RENEWAL OF RESOURCE CONSENTS TO ENABLE CONTINUED OPERATION OF SILVER FERN FARMS LIMITED'S PAREORA MEAT PROCESSING PLANT

ASSESSMENT OF ECONOMIC BENEFITS

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1. INTRODUCTION

Background

- Silver Fern Farms Limited (Silver Fern Farms) is a locally owned farmer cooperative and New Zealand's largest procurer of livestock and processor and marketer of meat products. Among the nineteen meat processing facilities it operates throughout New Zealand is the Pareora Meat Processing Plant located near the mouth of the Pareora River, 13 kilometres to the south of Timaru.
- 1.2 Silver Fern Farms is seeking to renew its Pareora Plant's existing consents from the Canterbury Regional Council for discharge of wastewater to land and sea.

Report Objective and Format

- 1.3 The purpose of this report is to assess the economic benefits from the continued operation of the Pareora Meat Processing Plant. The report will form part of the Assessment of Environmental Effects to be lodged in relation to the consents' renewal applications.
- **1.4** The report is divided into 5 parts (in addition to this introductory section). These are:
 - a consideration of the relevance of economic effects under the Resource
 Management Act (RMA);
 - a description of the key economic drivers of the South Canterbury subregion and the Canterbury region;
 - (c) the economic significance of Silver Fern Farms' Pareora Meat Processing Plant:
 - (d) the economic benefits from the renewal of resource consents and
 - (e) some overall conclusions.

2. ECONOMICS AND THE RMA

Community Economic Wellbeing

- 2.1 Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part II section 5(2) refers to enabling "people and communities to provide for their ... economic ... well being" as a part of the meaning of "sustainable management", the promotion of which is the purpose of the RMA.
- As well as indicating the relevance of economic effects in considerations under the RMA, this section also refers to "people and communities" (emphasis added), which highlights that in assessing the impacts of a proposal it is the impacts on the community and not just the applicant or particular individuals or organisations, that must be taken into account. This is underpinned by the definition of "environment" which also extends to include people and communities.
- 2.3 The continued operation of the Pareora plant enables the residents and businesses of the South Canterbury and Canterbury regions to provide for their social and economic wellbeing and this is discussed in later sections of this report.

Economic Efficiency

2.4 Part II section 7(b) of the RMA notes that in achieving the purpose of the Act, all persons "shall have particular regard to ... the efficient use and development of natural and physical resources" which include the economic concept of efficiency¹. Economic efficiency can be defined as:

"the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs"².

2.5 More generally economic efficiency can be considered in terms of:

See, for example, in *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73, the Court noted that all aspects of efficiency are "economic" by definition because economics is about the use of resources generally.

Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2nd edition), Harper Collins, page 148.

- Maximising the value of outputs divided by the cost of inputs;
- Maximising the value of outputs for a given cost of inputs;
- Minimising the cost of inputs for a given value of outputs;
- Improving the utilisation of existing assets; and
- Minimising waste.
- 2.6 The continued operation of Silver Fern Farms' Pareora plant is consistent with the efficient use of resources, especially in regard to the ongoing use of significant existing assets, transport cost savings and the economies of scale in production available at the plant. The ongoing operations of the plant also provide additional scale (or "critical mass") to the local economy and this improves resource use efficiency.

Value of Investment to the Existing Consents' Holder

2.7 Part 6, section 104 (2A) of the RMA requires the consent authority when considering a renewal of an existing consent to "have regard to the value of the investment of the existing consent holder." The value to Silver Fern Farms of its investment in the Pareora plant can be considered in terms of either the replacement value of the plant (\$165.5 million)³ or the foregone future earnings of the plant if it was forced to close. By both of these measures, the value of the Pareora plant is significant to the existing consents' holder.

Viewpoint

2.8 An essential first step in carrying out an assessment of the economic significance of the Silver Ferns Farms' Meat Processing Plant is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a district or wider regional viewpoint is adopted and sometimes even a nationwide viewpoint might be considered appropriate⁴.

Source: Silver Fern Farms Limited.

For example, there was an inference that the consideration of "Project Aqua" and other Waitaki River water allocation cases by a central government appointed body was to broaden the viewpoint from a local district or regional level to a wider national level.

- 2.9 In terms of expenditure, employment and incomes, Silver Fern Farms' Pareora Meat Processing Plant has most impact on residents and businesses of Pareora and Timaru. However its operation also impacts on farms, residents and businesses in the wider catchment area for stock supplied to the plant. Therefore this report considers the economic impacts of the plant and possible restrictions on its operations in the context of the South Canterbury sub-region (defined to include Timaru, Mackenzie and Waimate Districts, as well as the wider Canterbury region.
- 2.10 There are also private or financial benefits associated with the granting of consent renewals. Generally these benefits are not relevant under the RMA and the main focus of this report is therefore on the wider economic effects on parties other than Silver Fern Farms and its customers. Economists refer to such effects as "externalities"⁵.
- 2.11 However, Silver Fern Farms is owned by its farmer shareholders and financial benefits to it impact on the "economic (and social) well being" of these farmer shareholders including those within the local community i.e. the South Canterbury region. Increased returns to (or reduced costs for) farmer shareholders in Southland will flow through to increased expenditure, employment and incomes within the South Canterbury and Canterbury economies, as a consequence of increased disposable income for local farmer shareholders. Also financial benefits to Silver Fern Farms are relevant with respect to the "efficient use and development of natural and physical resources" and New Zealand's export competitiveness, given the Pareora plant's significant scale and the importance of meat and meat product exports to the New Zealand economy.

3. BACKGROUND TO THE SOUTH CANTERBURY SUB-REGIONAL AND CANTERBURY REGIONAL ECONOMIES⁶

South Canterbury Sub-Regional Economy

Defined as the side effects of the production or use of a good or service, which affects third parties, other than just the buyer and seller.

Data in this section from Statistics New Zealand.

- 3.1 Statistics New Zealand's June 2015 population estimate for the South Canterbury sub-region is 58,510 or 10.0% of Canterbury's population and 1.4% of New Zealand's total population. In 2006 population in the South Canterbury sub-region was 55,080 persons, which represented 10.2% of Canterbury's population. The South Canterbury sub-region's population over the period 2006 to 2015 has grown by 6.3%, as compared to growth of 8.6% for the Canterbury region and 9.8% for New Zealand as whole.
- 3.2 Statistics New Zealand's 'medium' population projections⁷ have South Canterbury's population increasing at an average rate of 0.2% per annum over the period 2015-43, compared to an average rate of growth for the Canterbury region of 0.8% per annum and for New Zealand of 1.1% per annum.
- economy on agriculture and agricultural product processing. In February 2015, 3,590 jobs (13.1%) of South Canterbury's 27,420 jobs were in the agriculture, forestry and fishing industry group, with most (an estimated 3,373 jobs or 94%) being agricultural jobs. The manufacturing sector accounted for 4,860 jobs or 17.7% of total employment, with 3,315 jobs in food manufacturing meat and meat product manufacturing engaging 1,400 persons and dairy product manufacturing engaging 820 persons.⁸ Other important sectors are retail trade (2,950 jobs or 10.8% of total employment), health care and social assistance (2,840 jobs or 10.4% of all jobs), accommodation and food services (1,900 jobs or 6.9% of total employment) and education and training (1,770 jobs or 6.5% of total employment).
- 3.4 Apart from tourism which accounts for some but not all⁹ of the jobs created in the retail trade and accommodation and food services sectors, the key economic drivers of the South Canterbury economy are agriculture and agricultural product

Statistics New Zealand prepare three sets of projections – high, medium and low – according to natural population change (i.e. the net effect of birth and death rate assumptions) and net migration assumptions. These projections do not explicitly incorporate assumptions about different rates of economic development. Also the projections have not been updated since the Christchurch City earthquakes.

⁸ Some of these figures are understated due to numbers not being disclosed for confidentiality reasons at a district level.

Employment in tourism is difficult to identify from official statistics since the relevant sectors such as retail trade and accommodation and food services for which data is collected meet the needs of domestic and international visitors, business travellers and local residents and businesses.

processing. Employment in other sectors is to a large extent driven by the demand for goods and services by these industries and their employees with the so called "multiplier" effects¹⁰ creating additional jobs for the sub-region's economy.

Canterbury Regional Economy

- 3.5 Statistics New Zealand's June 2015 population estimate for the Canterbury region is 586,400 or 14.0% of New Zealand's total population. It is the second largest region in New Zealand in terms of population. The Canterbury region's population is estimated to have declined between June 2010 and June 2012 by 2.1% due to Christchurch City's population falling by 21,200 (5.6%) after the earthquakes and only some of the consequent out-migration relocating to neighbouring districts within the Canterbury region. Statistics New Zealand estimate total employment in the Canterbury region in February 2015 at 284,110, which represents 13.9% of the total persons employed in New Zealand. The agriculture, forestry and fishing industry group employed 15,070 persons, of which 14,252 were engaged in agriculture (including 97% of agriculture and fishing support industry employees based on the proportionate shares in agriculture and fishing). Other significant sectors are manufacturing employing 34,850 (of which the most significant subsectors are food products manufacturing (11,500)¹¹, machinery and equipment manufacturing (5,460), fabricated metal products manufacturing (3,490) and transport equipment manufacturing (2,430)), construction (31,710), health care and social assistance (30,590), retail trade (28,710), education and training (21,460),professional, scientific and technical services (20,530) and accommodation and food services (18,450). Besides the tourism-related aspects of sectors such as retail trade, education and training and accommodation and food services, the key drivers of the Canterbury economy remain largely agriculture and manufacturing.
- 3.6 There are important linkages between the performance of the Canterbury regional economy (which is heavily dependent upon agriculture and agricultural product processing) and the Christchurch City economy. Apart from construction activities associated with the Christchurch rebuild, and tourism which accounts for some but

These are discussed in greater detail in the next section of the report.

¹¹ Including meat and meat products (4,730), seafood (880) and dairy products (1,930).

not all¹² of the jobs created in the retail trade and accommodation and food services sectors, the key economic drivers for Christchurch City are manufacturing and services provided to the agriculture and agricultural product processing activity within the wider Canterbury region.

- 3.7 Apart from the tourism related aspects of sectors such as retail trade, education and training and accommodation and food services, the key drivers of the Canterbury economy remain largely agriculture and manufacturing.
- 3.8 Future employment growth and associated economic well being for the Canterbury region is also likely to be largely associated with the three key economic drivers of agriculture, manufacturing (including agricultural product processing) and tourism, although in the short to medium term at least disruptions due to the 2010 and particularly 2011 earthquakes in and around Christchurch City will impede tourism growth.

4. THE ECONOMIC SIGNIFICANCE OF THE PAREORA MEAT PROCESSING PLANT¹³

Increased Economic Activity

- 4.1 Silver Fern Farms is involved in the processing of lambs, sheep, cattle, deer and other livestock at plants in New Zealand and the marketing of red meat and other animal products throughout the world. In the year ending 30 September 2015, Silver Fern Farms earned total income of \$2.434 billion, of which 83% was overseas direct¹⁴ export income, employed around 7,000 persons at the peak of the season and paid \$321 million in wages and salaries to its employees. The company is co-operatively owned by 16,000 farmer shareholders, who are predominantly family owned entities.
- **4.2** Silver Ferns Farms Pareora Meat Processing Plant covers 11.3 hectares on the south side of the Pareora River and was established in 1904. It has a current

Employment in tourism is difficult to identify from official statistics since the relevant sectors such as retail trade and accommodation and food services for which data is collected meet the needs of domestic and international visitors, business travellers and local residents and businesses.

Unless stated otherwise data in this section provided by Silver Fern Farms.

In addition to direct exports, some of Silver Fern Farms domestic sales will contribute to further export sales (e.g. skins which after processing by a New Zealand based customer will be exported).

(March 2016) replacement value of \$165.5 million¹⁵ and much of this value is sunk – i.e. it could not be recovered if the plant was forced to downsize, close or be relocated.

- In 2014-15, the Pareora Meat Processing Plant processed approximately 1,125,000 sheep and lambs, 35,600 cattle and 128,500 bobby calves. Stock numbers processed at the plant have increased over the last four years and in future years the plant will also process deer following the closure of Silver Fern Farms' venison production facility at Islington (on the outskirts of Christchurch). In terms of total carcass weight the total tonnage processed in 2014/15 was 30,179 tonnes, a 22% increase over the last four years and representing 40% of total carcass weight processed within the Canterbury region and this expected to increase to 42.5% with the addition of the venison production facility at the plant. In 2014/15 a total of 1,419 containers were shipped out of the Pareora plant with 932 exported through PrimePort (Timaru Port), 133 exported through Lyttelton Port and 354 exported through Port Chalmers.
- 4.4 The annual value of meat and other animal products produced in 2014/15 from the Pareora Meat Plant was \$206.9 million, a 24% increase over the last four years. Of this \$196 million (94%) was sold in export markets. Payments to the (principally South Canterbury) 2,304 farmers¹⁶ supplying the plant with livestock in 2014/15 were \$127 million, a 34% increase over payments in 2010/11.
- 4.5 The Plant employs up to 843 on-site staff in the peak of the season which is estimated to equate to around 570 fulltime equivalent (FTE) staff.¹⁷ The wage and salary payments to these staff in 2014/15 were around \$40.32 million per annum. In addition, Silver Fern Farms in 2014/15 spent around \$27.2 million in the South Canterbury economy for contractors and other local suppliers of goods and services. Local firms engaged to provide goods and services to the Pareora Meat Processing Plant include engineers, fabricators, riggers, scaffolders, electricians, cleaners, caterers, harvesting operators, painters, plasterers, cartage contractors, MAF and AsureQuality staff and suppliers of utilities, stores and packaging

¹⁵ \$145.5 million in buildings and \$20 million in plant.

¹⁶ Of whom around 64% are Silver Ferns farms shareholders.

¹⁷ Assumes a factor of 0.68 to convert peak work force to FTEs.

materials. These are the direct economic impacts for the Southland region's economy from the plant's operation.¹⁸

- **4.6** However, in addition to these direct economic impacts there are indirect impacts arising from:
 - (a) The effects on suppliers of goods and services provided to the Plant from within the region (i.e. the "forward and backward linkage" effects); and
 - (b) The supply of goods and services to employees at the Plant and to those engaged in supplying goods and services to the site (i.e. the "induced" effects). For example, there will be additional jobs and incomes in the South Canterbury retail sector to meet the needs of supplier farmers and their staff, Pareora Meat Processing Plant employees and other employees of local firms providing goods and services to the Plant.
- 4.7 Regional multipliers for expenditure, employment, and wages and salaries can be estimated to gauge the size of these indirect effects. The size of the multipliers is a function of the extent to which a region's economy is self-sufficient in the provision of goods and services and the region's proximity to alternative sources of supply. Multipliers typically fall in the range of 1.5 to 2.0 and taking the midpoint of this range (i.e. 1.75) implies total impacts (i.e. direct plus indirect impacts) of:
 - (a) \$ 47.6 million per annum expenditure in the South Canterbury economy;
 - (b) 998 jobs for local South Canterbury residents; and
 - (c) \$ 70.6 million per annum in additional wages and salaries for local South Canterbury residents.
- 4.8 Economic impacts in terms of increased expenditure, incomes, and employment within the South Canterbury economy are indicators of economic activity. They are not in themselves measures of improvements in economic welfare or economic well-being. However, there are economic welfare enhancing benefits

No account is taken in estimating the direct and indirect economic impacts of the plant of the direct and indirect economic impacts of sheep and beef cattle farming within the region. Sheep and beef cattle farming will in general not be affected by whether the resource consents are renewed – i.e. livestock produced within the region are assumed to be diverted to other meat processing plants that have capacity if consents are not renewed. However to the extent the non-renewal of consents or stricter consent conditions add costs to meat processing, farmers will be impacted as a consequence of lower payments for livestock.

associated with increased levels of economic activity. These relate to one or more of:

- Increased economies of scale: Businesses and public sector agencies (a) are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;
- (b) Increased competition: Increases in the demand for goods and services allow a greater number of providers of goods and services to enter markets and there are efficiency benefits from increased levels of competition;
- Reduced unemployment and underemployment¹⁹ of resources: To the (c) extent resources (including labour) would be otherwise unemployed or underemployed, increases in economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment. The extent of such gains is of course a function of the extent of underutilised resources within the local economy at the time and the match of resource requirements of a project and those resources unemployed or underemployed within the local economy; and
- (d) Increased quality of central government provided services: Sometimes the quality of services provided by central government such as education and health care are a function of population levels and the quality of such services in a community can be increased if increased economic activity maintains or enhances population levels.
- 4.9 Increases in economic activity (i.e. ongoing expenditures, incomes and employment) within the South Canterbury sub-regional economy as a consequence of Pareora Meat Processing Plant will contribute to these four welfare enhancing economic benefits for the local community.

Increased Economic Diversity

¹⁹ Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

- 4.10 Although the South Canterbury sub-region²⁰ is heavily reliant on both agriculture and agricultural product processing, the Pareora Meat Processing Plant provides the South Canterbury economy with greater resilience against cyclical variations in agricultural product prices. Whilst lower agricultural product prices lower returns to farmers, their livestock still need to be processed and therefore processing capacity within the local economy helps cushion the effects of cyclical downturns in agricultural product prices. If processing capacity within South Canterbury was reduced, the local economy would be more sensitive to changes in farm profitability.
- 4.11 Also the Canterbury region's agricultural sector and agricultural product processing capacity outside of Christchurch has significantly contributed to the ongoing prosperity of the whole Canterbury regional economy in the face of the 2010 and 2011 earthquakes. For example, in the year ending 30 June 2011 Lyttelton Port (the largest port in the South Island and the third largest in New Zealand) moved 9.6 million tonnes of cargo, only slightly down from the 9.8 million tonnes moved in the previous year despite the disruptions caused by the earthquakes.²¹
- 4.12 With respect to the container trade which includes exports of meat and other animal products, 290,842 twenty-foot container equivalent units (TEUs) were moved through the Lyttelton Port, an increase of 6.2% on the previous year.
- 4.13 In the year ending 30 June 2011, cargo moved through PrimePort (Timaru) also increased over the previous year tonnages. Non-containerised cargo handled through the port was the equivalent of 989,000 tonnes, 108,000 tonnes up on the previous year. Containers handled through the port increased from 44,800 TEUs to 49,100 TEUs.²²
- 4.14 This 2011 data on port tonnages and container movements highlights that Canterbury's farming and agricultural product processing industries in the region's rural and provincial areas (including the Pareora Meat Processing Plant) helped sustain the Canterbury region's economy in the face of significant disruption to

²⁰ And Canterbury region.

Data from 2011 Annual Report for Lyttelton Port.

Data from 2011 Annual Report for PrimePort.

businesses and residents within metropolitan Christchurch as a result of the 2010 and 2011 earthquakes.

Increased Rates Revenue for the Timaru District Council

4.15 In 2014/2015 rates paid by Silver Fern Farms to the Timaru District Council totalled \$104,700 (excluding GST). Because of economies of scale it is likely that the rates paid by Silver Fern Farms will be greater than the increase in Council's costs as a consequence of the Pareora Meat Processing Plant being on the site as compared to pastoral farming – the most likely alternative use. From the perspective of the Timaru District Council and other ratepayers in the District, this broadening of the rating base provides the opportunity for a greater range of Council provided services or a reduction in the rates burden for other ratepayers.

Community Involvement

- 4.16 Silver Fern Farms supports the local Pareora Rugby Club through sponsorship and owning the local sports ground which is used for rugby and other sports. The company sponsors the St Andrews Golf Club and other community initiatives such as road safety workbooks for rural schools. The plant is also recognised as an employer of volunteers, specifically volunteer firemen and army reserve personnel.
- 4.17 The Pareora Meat Processing Plant contributes to the "social fabric" of the local Pareora and Timaru communities via staff, contractors and their families belonging to service clubs, sports clubs and other voluntary organizations. As well as fulfilling leadership roles and making other contributions within the community the plant's staff, contractors and their families, help provide the critical mass to underpin these organizations' ongoing sustainability.

5. ECONOMIC BENEFITS FROM CONSENTS RENEWAL

Retention of Expenditure, Employment and Incomes

5.1 Without renewal of the wastewater disposal consents, Silver Fern Farms would be unable to process livestock at the Pareroa Meat Processing Plant and stock would need to be diverted to other plants²³ for processing - most likely to Silver Fern Farms' Fairton Plant near Ashburton to the north and the Mosgiel and Finegand (Balclutha) Plants to the south. This will firstly result in a reduction in South Canterbury expenditure, employment and incomes as a result of the direct and indirect (multiplier) effects of reduced processing of livestock at the Pareora Plant.

- Secondly, the increased transport costs and animal health related costs for South Canterbury farmers having to truck their stock further distances would result in reduced returns from the sale of their livestock. This will result in lower farm incomes and this together with the indirect (multiplier) effects will reduce expenditure, employment and incomes in the local South Canterbury economy.
- 5.3 These two sets of direct and indirect economic effects will be particularly significant if non-renewal of the consents, or renewal of consents but with significantly increased restrictions, force Silver Fern Farms to close the Pareora Plant or relocate it outside of South Canterbury.

Economic Efficiency Benefits from Optimising Plant Location

- 5.4 There are a number of economic efficiency benefits from Silver Fern Farms obtaining consents to enable the continued operation of the Pareora plant at its current site. These include:
 - (a) The continued use of existing plant and equipment having significant sunk costs;
 - (b) Sufficient livestock production in the immediate area and wider surrounding catchment;
 - (c) Optimised location from the perspective of livestock and processed products transportation;
 - (d) The proximity of a trained and experienced workforce;
 - (e) The proximity of supplier businesses with appropriate expertise and experience;
 - (f) The proximity of both road and rail networks for plant inputs and outputs;

The Plant at Pareora also processes products such as blood from other Silver Fern Farms' plants in the South Island. Should the Pareora Meat Processing Plant's operation be restricted this will require relocation of these activities at higher cost and therefore reduced efficiency.

- (g) The availability of sufficient water supply to enable livestock processing operations;
- (h) The ability to discharge treated meat processing waste to land and water;
- (i) The ability to minimise and mitigate adverse environmental effects for neighbours and the wider community;
- (j) Few incompatible adjacent or nearby land uses;
- (k) The site is large enough for any future expansion; and
- (I) Economies of scale and scope as compared to relocating processing capacity to a number of alternative sites.
- 5.5 Consent renewals will enable Silver Fern Farms and its supplier shareholders to continue to benefit from these economic advantages of the plant. Closure or downsizing of the plant due to consents not being renewed or being renewed with more stringent conditions would result in efficiency losses, higher costs and reduced returns for Silver Fern Farm's farmer shareholders. In addition there will be economic costs for the broader South Canterbury and Canterbury communities. These have been are covered earlier in this report.

Other Economic Effects

Reductions in livestock processed at the Pareora Meat Processing Plant or closure of the Pareora Plant, will reduce the diversity of the local South Canterbury economy, reduce the Timaru District Council's rates revenue and reduce the contributions from Silver Fern Farms and Plant employees to the local Pareora and Timaru communities.

6. CONCLUSIONS

- 6.1 The granting of consents enabling the continued operation of the Pareora meat processing plant will maintain the economic wellbeing of people and communities within the South Canterbury and Canterbury regions by:
 - (i) Maintaining significant direct and indirect employment opportunities for local residents:
 - (ii) Maintaining significant direct and indirect wages and salaries for local residents:

- (iii) Maintaining significant levels of direct and indirect expenditure with local businesses;
- (iv) Maintaining population and economic activity levels within local communities thereby maintaining the breadth and quality level of services available to local residents and businesses;
- (v) Providing greater employment choice for local residents;
- (vi) Broadening the rating base of the Timaru District Council; and
- (vii) Continuing Silver Fern Farms' and the Pareora Meat Processing Plant's employees contributions to the Pareora and Timaru communities.
- 6.2 The granting of consents sought for the Pareora plant will maintain resource use efficiency by enabling:
 - The continued use of existing plant and equipment with significant sunk costs;
 - (ii) The minimisation of transport costs for livestock and finished product dispatch;
 - (iii) The minimisation of externality costs associated with road transport including road accident costs, road transport pollution costs and travel time costs for other road users.
 - (iv) The continued utilisation of a trained and experienced workforce and businesses with appropriate expertise and experience within close proximity of the plant;
 - (v) The continued benefits from economies of scale and scope as compared to re-locating processing capability to a number of alternative sites; and
 - (vi) The maintenance of population and economic activity levels (or "critical mass") in South Canterbury, thereby providing economies of scale and competition in the local provision of goods and services.
- 6.3 The Pareora plant has a replacement value estimated at \$165.5 million. Therefore its value to Silver Fern Farms (the existing consents' holder) is very significant.
- Restrictions on the Pareora Meat Processing Plant's water take from the Pareora River catchment will reduce the quantity of livestock that can be processed at the Plant, possibly undermining the Plant's financial viability leading to its closure or relocation. Reductions in livestock processed at the Plant or the closure or

relocation of the Plant will result in reduced economic efficiency and reduced economic wellbeing for South Canterbury residents and businesses.