecological attributes being preserved or enhanced through knowing they continue to have the option of using them should they so wish at some time in the future.

7. POTENTIAL ECONOMIC COSTS OF PROPOSED DEVELOPMENT

7.1 Forgone economic activity associated with alternative land use

- a. The productive value of the land in alternative uses will be internalised into the cost structure of any future development – in other words the developer and ultimately future land owners will pay for the land, and these payments will among other things reflect the future profitability of the land in alternative uses. Therefore there is no need to consider any "externality costs" associated with alternative uses of the land.

7.2 Utility costs

- a. Externality costs can arise when utilities provided by central or local government (e.g. roads, water supply, storm water and wastewater disposal) are not appropriately priced. In the case of increased development that may occur on Matakana Island, no such externality costs will arise.
- b. With respect to additional roading requirements, the existing private right of ways will be utilised and any additional requirements can be at the sole cost of landowners.
- c. With respect to water supply, storm water and wastewater disposal the development can be self-sufficient and therefore not dependent upon the provision of these services by the Council.
- d. Other utility costs (e.g. electricity and telecommunications) can also be internalized within development costs.

8. CONCLUSIONS

- 8.1 A full economic assessment of economic effects of future land use patterns on Matakana Island will be undertaken once direction is available from the Council's Whole of Island Review.
- 8.2 There will be significant economic consequences from the cessation or decline of any of the existing industries on the Island. Reductions in employment and household incomes could lead to depopulation of the Island and therefore negative impacts on the viability of ferry transport services, electricity supply and other community services and activities.
- 8.3 The Island's two separate economic zones require different economic policy responses. The sand barrier area is totally reliant on forestry, which faces difficult economic conditions and limitations due to its 30 year crop rotation. Forestry on the Island requires a supporting alternative land use. The current discussions forecasting 300 additional landowners (approximately 600 addition people) will begin to address this imbalance and help to retain and enhance services for the population of the whole Island. Given the contained nature of the Island environment, this can be uniquely achieved with no cost to the Western Bay of Plenty District economy.
- 8.4 Future policies covering land use on the Island should be consistent with enabling *"people and communities to provide for their ... economic ... well being" and the efficient use and development of natural and physical resources"*.

APPENDIX 1: CURRICULUM VITAE

MICHAEL CAMPBELL COPELAND

DATE OF BIRTH 3 October 1950

NATIONALITY New Zealand

EDUCATIONAL Bachelor of Science (Mathematics) 1971

QUALIFICATIONS Master of Commerce (Economics) 1972

PRESENT POSITIONS

(Since 1982) Economic Consultant, Brown, Copeland & Co Ltd

(Since 2010) Director, Southern Pastures

(Since 2010) Director, Healthcare Holdings Limited

(Since 2012) Director, Mclsacs Healthcare Limited

(Since 2012) Director, Panacea Healthcare Limited

PREVIOUS EXPERIENCE

1978-82 NZ Institute of Economic Research
Contracts Manager/Senior Economist

1975-78 Confederation of British Industry
Industrial Economist

1972-75 NZ Institute of Economic Research
Research Economist

1990-94 Member, Commerce Commission

2001-06 West Coast Regional Council Trustee, West Coast
Development Trust

2002-08 Lay Member of the High Court under the Commerce Act 1986

2003-11 Director, Wellington Rugby Union

GEOGRAPHICAL EXPERIENCE

- New Zealand
- Australia
- Asia (Cambodia, India, Indonesia, Kazakhstan, Malaysia, Nepal, Pakistan, People's Republic of China, Philippines, Tajikistan, Sri Lanka, Uzbekistan, Viet Nam)
- South Pacific (Cook Islands, Fiji, Tokelau, Tonga, Vanuatu, Western Samoa)
- United Kingdom

AREAS OF PRIMARY EXPERTISE

- Agriculture and Resource Use Economics (including Resource Management Act)
- Commercial Law and Economics (including Commerce Act)
- Development Programme Management
- Energy Economics
- Industry Economics
- Transport Economics

SECTORAL COVERAGE

Agriculture	Aluminium	Airports	Aviation
Electricity	Fertiliser	Flood Control	Forestry
Natural Gas	Pharmaceuticals	Public Transport	Rail
Road Transport	Sea Ports	Tourism	Utilities

RESOURCE MANAGEMENT ACT SPECIFIC PROJECTS

- New supermarkets in Dunedin, Rangiora and Kaiapoi;
- Port storage facilities at Westport;
- The proposed Clifford Bay ferry terminal;
- The proposed pipeline and related facilities to utilise water from the Waikato River for metropolitan Auckland;
- A container terminal expansion by the Ports of Auckland;
- The designation of the Transmission Gully motorway route;
- The proposed Variation No. 8 to the Wellington City District Plan covering height and other controls on development of the airspace above the Wellington railway yards;
- A proposed Town Centre Zone within the Kapiti Coast District;
- Wellington City Council's heritage preservation policy;
- Solid Energy's proposed West Coast Coal Terminal at Gravity;
- The proposed Waimakariri Employment Park;
- The designation of land for a proposed motorway extension in the Hawke's Bay;
- The Hastings District Council's Ocean Outfall;
- A proposed new shopping and entertainment centre in Upper Hutt;
- New regional correctional facilities in Northland, South Auckland, Waikato and Otago;
- Proposed controls on wake generation by vessels travelling within the waterways of the Marlborough Sounds;
- Southern Capital's proposed new township at Pegasus Bay, north of Christchurch;
- Renewal of water resource consents for the Tongariro Power Development Scheme;
- Economic analysis inputs to a Section 32 report for the Waitaki Water Allocation Board;
- The imposition of land use restrictions within noise contours surrounding Christchurch International Airport;
- The expansion of the Whangaripo Quarry in Rodney District;
- A proposed five star hotel development for Wanaka;
- Holcim's proposed new cement plant near Weston in the Waitaki District;
- TrustPower's proposed new wind farm at Mahinerangi in Central Otago;
- TrustPower's proposed new Arnold hydroelectric power scheme on the West Coast;

- McCallum Bros and Sea Tow Limited's appeal before the Environment Court regarding extraction of sand from the Mangawhai-Pakiri embayment north of Auckland;
- The development of the Symonds Hill pit at Winstones' Hunua Quarry;
- The rezoning of land for residential development at Peninsula Bay, Wanaka;
- The rezoning of land for more intensive residential development at Peka Peka on the Kapiti Coast;
- A gondola development for the Treble Cone skifield;
- A gondola development for the Snow Farm and Snow Park skiing and snowboarding facilities;
- The extraction of gravel from the bed of the Shotover River;
- The proposed Hilton hotel development on Wellington's Queen's Wharf;
- Land use restrictions in relation to the Runway Extension Protection Areas for Christchurch International Airport;
- A new residential and commercial development by Apple Fields at Belfast on the outskirts of Christchurch;
- A proposed business park development on land at Paraparaumu Airport;
- The proposed redevelopment of Wellington's Overseas Passenger Terminal;
- The proposed Central Plains irrigation scheme in Canterbury;
- The staging of residential and business development at Silverdale North in the Rodney District;
- The redevelopment of the Johnsonville Shopping Centre;
- A Plan Change enabling the relocation of existing development rights for a residential and commercial development on Mount Cardrona Station in the Queenstown Lakes District;
- A new Pak'n Save supermarket at Rangiora;
- New supermarkets at Whitby and Silverstream;
- The extension of the Te Rere Hau wind farm in the Tararua District;
- MainPower's proposed new wind farm at Mount Cass;
- Fonterra's proposed new milk processing plant at Darfield;
- Designation of land for NZTA's Waterview motorway project in Auckland;
- Resource consent extensions for Oceana Gold (New Zealand) Limited's gold mining operations at Macraes Flat in north-east Otago;
- Designation of land for NZTA's Transmission Gully motorway project in Wellington;
- Designation of land for NZTA's MacKays to Peka Peka Expressway;
- Assessment of economic effects of a Queenstown Airport Corporation's proposed Notice of Requirement for the designation of additional land for aerodrome purposes;
- Assessment of the retail effects of proposed Plan Change 19 to the Queenstown Lakes District's District Plan;
- Assessment of the regional and national economic significance of Lyttelton Port;
- Meridian's proposed new Mokihinui hydro scheme;
- Assessment of the economic effects of alternative wreck recovery options for the MV Rena;
- Assessment of economic effects of proposed extension to Arrowtown's urban boundary.