Auckland Unleashed
“A rural view”
SUBMISSION ON THE DISCUSSION DOCUMENT FOR THE PROPOSED AUCKLAND COUNCIL SPATIAL PLAN 2011 - “AUCKLAND UNLEASHED”.

TO: Auckland Council

SUBMISSION ON: The Discussion Document for the Proposed Auckland Council Spatial Plan 2011

NAMES: The Rural Advisory Panel for Auckland Council:
- Horticulture New Zealand
- Federated Farmers
- Fonterra
- New Zealand Winegrowers
- New Zealand Forest Owners Association
- Rural Contractors New Zealand
- Aggregates and Quarry Association of NZ
- Sport-horse / Equestrian Associations
- Aquaculture Associations

ADDRESS: PO Box 10 232
WELLINGTON

1. Submissions of the parties above, and the decisions sought, are detailed as follows:

   Schedule 1   General comments
   Schedule 2   Questions - analysis
   Appendices   Foundation Objectives, membership, economic data

2. Submission of the Rural Advisory Panel (The Parties):

   The Rural Advisory Panel to Auckland Council is affiliated to, and mandated by the wider Rural Industry Group (for membership see Appendix 1). The purpose of the panel is to:
   - Identify and communicate to the Council the interests and preferences of the rural based industries and communities of Auckland in relation to:
     - the content of the strategies, policies, plans, and bylaws of the Council; and
     - any matter that the Panel considers to be of particular interest or concern to the rural based industries and communities of Auckland.
   - Advise the Mayor and the Council’s governing body and local boards, of the Council processes and mechanisms for engagement with the rural based industries and communities in Auckland.
   - To deliver recommendations for accelerating the social, economic, environmental and cultural performance of the rural part of the Auckland Council region.
The Rural Advisory Panel was appointed by Auckland Council to develop recommendations regarding the rural economic sectors and rural communities in respect of a number of matters including policy and planning. The Panel is mandated by a wider Rural Industry Group, which developed a set of objectives for the Spatial Plan. Both the Panel and the Group have focussed their discussions on how rural productivity is to be provided for and how the rural zone for Auckland is to be managed under the new Council structure.

The Objectives of the Rural Industry Group for the Spatial Plan were adopted and presented to Auckland Council at the Rural Industry Group meeting on 28 January, after presentations to Council in late November and early December 2010. The views represented in this submission are views a consensus has been established on among all members of the Panel.

**ORGANISATIONS REPRESENTED ON THE RURAL ADVISORY PANEL**

**Horticulture New Zealand**

Horticulture New Zealand was established on 1 December 2005, combining the New Zealand Vegetable and Potato Growers’ and New Zealand Fruitgrowers’ and New Zealand Berry-fruit Growers Federations, and now include Olives New Zealand. On behalf of its 7,000 active grower members Horticulture New Zealand takes a detailed involvement in resource management planning processes as part of its National Environmental Policies. The principles that Horticulture New Zealand considers in assessing the implementation of the Resource Management Act 1991 (RMA) include:

- The effects based purpose of the Resource Management Act,
- Audited Self Management should be encouraged and provided for by councils;
- Regulation should impact fairly on the whole community, make sense in practice, and be developed in full consultation with those affected by it;
- There should be early consultation of land users in preparation of regulatory frameworks;
- That RMA plans should work in the interests of the parties to protect and preserve opportunities for sustainable growth, to meet the industry vision of being a $10 billion industry by 2020.

Horticulture New Zealand works to raise growers’ awareness of the RMA to ensure effective grower involvement under the Act, whether in the planning process or through resource consent applications. Horticulture New Zealand is affiliated to; and supportive of the Pukekohe Vegetable Growers Association (PVGA), the main local organised vegetable growing organisation for the Auckland Region. The PVGA now represents 364 active growing members in the Auckland region.

In addition, local branches of New Zealand Kiwifruit Growers Association and the Fresh Vegetable Product Group, The Covered Crops and Fresh Tomato Product Groups are active organisations in the Auckland Region. All are affiliated to Horticulture New Zealand.

**Federated Farmers**
Federated Farmers of New Zealand is a primary sector organisation that represents the majority of the country’s farming businesses. The Federation has a long and proud history of representing the interests of New Zealand’s farming communities, primary producers, and agricultural exporters.

The Federation aims to add value to its members’ farming business. Our key strategic outcomes include the need for New Zealand to provide an economic and social environment within which:

- Our members may operate their business in a fair and flexible commercial environment
- Our members’ families and their staff have access to services essential to the needs of the rural community
- Our members adopt responsible management and environmental practices.

The total agricultural sector is even more important to the economy than it was fifteen years ago. Its contribution to the New Zealand economy has risen from around 14.2 percent of GDP in 1986/87 to around 17 percent today (including downstream processing). Some authorities consider agriculture’s current contribution to the New Zealand economy to be about 20 percent of GDP.

**New Zealand Winegrowers**

New Zealand Winegrowers (NZW) is the national organisation representing the interests of the New Zealand grape and wine sector. NZW was established in 2002 as a joint venture between the New Zealand Grape Growers Council Inc. and the Wine Institute of New Zealand Inc. NZW is recognised as the principal wine industry organisation. Every grape grower and winemaker in New Zealand is a member of our organisation. NZW currently has over 1000 grower members and 700 winery members. There are over 115 wineries (many including extensive vineyards) and 20 independent growers in the Auckland region.

The wine industry is an important contributor to the Auckland economy, specifically in terms of its tourism offer. In light of that, we take our environmental responsibilities extremely seriously. Nationally, our goal is to have 100% of production accredited to an independently accredited sustainability programme by 2012. To date, over 92% of producing area is accredited or working towards Sustainable Winegrowing New Zealand accreditation.

**Fonterra**

Fonterra Co-operative Group is the world’s largest milk processor and dairy exporting company, owned by 10,500 NZ dairy farmers. Our 15,800 staff work across the dairy spectrum; from advising farmers on sustainable farming and milk production, to ensuring we meet exacting quality standards and deliver dairy nutrition every day in more than 140 markets around the world.

Our success is backed by sophisticated systems for collecting over 14.5 billion litres of milk from farms all over New Zealand and over 6.5 billion litres in a growing number of...
markets around the world. Our global revenue is just under $17 billion, and our exports for the 2009 calendar year represented 26% of New Zealand’s total exports. With 309 farms in Auckland receiving $127,318,560.00 milk solid payment in the 2009/10 season the sector is a significant contributor to the regional economy. Our interests in Auckland extend from ‘Cow to Customer’, from farm to processing, distribution and retail. Fonterra holds property interests across the region, with twelve sites involved across production, coolstores, depots and retail, in addition to the Fonterra Centre.

**New Zealand Forest Owners Association**

NZFOA is a NGO that represents the majority of plantation forest owners in New Zealand. Its members’ forests comprise more than 75 per cent of the country’s 1.8 million hectares of plantation forestry. The Association adds value to the businesses of its members by undertaking activities which could not be handled easily or efficiently by individual growers working alone. Its credibility also relies on the fact it has the support of the majority of New Zealand’s production forest owners.

Products produced by the forest sector include: Yr ended 31 March 2010
- Log Production – 22.6 million m3
- Logs processed domestically – 13.0 million m3
- Logs exported – 9.6 million m3

Employment: Forestry and Logging – 2009: 6,010

**Rural Contractors New Zealand**

The Association was formed in 1996 and represents about a third of the rural contractors providing a wide variety of services to agriculture, horticulture, viticulture as well as lifestyle land owners, government and local authorities. The range of service is extensive but as they mainly support the rural industries, their requirements and needs are similarly aligned.

An economic analysis of the rural contracting industry (Infometrics Dec 2010) showed there were 25,898 employees and the industry had a gross output of $2,405 billion with a value added contribution of $1,106 billion, a gross contribution of $3.511 billion or $135,570 per employee. Based on estimated figures for rural contractors in the Auckland Council area, this is a total contribution of just under $55 million to the Auckland economy.

Rural contracting services are vital to the rural industries with which they are involved and their support for those industries are often dictated by the readiness of the crop and the state of the weather both allowing that activity to be undertaken. Without rural contracting services, the rural industries would have significant difficulties in continuing in their present economic state and would be unable to continue to provide the economic and materials wealth they currently generate for the Auckland region. Rural Contractors is a group that works with the land, understand the need to maximize its use, ensure the longevity of that use and to blend that use with the other activities that may be undertaken in the same area.
The organisation advocates to ensure that well trained, professional, safe and compliant contractors are applying agrichemicals; and that off road rural vehicles can be transported or may move along on public roads effectively.

**Aggregates and Quarry Association of New Zealand**

The AQA was formed in 1969 by companies involved in extracting and supplying gravel and allied materials in New Zealand, in response to the need for an industry group that could represent aggregate suppliers on a range of issues. Membership of the AQA stands at over 80 companies, which between them produce 85% of the aggregates and allied raw materials used in New Zealand.

The members of AQA take their responsibilities regarding the environment seriously, and the AQA is committed to advocating to its member companies about the need to avoid, remedy or mitigate the adverse environmental effects of their operations on the surrounding environment. In recognition of this, the AQA seeks a planning regime that recognises the benefits of aggregates to our communities and supports our member companies’ commitment to the management of environmental effects.

AQA members are active in the Auckland Region with respect to aggregate extraction, process, transportation, and sales. AQA members provide necessary materials for residential, industrial and commercial development, within the Auckland Region thereby contributing significantly to the Region’s sustainable economic development.

**Equine industries:**

**The Equestrian Industry**

Equestrian Sports New Zealand (ESNZ) is the national body for equestrian sport in NZ, such as Eventing, Show jumping, Dressage, Endurance, Para equestrian, polo cross and show hunter. There are 2 equestrian clusters in the Auckland region – a northern cluster - The Northern Region Equestrian Initiative (NREI) and a southern cluster - New Zealand Sport Horse (NZSH).

NREI comprises of 4 ESNZ regional organising committees, Woodhill Sands Equestrian Centre (WSEC), NZ horse recreation (NZHR) and most major regional organising committees. It is the largest community of equestrian stakeholders in New Zealand. WSEC is the primary venue in Auckland for the delivery of these sports and competitions, and NZHR is the major representative body for recreational riders. The southern cluster is New Zealand Sport Horse (NZSH) supported by 3 ESNZ regional organising committees or designated Auckland area clubs and is based in South Auckland.

Equestrian sports and recreation, capture a large section of urban working, rural living lifestylers, and have a higher than average participation rate, than the national equestrian average. This sector is family orientated, fostering youth with good etiquette and social development. The Auckland region has approximately 40,000 horses, 6,240\(^1\) of them are GST - registered. The equine business sector in this region, contributes an estimated $350 m. to the GDP of Auckland through goods and services, excluding the

\(^1\) Statistics NZ 2007
export of sport horses. This industry supports approximately 200 equestrian specific businesses in the northern area, and a similar number in the Southern area.

Working on historic figures, the industry is set to double over the next decade, and the need for related venues and bridleways enhancement should be recognised in the future strategic plan of the Auckland Council. The equine business sector mirrors the Marine Industry as large recreational financial contributors to the regional economy with similar GDP inputs. They both have complex and closely linked relationships and dependencies between recreation, with sport and industry components, and both run with success in our sports as world leaders. This industry significantly adds to the attraction of the tourism components in Auckland, and has an integral role in the future of rural Auckland, and its rural real estate model, which in return has a large effect on the rateable contributions.

The Thoroughbred Racing Industry
The thoroughbred racing industry supports more than 23,000 participants at various levels of employment. More than 3918 job opportunities are generated for the thoroughbred racing industry in Auckland, illustrating the importance of the racing industry to the wider community. Over $142,465,568 of wages and salaries are generated by racing in New Zealand for the thoroughbred sector in Auckland.

There are 534 thoroughbred Breeders in Auckland. The value of thoroughbred auction sales in New Zealand for 2004 was $75,068,250. More than half of these sales are to overseas parties, resulting in the flow of “new money” into the New Zealand economy. It is estimated by New Zealand Bloodstock that the value of the thoroughbred export market is around $120 million Per Annum.

There are over 1236 thoroughbred horses in training. It is estimated that the thoroughbred horse will be in full training on average 8 months of the year. Thoroughbred training expenditure on training activities (transport, vet, track fees, gear and accessories, adjustment etc) is $37,842,167 per annum. Annual prize money allocated for the thoroughbred racing industry in Auckland is $7.9 million (2002 -2003 season). There were over 157,000 on-course customers in Auckland region. Total on-course spending was $6,441,966. Total off-course spending was $2,338,569.

The NZ Racing Board report 2004 provides a detailed economic assessment of the equine industry indicating that the racing industry in the Auckland region is responsible for the generation of $399.78 million in value added contribution to GDP. 7195 people are employed in full time, part time, casual or volunteer jobs within the racing industry, roughly 0.6% of the Auckland population. These jobs equate to approximately 4956 full time equivalent jobs, generating more than $183.8 million in wages and salaries for these employees.²

² NZ Racing Board Report – Size and Scope of Industry, 2004
Aquaculture

Aquaculture in the Auckland region currently consists of intertidal oyster growing in the Mahurangi, several bays on the south coast of Waiheke, Kauri Bay near the Clevedon River and one area in the south Kaipara Harbour. The Mahurangi is the original cultivated oyster area dating back to the early 1960’s. There are mussel farms in deeper water at Waimungu Point and the western shores of Great Barrier Island. Currently, there are 69 marine farms in the Auckland region, covering an area of 341 hectares and comprising 17 mussel farms and 52 oyster farms. Oyster farming employs around 100 people in farming and processing the oysters for export and the mussel farms slightly less.

In the Auckland region, the Pacific oyster contributed 26% ($4.4 million) of total national output (sales), the second highest regional value, surpassed only by Northland with an output share of 47%. If the Northland growing region is also included (as some products from this area are processed and distributed in the Auckland region), the combined total output would equate to 73% ($12.3 million) of the national Pacific Oyster production output ($16.9 million). In comparison, the Greenshell™ mussel contributed only 3% ($6.1 million) of total national output, with Tasman and Golden Bay, Canterbury and Southland all showing similar values. Coromandel (22%) and the Marlborough region (68%) combined contributed 90% to the total national Greenshell™ mussel output ($204.3 million).

In terms of aquaculture’s contribution to the Auckland economy, the latest available figures are from an economic impact assessment undertaken by ARC. Although figures represent current value generated, the study uses an Input-Output methodology and results are expressed in $2004, as this is the reference year for the input-output table on which the analysis is based. The study shows that Aquaculture contributed $200472 million of output to Auckland’s economy. This equated to $200428.2 million of value added or gross regional product (GRP), or 0.06% of Auckland’s total regional GRP. The contribution to GRP is comprised of aquaculture farming impacts (approximately 20% of total) and aquaculture processing impacts (approximately 80% of GRP impact).

Freshwater aquaculture is also important in Auckland with production ponds in Warkworth and South Kaipara Heads producing freshwater fish for weed control and waterways as well as food and potential by products. Fresh water farmers are supported by AquA™ Incorporated (an established Auckland aquaculture industry cluster) through membership to which most freshwater farmers throughout New Zealand can belong. This industry is well served by tertiary institutes such as Auckland University with the research laboratory at Leigh for marine aquaculture, and Mahurangi Technical Institute for fresh water.

AquA™ is of the view that the industry as a whole has a much larger economic impact and that growth and innovation throughout the industry value chain will have far reaching economic benefits on a nationwide scale. Further, land-based aquaculture is currently an area of unrealised potential that can become a significant contributor to economic growth at regional and national level. Globally the demand for protein is increasing with fish being recognised as a sustainable resource to meet this demand.
Aquaculture is supplanting wild catch fisheries worldwide as the largest source of fish as food because of its sustainability. All aquaculture, both freshwater and marine, has a keen interest in water quality as very high water quality is essential for the production of fish for human consumption through aquaculture.

**Waikato connectivity**

Primary Focus Trust, a rural development agency located in North Waikato provides a link between Auckland and the Waikato rural communities, helping to facilitate inter-regional connectivity.

3. **The parties to this submission wish to be heard in support of this submission.**

Thank you for the opportunity to submit on the discussion document.

CHRIS KEENAN  
Manager – Resource Management and Environment  
Horticulture New Zealand

ROGER PARTON  
Executive Director  
Rural Contractors New Zealand

ROGER PARTON  
Executive Director  
Aggregate & Quarry Association of New Zealand

PETER SPENCER  
Rayonier NZ Ltd.  
New Zealand Forest Owners Association

PHILIPPA BARRIBALL  
Manager, Local Government & Community Relations  
Fonterra Co-operative Group Limited

WENDY CLARK  
President, Auckland Province  
Federated Farmers of New Zealand
ASTRID LAMBERT
Chief Executive Officer
Primary Focus Trust

JIM DOLLIMORE
Aquaculture Industries Representative
Biomarine Ltd.

DR JOHN BARKER
General Counsel
New Zealand Winegrowers

Date: 31 May 2011

Address for Service: Chris Keenan
Manager – Resource Management and Environment
Horticulture New Zealand
P O Box 10-232
WELLINGTON
Phone: DDI (04) 470 5669
(04) 472 3795
Facsimile: (04) 471 2861
Mobile 027 668 0142
Email: chris.keenan@hortnz.co.nz
SCHEDULE ONE – General Comments

Form and Structure
The discussion document contains many questions. It makes some suggestions for what may be contained in the spatial plan. It is, in many ways in a similar form to the discussion documents released for National Environmental Standards by central government. The difficulty with this method of consultation is that there is no “construction draft” to comment directly on. The Parties note that consultation will allow for direct engagement on a draft of the spatial plan later this year, and this will enable more detailed comment on proposals.

It is noted that the spatial plan provides an opportunity to map areas that are of strategic economic importance such as aggregate resource locations. This is encouraged. For other rural activities this may be more complex, and any constraints mapping should be conducted with the community of interest engaged in a timely manner.

The Parties generally support the use of a planning instrument that is able to prioritise the differing requirements of subregions within Auckland. The key advantage of a spatial plan is the opportunity to improve how a unitary plan recognises and provides for spatial variation in the region. The rural zone has different features and characteristics. For example, some rural land is suited to horticulture or viticulture, other rural land is more suited to forestry and pastoral farming and aggregate production. The suitability of rural land changes, and is best determined by the market. There are equal opportunities for growth in aquaculture, but they are not evenly spread through the region.

Equally, opportunities exist for the maintenance and enhancement of amenity values, provision for greater biodiversity and the protection of significant natural features. Few would argue that there have not been significant efforts to protect the latter\(^3\).

The provision of food, fibre, aggregates and other quality products from the rural sector provides the framework for a sustainable city. Growth is predicted to increase rapidly – by 2040 60% of New Zealand’s population is predicted to live north of Taupo. Currently the figure is 53% (2.2million people). Planning instruments are being reconstructed around the country to recognise and provide for that growth. Water for Auckland is currently being sought from the Waikato River. Growth plans look to provide housing and industrial space. A new National Policy Statement seeks to prioritise renewable energy generation, in response to the growth requirements predicted. Transportation needs are being prioritised in government expenditure.

\(^3\) Examples include the Waitakere Ranges Heritage Area Act 2008 and the Hauraki Gulf Marine Park Act 2000.
Many rural organisations have been focussed on sub regional Plan Changes in Rodney and Franklin. In addition, plan changes in Papakura District, Auckland City, Manukau City and Waitakere City are relevant to what is now rural Auckland. These plan changes have taken between 4 and 8 years to progress through appeals. Many Plan changes that are of relevance have not quite finished their processes, including Rodney District’s Plan variation 132, Papakura District’s Plan Change 13, the Hauraki Gulf Islands section of the Auckland City District Plan and Waitakere City’s Plan Changes 35 & 36. While the Parties recognise that the new Auckland Council will be incorporating planning content from these processes into the new unitary plan, it is considered that the new governance structure will offer the opportunity for a complete review of the planning provisions applicable in the new Auckland.

Regretfully, rural industry has not been well recognised in regional plan processes, where a focus on recognition of environmental and amenity values for greater Auckland has been combined with attempts to hinder urban expansion in the rural zone. Some plan changes have been more usefully focussed and provide some good policy examples of provisioning for rural activities⁴, although the process has raised some challenges and could be improved under the new Council structure.

In general rural production has not been well understood or promoted. Increasing difficulty with compliance costs, high rates, water access, reverse sensitivity and transportation restrictions and regulations has decreased the profitability of rural business. In addition, there are several areas where the vertical nature of our industries does not fit neatly within the traditional planning framework. For example, even well-intentioned controls to protect productive land can unnecessarily inhibit rural industries reliant on ancillary activities (such as the winery cellar door or winemaking facility).

### As a result succession planning has become a key issue. When there is no succession pathway landowners are instead incentivised to take advantage of high land values by subdividing. The cycle is self perpetuating.

The Parties seek some recognition that the current planning approach is not working. It is clear that the new Auckland Council is seeking to enhance productivity, and for the first time there is an indication that the region is looking to strategically plan for economic growth and productivity. Some of the key New Zealand examples of productivity and growth are found in rural industries. The dairy and kiwifruit sectors have demonstrated compounding annual growth at rates of between 9 and 10% between 2000 - 2009⁵. The recent resurgence in interest the country’s traditional meat and fibre products will also reflect favourably on

---

⁴ For example Franklin Plan Changes 14, 25 and 30.
growth and productivity in rural Auckland. These industries have strategies for growth\(^6\) and a proven track record to achieve it\(^7\).

Auckland Council has demonstrated a clear willingness to engage on these key issues through the Rural Industry Liaison Group and the Rural Advisory Panel. The Rural Advisory Panel has already provided to the Auckland Council a list of key objectives (See attached appendix 2). The Objectives are carefully thought out, and have been widely consulted on by rural industry organisations. Some local groups have been working on these Objectives since 2009. All the responses to the document need to be viewed within the context of the submitted Objectives that provide a framework for interpreting rural views on spatial plan objectives.

The Parties also attach, as APPENDIX 3 an analysis of economic contributions by the rural sector in Auckland. It has been prepared by Doctor Warren Hughes, for the submission of Man of War Farms. The Parties note that Dr Hughes assessment matches the assessment of the contributing organisations as outlined in the RIG Objectives in Appendix 2. The 2 analyses were produced independently.

**Aggregates**

The aggregates industry has had to advocate forcefully and repetitively with various Councils over the last two decades to achieve an appropriate planning framework for the extraction of aggregates resources and protection of these resources from reverse sensitivity effects. The Auckland RPS, Rodney District Plan 2000, Manukau, Papakura and Franklin District Plans including Franklin Plan Change 14 are prime examples of this. The provisions in such documents are now generally well balanced, providing for the development and extraction of aggregate resources, whilst managing the effects of aggregate extraction, however these outcomes have only been able to be achieved through significant involvement of time and financial resources into the various processes and typically only after lengthy Environment Court appeals following mediation or hearing time. It would be disappointing to see provisions which already exist within such documents be lost through the new planning regime.

An area that does need further consideration in relation to aggregates but also other industry generating large numbers of heavy vehicle movements is providing for these movements. We consider that the Plan should seek to recognise heavy haulage routes to and from sites which generate large volumes of heavy traffic e.g. ports, quarries etc. A good example of this is as described in Map 1 of the Auckland Regional Land Transport Strategy. Generally, The Parties consider there should be a map identifying aggregate resources within the spatial plan.

**Aquaculture**

Auckland has very suitable water for aquaculture. However it also has a lot of pressures on its water resources. Establishing aquaculture in an area provides a powerful incentive to maintain and increase water quality as the aquaculture is totally dependent on high water quality. Realistically the near-shore area for aquaculture in Auckland will not be able to be increased much in the near to medium future, apart from some small additions to existing marine farms

where practical. In the medium to longer term there is potential for some high value mid-water farms in the outer Hauraki Gulf and some expansion of the aquaculture activities in the South Kaipara Harbour.

In the Mahurangi Harbour there is scope for some new intertidal oyster areas on the eastern side of the main channel above Grants Island. This could be exchanged for area too shallow for farming, returned in a fully restored state. There is little scope for an overall increase in area. These changes would however improve the production of the harbour by up to 250,000 dozen. At the Tamaki Straight area there is scope for some modest extensions to existing farms such as Kauri Bay. These extensions would be less than 20% of the existing areas but would allow a disproportionate increase in production. There is similar scope for mussel farm incremental increases in Waimungu Point and some parts of Great Barrier.

A very important requirement for aquaculture is the provision of support facilities. Marine aquaculture has a requirement for shore facilities with access to the sea adjacent to the marine farm ideally. A number of farms have purchased adjacent shoreline land to allow facilities to be built. However there is no provision for aquaculture facilities in the existing plans. This must be remedied. Creative solutions to shore facilities need to be considered where possible. In the Mahurangi Harbour, 20 farm workers have farmed 100Ha of leases with 10 barges of various sizes since the 1960s. However access to the harbour is limited with only 2 public boat ramps below the town and only one of which offers all-tide access. This caused considerable congestion.

A plan to build an aquaculture park with an extra boat ramp and provision for farmers to lease area and erect sheds is being considered as part of a wider harbour restoration project which will include dredging navigation channels to Warkworth. Other areas will rely on individual farmer initiatives, but these must be supported by the plan if aquaculture is to attain its potential to provide employment and exports for Auckland.

Aquaculture is a very efficient producer of both employment and exports. For instance the Mahurangi Harbour has 100Ha of leases. About 70 of these are usable for Pacific Oyster farming, the rest are too high and were used for rock oysters in the 1960s. These 70Hectares support 20 farm workers and a further 30 process workers. About $2.5m in exports and $1m in local sales are produced, equating to 0.7 FTE and $50k/Ha. Production is enabled from a relatively benign range of inputs.
SCHEDULE 2: Questions and analysis

This section provides analysis of the questions within the document. The section cannot be read outside the context of the entire submission.

Some of the questions are extending beyond the scope of what the legislation is seeking of a spatial plan\(^8\) and while it is recognised that they are important issues, it is questioned whether the spatial plan is the appropriate vehicle for addressing these issues.

This submission addresses the questions where the Parties have a consensus view.

The Big Picture

1. Do you think we have the proposed "big picture" ideas right? Give us your suggestions to help Auckland lift its performance.

The areas chosen are not challenged by the Parties – the rationale for their identification has been carried through from prior plans. It is less clear however, that the top spatial priorities adequately address priorities for rural industry and community growth. As an example, the northern part of the region’s forestry exports link to the northern port and mills outside the region. The Southern horticultural growth node of Franklin does not terminate at the boundary of the region - it carries on into Pukekawa; and many of the freight movements travel south to ports such as Tauranga or domestic destinations.

Given that 88% of Auckland is rural\(^9\) and as the RIG objective statement records an economic contribution of 2-3% GDP is made by primary producing sectors. Dr Warren Hughes (see Appendix 3) assesses that this will increase to between 3 and 4% by 2030. A 3-4% economic contribution is of the same order of magnitude as the other key economic contributors to Auckland GDP listed at paragraph 121 of the discussion document. We note that this contribution is from a disproportionately low number of employees (0.7%) so the sector is very efficient and with proper planning and economic incentive and stability could make a very much greater contribution.

Recognition of the rural opportunity would signal both the spatial and economic significance of the rural land component of Auckland.

The spatial mapping presented in the discussion document does not extend across the boundaries and some key links with other regions are not included. Two key links beside the arterial transport networks are the gas line (growth opportunities for the glasshouse industry as an example) and the pipeline(s) providing water from the Waikato River. The spatial mapping should identify these links and the spatial plan should consider how these strategic interregional assets may assist productivity growth in rural communities.

---

\(^8\) Local Government ((Auckland Council) Act 2009, section 79.
\(^9\) Auckland Unleashed paragraph 374
**People and quality of Life**

4. **What do you think the Council’s role should be in helping to improve the potential for Aucklanders to gain employment and increase income levels?**

Council has a role in promoting connections between industry and community, through enhancing transport links and increasing the connectivity between economic development agencies, industries and training institutions. The Council also has a role in monitoring the economic performance of industry to present a clear picture of economic growth opportunities in the region. To effectively achieve this Council will require a continued close association with rural industry.

As a microcosm, winegrowing has become an important economic activity on Waiheke Island, extending the range of employment opportunities for its residents, as well as enhancing the quality and appeal of some lifestyle choices. It is therefore crucial that Council adopt policies which sustain rural industry and ensure that people and communities are able to provide for their economic and social wellbeing.

Auckland Tourism Events and Economic Development (ATEED) is the newly formed Council Controlled Organisation charged with economic development for the Auckland Region. At this time there are two “Rural Development Specialists” within this organisation, one position located in the north and one in the south. The role of these positions is to provide an interface with businesses in the rural community. Whilst this interface is already occurring within this organisation, there is still a need for a greater interface between ATEED and the Auckland Council policy staff at a local level.

To be effective in having a close association with rural industries, promoting connections, or in monitoring performance the Auckland Council must as part of the consultation process and policy formulation, work with these local officers. Unless ATEED is directed to engage directly with the Council and rural industry on rural economic development, the organisation will not be effective in fostering opportunity in the rural areas.

The Auckland Council has relationships with the CCO’s whose investment, policies and strategies impact on rural industry. Investment decisions with regard to essential infrastructure such as water and roading made in isolation of each other and without a planned programme of consultation with rural industries would most certainly impact on these industries and could be a barrier to growth and opportunities for better management of these resources could be lost.

The Transport CCO needs to understand key freight distribution routes and centres and challenges facing the rural industries; to guide investment in this area to ensure continued growth and development. Another opportunity is provided by the series of projects being initiated by Watercare to develop water infrastructure from the Waikato River. The decisions made in these projects will have a significant impact on the local agricultural industry and have opportunities within them to either ensure or restrict existing industry and / or growth for these rural industries.
It is imperative that a mechanism is put in place for the CCO’s to co-ordinate their investments, policies and strategies and to ensure that these are directly linked to rural industry and market opportunities.

5. How should the Auckland Plan address housing needs (e.g. supply, range, location, affordability and quality)?

Uncontrolled release of land for housing is not supported. The Parties prefer a controlled approach to planning. The approach should also recognise the historic development trends for the region; ie. There is not a clean slate to start with. Council should complete a stocktake of current subregional growth plan initiatives and determine what provision for housing has been made in the rural zone, before making decisions on planning for more affordable housing located in rural zones.

Subregional growth planning has been tested through the Environment Court in the last ten years and many new growth areas have been established. Because production activities are likely to be compromised in these areas it is suggested that any continued urban development be based around existing towns and settlements.

6. What should Council’s focus be regarding the arts, culture and heritage?

The Parties acknowledge that the arts, culture and heritage discussion is focussed on the central city area but consider that rural events and culture should receive some acknowledgement in the spatial plan. Much of the country’s heritage is founded in Auckland’s rural areas, and Auckland’s rural communities continue to foster many culturally and historically significant occasions and events. A & P shows, sports days, racing functions, even farmers markets are part of today’s rural Auckland.  

It appears that within the document the ‘rural strategy’ is located under “People & Amenity” on page 145 - this is not where it should be. There are two different aspects that need consideration. A rural strategy should focus upon production as well: whereas “People & Place” is only exploring the amenity value of the rural areas.

7. How should the Auckland Plan balance the needs of community recreation, elite sports and international events?

Auckland Council has opportunities to enhance event based marketing in the region with the innovative food and beverage production taking place in the rural zone. ATEED has confirmed its support for work on niche and artisan food, support for food shows and events that support rural production. Including farmers markets, festivals, recreational opportunities in production forests and harvest celebrations are all part of increasing innovation in the rural

---

10 The A&P Show in Pukekohe for example, has been held since 1886, having attracted over the years large numbers of people still holding onto many rural traditions. The A&P Society is self-funded, owning their own land, and is not seeking financial support from the Council. Their key requirement is for the Council to allow them to continue as they are operating and understand that they may in the future need to undertake developments, to continue funding their operations.
zone and recognising the important contributions the agricultural sector make towards provisioning for Aucklanders.

This can be best achieved through strategically identifying the respective sport and potential recreational users, the major stakeholders, and to engage their professional opinions. This process will align the needs of a community with the opportunities, and it should yield the true potential of a specific project. For example equestrian sports and recreation is one of the largest rural activities, and some key aspects surrounding the availability of venues, bridle trails and riding areas are:

1. Land suitability, durability of facility and the cost of upkeep and maintenance.
2. Proximity for participants, grazing land, rural users, and relevant organising committees.
3. Guaranteed use of facilities all year round, venue competition.
4. Support by participants, integration with national body and delivery of national and international events attracting regional tourism.
5. Access and ease of location for spectator base.
6. Multiple use of venue through other communities enabled – the large weather proof parking and grounds offer great opportunity for other events and expos.
8. Links with attractive bridle trails that will attract use, and be of weather resistant durable nature.

As an example New Zealand exported a total of 1,354 horses through the Karaka Bloodstock Centre during the 2008/2009 year, with a value estimated at $140M. A total of 900 horses were imported in the same period. In addition, a considerable number of racing thoroughbred and harness horses from across New Zealand and internationally are regularly housed in facilities in the region prior to or after racing.11

8. How can we address community safety and security concerns?

Food safety is a concern that is the number one priority for many rural industries. Comprehensive self management programmes that ensure compliance with agrichemical withholding periods are in place for food sold to supermarket chains domestically or for export. The same level of food safety cannot be guaranteed by audited self management in produce sold outside of industry checks and balances. Auckland Council should incentivise production that maintains quality assurance standards set by industry accredited systems, such as the NZ GAP / GlobalGAP and Sustainable Winegrowing (SWNZ) systems used to manage product quality and safety.

The parties also support sound agrichemical management, and seek that all agrichemical use is undertaken responsibly. GrowSafe training, adherence to NZS8409, and compliance with HSNO 1996 are the industry standard. Regulation needs to be developed with these systems in mind as deviation from the nationally consistent framework for agrichemical management has unintended potential safety consequences.

---

The Parties seek that strong guidance is provided in the planning framework to ensure that new sensitive activities (Childcare facilities, hospitals, rest homes, schools) are located where the occupational health and safety risks associated with rural production activities are minimised or avoided.\(^\text{12}\) Risks include spray drift hazard, machinery, access to constructed silt control ponds, dams and drainage networks.

**People and Economy**

10. Are these five priority areas the areas that Auckland should focus on to develop a more outward-looking, productive, high value economy? Do you believe that the Auckland Plan should have an aspirational economic goal? If so, what should this be?

The Parties support the development of a business friendly and well functioning city. Many rural industries have a focus on technological innovation and connections to research and development in food innovation are crucial to encourage further innovation in these sectors. Many rural industries in the Auckland region are already well connected internationally, and there many opportunities to learn from and to enhance rural export opportunities.

---

**It is encouraging that the discussion document suggests innovation in the rural economy should be enhanced. Enhancing rural growth will require:**

- A clear planning structure that encourages flexibility, and prioritises rural production in key areas,
- Good information about key drivers in the rural economy, and benchmarks of performance to measure progress,
- A systems based approach that recognises all elements of a production system,
- Provision of the tools for sustainable development, including provision of water resources for economic growth and ecosystem services.
- Supportive initiatives to improve environmental benchmarks, and incentives for cleaner production.

**Rural communities will be enhanced where rural policy supports flexibility of land use to enable growers and farmers to add value and diversify their businesses through on-farm processing, sales and tourism ventures.**

11. What will help Auckland become more business friendly and efficient?

Businesses require good information, sound logistical networks and “certain” operating conditions to thrive. Self management provides the most opportunities to minimise the costs of compliance - and increasing emphasis is being placed by rural industries on the development of third party audited self management systems. These are usually driven by market requirements for traceability and safety.

---

\(^{12}\) For example Plan Change 29 has resulted in purchase by the Ministry of Education of land for the purpose of constructing a school adjacent to permanent cropping operations.
This recommendation is supported by the Land and Water Forum\textsuperscript{13}

\textbf{13. In developing a more productive, high value economy, what priorities and sectors should the Auckland Plan focus on?}

\text{}\textbf{A key recommendation of the Parties is that the Auckland Council does not seek to prioritise winners for developing productivity. It is virtually impossible to predict where entrepreneurs will find and exploit opportunities.}

Rural industries are technology driven and highly competitive because of their continuous improvement. In Oyster Aquaculture the advent of an oyster virus from France through a biosecurity incursion, has resulted in a need to make changes to farming systems. Some consents are so prescriptive that they do not allow this. Care must be taken to allow room in consents and rules to allow for continuous improvement of both production and monitoring. Similarly, in order to understand the nature of the ancillary and non-productive activities that arise as part of a viticultural operation, it is necessary to understand the more technical aspects of the process.

The Auckland Council can support entrepreneurs by understanding the nature of business systems well; appreciating and minimising the barriers (including compliance costs) and constraints to growth in industries currently providing opportunities for Aucklanders. Further improvements to transport routes are required as well as protection of transport routes from inappropriate development within close proximity to their alignments.

Effects from many activities are well researched and known. Accordingly effects can be mitigated by standards - rather than requiring resource consents. Instead of reinventing the wheel use of certified national or international standards should be used, eg noise and or agrichemical best practice systems. One major benefit of having the Auckland Council is the opportunity of deleting duplication between regional and district council functions. There should be no excuse to have to obtain two resource consents for such activities. Activities such as earthworks on production land require specific policy treatment, and Plan Change 25 recently notified by Franklin Council is a good example of a permitted activity standard that recognises and provides for

\textsuperscript{13} http://www.landandwater.org.nz/land_and_water_forum_report.pdf
14. How should the Auckland Plan support the development of skills to increase Auckland’s labour market participation and productivity?

The Parties suggest there are opportunities to link tertiary training institutes more closely with the economic development agency to encourage closer links between student research and development programmes and industry.

17. Which key economic areas should receive priority?

A key recommendation of the Parties is that the Auckland Council does not seek to prioritise winners for developing productivity. It is difficult, if not impossible to predict where entrepreneurs will find and exploit opportunities.

People and the Environment

18. How can we help Auckland become an eco city? How can we maintain rural values, character and lifestyles?

Current rural character is a result of flexible and viable rural production. The landscape is constantly changing as new business opportunities develop. Accordingly, “rural character” is notoriously difficult to define, and we note that a range of values are commonly attributed to rural landscapes. We wish to emphasise that rural landscapes are, by definition, working landscapes and this should be borne in mind when attempting to “maintain” what is there now. If “maintenance” of current rural character is the goal it is likely that this will stifle the innovation that created the current rural character. The evolution of rural landscape should be promoted.

A key challenge for the Auckland Council will be management of urban growth in the rural zones. It is recommended that the Council develops an approach that incentivises rural production activities.

19. What initiatives should the Auckland Plan focus on to reduce greenhouse gases?

By increasing opportunities for local production of food, fibre and aggregates and decreasing reliance on imported goods and services. Also, by making provision for efficient transport of goods and people.

20. Through the Auckland Plan, how can we celebrate and further protect our distinctive natural and rural environment? What are the most important values of Auckland’s rural land that we wish to protect, and how should we do so?

The greatest asset rural Auckland has is rural people. Rural environments are highly modified by people, but they contain features with varying degrees of natural character. It is recognised that elements that retain strong natural character should be recognised and provided for. Identification of such areas is paramount to ensure certainty for all. There must be a clear demarcation of these outstanding areas that fall within section 6 (of the RMA) rather than
elevating section 7 matters into areas that require specific identification and protection measures. Allowing for a viable rural sector will be the best method to ensure rural amenity is maintained.

It is also recognised that the same standards and priorities should not be set across the breadth of Auckland, because of the spatial variance. For example, Awhitu Peninsula has strong pastoral focus with some increasing opportunity for lifestyle development. The hill country in the north of the region has a plantation forestry industry established due to historic landuse patterns and land use capability. Franklin produces over half the vegetables consumed domestically. Waiheke and Kumeu have historically supported winegrowing activities. The diversity of rural land use adds resilience to the Auckland economy.

For this reason, rural land use planning should encourage flexibility and recognition of some of the requirements for an established rural production system. Rural landowners have lawfully established operations with an expectation that there will be access to resources. Increasingly, regional authorities are seeking to reverse historic water allocation decisions or increase compliance costs associated with maintaining existing use rights.

The Regional Council has progressed these “clawback” processes autocratically, and without any detailed analysis of the costs and benefits. One process involving 131 resource consents for take and use of water on the Franklin Lowland Streams is before the Court. These ad hoc new management objectives also are contrary to the policy approach that has been adopted by the Regional Council seeking to maintain that land in rural production.

The new National Policy Statement for the management of Freshwater seeks that standards and limits are set in catchments. Standards and limits are set based on a range of values and objectives. These will vary across Auckland. Regional Council has not engaged well with the rural community on how standards should be set. Any process to set standards should have rural community engagement at the start of the process.

It is entirely appropriate to maintain a primacy for rural production in some areas, give that priorities are placed on conservation of natural and historic heritage values in other parts of Auckland such as the Hunua and Waitakere Ranges, and the Hauraki Gulf. An approach that focuses on protection of particular values (such as soil or biodiversity) is not supported. All values require recognition in a sound planning approach.

People and Place
22. How do you think the Auckland Plan should promote and support high quality development in Auckland?

A structured and planned approach to managing growth is supported, with limitations on the ability for urban expansion to continue into the rural areas at the current rate.

26. What do you think about the idea of gradual change to the way Auckland grows by having some new areas for growth (outside the current MUL), while also aiming to redevelop existing areas in a better way? What do you think about the idea of allowing more intensive development in areas where people particularly like to live, such as coastal
environments? Do you think there should be specific “no-go” urban areas where new development should not be allowed, and what should be the nature of such “no-go” areas – what should be allowed in them and what not? How do we accommodate growth while supporting the vision of becoming the world’s most liveable city? Should the Auckland Plan:

- Support a compact city model that focuses growth in centres and corridors,
- Supports public transport and protect rural areas from further residential and business development;
- Consider areas with high amenity, (e.g. coastal or rural aspects, elevated sight lines on ridges) for intensification;
- Support more local employment close to people’s homes;
- Protect specific areas from urban development;
- Support a high standard of urban and rural design and heritage protection;
- Investigate areas for new development.

As noted in the Rural Industry Group objectives for the spatial plan (Appendix 2), the parties see the primary purpose of the rural areas of Auckland being primary production and they recognise that, in order to achieve that purpose, there is a need to impose restrictions on urban expansion. It follows from that that the parties support growth in the metropolitan area of Auckland being contained. However this has not been the approach that has been adopted to date.

Landowners carefully watch the developments of neighbours and see that there are elements of natural justice at stake if the rights and interests conferred on one landowner are not available to all. District and regional plans and statutes confer a bundle of rights and privileges on private land owners. This needs to be acknowledged.

Previous Councils have rated landowners on their potential to develop the land, not what they are actually using the land for. In effect, these landowners have already paid for the development right that has been conferred. This bundle of conferred and authorised rights needs to be recognised in any change in the planning framework which is made to encourage more compact growth and better urban form.

The parties recognise that there are pockets of urban Auckland in the more general rural areas of Auckland, and the Rural Advisory Panel’s mandate extends into those locations. Thus the parties support change being made to the way Auckland grows by providing new areas for growth around some existing towns. However, such development needs to take place in a way that protects the rural character and rural productive base of those towns and their surrounds, in particular where those towns provide a base for rural service industries. The discussion document recognises that rural land and landowners already provide significant amenity values to Auckland communities - at no cost to the Auckland communities. The question is: if the plan framework is to change how is the bundle of conferred property entitlements to be recognised?

A green belt has been suggested for Auckland City that incorporates land in private ownership. Much of the proposed belt would be rural land. It is clear that the intent of the greenbelt is to limit urban expansion, but we have no definition provided that adequately describes how this belt of land would be utilised, and what package of rights and interests are proposed for
landowners within the proposed green belt. In addition, the term “green belt” is considered by
the parties to give a misleading impression of the nature of the peri-urban band around
metropolitan Auckland. The land generally has a rural type zoning. But it is also characterised
by high levels of rural residential living. “Transitional zone”, may be an alternative term.

**Without proposing a definition for a green belt or transitional zone, the following “draft” principles are proposed to guide discussions:**

1. Existing use rights for rural production activities would be protected, and recognised in plan documents with permitted activity status.
2. Significant aggregate resources and the access routes to these would be protected for the purpose of current and future aggregate extraction.
3. Functioning rural production systems and associated rural trades and / or services would be anticipated.
4. Catchment management strategies developed in close consultation with landowners would guide use and development.
5. Loss of subdivision opportunities and rights would need to be fully offset. Appropriate offsets may include:
   - Recognition that reliable access to sufficient quantity and quality of water is essential for efficient rural production activities.
   - Riparian management funding.
   - Allocation of transferable development rights.
   - Compensation for loss of rights through the rating system.
6. Any land within the rural / transitional zone should be rated based on the value for current use, not on the potential to be able to subdivide the land. Landowners with no subdivision development rights should expect considerable decreases in the rates they pay now.
7. Access to rural / transitional land would need to be negotiated collectively with landowners and their representative organisations.

A mixture or all of these principles are what we would envisage as being part of the entitlement of any rural landowner – within, or outside the transitional zone on rural land.

**People and Infrastructure**

27. Do you agree with these principles? Are there others you would add?

Generally, the parties would propose another principle, to ensure that the development of infrastructure is *facilitative* for industry and communities. Infrastructure planning for transport and water supply should be prioritised to meet the needs and requirements for industry seeking to grow productivity. Transportation is supported as the number one priority for
Auckland City. Enabling on farm water storage infrastructure is also a key priority for rural industry.

Enabling transport access for aggregate resources and other activities that generate considerable numbers of heavy vehicles:

A key challenge facing activities that generate large numbers of heavy vehicle movements is ensuring that access routes are not compromised by sensitive activities locating in close proximity to these access routes.

Inadequate recognition has been given to ensuring heavy haulage access routes to aggregate resources and other key freight hubs are protected through both statutory and non-statutory documents. Obtaining access to aggregate resources in recent times has become a key issue throughout the country as residents along access routes object to noise and vibration generated by heavy vehicle movements, and quarries are severely limited in their output volume by restricted truck movements. 14

In many cases, intensification of sensitive uses around key transport routes (whether they be State Highways, collector or local roads), has resulted in activities having their vehicle numbers limited to the detriment of economic growth. Such limitations can result in operations having to cease permanently. In addition, the location of sensitive activities close to heavy haulage transport routes has the potential to adversely affect the health and well being (i.e. due to noise and vibration) of those persons involved with the sensitive activity.

The Spatial Plan should enable work already started under the Regional Land Transport Strategy and recognise the potential for conflict between sensitive development in close proximity to the roading network and road traffic, in particular heavy vehicle movements, and provide direction on how such conflicts can be avoided, remedied or mitigated. One approach could involve recognising the importance of key local roads to locationally constrained activities such as mineral extraction. Examples of such roads are shown in Map 1 of the Auckland Regional Land Transport Strategy (attached).

There is a direct link between infrastructure and productivity, so the emphasis should be on the physical assets. An efficient freight industry is vital in New Zealand’s overall competitiveness as it is the critical link between areas of production and markets. Greater Auckland generates 34 per cent of the national output for freight, creating a heavy demand for freight services. Ports of Auckland and the Auckland International Airport cater for 75 per cent of New Zealand’s imports and 42 per cent of its exports. Many of these export opportunities are for niche fresh foods from the aquaculture, berry or exotic food industries. Auckland has a market advantage with the international airport that many other rural areas lack.

14 Recent decisions of the Environment Court regarding Brookby, Whangaripo, Pokeno and Otamarakau Quarries (refer the decisions of Brookby Quarries Ltd v Manukau City Council A153/06, Rodney Aggregate Supplies v Rodney District Council A196/05, Winstone Aggregates v Franklin District Council A80/02, Winstone Aggregates v Western Bay of Plenty District Council A127/2011) you will note that truck movements have been the most significant/or a very significant issue in all cases.
On a national basis:

- Road freight tonne-kilometres has increased by 34% since 2000.
- Rail currently moves 18% of freight (in tones-kilometres) within New Zealand. Coastal shipping moves 15% of inter-regional freight (in tonnes-kilometres).
- New Zealand has experienced a trend towards fewer, but larger ships in the sea freight sector. Between 2002-2007 the average number of vessels arriving in ports each month reduced from approximately 600 to below 500. However, in the same period, the total gross tonnage of freight increased from approximately 2.2 to 4.2 tonnes.
- In the period 200-2007, there was 14% growth in the value of New Zealand exports carried by air and 8% growth in value of imports.

Therefore continuing to support developments of roading infrastructure is still warranted with regards to freight movements. Port and airport activities will also need reviewing as changes in sea-freight are being driven by international developments.¹⁵

It is important to ensure that businesses are at the forefront of their fields, connecting easily with the rest of the world in which they are trading with. This can only be achieved with robust broadband infrastructure. The way forward to achieving economic growth is through innovation. Rural communities undertaking production based activities must therefore be supported with technology and the broadband infrastructure to achieve the desired growth.

**Gas Infrastructure**

Gas infrastructure provides for a regionally significant technology focussed greenhouse / glasshouse sector. Planning approaches should provide for these opportunities and not discourage industry dependent on access to this infrastructure.

**Water Storage Infrastructure and rural water infrastructure**

The Parties note that Question 31 relating to water infrastructure was deleted and replaced by a blanket statement of intention from the CCO. It is not appropriate for the Council to address water infrastructure in this way. The Parties support the development of an integrated and efficient water infrastructure network that recognises and provides for rural water use as well as urban use. Key opportunities may exist with the development of new infrastructure sourcing water from the Waikato River, either through the addition of a third pipeline or the removal of local water infrastructure in Franklin from access to local resource and replacement with pipeline water.

Small scale storage opportunities are fundamental to continued security of water access on rural properties and current policy structures dis-incentivise the development of storage facilities. There needs to be recognition of the significant benefits created by providing water for rural production. Currently all Council efforts have resulted in the removal of these resources from productive land, Council management of the resource needs drastic improvement. The current policy structure is inappropriate.

---

In areas where rural production relies on reliable water for irrigation of vegetable and fruit crops there needs to be a spatial offset that prioritises production values - much as environmental values are prioritised in key areas such as the Hunua and Waitakere Ranges and the Hauraki Gulf. Best practice should be promoted and incentivised, but the provisioning of food for Auckland communities should be prioritised through favourable use and development objectives, policies and rules. Coastal marine protection areas that have been identified may also require a “constraints based” approach that recognises land based production values.

29. What is your preference for the form of a potential additional harbour crossing?

Investment in infrastructure such as a harbour crossing should be tested against the fundamental principles of building an economy – the ability of such investment to:

- retain existing wealth
- generate new wealth
- capture wealth from elsewhere (such as domestic and international tourism).
APPENDIX 1: MEMBER ORGANISATIONS FOR THE RURAL INDUSTRY GROUP

Aquaculture
Aggregate and Quarry Association
Auckland Dairy Action Team
Awhitu Peninsula Landcare
Beef + Lamb NZ
DairyNZ
Federated Farmers
Fonterra Co-Operative Group Limited
Horticulture NZ
Irrigation NZ
MAF
NZ Fertilizer Manufacturers Research Assn
NZ Forest Owners Association
NZ Tree Crops Association
NZ Winegrowers
Pukekohe Vegetable Growers Association
Rural Contractors New Zealand
Rural Women New Zealand
Landowners and Contractors Protection Association
APPENDIX 2: KEY OBJECTIVES FOR THE RURAL INDUSTRY GROUP AND THE RURAL ADVISORY PANEL

Auckland Spatial Plan

Introduction

Most of Auckland is rural, and a large part of rural Auckland is rural production land. Rural Auckland has its unique rural character and both Auckland’s rural character and its rural economy continue to undergo change as Auckland grows. Auckland’s rural character gives urban Auckland a sense of place, and is just as fundamental to Auckland’s identity as its parks, ranges, harbours, volcanic cones, islands, lakes as well as the many different beaches that Aucklanders identify with.

Auckland’s rural industries have been influenced by land values, but rural productivity has increased rapidly, and has readily adapted to changing technology and economies of scale. New opportunities are continuously emerging that add value to Auckland’s economy. Rural Auckland is seen by many as being its food bowl, so for this reason alone it is regionally significant. Auckland is an entity with a strong urban focus, but it is equally important that rural economy and community are recognised. For example, the Franklin area produces most of Auckland’s vegetables.

Total sales by Auckland’s horticulture sector in 2006 was in excess of $227 million, of which 92.8% was exported out of the region. Like most other primary production, horticulture is driven by exports, not domestic sales. As at 1 April 2009 there are approximately 39,000 ha of exotic forests in Auckland. These forests are estimated to contribute approximately $70 million per annum to New Zealand’s GDP and to sequester approximately 975,000 tonnes of carbon dioxide per annum.

There are 340 dairy herds in Auckland, which produce a gross annual payment to farmers of $230 million. In addition to this there is a significant contribution to Auckland’s economy generated by dairy farming, for example on processing, transport and infrastructure. Auckland’s sheep and beef farmers are estimated to contribute approximately $100 million annually into the Auckland and the national economy.

There is a significant aquaculture industry in Auckland, producing mainly mussels and pacific oysters. 26% of the national output of pacific oysters is grown on Auckland’s coast. Aquaculture development is a key government initiative, with the national industry targeted to turn over $1billion in sales by 2025. Auckland’s wine industry is significant nationally, and its wine producing areas attract more wine tourists than does any other part of New Zealand, 130,700 visitors in the 2007-08 year.

Rural Auckland is home to a large equine and equestrian industry which has growing sporting, recreational and tourist significance, which ranges from breeding to gallopers, sporthorse to equestrian sports and includes a large equine supply chain.
All up, the direct annual contribution to Auckland’s economy by its rural sector is estimated to
be a little over $1b. While this represents a direct contribution of only about 2% of the
Auckland economy, it needs to be remembered firstly, that this is contribution is measured
against the contributions made by a large proportion of the nation’s commercial and industrial
enterprises and secondly, that the direct contribution of agriculture to the New Zealand
economy as a whole is only about 5%. The significance of Auckland’s rural sector should be
measured, not so much against the contribution it makes to the Auckland economy, but
against the contribution it makes to the national economy and by the ability of the rural sector
as a whole to access offshore markets and to generate foreign exchange.

It is against that background that Auckland’s rural industries have formed the Rural Industry
Group, and prepared a set of objectives for Auckland’s Spatial Plan.

**RIG Objectives for Spatial Plan**

1. The primary purpose of the rural areas of Auckland is rural production

   - The regulatory framework should be such that it promotes and prioritises growth and
     innovation on production land and in the rural production economy
   - There should be a program established to benchmark the social, economic,
     environmental and cultural performance of rural Auckland
   - Council will ensure that there is meaningful collaboration and engagement between
     itself and the rural community

While the primary purpose of the rural areas of Auckland is rural production, it is recognised
that the rural areas of Auckland contain public parkland and reserve land.

2. Recognise that in order to achieve the primary purpose of the rural areas of Auckland, ie. rural
   production, there is a need to impose restrictions on urban expansion

   - But recognise that urban expansion has taken place onto rural land
   - Recognise also that a complete rural production system requires labour and services to
     be readily available
   - In locations where the rural production system is incomplete, it is appropriate to
     provide for residential expansion

Affirm that urban growth should take place in a structured way. The regulatory regime should
not be such that it precludes the establishment of new villages in the rural area, where these
may in some way be innovative. Nevertheless, despite the focus on rural production, recognise
and provide for those who want to live in rural areas

It may be appropriate to establish special residential zones in the rural area around
metropolitan Auckland within which there is greater certainty that those rural production
activities which are likely to have significant adverse effects on residential activity (such as
quarrying and piggeries) will not occur.
Examples are the “rural lifestyle environment” in the Rodney District Council Rural Strategy (September 2010) and the “Runciman Triangle” concept which is under consideration in the former Franklin District.

3. It should be made clear that, in the rural areas outside the special residential zones and urban zones, the needs of those engaging in residential activity must be secondary to the needs of those engaging in rural production activities.

4. The rating system should be based on the actual use of the land rather than the potential use of land, and it should reflect the services, including the levels of those services, that are reasonably available to ratepayers.

5. Market forces are to determine the type and location of rural production undertaken in rural Auckland.

6. Any standards and limits set should be relevant to the activities being conducted, or those that are likely to be conducted, in the rural area. There should be only such rules as are necessary and reasonable.

7. Recognise and provide for access to land, surface and ground water, labour and infrastructure.

8. Acknowledge the role of the rural areas in providing the rural backdrop to urban Auckland.

   - While rural areas may form a backdrop to urban Auckland and allow for secondary uses such as the provision of beaches, parks, open spaces and commercial activities, the primary purpose of rural production must be recognised.

   - There is a place for some controls to protect Matters of National Importance but in the context that such controls should not serve to constrain the primary purpose of the rural areas of Auckland which is rural production.
APPENDIX 3

THE ECONOMIC CONTRIBUTION OF AUCKLAND’S AGRICULTURAL SECTORS TO THE AUCKLAND ECONOMY

BY

DR WARREN R HUGHES

INTRODUCTION

The purpose of this analysis is to objectively estimate the economic importance of Auckland’s agricultural sectors to the Auckland economy. Activity in Auckland’s agricultural sectors contributes directly to the Auckland regional economy (now administered by Auckland Council) both in employment and gross regional product (or value added), but also indirectly to the extent that they use outputs from other sectors such as Agricultural Services and contribute inputs to follow-on processing sectors such as Meat Processing. These indirect contributions to other Auckland sectors turn out to be even more important in terms of employment and value added than Auckland Agriculture’s direct contribution to these economic measures (see Table 2 below).

BASIC DATA

An estimated 88% of the Auckland region (now administered by Auckland Council) is designated as “rural”, while direct employment in the primary producing sectors at 4,195 is only 0.7% of Auckland’s total employment of 611,500 (Employment Count as at February 2010). Related sectors such as Agricultural Services, Meat Processing, Fruit & Vegetable Processing directly employ another 11,820 (1.9%) persons making for a direct employment total of 16,015 persons or 2.6% of Auckland employment by agricultural and related sectors (see Table 1 below).

Economic impacts for agricultural activities have been estimated using a 112-sector economic model of the Auckland economy for the year ended December 2009, the latest model available for this type of analysis. Individual sectors in the model are italicised (as above) for easy identification.

The main conclusion of the analysis presented here is that, while direct employment in the primary producing sectors is relatively minor at 0.7% of Auckland’s total employment, the total contribution of these sectors both directly and indirectly in terms of Value Added or regional GDP, is much larger at 2% – 3% of Auckland’s GDP. Activity in sectors such as Horticulture, Sheep & Beef Farming, Dairy Farming etc. links backward to input supplying sectors such as Agricultural Services, Electricity, Road Freight etc. And this farming activity also links forward to sectors such as Meat Processing, Dairy Processing, Fruit & Vegetable Processing etc. that use the output of the farms in Auckland. A proper accounting for the total value generated from these initial farming activities by these linkages raises the contribution of primary production to the 2% – 3% range for Auckland, far exceeding the direct farm employment contribution of just 0.7%.

RURAL ADVISORY PANEL
Horticulture New Zealand | Federated Farmers | Fonterra | New Zealand Winegrowers | New Zealand Forest Owners Association
Rural Contractors New Zealand | Aggregates and Quarry Association of NZ | Sport-horse & Equestrian Associations | Aquaculture Associations | Rural Industry Group
DIRECT EMPLOYMENT IN FARM & RELATED SECTORS

Table 1 below summarises direct employment in various sectors within the Auckland economy as estimated at February 2010. The corresponding 2011 data is not available until November 2011.

**TABLE 1: DIRECT EMPLOYMENT IN AUCKLAND’S AGRICULTURAL & RELATED SECTORS AS AT FEB 2010**

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>EMPLOYMENT COUNT Feb 2010</th>
<th>PERCENT OF AUCKLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture (e.g. onions, potatoes and green leaf vegetables)</td>
<td>2110</td>
<td></td>
</tr>
<tr>
<td>Apple &amp; Pear</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Kiwifruit</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Other Fruit (e.g. grapes, blueberries, citrus)</td>
<td>830</td>
<td></td>
</tr>
<tr>
<td>Mixed Farming (e.g. wheat, maize, feed)</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Sheep &amp; Beef Farming</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>Dairy Farming</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>Other Farming (e.g. goats, pigs, poultry, horses)</td>
<td>430</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PRIMARY PRODUCING</strong></td>
<td><strong>4,195</strong></td>
<td><strong>0.7%</strong></td>
</tr>
<tr>
<td>RELATED SECTORS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Services</td>
<td>1380</td>
<td></td>
</tr>
<tr>
<td>Meat Processing</td>
<td>990</td>
<td></td>
</tr>
<tr>
<td>Poultry Processing</td>
<td>720</td>
<td></td>
</tr>
<tr>
<td>Bacon Ham &amp; Smallgoods</td>
<td>510</td>
<td></td>
</tr>
<tr>
<td>Dairy Processing</td>
<td>1330</td>
<td></td>
</tr>
<tr>
<td>Fruit Vegetable &amp; Oil Processing</td>
<td>1130</td>
<td></td>
</tr>
<tr>
<td>Other Food (e.g. animal foods)</td>
<td>3890</td>
<td></td>
</tr>
<tr>
<td>Beer &amp; Wine</td>
<td>1870</td>
<td></td>
</tr>
<tr>
<td><strong>SERVICES &amp; PROCESSING</strong></td>
<td><strong>11,820</strong></td>
<td><strong>1.9%</strong></td>
</tr>
<tr>
<td><strong>ALL AGRICULTURAL &amp; RELATED SECTORS</strong></td>
<td><strong>16,015</strong></td>
<td><strong>2.6%</strong></td>
</tr>
</tbody>
</table>

Although direct employment is falling in sectors such as Sheep & Beef Farming and Dairy Farming, employment in the related sectors such as Meat Processing, Poultry Processing and Dairy Processing is rising steadily at annual rates in the range 2.4% - 7.8% over 2007 – 2010. It is quite possible that, even with direct employment falling in the farming sectors, farm consolidation and/or rising productivity in the remaining farms may result in static or possibly increasing output levels of primary production.

VALUE ADDED FROM AUCKLAND PRIMARY PRODUCTION

The total contribution, both direct and indirect, of Auckland’s farmers to the Auckland regional economy is summarised in Table 2 below. While sales revenue by sector is easily measured, the best measure of economic value to an economy such as Auckland is Value Added or regional GDP. Value Added comprises gross wages and salaries of employees (including super and ACC levies), gross operating surpluses of business units (including SOEs) and depreciation of plant in business units used up in current production. Some proportion of wages and salaries and operating surpluses accrues to government via income and company tax as well as via indirect taxes such as GST and excise tax. Value Added therefore can be thought of as income for workers, business owners and government arising out of economic activity in all sectors in a city, region or country for a given period such as a year.
The 112-sector economic model allows us to estimate how total Value Added or GDP created in an economy should be attributed to particular sectors. In the present case, production of livestock, poultry, milk-solids and other primary outputs generates income for farmers but also income for workers in sectors such as Agricultural Services, Electricity, Financial Services etc. (backward linkages). In addition the output from these farms goes into Auckland processing sectors such as Meat Processing, Poultry Processing etc. generating income for workers in such plants (forward linkages). Accounting for all these linkages shows the total Value Added generated by the farmers producing the output that is the first step in a value-adding chain of activity through to final consumption by New Zealanders or exports overseas. Table 2 below summarises this information.

### TABLE 2: TOTAL VALUE ADDED GENERATED BY AUCKLAND FARMERS FOR THE AUCKLAND ECONOMY

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>Employment 2010</th>
<th>Direct VA* 2010 $ mill</th>
<th>Backward Linked VA $ m</th>
<th>Sub-Total VA $ mill</th>
<th>Forward Linked VA $ m</th>
<th>Total Value Added $ m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticulture</td>
<td>2110</td>
<td>158.7</td>
<td>144.6</td>
<td>303.3</td>
<td>252.4</td>
<td>555.7</td>
</tr>
<tr>
<td>Other Fruit</td>
<td>830</td>
<td>16.4</td>
<td>9.4</td>
<td>25.8</td>
<td>36.2</td>
<td>62.0</td>
</tr>
<tr>
<td>Sheep &amp; Beef Farming</td>
<td>320</td>
<td>44.2</td>
<td>6.6</td>
<td>50.8</td>
<td>151.5</td>
<td>202.3</td>
</tr>
<tr>
<td>Dairy Farming</td>
<td>370</td>
<td>95.7</td>
<td>10.5</td>
<td>106.2</td>
<td>98.7</td>
<td>204.9</td>
</tr>
<tr>
<td>Other Farming</td>
<td>430</td>
<td>44.6</td>
<td>23.2</td>
<td>67.8</td>
<td>90.2</td>
<td>158.0</td>
</tr>
<tr>
<td><strong>TOTAL ABOVE 5 SECTORS</strong></td>
<td><strong>4060</strong></td>
<td><strong>553.9</strong></td>
<td><strong>629.0</strong></td>
<td><strong>1182.9</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL 8 PRIMARY SECTORS</strong></td>
<td><strong>4195</strong></td>
<td><strong>572.3</strong></td>
<td><strong>649.9</strong></td>
<td><strong>1222.2</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*VA = Value Added, gross regional product (GRP) or regional GDP

Note that if all farm activity in the Auckland region ceased, the immediate loss to Auckland GDP would be the Sub-Total in Table 2 or $572.3 m. That is the direct and backward-linked Value Added. The forward linked Value Added at $649.9 m would not necessarily be lost to the Auckland economy since Auckland farm production could be replaced by farm outputs from adjacent regions, mainly Waikato and Northland. Clearly, however, another $649.9 m of Auckland GDP would also be “at risk” if farming ceased in Auckland. Table 2 shows a total Auckland GDP attributable to Agriculture of $1,222.2 m after scaling up the 5-sector totals by 4195/4060 to account for employment and production in another three minor primary-producing sectors (see Table 1).

The total Value Added of $1,222.2 m attributable to Auckland farmers represents 2.6% of Auckland GDP estimated at $47,636 m in the Auckland Unleashed publication by Auckland Council. After allowing for variations in primary production levels (e.g. climate, world prices, exchange rates etc.), the economic model year utilized (currently 2009) and the scaling approximation above in Table 2, a 2% – 3% range for Auckland’s GDP percentage attributable to Auckland farmers is credible after accounting for all linkages.

### AUCKLAND GROWTH FORECAST OUT TO 2030

The latest NZ Institute of Economic Research (NZIER) forecast growth rates in real GDP for various sectors and NZ in total out to 2030 (March years) are summarised in Table 3 and reproduced in full in Appendix 1.
TABLE 3: NZIER PERCENTAGE CHANGE FORECASTS FOR REAL GDP BY SECTOR FOR THE YEARS 2010 – 2030

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>2010 - 2015</th>
<th>2016 -2020</th>
<th>2021 -2025</th>
<th>2026 - 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4.8</td>
<td>3.2</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>2.0</td>
<td>1.5</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Business Services</td>
<td>1.8</td>
<td>2.4</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>NZ GDP</td>
<td>1.9</td>
<td>2.1</td>
<td>1.9</td>
<td>1.8</td>
</tr>
</tbody>
</table>

For the sectors in Table 3 and NZ in total, all percentage changes are positive. Finance & Insurance is number 1 in the list of key contributors to Auckland’s GDP as listed on p. 44 of Auckland Unleashed and Auckland’s future as NZ’s centre for financial and business services is clearly assured. But forecasted growth in Agriculture significantly outstrips all 28 other sectors (apart from Communication Services) in percentage growth over the next 20 years based on the latest NZIER research available (see Appendix 1). This results from the assumption that the Asian growth of recent years (and particularly China and India) will continue well into the future presenting Australasia with unprecedented opportunities as a major food, beverage, floriculture etc. supplier to the Asian region. On the basis of the assumed growth rates in Table 3, the GDP estimates in Table 2 can be projected out to 2030. Auckland GDP is assumed to grow at the same rate as NZ’s GDP. These projections are summarised in Table 4.

TABLE 4: PROJECTED AUCKLAND GDP AND AGRICULTURAL GDP OUT TO 2030 IN 2010 PRICES

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AUCKLAND GDP $ m</th>
<th>AGRICULTURAL GDP $ m</th>
<th>PERCENT OF AUCKLAND GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>47,636</td>
<td>1,222</td>
<td>2.6%</td>
</tr>
<tr>
<td>2015</td>
<td>52,337</td>
<td>1,545</td>
<td>3.0%</td>
</tr>
<tr>
<td>2020</td>
<td>58,068</td>
<td>1,808</td>
<td>3.1%</td>
</tr>
<tr>
<td>2025</td>
<td>63,798</td>
<td>2,086</td>
<td>3.3%</td>
</tr>
<tr>
<td>2030</td>
<td>69,750</td>
<td>2,372</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

All GDP values in Table 4 are in millions of 2010 dollars. The NZIER projected growth rates are for March years whereas the Auckland GDP values are for calendar years, but this difference would not affect the conclusions drawn here such as the 2% – 3% Agricultural share of Auckland GDP in 2010.

The most important point of the projections in Table 4 is that Agriculture’s share of Auckland GDP, currently in the 2% – 3% range, will grow a full percentage point to the 3% – 4% range by 2030 and contribute $2.4 b annually to the City.

Any sector contributing $2.4 b (2010 dollars) to a NZ city or region’s GDP annually should be nurtured. With Auckland as the main tourist gateway into NZ, hospitality services (involving food, beverage, floriculture etc.) in the Auckland economy are already an important driver in generating economic activity throughout the region. Accordingly, it will be important for Auckland to develop efficiency and self-sufficiency in provisioning for tourists so as to further enhance the region’s tourism capabilities of which farm tourism will also be a feature.

Furthermore, Auckland currently at about one third of the NZ economy, could also evolve into a world financial centre given its unique time window as a bridge between the closing of US financial markets and the opening of the Asian markets. If this were to eventuate, hospitality services in Auckland would assume even greater significance in the future with Auckland Agriculture playing an important role in guaranteeing self-sufficiency to some extent in food, beverage, floriculture etc. provisioning. The greater the extent of home-based production with typically lower logistic etc. costs, the greater the likelihood of keeping out-of-region suppliers price competitive.
REFERENCES


## APPENDIX 1

### Table A23 Real GDP by industry-NZ Level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1.5</td>
<td>4.8</td>
<td>3.2</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Fishing</td>
<td>-2.0</td>
<td>8.9</td>
<td>1.3</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Forestry and logging</td>
<td>2.4</td>
<td>1.7</td>
<td>1.7</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>8.4</td>
<td>-3.8</td>
<td>1.6</td>
<td>3.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Food, beverage and tobacco manufacturing</td>
<td>-2.5</td>
<td>1.0</td>
<td>0.7</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Textiles and apparel manufacturing</td>
<td>-4.7</td>
<td>-1.2</td>
<td>-0.2</td>
<td>-0.9</td>
<td>-0.7</td>
</tr>
<tr>
<td>Wood and paper products manufacturing</td>
<td>-1.6</td>
<td>1.3</td>
<td>1.7</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Printing, publishing and recorded media</td>
<td>-3.4</td>
<td>-1.7</td>
<td>-0.2</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Chemicals manufacturing</td>
<td>-2.6</td>
<td>-0.3</td>
<td>1.7</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Non-metallic mineral products manufacturing</td>
<td>-3.0</td>
<td>-0.1</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Metal product manufacturing</td>
<td>-6.4</td>
<td>1.4</td>
<td>2.9</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Machinery and equipment manufacturing</td>
<td>-4.6</td>
<td>1.8</td>
<td>2.7</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Furniture and other manufacturing</td>
<td>-6.8</td>
<td>-1.3</td>
<td>0.1</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>0.7</td>
<td>-0.3</td>
<td>0.4</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Construction</td>
<td>-2.6</td>
<td>1.0</td>
<td>1.3</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>-1.0</td>
<td>2.0</td>
<td>2.2</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Retail trade (including motor vehicle repairs)</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Accommodation, cafes and restaurants</td>
<td>0.1</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>-0.5</td>
<td>2.9</td>
<td>2.8</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Communication services</td>
<td>3.7</td>
<td>4.9</td>
<td>5.1</td>
<td>4.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>5.1</td>
<td>2.0</td>
<td>1.5</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Property services</td>
<td>0.9</td>
<td>1.7</td>
<td>1.6</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Business services</td>
<td>5.0</td>
<td>1.8</td>
<td>2.4</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Central government admin. and defence</td>
<td>5.2</td>
<td>1.1</td>
<td>2.0</td>
<td>2.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Local government admin.</td>
<td>5.2</td>
<td>0.3</td>
<td>1.5</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Education</td>
<td>-0.8</td>
<td>0.6</td>
<td>1.3</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Health and community services</td>
<td>3.8</td>
<td>3.6</td>
<td>3.7</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Cultural and recreational</td>
<td>0.3</td>
<td>2.8</td>
<td>2.8</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Total GDP</td>
<td>1.0</td>
<td>1.9</td>
<td>2.1</td>
<td>1.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Population</td>
<td>1.2</td>
<td>1.1</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Real GDP per person</td>
<td>-0.2</td>
<td>0.8</td>
<td>1.3</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Consumers price index</td>
<td>2.7</td>
<td>1.6</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Statistics New Zealand, NZIER forecasts and projections
Dr WARREN R HUGHES - AUTHOR PROFILE

The author is Cambridge, NZ born and a graduate of the University of Auckland and Indiana University in the USA, where he completed his doctorate in Business Economics and Public Policy in 1970.

Since that time, he has taught in the areas of econometrics, forecasting, financial economics and managerial strategy at The University of New South Wales in Sydney (1970 – 1978) and most recently at The University of Waikato (1978 – 2007). At various times, he has taught in MBA programmes at the University of Florida in Gainesville and in the Graduate School of Management at the University of California at Irvine. Dr Hughes retired from the University of Waikato in 2007 and was appointed an Honorary Fellow in Economics in 2008. At the present time, he works as an independent economic consultant based in Auckland.

The author has published extensively, mainly as single-authored articles in international journals such as Decision Sciences, Theory and Decision, The Journal of Business, Mathematical & Computer Modelling, Environment & Planning, Australian Journal of Management, Forest Science, Australasian Journal of Regional Studies and, most recently in April 2009, OMEGA, the international journal of management science and again in September 2010 in the Chinese Business Review. Other articles on theoretical and applied economics have been published by the author in NZ Economic Papers and Australia’s Economic Record. He is a member of the Advisory Board for the Wiley journal Managerial and Decision Economics and maintains a continuing interest in the latest developments in economic theory as it relates to management and business. The author has developed a particular expertise in the area of impact and regional analysis. He was the Editor/Manager of the Regional Economic Bulletin, which focused on topical issues relevant to the business and wider communities, mainly but not exclusively, in the Waikato and Bay of Plenty regions. The Bulletin, which was a complimentary publication of the University of Waikato, ceased publication in 2008.

The author has acted as a consulting economist for Alpha Aviation Limited, Economic Solutions Limited, Environment Waikato, Carter Holt Harvey Limited, Contact Energy, Norske Skog Tasman Limited, Port of Tauranga Limited, Port of Napier, Feltex Carpets Limited, Man’O War Farm Limited, NZ Refining Company Limited, Zespri International, Waikato Innovation Park, Property Council of NZ, Creative Napier, Katalyst, Priority One BOP, Vision Manawatu, Enterprise Franklin, Venture Taranaki, various District Councils in the Waikato, Bay of Plenty, Hawkes Bay and other regions and for events such as Tauranga’s Montana Jazz Festival, Hamilton’s Balloons Over Waikato and Napier’s Art Deco Weekend.