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People & Places

# Economic assessment of current and planned activities at Blue Sky Meats



Spatial extents of proposed plan change (46ha)

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# 1 Contents

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1	Contents.....	1
2	Executive summary.....	2
2.1	Key findings.....	2
3	About BSM’s operations and proposed investments .....	3
3.1	Baseline description of land .....	3
3.2	BSM current operations .....	4
3.3	BSM proposed development plan .....	5
4	Industrial land availability in Southland District .....	6
4.1	BSM’s role and location in Southland District .....	6
4.2	Insufficient availability of other vacant industrial land .....	7
5	Current economic and employment impacts .....	10
5.1	Current economic impacts (measured by GDP) .....	10
5.2	Current employment impacts.....	11
6	Future economic and employment impacts.....	13
6.1	Future economic impacts (measured by GDP) .....	13
6.2	Future social impacts (proxied by employment).....	14
6.3	One-off benefits during construction of BSM’s expansion.....	14
7	Opportunity cost of alternative land uses .....	15
7.1	Current primary production returns from the Morton Mains site.....	15
7.2	Potential returns from alternative uses of the Morton Mains site .....	15
8	Concluding remarks .....	17

## 2 Executive summary

This report gives an economic impact assessment of current activities and planned future investments at Blue Sky Meats' (BSM) meat processing plant at Morton Mains. The analysis has been requested by BSM to support a potential Plan Change process of its Morton Mains site from being rurally zoned to a zoning that better reflects its rurally-based processing and industrial activities. The work considers:

- What are the current economic and employment impacts of BSM on the Southland economy?
- What are the potential economic and employment impacts from further investment by BSM?
- What is the opportunity cost of removing the land parcel from potential primary production use?
- Are there any other suitable locations for the processing plant elsewhere in Southland District?

### 2.1 Key findings

The overarching conclusion is that the anticipated long-term economic and social benefits from BSM's continued operations (Sections 5 and 6) significantly outweigh the costs of not having the land available for productive land-based use (Section 7). This conclusion is also supported by the fact that there is no other General Industrial Zone land in Southland District that is readily available to develop a large wet industry such as BSM (Section 4.2).

- The only available General Industrial Zone site large enough in Southland District to accommodate wet industry activities of the scale of BSM is in Makarewa. But Makarewa 3-waters infrastructure challenges meaning that it would be relatively difficult to develop a similar operation to what is currently undertaken at BSM's Morton Mains site (Section 4.2).
- BSM has been operating its Morton Mains plant since the mid-1980s. Direct employment at the plant accounts for around 13% of all meat processing sector employment in Southland.
- BSM's Morton Mains location balances two site selection considerations (Section 4.1) because it:
  - **Helps keep transport costs in check:** BSM Morton Mains processing plant is located within 2 hours of livestock across Southland and South Otago, as well as within 2.5 hours of Port Otago where most BSM meat is exported from. In the June 2023 year, BSM spent approximately \$5.0 million on land transportation, including cartage of stock and general freight costs, while a further \$6.6 million was spent on marine freight for exports.
  - **Allows for good access to workforce:** Being located within 25 minutes of Invercargill, means that the Morton Mains site is well-positioned for many of its 400 workers to commute to each day. Rental housing shortages in rural towns across Southland mean that similarly-sized workforces could not be housed in other parts of Southland District.
- The long-term economic benefits from BSM's continued meat processing activities at Morton Mains outweigh the costs of not having the land available for productive land-based use:
  - **Benefits under meat processing use of the site (sections 5 and 6):** BSM's proposed development could lift its contribution to the Southland economy from \$104.1 million of GDP annually to \$163.1 million. Total employment supported by BSM would rise from 863 jobs to 1,224 jobs. These estimates capture activities directly occurring at Morton Mains, and flow-on effects to other industries (e.g. land-based primary production).
  - **Returns from alternative land uses of the site (section 7):** If the processing plant were to cease operations so that there could be agricultural use of the land for sheep and beef or dairying, then this would yield between \$0.1 million and \$1.1 million of GDP annually for the local economy and support 0.73 to 4.9 jobs.

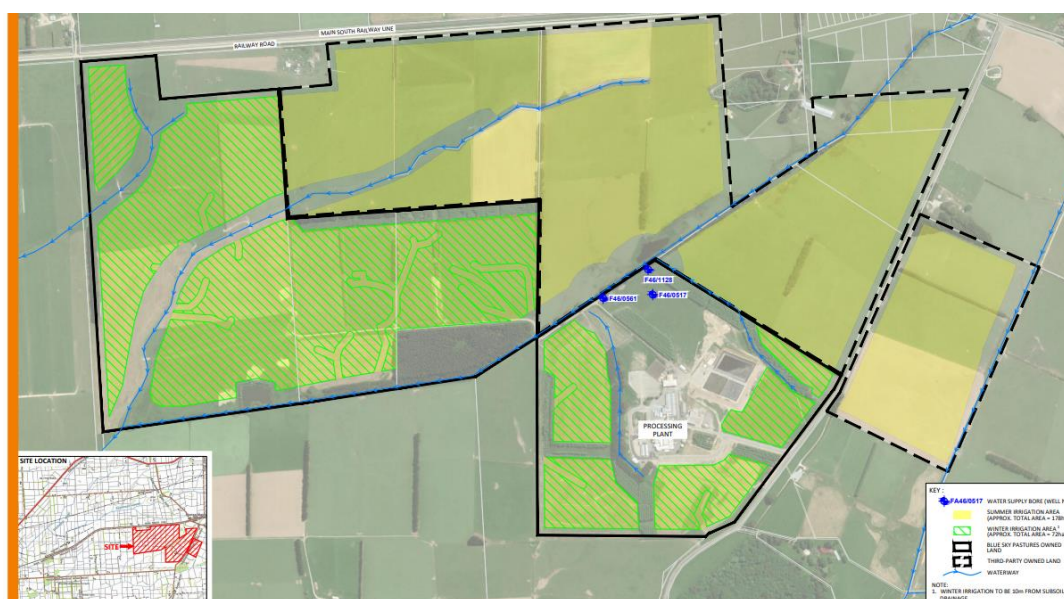
## 3 About BSM's operations and proposed investments

This section outlines the land on which BSM's processing plant is situated and proposed developments.

### 3.1 Baseline description of land

BSM's processing plant is situated on land at 729 Morton Mains Road. The processing plant itself takes up 7.3 hectares and is at the centre of operations of a broader area that includes land onto which treated processing wastewater is sprayed and buffer zones. In total, across the plant, buffer zones, and irrigated land, 252 hectares is influenced by BSM's operations, of which BSM owns 130 hectares and third parties own the other 122 hectares. The entire site is Rural Zoned land in the Southland District Plan (SDP). Manaaki Whenua Landcare Research<sup>1</sup> identifies the land use capability as Highly Productive Land Class 2.

**Figure 1** – Current site and immediate surrounds



BSM is currently in the project planning stages for an upgrade to its processing plant facility, which would enable it to operate more efficiently and pursue opportunities for growth. To progress these development plans, BSM has been advised by Mitchell Daysh that a Plan Change for part of the Morton Mains site should be undertaken. The Plan Change would be from Rural Zone to some form of Industrial Zone. The Plan Change's aim would be to bring the SDP into line with the existing realities on the ground of processing that already occurs on site and to enable future development of these processing activities.

The preferred quantum of land to be rezoned is 46 hectares, which is the existing property boundary of the land parcel (Lot 1 Deposited Plan 595) on which the processing plant facility is located. At present, 7.3 hectares of this land has been developed for existing hardstand and buildings. At this stage, future development plans have not been confirmed, but initial concepts indicate that approximately 2.2 hectares of land will be required. The remaining undeveloped elements of the 46-hectare land holding subject to the proposed plan change will continue to be used for spraying treated wastewater for the foreseeable future, but it is intended to be available for alternative industrial uses when required.

Until required, the land will continue to be irrigated with wastewater and topped and bailed for feeding animals off site. This is supplemented by low intensity sheep grazing to keep buffer areas tidy, tidy up

<sup>1</sup> Land use capability maps viewed 28 March 2024 from Manaaki Whenua Landcare Research, available here: [https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Land%20Capability/Iri\\_luc\\_hp](https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Land%20Capability/Iri_luc_hp)

surplus grass and maintain pasture quality. If the processing plant were to close then land, which is currently irrigated with treated wastewater, could theoretically be used for livestock as is the land use of farms in the surrounding area. Farming in nearby locations is a mix between sheep and beef farming, as well as dairy farming.

**Figure 2** – Spatial extents of Proposed Plan Change (46 hectares)



## 3.2 BSM current operations

BSM have been operating since the mid-1980s and its Morton Mains processing plant currently takes up 7.3 hectares of land in buildings and hardstand. The processing plant processes a mix of lamb, sheep, and calves and is a key support activity to land-based primary production across the region.

766,554 animals slaughtered at BSM's processing plant in the June 2023 year – 73% of these were lamb, 20% mutton, and the rest were calves. BSM's slaughter equated to 11% of the total slaughter across Otago and Southland<sup>2</sup>.

From an operational perspective, the following facts about BSM's current operations are worth noting<sup>3</sup>:

- Total current daily output capacity from existing processing facilities is approximately 4,950 carcasses per day, with processing spread across two shifts.
- Around 400 people work at BSM, with 268 employed in operational boning and slaughter roles, and the remainder employed across other tasks (management, office, marketing, logistics, etc).
- 6% of BSM's meat is sold as chilled cuts. Export data shows that chilled cuts, on average, are sold at twice the average per kilogram price to frozen cuts<sup>4</sup>.
- 90% of output is exported, which means that BSM's revenue is largely derived from overseas and so its earnings directly improve New Zealand's external position with the rest of the world.

Building operational capacity at BSM's Morton Mains processing plant has been a recent focus. Investments over recent years at Morton Mains by BSM have totalled more than \$15 million.

Alongside investment in processing buildings and equipment, BSM's recent investments have included developing a wastewater treatment plant and later in 2024 a coal-fired boiler will be decommissioned and electrified as part of investment in decarbonisation, heat recovery and energy efficiency.

<sup>2</sup> Calculated from Statistics New Zealand Agricultural Survey, June 2022.

<sup>3</sup> These facts will form the basis of assumptions used in calculating the economic and employment impacts of BSM in section 4. Apart from where noted, these facts are derived directly from BSM.

<sup>4</sup> Calculated from Statistics New Zealand overseas merchandise trade data, September 2023 year.



### 3.3 BSM proposed development plan

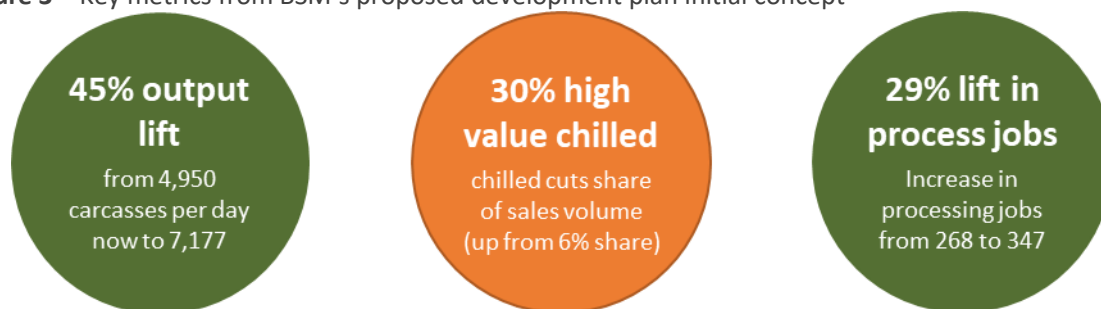
BSM is currently in the project planning stages for an upgrade to its processing plant facility, which would enable it to operate more efficiently and pursue opportunities for growth.

An initial concept for a \$24.4 million investment by BSM centres on an upgrade to the slaughter and chiller facilities and the development of a new boning room. The investments will expand capacity and lift productivity through better layout design and labour-saving technologies, as well as create more opportunities for BSM to sell higher-value chilled cuts.

The following key operational considerations can be made about the proposed upgrades<sup>5</sup>:

- 45% increase in daily output capacity from 4,950 carcasses per day at present to 7,177 carcasses per day after the investment.
- 29% lift in processing jobs – from 268 slaughter and boning staff to 347. Staff performing other roles (management, office, marketing, logistics, etc) are only expected to rise by 15% (20 people) to around 152.
- 30% of meat will be sold as high-value chilled cuts, up from a 6% share of meat sold as chilled cuts at present. Chilled cuts receive twice the average export price of frozen cuts.

**Figure 3** – Key metrics from BSM’s proposed development plan initial concept<sup>6</sup>



The fact that output will rise faster than processing jobs represents a productivity gain from investing in technology and more efficient operational design layouts. In addition to these productivity gains, having a much larger proportion of meat sold as high-value chilled cuts will further lift BSM’s ability to add value to land-based primary production in the Southland economy.

Lifting productivity is an important consideration not just for BSM as a business, but also for the Southland economy. The former Productivity Commission stated that “Productivity matters for wellbeing. Achieving higher productivity – producing more with what we have (people, knowledge, skills, produced capital, and natural resources) – means there is more to go around for current and future generations.”<sup>7</sup>

But for these investment plans to progress and productivity benefits to be realised, BSM will first require a zoning change to its Morton Mains site to reflect the realities of what already occurs on the ground and enable future development of the site. The next section highlights that there are no other currently zoned industrial sites in Southland that would be suitable to house BSM’s operations.

<sup>5</sup> These operational considerations have been drawn from BSM’s internal design brief (14 September 2023, revision 4) for its brownfield slaughter floor and greenfield boning room project. These considerations will form the basis of future economic and employment impacts from the investment calculated in section 4.

<sup>6</sup> See footnote 5 above.

<sup>7</sup> See: <https://www.productivity.govt.nz/productivity/>.

## 4 Industrial land availability in Southland District

The purpose of this section is to provide context regarding industrial land availability in Southland District. This section begins by showing BSM's role within Southland's meat processing industry and identifies key considerations behind its current location. The analysis then demonstrates that it would be impractical for BSM to move to another location because there is a lack of available General Industrial Zoned land in Southland District that is suitable to accommodate BSM's meat processing operations.

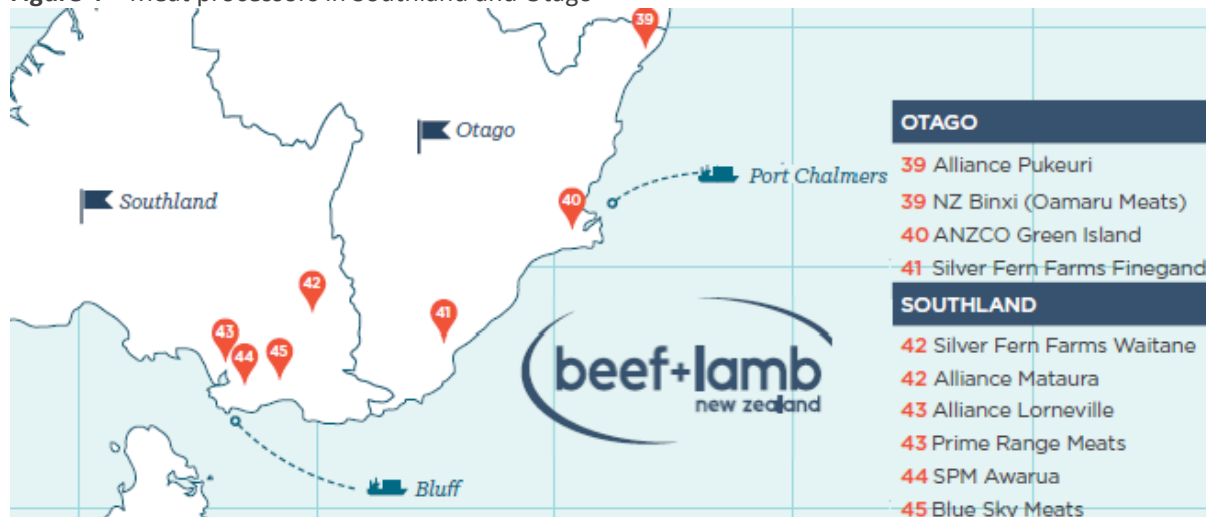
### 4.1 BSM's role and location in Southland District

BSM plays a large role in the Southland economy (see Section 5 for detailed calculations of its economic and employment impacts). It directly employs around 400 staff on-site, while the total economic impact of BSM on the local economy is currently around \$104.1 million of GDP a year once the flow-on effects of its operations on other industries are considered.

BSM is one of just two meat processors located within Southland District, with the other one being the Alliance Lorneville site. Across the broader Southland Region, there are four other processors split between Invercargill City (Prime Range Meats and SPM Awarua) and Gore District (Alliance Maitara and Silver Fern Farms Waitane). The locations of these sites are shown in Figure 4.

BSM is a key employer within Southland's food and fibre sector. The Southland Murihiku Regional Skills Leadership Group's (RSLG) Regional Workforce Plan<sup>8</sup> identified the food and fibre sector as a priority 'pou' for Southland to focus on to support the needs and aspirations of Southland's workforce. The Plan showed that there are almost 3,200 jobs with meat processors across Southland, so this suggests that direct employment at BSM's Morton Mains processing plant accounts for around 13% of all meat processing sector employment in Southland.

Figure 4 – Meat processors in Southland and Otago<sup>9</sup>



Minimising transport costs, while also having access to a large workforce, are the biggest considerations for site selection by meat processors. The clustering of meat processors close to Invercargill and Gore

<sup>8</sup> Southland Murihiku Regional Skills Leadership Group Regional Workforce Plan (2022) is available for download here: <https://www.mbie.govt.nz/assets/southland-murihiku-regional-workforce-plan.pdf>.

<sup>9</sup> Source: Beef + Lamb New Zealand. Note some pins represent two individual processing plants located close to each other (pins 39, 42, and 43). Each individual processing plant is listed by name in the key on the right.



reflects these two considerations as these urban areas are the biggest population centres in Southland Region and are well-connected to state highways. BSM's location balances these two considerations. BSM Morton Mains processing plant is located within 5 kilometres of State Highway 1, 25 minutes to the east of Invercargill and a 2.5-hour drive to Port Otago from which the majority of BSM's meat is exported. The site sits in the middle of Southland's farming land, and even livestock sourced from the edges of Southland or southern reaches of Otago could be at Morton Mains within a 2-hour drive.

Logistics and transportation costs are a huge line item for BSM. In the June 2023 year, approximately \$5.0 million was spent on land transportation, including cartage of stock and general freight costs, while a further \$6.6 million was spent on marine freight for exports. The Morton Main's site helps keep these costs in check because it is located close to farms that it draws its animals for slaughter from, while also being located close to major transportation infrastructure in order to streamline export processes.

Being located within 25 minutes of Invercargill with a population of 57,900<sup>10</sup>, means that the Morton Mains site is well-positioned for many of its 400 workers to be able to commute to each day. BSM itself values this proximity to a major population centre and has invested in several staff houses within Invercargill to ensure that there is an availability of accommodation for its seasonal workers without putting an unnecessary burden on the city's rental stock.

Rental housing shortages in rural towns across Southland would mean that similarly-sized workforces could not be easily housed in other parts of Southland District<sup>11</sup>. A 400-strong workforce could need 200 to 400 homes<sup>12</sup> to accommodate them, with many of these houses being rented. Even Southland District's largest towns, Winton (2,460 residents) and Te Anau (3,060 residents) do not currently have enough rental properties to make a dent in this potential housing demand. Te Anau has 225 tenanted rentals at present<sup>13</sup>, but none that are currently available for rent on TradeMe, while Winton has 153 tenanted rentals and just five rentals that are currently available on TradeMe for new tenants to rent.

## 4.2 Insufficient availability of other vacant industrial land

The previous subsection showed why BSM's current location at Morton Mains makes sense from operational perspectives of minimising transportation costs and having access to workforce. This subsection demonstrates that it would also be impractical for BSM to move to another location because there is a lack of other vacant General Industrial Zone land in Southland District that is suitable to accommodate meat processing activities of the scale of BSM's operations<sup>14</sup>.

The current provision of General Industrial Zone land in the Southland District mostly occurs on the periphery of small towns located around the District, including: Te Anau, Tuatapere, Otautau, Riversdale, Winton, and Riverton. Within most of these towns there are some vacant General Industrial Zone lots, however, none of the blocks of land are of a scale that could accommodate a relatively large industrial operation like BSM, particularly when large wastewater treatment plants and land required for

<sup>10</sup> Source: Statistics New Zealand Subnational Population Estimates (2023)

<sup>11</sup> See: McElrea Consulting, Employer Workforce Research 2023 for Beyond 2025 Southland Regional Long Term Plan, available here: [https://beyond2025southland.nz/nov/wp-content/uploads/2023/06/Southland-Murihiku-Employer-Workforce-Research-2023-FINAL\\_pages1-33-002-1.pdf](https://beyond2025southland.nz/nov/wp-content/uploads/2023/06/Southland-Murihiku-Employer-Workforce-Research-2023-FINAL_pages1-33-002-1.pdf)

<sup>12</sup> The number of homes required would depend on the number of workers who live alone or with their families, compared to the number who cohabitated with colleagues.

<sup>13</sup> The number of tenanted rental properties are as at 1 July 2023 and have been sourced from data on rental bonds lodged with Tenancy Services.

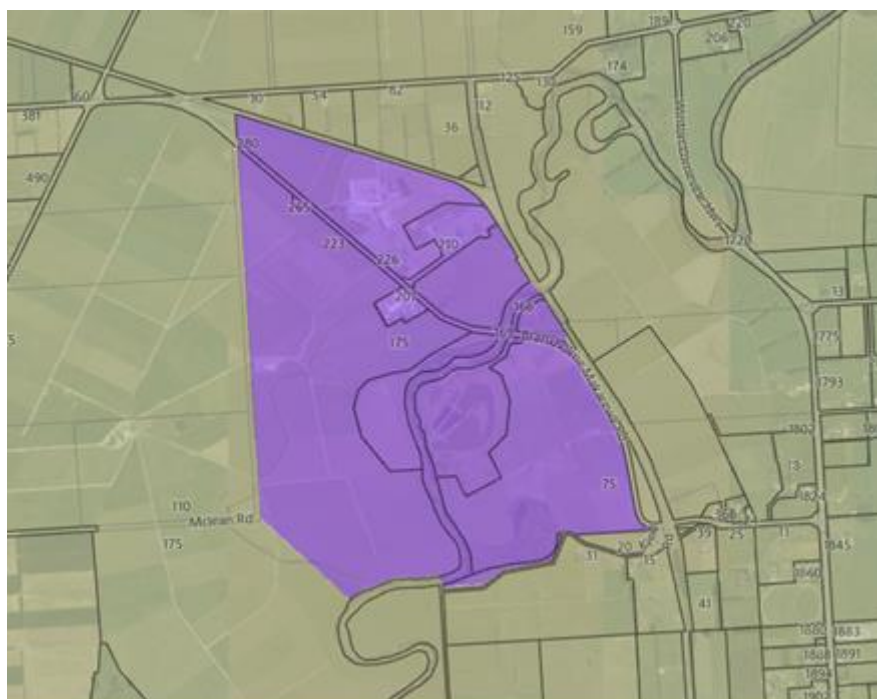
<sup>14</sup> The insights provided in this subsection regarding the availability of General Industrial Zone land in Southland District has been informed by analysis and commentary provided to the author by Mitchell Daysh.

wastewater disposal is included. It should be noted that under the Southland District Plan, land use consents would be required for these activities on land zoned either Rural or Residential.

Alongside the General Industrial Zone land by the towns listed above, there is also a relatively large block of General Industrial Zone land at Underwood. However, that land is associated with the Alliance Lorneville processing plant and all land in this area is utilised for production, wastewater treatment or wastewater disposal industrial activities. There is also some General Industrial Zone capacity at Edendale, but that has been earmarked for use by Fonterra.

The only remaining vacant General Industrial Zone land in Southland District that could accommodate a large-scale industrial development is 190 hectares (approximately) of land on Branxholme-Makarewa Road in Makarewa. This site is shown in the figure below.

**Figure 5** – Vacant General Industrial Land in Makarewa



Although there is a large amount of available land at the Makarewa site located just 15 minutes from Invercargill, potential use of the site for meat processing is relatively constrained by the inability to cost effectively dispose of wastewater. The Makarewa site currently has no ready-to-use wastewater treatment facilities or disposal options available. It is also unlikely that consents could readily be obtained for a wastewater discharge to the environment (land or water) given the site is part of a catchment (Oreti and Invercargill Catchments (New River Estuary)) which requires a 62% reduction in nitrogen<sup>15</sup>.

The only potentially feasible way to deal with wastewater generated on the Makarewa site by an industrial user would be to pipe it and discharge it to the Invercargill City (a different district) wastewater network. Developing a pipeline of this length would be a very costly investment and is likely to only provide capacity for one operator similar to BSM. A trade waste permit from Invercargill City Council would also be needed for any discharge. The capacity of the Invercargill City wastewater network and

<sup>15</sup> See here: <https://www.es.govt.nz/environment/water/whats-in-our-waterways/nitrogen#:~:text=The%20estimated%20reduction%20in%20nitrogen,freshwater%20objectives%20it%20is%2070%25>

treatment system is finite, meaning that large industrial wet industries (such as BSM) would potentially find it difficult to secure the necessary approval to discharge into the trade waste network<sup>16</sup>.

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The above analysis shows that although there is some vacant General Industrial Zone land around Makarewa, there are such significant 3-waters constraints on the site that it would be impractical to develop a similar scale of operation to what is currently undertaken at the BSM's Morton Mains site.

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It is worth noting that not only would attempting to overcome such significant infrastructure challenges at the Makarewa be very difficult, but it would also be a very inefficient use of capital to recreate such infrastructure.

BSM meat processing facility currently already processes more than three quarters of a million animals each year (11% of all animals across Otago/Southland), and BSM continues to invest in ensuring this plant is fit for purpose and can remain competitive and efficient in an evolving world. Alongside \$24.4 million of proposed investments in capacity, automation, and value adding processes, BSM has already performed more than \$15 million of other capital investment over recent years. These recent investments have included upgrades into water treatment facilities that reduce nutrient leaching, as well as electrification initiatives that are underway as part of decarbonisation, heat recovery and energy efficiency investment.

It would be a completely inefficient use of capital within Southland to ignore the investment that has already been sunk at Morton Mains, and instead to attempt to recreate such facilities at a cost of an additional tens of millions of dollars elsewhere. It would also be equally inefficient to maintain current production at Morton Mains and to accommodate the additional capacity on a different site, given the redundancy in wastewater treatment facilities on the existing site, and the inefficiencies associated with trying to operate the business across two sites (including additional transportation and logistics, increased asset management expenses, and lost economies of scale). Furthermore, it is shown in Section 7 that enabling a long-term continuation of meat processing at Morton Mains comes with very little opportunity costs because the potential economic returns from alternative uses of the Morton Mains site for agriculture are small compared to the returns from meat processing.

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<sup>16</sup> To give an idea of the scale needed to support a large wet industry, BSM's current wastewater treatment plant is estimated to provide enough treatment capacity for 105,000 people (twice Invercargill's size).

## 5 Current economic and employment impacts

This section assesses the current economic and employment impacts of BSM's operations on the Southland economy. These impacts are looked at from the perspective of what directly occurs onsite at BSM's processing plant, as well as the flow-on effects that accrue to land-based primary production (farmers) and other industries (eg. trucking, engineering, etc) because of this meat processing activity.

### 5.1 Current economic impacts (measured by GDP)

The current economic impacts of processing activities at BSM's Morton Mains processing plant have been measured by GDP. Using GDP to measure economic impacts is appropriate because GDP is New Zealand's official measure of economic growth<sup>17</sup>.

GDP is the economics equivalent of an accounting profit. The key difference between an economic and accounting profit is that economic profits (GDP) consider the value added widely across the economy for both labour (workers) and capital (financial, physical, intangible), while accounting profits only focus on returns to the owner of the business in question. At an individual business level, the direct contribution of that business to regional GDP can be proxied by the summation of EBITDA with wages and salaries.

It is estimated that BSM's operations at Morton Mains directly contributed \$32.7 million of GDP to the Southland economy in 2023<sup>18</sup>.

Alongside this direct GDP contribution, there is also further economic activity in other industries (included land-based primary production) supported by the flow-on effects of BSM's Morton Mains operations. These flow-on effects to other industries are called multiplier effects and accrue because of:

1. **The procurement of other goods and services as inputs into BSM's operations** (known as indirect effects). For example, the purchasing of stock for slaughter supports a large amount of land-based primary production at a farm-level, while BSM also requires support from a range of other industries including trucking services, engineering maintenance, professional services, etc.
2. **The recirculation of wages earned by BSM workers back into other industries** within Southland (known as induced or earnings effects). For example, a boning line staff member spending some of their wages on retail or hospitality.

Estimates of these flow-on effects have been formed by making calculations that draw on economic multipliers sourced from New Zealand's leading regional economic data provider Infometrics<sup>19</sup>.

In addition to the \$32.7 million of GDP directly generated at BSM's site, the flow-on economic impacts could add as much as another \$71.4 million of GDP a year to other industries in Southland. This implies the total economic impact of BSM's operations could be \$104.1 million a year across the local economy.

<sup>17</sup> According to [Statistics New Zealand](#).

<sup>18</sup> This direct economic impact was calculated from financial information provided by BSM to the author. As highlighted above, the direct GDP contribution is a measure of value added that accrues as returns to capital and labour inputs. It is proxied by EBITDA + wages and salaries, and must not be confused with gross revenue.

<sup>19</sup> The economic multipliers are specific for Southland, and factor in differing multiplier effects across different industries. For example, meat manufacturing tends to have a larger multiplier effect of what other activity it supports compared to a café or restaurant. Estimated multiplier effects should be taken as a theoretical maximum of additional flow-on economic effects supported by BSM because in the absence of BSM some of the resources in other industries that are benefiting from BSM's operations could still be applied to other uses.

**Figure 6** – Total current economic impact of BSM’s on the Southland economy in 2023

Given that approximately 90% of BSM’s meat is exported, these economic impacts are largely derived from income that is earned from improving New Zealand’s external position with the rest of the world.

The estimated flow-on economic effects beyond what directly is attributable to what occurs directly at BSM’s Morton Mains site are broadly consistent with the scale of multiplier effects used in other studies of the economic impacts of meat processing on local economies. For example, a 2012 assessment of the economic impacts of Silver Fern Farms Limited’s Pareora meat processing plant on the South Canterbury economy used a multiplier of 3.5 to scale direct GDP from Silver Fern Farms’ financial statements into the total GDP effects across the local economy<sup>20</sup>. The multiplier used in the estimates for BSM in this report is a similar, but slightly smaller, 3.2 multiplier. Using a smaller multiplier means that the estimated total GDP effects given in this report are slightly more conservative than in some other studies.

## 5.2 Current employment impacts

The employment impacts from BSM’s operations have also been considered.

Employment is a key factor within social wellbeing because it provides the financial security for people to set and achieve goals<sup>21</sup>. Statistics New Zealand data shows that 70% of people in satisfactory employment rate their overall life satisfaction to be 8 or higher (on a 1-10 scale) compared to just 48% of unemployed people who give such a rating<sup>22</sup>.

BSM is a large employer as is evident from Table 1.

**Table 1** – Current employment at BSM<sup>23</sup>

Description of current employment	Jobs
Processing (slaughter and boning)	268
Other tasks (management, office, marketing, logistics, etc)	132
<b>Approximate total direct employment at BSM</b>	<b>400</b>

<sup>20</sup> This figure is taken from point 4.8 of the economic impact assessment, which was written by Mike Copeland and is available for download here: <https://api.ecan.govt.nz/TrimPublicAPI/documents/download/1767508>

<sup>21</sup> This assertion regarding employment is supported by the [Department of Prime Minister and Cabinet’s Guide for Central Government Engagement with Local Government](#) which highlights that social wellbeing encompasses factors (including financial security) that enable people to set and achieve goals.

<sup>22</sup> See: Statistics New Zealand’s [Job Satisfaction and Wellbeing](#), released 23/07/19.

<sup>23</sup> Total employment has been provided by BSM. Current processing employment has been estimated based on a slaughter rate of 5 carcasses a minute over two shifts per day for a total throughput of 4,950 carcasses daily.

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BSM currently employs about 400 people, with 268 of these staff in processing roles associated with slaughter and boning, while the remainder work across a variety of other tasks (such as management, office, marketing, logistics, etc).

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Alongside the 400 jobs directly at BSM's processing plant, there are also a number of jobs in other industries supported by the flow-on effects from BSM's procurement of goods and services (indirect effects) and the recirculation of wages from its employees back into other industries (induced effects). To calculate these flow-on effects, multiplier analysis, similar to that outlined in Section 5.1, was performed using employment multipliers from Infometrics<sup>24</sup>.

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In addition to the 400 jobs directly employed at BSM's processing plant, the flow-on employment effects could total up to a further 463 indirect and induced jobs in other industries (including land-based primary production). This implies that the total social impact from BSM's operations could currently be 863 jobs across the local economy.

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**Figure 7** – Total current impact of BSM on jobs in Southland factoring in direct and flow-on employment



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<sup>24</sup> The employment multipliers from Infometrics pertained to relationships between GDP and employment established in 2020 so these were adjusted to account for wage inflation to 2023 using data from Statistics New Zealand Quarterly Employment Survey. Estimated multiplier effects for employment should be taken as a theoretical maximum of additional flow-on employment supported by BSM because in the absence of BSM some of the resources in other industries that are benefiting from BSM's operations could still be applied to other uses.



## 6 Future economic and employment impacts

BSM is currently developing plans for future investment in its Morton Mains processing plant to increase productivity and lift its meat processing capacity. This section assesses the potential future economic and employment effects from proposed investments at BSM's processing plant. As with the earlier analysis of current economic and employment effects, these future impacts are looked at from the perspective of what directly would occur onsite at the processing plant, as well as the flow-on effects that would accrue to other industries (including land-based primary production) because of the activity.

### 6.1 Future economic impacts (measured by GDP)

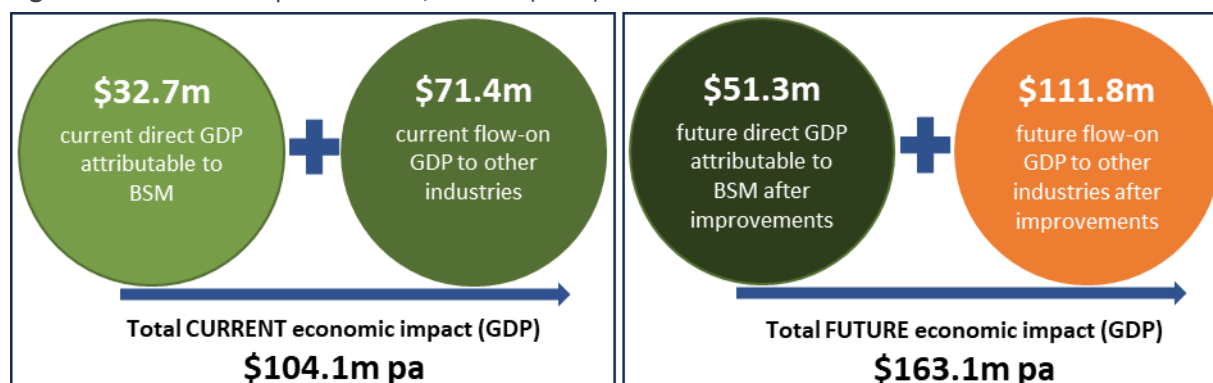
Future economic impacts from BSM's proposed investments have been calculated by drawing on the operational assumptions for expanded processing capacity outlined in section 3.3. These updated operational assumptions were used to scale baseline current economic activity calculated in section 5.1<sup>25</sup>.

It is estimated that proposed investments at BSM's processing plant will lead to a \$18.6 million (57%) increase in GDP directly generated at the Morton Main's site from (\$32.7 to \$51.3 million of annual GDP). The 57% increase in direct GDP is larger than the 45% rise in processing capacity (from 4,950 carcasses per day to 7,177 carcasses per day) because more meat will be sold as higher-value chilled cuts, while labour inputs will be used more efficiently.

On top of these direct GDP effects from increasing activities at BSM's site, there will also be flow-on effects that accrue to other industries (including land-based primary production and other suppliers) from purchases by BSM and its employees.

In addition to the \$18.6 million increase in GDP directly generated at BSM's site, the flow-on economic impacts to other industries (including land-based primary production and other suppliers) could rise by \$40.4 million (from \$71.4 million to \$111.8 million). This implies the total economic impact of BSM's operations across the local economy could increase from its current level of \$104.1 million to a future level of \$163.1 million of GDP.

**Figure 8** – Economic impacts of BSM, current (2023) versus future after investments have occurred



<sup>25</sup> It was assumed that the investments that lead to a 45% lift in processing capacity and expansion of higher-value chilled sales (from 6% to 30% by volume), flow directly through into topline revenue. This topline revenue estimate was converted to direct GDP and its flow-on GDP effects using industry average value add margins and multipliers from Infometrics.

## 6.2 Future social impacts (proxied by employment)

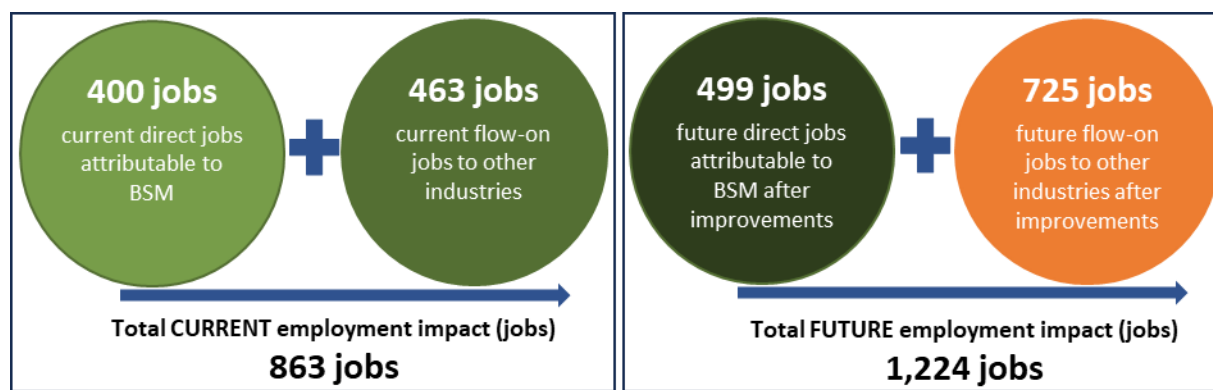
Under the future scenario for BSM after the investment has been made, there will be a significant increase to the total number of jobs supported by BSM.

Direct employment at BSM Morton Mains site is anticipated to rise from 400 to 499 staff, with 79 of this increase being processing staff (in slaughter or boning roles), while the remainder (20 jobs) of the increase will be for additional office and logistics related roles<sup>26</sup>.

Employment that flows-on into other industries because of BSM’s procurement of other goods and services, and spending by BSM’s employees, is expected to rise from 463 to 725.

Factoring in both employment directly at BSM and that which could be supported by flow-on effects, the total employment effects from BSM could rise from 863 jobs across Southland at present to 1,224 after BSM’s proposed investment.

**Figure 9** – Employment impacts of BSM, current (2023) versus future employment after investments



## 6.3 One-off benefits during construction of BSM’s expansion

Alongside the potential long-term economic and social impacts that will accrue each year from BSM’s development once it is operational, there are also one-off benefits that occur during the construction phase of the development. These one-off benefits will only occur during construction and will not persist over the long-term.

Plant and equipment investments as part of BSM’s proposed development plan is anticipated to be approximately \$24.4 million. It is estimated that a construction project of such a scale could support up to \$18.9 million of GDP across the local economy and sustain employment during the project of up to 182 jobs (factoring in those directly employed on site and the flow-on effects to jobs among suppliers).

**Table 2** – One-off social and economic impacts during construction of the proposed development

	Employment (social) impact of construction	Economic (GDP) impact of construction
Direct on site	60	\$4.9 million
Flow-on to other industries	122	\$14.0 million
<b>Total effect</b>	<b>182 jobs</b>	<b>\$18.9 million of GDP</b>

<sup>26</sup> This lift in direct employment is consistent with that outlined in the operational assumptions outlined in section 3.3.

## 7 Opportunity cost of alternative land uses

This section considers the potential yields from alternative land uses of BSM's Morton Mains site. The analysis shows that the opportunity cost of forgoing these alternative land uses is low compared to the economic impacts from BSM's current operations.

### 7.1 Current primary production returns from the Morton Mains site

The 130 hectares of land (including buffer zones) at Morton Mains owned by BSM currently yields very little return from a primary production perspective.

Given pre-existing consents to irrigate treated processing plant wastewater on land surrounding the processing plant, the only current income-earning land use is occasional toping and baling for feed. In the June 2023 year, BSM earned just \$40,200 of bailage income from toping surrounding land.

### 7.2 Potential returns from alternative uses of the Morton Mains site

There would be other higher-yielding alternative uses for the 46-hectare land parcel which BSM is considering rezoning, as well as the broader 130 hectares of land owned by BSM, but these would first require the processing plant to cease its operations. Shutting down the processing plant would be an impractical step and an inefficient use of capital that ignored sunk investment (more on this in section 4.2), but for now let's put this point to one side, and hypothetically consider what economic returns alternative land uses could yield.

If the processing plant were to close then BSM's 130-hectares of land could theoretically be used for livestock as is the land use of farms in the surrounding area. Farming in nearby locations is a mix between sheep and beef farming, as well as dairy farming<sup>27</sup>.

Average farm financials from Beef and Lamb NZ<sup>28</sup> suggest that a sheep and beef farm could support up to \$656.98 per hectare of EBITDA and wages, while data from DairyNZ's Farmbase budgeting database<sup>29</sup> shows that a highly efficient dairy farm could support up to \$6,526 of EBITDA and wages per hectare.

Recall that EBITDA together with wages is equivalent to direct GDP (economic value add) at a farm level. This farm-level economic value add can then be multiplied by the land area (130 hectares) to give a total estimate of potential direct GDP supported by farming across the land holding. Using multiplier analysis similar to that performed earlier in section 5, it is also possible to calculate the flow-on effects of this activity into other industries and the level of employment supported by livestock farming.

The following table highlights the potential economic and employment effects from converting the Morton Mains site to sheep and beef farming.

<sup>27</sup> Dairying might not be possible on this site given the consenting requirements and water quality issues experienced in the catchment. But for illustrative purposes, the potential yields from dairying are still shown.

<sup>28</sup> Calculated from Beef and Lamb NZ, [Sheep and Beef Farm Survey: Class 7 S.I. Finishing - Otago-Southland](#).

<sup>29</sup> See DairyNZ Southland case study (2022-2023).

**Table 3** – Social and economic impacts of sheep and beef farming on the land

	Employment (social) impact of a sheep and beef farm	Economic (GDP) impact of a sheep and beef farm
Direct	0.47	\$85,407
Flow-on to other industries	0.26	\$38,861
<b>Total effect</b>	<b>0.73 jobs</b>	<b>\$124,268 of GDP</b>

A 130-hectare sheep and beef farm could over the long-term generate economic benefits to the local economy of up to \$124,268 of GDP per annum and would sustain employment of 0.73 jobs across the local economy.

A similar analysis, summarised in the table below, gives the potential economic and employment effects from converting the Morton Mains site to dairy farming.

**Table 4** – Social and economic impacts of dairy farming on the land

	Employment (social) impact from dairy farming	Economic (GDP) impact from dairy farming
Direct	3.3	\$847,080
Flow-on to other industries	1.6	\$233,551
<b>Total effect</b>	<b>4.9 jobs</b>	<b>\$1,080,631 of GDP</b>

Calculations show that a 130-hectare dairy farm could hypothetically over the long-term generate economic benefits to the local economy of up to \$1.1 million of GDP per annum and sustain employment of 4.9 jobs across the local economy.

Clearly these potential sheep and beef or dairying<sup>30</sup> returns from shutting down the processing plant to reuse surrounding land for pastoral farming are much smaller than the estimated long-term benefits of \$104.1 million of annual GDP and up to 863 jobs which the BSM processing plant currently supports across Southland, let alone the increase which could accrue after proposed developments<sup>31</sup>.

For further context taking 130 hectares of land away from primary production use would represent just 0.01% of the almost 1 million hectares of farmland in Southland District<sup>32</sup>.

<sup>30</sup> Given the likely challenges in gaining consents to dairy farm the site, it is worth noting that dairying is not the only potential higher yielding alternate use of the land, with another being horticulture. But gross horticultural margins are in a similar ballpark to the gross margins of dairy farming so do not warrant more detailed analysis into the differences in their economic and employment effects. A recent land use assessment (See Paul Sharp (2022), [Primary Production Land Use Assessment – Constable Road Waiuku](#)) in Waiuku (Auckland) using data from Lincoln University's Financial Budget Manual showed that mixed cropping that rotated between potatoes, onions, and wheat can provide average gross margins of about \$5,259 per hectare.

<sup>31</sup> It is worth noting that if BSM were to shut down, then not all its existing economic impacts would necessarily be lost to Southland, as it might be possible for another existing meat processor in Southland to pick up some of the processing activities that BSM had been doing. However, such a situation would reduce competition among meat processors in Southland, which could be detrimental to farmers supplying them. The other meat processors would also be likely to need to invest to lift their processing capacity which would be an inefficient use of capital given such capacity already exists at BSM.

<sup>32</sup> Source: Calculations from Statistics New Zealand's Agricultural Production Survey.

## 8 Concluding remarks

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These concluding remarks tie together the analysis of benefits from BSM's current activities and proposed development (identified in Section 5 and 6), against the context that there is no other readily available General Industrial Zone land in Southland District to house such meat processing activities (see Section 4.2). The conclusion also shows that the opportunity costs from forgoing the use of the land for alternative uses are very low (identified in Section 7).

The overarching conclusion from the analysis is that the anticipated long-term economic and social benefits from BSM's continued operations significantly outweigh the costs of not having the land available for productive land-based use. Front and centre to this conclusion is that there is also no other readily available General Industrial Zoned land in Southland District that would be viable to develop a large wet industry such as BSM (see Section 4.2).

BSM's proposed development could lift its total contribution to the Southland economy from its current level of \$104.1 million of GDP annually to potentially as much as \$163.1 million of GDP annually<sup>33</sup>. At present, total employment supported by BSM, both directly at the Morton Mains processing plant as well as the flow-on effects to other industries, is 863 jobs, but this would rise to 1,224 jobs under the future scenario modelled. In comparison, if the processing plant were to cease operations so that there could be agricultural use of the land for sheep and beef or dairying, then this would yield between \$0.1 million and \$1.1 million of GDP annually for the local economy and support 0.73 to 4.9 jobs. Horticultural use could yield returns that are similar to dairying, at the top end of that range.

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<sup>33</sup> As mentioned earlier, if BSM were to shut down, then not all its existing economic impacts would necessarily be lost to Southland, as it might be possible for another existing meat processor in Southland to pick up some of the processing activities that BSM had been doing. However, the other meat processors would be likely to need to invest to lift their processing capacity which would be an inefficient use of capital given such capacity already exists at BSM.