



SHIRE OF CAPEL AGRIBUSINESS PRECINCT

DEMAND AND OPPORTUNITIES REPORT

February 2024

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Hatch Pty Ltd, 2024

1. Executive summary

The Shire of Capel is preparing and implementing a plan to realise the development of an Agribusiness Precinct (precinct) within the Capel district. The precinct will act as a drawcard for investment in the South West's agricultural industry, as well as house a replacement of the existing cattle sale yards in Boyanup. The objective of this report is to detail the identified current and future demands and opportunities that exist in the agriculture, logistics and transport sectors in the region, with this information used to inform site selection and focus industries of the agribusiness precinct.

Hosting a new agribusiness precinct would create significant benefits to the Shire of Capel. As well as new opportunities for economic diversification, job creation, value-add and export products, there is potential to attract new workforce, promote best practice, utilise circular economies and develop new industries such as waste-to-energy businesses. An agribusiness precinct has the potential to create a range of significant economic benefits for the Capel, the South West region, and the State including gains in productivity, expanding and diversifying industry, increased competitiveness, attracting new investment, food security, and creating sustainable jobs.

Key findings are listed below.

1. The Shire of Capel is strategically located to host an agribusiness precinct of State significance

The Shire of Capel is ideally located for an agribusiness precinct due to its strategic position linking agricultural producers with efficient distribution to markets. The Shire of Capel has excellent access to key transport infrastructure that promotes supply chain efficiencies, including Bunbury Port, Busselton Airport, and the Perth metropolitan area via the under-construction Bunbury Outer Ring Road (BORR) and the broader South West region.

The Shire's strategic location, which serves as a conduit for all agricultural products from the south and southeast, was repeatedly highlighted by stakeholders across diverse agricultural sectors. Combined with efficient transport links and access to nearby agricultural production areas, the Shire of Capel makes a potentially ideal location for an agribusiness precinct in the South West.

2. Clear demand exists for new best practice sale yards

The need for a relocated new, fit-for-purpose sale yards to replace the Boyanup yards is well established. Demand persists and is strengthening for sale yards facilities within this region, with stakeholders indicating the efficiency of selling stock from the South West catchment through the Shire of Capel rather than through facilities in Muchea or Mt Barker. Maintaining sale yards close to their current location is crucial for aggregating cattle herds, supporting feedlots, aiding small producers in competitive sales, and serving as a transit point for a variety of destinations.

Furthermore, the current location of the existing saleyards within the Boyanup townsite creates land use conflicts including issues relating to odour, noise, dust and effluent disposal, as well as constraining development of fully serviced residential land.

Key social and environmental considerations for new sale yards include prioritising animal welfare, minimising distance to market for producers, planning and site considerations including adequate buffers, increased capacity, environmentally sound water management, potential to host multiple-species, biosecurity, and efficient transport links.

3. A variety of agricultural business types could anchor an agribusiness precinct in the Shire of Capel

An anchor tenant in a precinct serves as a prominent, large-scale entity that attracts other businesses, and helps drive economic development within the precinct. Consultation with industry stakeholders for this report indicated a variety of different types of large businesses across several different agricultural industries that could potentially act as an anchor, including a service kill abattoir, a major red meat abattoir / privately-owned boning rooms, a horticulture processing facility, and grains processing.

It is likely a variety of the above anchors could co-exist in the precinct if an appropriate site is chosen. While there is clearly a wide range of potential focusses and anchor tenants for the precinct, the presence of the relocated cattle sale yards means any non-red meat related industries would be required to be separated by internal buffers within the precinct. This is an important fact to consider during the site selection and future masterplanning processes.

4. The agribusiness precinct can host a wide variety of supporting businesses and facilities

As well as a major facility anchor, an agribusiness precinct can host a wide variety of supporting agricultural businesses, creating synergies and productivity gains through their proximity, common user infrastructure, and shared supply chains. Many of these businesses are likely to be 'agnostic' to what type of agricultural business acts as an anchor for the precinct. Some potential supporting businesses include logistics, value-add processing, education and workforce training, and a wide variety of support businesses such as truck wash down facilities, stock agencies, mechanical workshops, nursery's and fuel depots.

5. The agribusiness precinct can showcase leading technology and circular economy approaches

A circular economy has closed-loop value chains that promotes reusing, repairing, refurbishing, and recycling in order to reduce waste and regenerate natural systems. Potential circular economy approaches that could be used at an agribusiness precinct in the Shire of Capel include closed-loop water management, waste re-use including waste-to-energy, circular supply chains and packaging, and hosting R&D into emerging circular economy practices such as zero waste farming, product life extension and enhancing farm to tables supply chains.

Next steps for the project are to find a suitable site for an agribusiness precinct that is suitable to host the range of industries that could become established. Information developed for this report will be used to influence this process to ensure an optimum site is found that maximises the agribusiness precinct's full potential.

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2. Introduction

2.1. Purpose

The Shire of Capel is preparing and implementing a plan to realise the development of an agribusiness precinct within the Capel district and service the South West agricultural industry. The overall project is envisaged to include the following key stages:

- Industry, government and stakeholder engagement.
- Demand and opportunity identification.
- Site identification and analysis.
- Feasibility studies and business case development
- Approvals, construction and operations.

The purpose of this report (relating to the second dot point above) is to detail the current and future demands and opportunities that exist in the agriculture, logistics and transport sectors, with this information used to inform site selection and focus industries of the agribusiness precinct.

2.2. Background

Boyanup Cattle Sale Yards

The Boyanup Cattle Sale Yards are an important strategic asset for the South West livestock industry and the Shire of Capel. Established in 1961, the sale yards continue to play an important role in the South West's agricultural industry, including hosting significant cattle sales and movements. The yards are operated by the West Australian Livestock Salesmen's Association (WALSA), comprised of Elders Rural Services Limited and Nutrien Ag Solutions Limited, which since 2002 have co-leased and operated the Boyanup Cattle Sale Yards from the Shire of Capel.¹

The Boyanup sale yards have played an important role for the Shire of Capel's agricultural industry but are no longer fit for purpose. Concerns have been raised by farmers and transporters regarding animal welfare on the site and environmental issues. These issues impact both local industry and the nearby residential community, which is located only hundreds of metres away.²

In 2017 Deloitte Access Economics recommended a new saleyard facility for the South West should the Boyanup sale yards be shut down.³ An EOI process in 2018 however failed to attract enough proposals for a feasible saleyard alternative for the South West. The Minister for Primary Industries and Regional Development and West Australian Meat Industry Authority (WAMIA) therefore requested the Shire of Capel to extend the current lease agreement for the Boyanup sale yards. This occurred, with the sale yards now leased to Elders Rural Services Limited and Nutrien Ag Solutions Limited on a ten year lease, with the option to extend my mutual agreement.⁴

¹ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, 2023, p 9.

² ABC, [Boyanup saleyards' licence conditions under review after 'minimally treated effluent' pumped into bush](#), news article, April 2023.

³ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, 2023, p 9.

⁴ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, 2023, p 9.

Benefits of an agribusiness precinct

Hosting a new agribusiness precinct would create significant benefits to the Shire of Capel and the South West Region more broadly. As well as new opportunities for economic diversification, job creation, and value-add and export products, there is potential to attract commercial investment, promote best practice, circular economies and develop new industries such as waste-to-energy businesses. Importantly, there is also potential to relocate the sale yards and thereby free up much needed land to create new residential housing developments and help growing regional demand.

An agribusiness precinct is far more than simply new sale yards, with the potential to create a range of significant economic benefits for the Shire of Capel, the South West region and the state including:

- Increased state and regional economic diversification as new food processing enterprises and industries become established and scale to meet market demand.
- Productivity gains from shared infrastructure and supply chains that leverage the Busselton airport expansion and the new Bunbury Outer Ring Road.
- Increased exports and value realisation from joint-branding that leverages regional brands to support the Shire of Capel's provenance and "clean and green" positioning.
- Increased national and international competitiveness as new specialisations and knowhow are developed and shared across firms.
- Improved market access as new businesses leverage the Shire of Capel's existing networks to interstate and overseas markets.
- Improved food security from decreased reliance on interstate and international supply chains.

Other studies have investigated the creation of an agribusiness precinct in the South West, including the Red Meat Action Group's South West Red Meat Precinct report in 2009, and Cardno's South West Food Processing Precinct report in 2017 in conjunction with DPIRD.

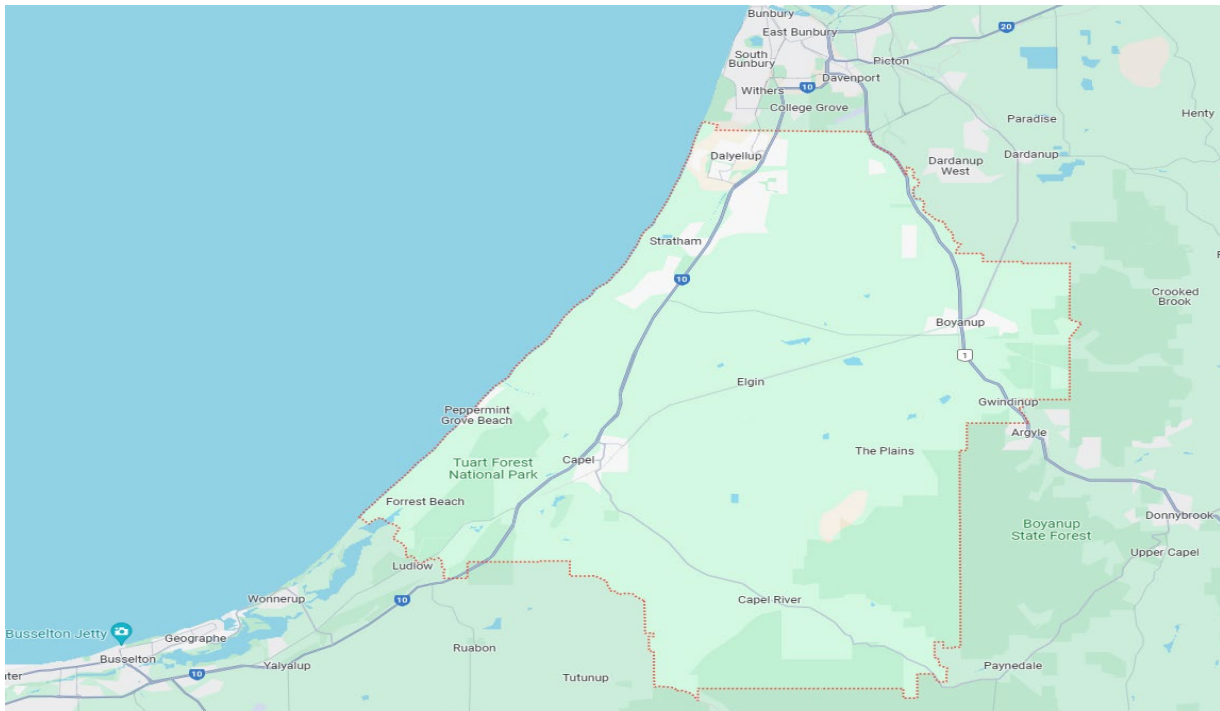
2.3. Study area

The Shire of Capel (Shire) is part of the Bunbury-Geographe sub-region in Australia's South West region. The Shire covers 558km² of land, where nearly 18,500 people live.⁵ A map of the Shire and its surrounds is at Figure 1.

The major industry of the Shire is agriculture, which still influences the way of life, work and economy of the South West and especially, the Bunbury Geographe sub-region. The strategic location of the Shire of Capel close to important agricultural production bases, and proximity to key export infrastructure and skilled labour force, will also enable significant value capture and uplift. More information is provided about the Shire's agricultural industry throughout this report. Please also note that the Shire of Capel's strategic location for an agricultural precinct is addressed at section 4.

⁵ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, 2023, p 8.

Figure 1 – Map of Shire of Capel and surrounds



Source: Google Maps, 2023.

3. Methodology overview

Methodology for producing this report included quantitative desktop research of the Shire of Capel's agricultural industry, and qualitative information gathering via extensive consultation and site visits by Hatch and AgDots. Engagement targeted a range of stakeholders including key industry, government, and supply chain representatives, as well as Shire of Capel staff and elected members. It incorporated a range of activities including attending a cattle sale at the Boyanup sale yards, ongoing communication with an industry reference group, and conducting stakeholder workshops and targeted interviews.

Key feedback sought from stakeholders included consideration of:

- Evolving industry trends and value drivers.
- Current capacity constraints/challenges facing industry.
- Potential business/industry opportunities and key enablers (e.g. infrastructure, input costs).
- Key locational criteria for an agribusiness precinct in the Shire of Capel.
- Key local considerations, including from current users for the Boyanup cattle sale yards.

The engagement was designed to deliver comprehensive and genuine collaboration with local stakeholders necessary to achieve broad buy-in and support for a future Shire of Capel agribusiness precinct. Past experiences where buy-in from industry was not achieved meant that project has been unable to progress beyond initial scoping stage.⁶ A full list of parties engaged with can be found at section 13.

⁶ Discussions between Hatch and a variety of stakeholders including Shire staff and the local agricultural industry; as well as Trina Anderson and Pat Page, Department of Primary Industries and Regional Development, November 2023.

4. Overview of agriculture in the South West

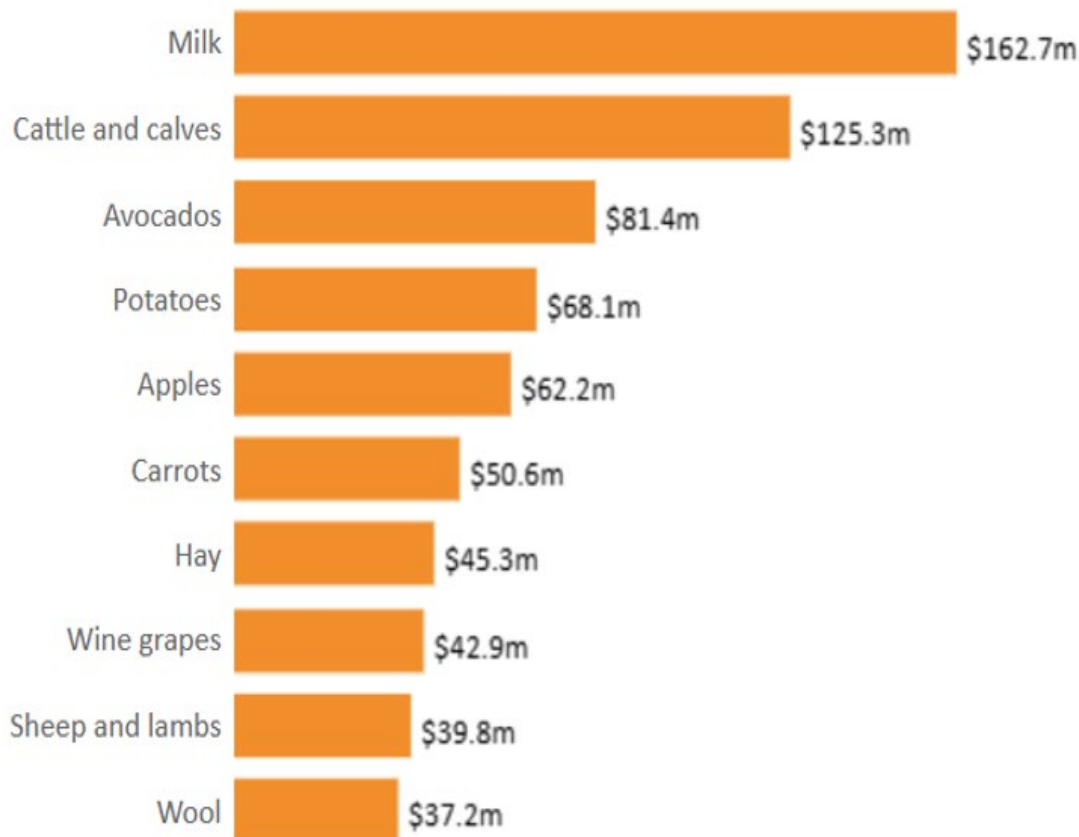
This section provides a general introduction of agriculture in the Shire of Capel and the South West more broadly. Please note that key individual agricultural sectors are examined in detail commencing from section 5.

4.1. Key agricultural crops in the South West

The South West's agricultural sector is a major contributor to the economy and global food supplies. The region produces a diverse range of commodities, such as milk, beef, avocados, apples, truffles, wine grapes, and vegetables. The region is well-known for its clean, green, and safe environment, which supports high-quality and traceable produce, and has a growing reputation as a culinary food destination and hosts several food events throughout the year. Agriculture, Forestry and Fishing produces 4.7% of employment within the region.⁷

In 2020-21 the Australian Bureau of Agricultural and Resource Economics (ABARE) reported that the gross value of agricultural production within the south west region totalled \$799 million, which was 9.25% of WA's total gross value of agricultural production.⁸ Within this year the three major agricultural sectors that contributed the highest value included dairy production with a value of \$162.7 million, cattle and calves at \$125.3 million, and avocados at \$81.4 million (Figure 2).

Figure 2 - Top agricultural commodities by value in the South West for 2021-22



Source: [ABARES](#), 2022.

⁷ Department of Planning, Lands and Heritage, [Bunbury-Geographe Sub-regional Strategy](#), 2022, p 37.

⁸ Regional Development Australia, [Regional Futures 2023](#), p 33.

The South West is a major food production area for the state. Table 1 shows South West crops that contributed more than half the State’s total production.

Table 1 - Proportion of WA’s total crops produced in the South West

Agricultural crop	Proportion of WA’s total crop produced in the South West
Dairy production	82%
Avocado	89%
Potatoes	86%
Apples	84%
Carrots	53%
Wine Grapes	65%
Onions	100%

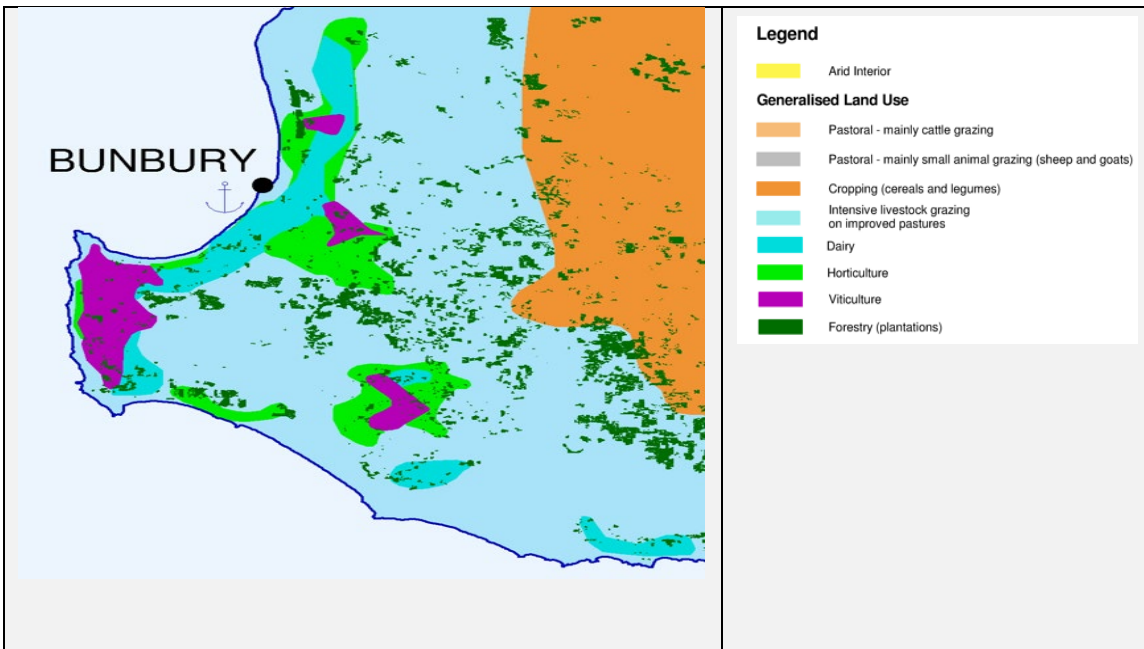
Source: Adapted from Regional Development Australia, [Regional Futures 2023](#).

It is notable that the pork industry is primarily located in the north of WA and does not have a significant influence on the south west agricultural economy.⁹

4.2. Agricultural land use in the South West

Agriculture is a key land use in the South West, encompassing 29% of all land in the region (Figure 3).¹⁰ Major agricultural land uses align with key crop production types, including livestock grazing, dairy, horticulture and viticulture, noting these land uses are all prevalent in the Shire of Capel.

Figure 3 - Map of agricultural land use in the South West



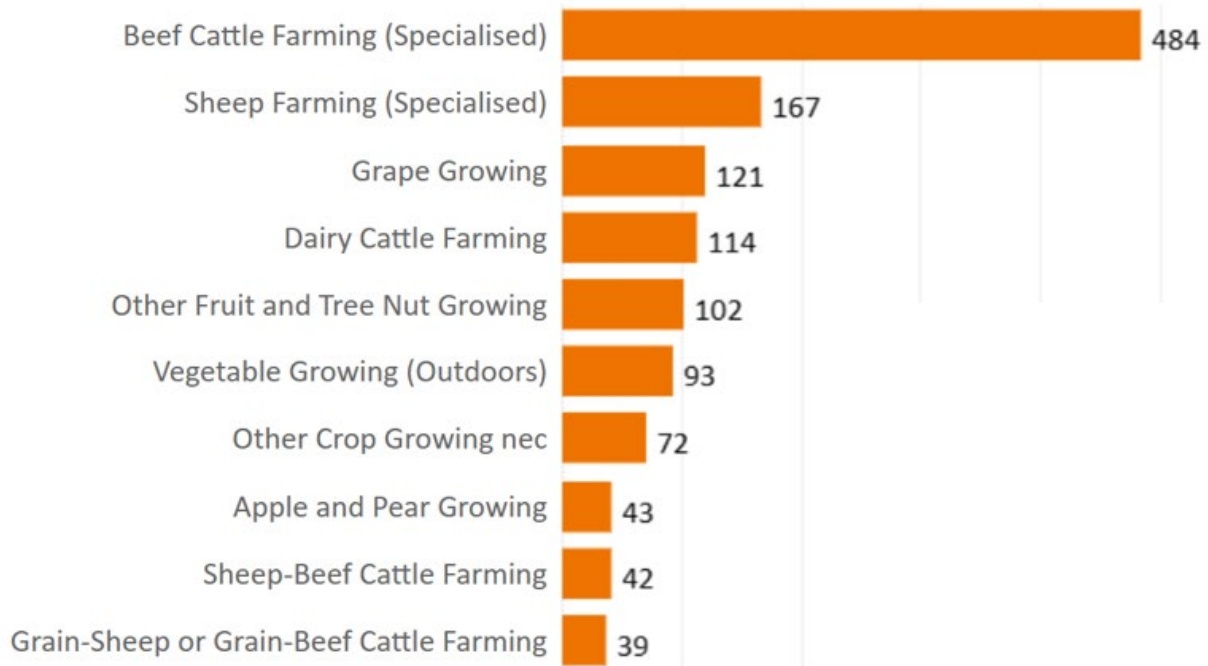
Source: [Department of Primary Industries and Regional Development](#), 2016.

⁹ Department of Primary Industries and Regional Development, [Livestock Species website](#), last accessed December 2023.

¹⁰ Regional Development Australia, [Regional Futures 2023](#), p 33.

As of 2021 there were 1,383 commercial farms in the South West, with beef cattle farming the largest land use at 484 farms.

Figure 4 - Farm types in the South West



Source: [ABARES](#), 2022.

4.3. Major emerging trends impacting agriculture in the South West

Please note that trends relating to specific agricultural industries are examined in their respective sections from section 6 onwards.

Climate change and water availability

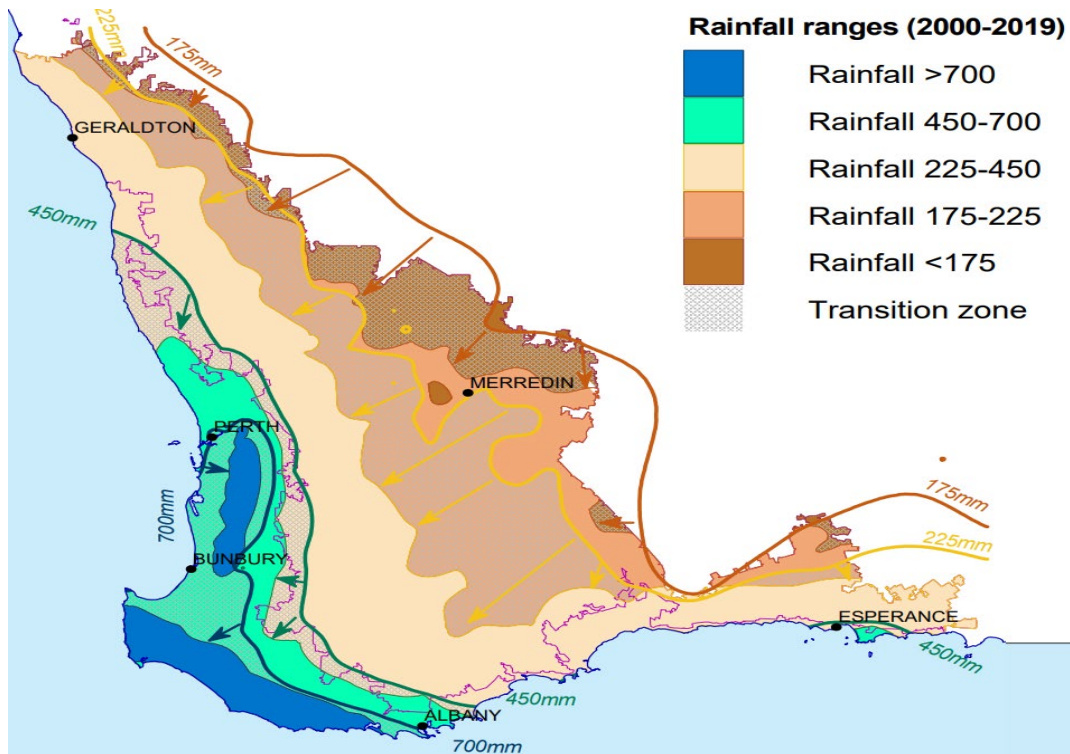
Rainfall in the south and west of WA is shifting, with precipitation increasingly concentrated towards the coast and away from the marginal areas. This has resulted in a decrease in the number of zones receiving more 700ml of annual rainfall as depicted in Figure 5. Over time, climate change is anticipated to further decrease rainfall within the region and impact the availability of water for agricultural industries.¹¹

The South West is also projected to experience a rise in average temperatures, accompanied by an increase in the number of dry days. This could lead to an expansion of agricultural dry months (defined as months with extremely low soil moisture levels), which are predicted to increase by up to 80% in south west WA by 2070. These changes highlight probable need for adaptive strategies to mitigate the impacts of climate change on agriculture and water resources. The availability of water will potentially be a significant limitation in being able to expand agricultural businesses.¹²

¹¹ Department of Primary Industries and Regional Development, [Primary Industries Plan 2022-2024](#), p 22.

¹² Grower Group Alliance, [South West Western Australia Drought Resilience Situational Analysis](#), 2022, p 45.

Figure 5 - Map of annual rainfall changes in south and west WA, 2000 to 2019



Source: [Primary Industries Plan](#), 2022.

In order to address these climate related issues, innovative ideas are required to ensure agriculture can continue in the region, particularly for water intensive produce such as dairy and beef cattle. Government programs for agricultural related industries are starting to be implemented to incentivise adoption to, and mitigation of, climate change. For example, carbon farming involves the managing of soil, vegetation, water and animals to increase carbon storage and reduce green house gas emissions. Types of carbon farming relevant to current agriculture industries in the Shire of Capel include managing cattle manure and breeding specific types of cattle to reduce greenhouse gas emissions.¹³

Farms and farmers are changing

Farming is undergoing a major transition at it becomes more corporate, with overseas investors and superannuation funds purchasing and consolidating farms. As a result, many family-owned businesses are also increasing in size in order to remain competitive.¹⁴

Other land use changes affecting agricultural land in the South West include increased forestry plantations, carbon developments, and demand for lifestyle blocks.¹⁵

¹³ Department of Primary Industries and Regional Development, [Carbon farming management options in Western Australia website](#), last accessed December 2023.

¹⁴ Department of Primary Industries and Regional Development, [Primary Industries Plan 2022-2024](#), p 23.

¹⁵ AgDots and Hatch discussions with multiple industry stakeholders and Shire staff, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

Anecdotally, “treechanges” purchasing lifestyle blocks appears particularly prevalent in the Shire of Capel, likely due to its pleasant amenity, and good connections to the Margaret River area and Perth.

Stakeholders consulted for this report indicated these shifts in land use could potentially lead to a major reduction in land available for agriculture in the South West over the long term, as well as land use conflicts, particularly beef and dairy farming. However, it was also noted that production level could potentially be mitigated with improvements in efficiency and productivity.

AgTech and innovation

AgTech refers to the use of technology and innovation in agriculture to improve efficiency, sustainability, and productivity in farming practices. AgTech in Australia is a major growth industry, with the market expected to triple in size from \$12.4 billion in 2020 to \$34.1 billion by 2026. AgTech is also seen by industry as being crucial to addressing the many challenges being faced by the agriculture sector, such as labour shortages, an increasingly competitive market, and climate change impacts.¹⁶

Some innovative AgTech examples relevant to the Shire of Capel’s current agricultural industries include:

- AI and data analytics are being used to improve the environmental performance of the Australian beef herd, with blockchain used for enhanced herd traceability from “paddock to plate”.¹⁷
- The dairy industry is using big data to improve decision-making and operations, such as robot cow milking.¹⁸
- Climate controlled, closed loop warehouses are being used for horticulture production (referred to as vertical farms), which is greatly reducing water usage.¹⁹, as well as reducing pesticide usage, reduced nutrient demand and overall improved productivity.

Another example of AgTech that is directly relevant to the sale yards is online cattle sales. Online cattle sales offer benefits including access to a wider range of buyers, the ability to sell livestock by description, and the convenience of direct consignment to the buyer from the farm (instead of carting the animals from the farm to the sale yards, then to the purchaser), which can be more efficient and less stressful for the cattle compared to traditional sale yards auctions.²⁰

However, stakeholders indicated some concerns with the online sales approach, including limited price transparency and loss of social amenity from gathering at the sale yards. Consequently, some South West producers tend to prefer the current sale yards model, which fosters competitive and transparent pricing.²¹

The South West have many small herds that may not be suitable for sale via online auction, leaving saleyards as the most viable option.

¹⁶ BDO Australia, [The Future of Australian Agribusiness website](#), last accessed December 2023.

¹⁷ Dock.io, [Blockchain Food Traceability: Enhancing Transparency and Safety](#), 2023.

¹⁸ Pasture.io, [New dairy trends website](#), last accessed December 2023.

¹⁹ Eden Towers, [website](#), last accessed December 2023.

²⁰ Future Beef, [Selling options for beef cattle website](#), last accessed December 2023.

²¹ AgDots and Hatch discussions with beef industry producers, Boyanup cattle sale yards, November 2023.

Environmental, Social, and Governance issues (ESG)

Australia's agricultural industries are being impacted by emerging global ESG market trends such as prioritising sustainable practices, ethical sourcing, provenance and transparency in supply chains, reduced environmental impact, higher animal welfare standards, and meeting the preferences of a more health-conscious and socially responsible consumer base.²²

The South West is arguably strongly positioned to take advantage of these emerging trends by leveraging its “clean and green” reputation and embracing AgTech solutions to help meet new market expectations. Potential opportunities include developing a carbon-neutral beef market, maintaining the highest standards of animal welfare, and implementing full traceability for livestock herds.

A crucial ESG issue for the Shire of Capel regards the current animal welfare standards at the Boyanup cattle yards which do not meet best practice, something repeatedly raised by industry stakeholders as a major problem.²³ A new sale yards would address these issues upfront to ensure the highest standards of animal welfare (see section 5.2 for further details).

International exports and diversification of markets

Stakeholders consulted for this report consistently raised the limited markets of wholesale purchasers as a major issue. This lack of competition means small agricultural producers are frequently price-takers, with limited negotiating power and no control over prices received for their goods. This puts producers under constant financial pressure and reduces their ability to invest capital back into their farms and operations.²⁴

Diversifying into international markets may potentially help address this problem. In particular, Asia is experiencing strong population growth, rapid urbanisation, rising incomes and escalating food security requirements, all of which are likely to drive ongoing demand for agricultural products. Emerging nations are also becoming more wealthy, giving consumers more purchasing power for high quality agricultural products. With 4.9 billion middle class consumers estimated to exist by 2030, two thirds of who will be in Asia,²⁵ this represents a strong opportunity to export the South West’s high quality produce to these emerging markets.

Leveraging the Australian and State governments’ international trade networks should be pursued by the South West’s agricultural industries to help develop new networks and tap these major growth markets. This approach will potentially help create more international demand for local agricultural products, and thereby increase profits for producers.

²² Department of Primary Industries and Regional Development, [Primary Industries Plan](#) 2022-2024, p 33.

²³ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, August 2023.

²⁴ AgDots and Hach discussions with a variety of separate agricultural stakeholders in the South West from the beef, dairy and horticulture industries, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

²⁵ Department of Primary Industries and Regional Development, [Primary Industries Plan](#) 2022-2024, p 18.

5. Key findings

5.1. Key finding #1 – The Shire of Capel is strategically located to host an agribusiness precinct of state significance

The Shire of Capel is ideally located for an agribusiness precinct, due to its strategic positioning linking agricultural producers with major transport infrastructure that allows efficient distribution to markets. Stakeholders consulted for this report across a wide variety of agricultural industries across the South West repeatedly emphasised the importance of the Shire of Capel's location, and the fact that all agricultural products going to/from south and south east of Bunbury were moved through the shire.²⁶

Two major highways traverse the Shire of Capel. Bussell Highway (Highway #10) links to agricultural production areas to the Margaret River area, Nannup and Pemberton in the south, while South Western Highway (Highway #1) connects to Donnybrook, Bridgetown, Manjimup and the Great Southern region. A map of the South West's major roads and connections to the Shire of Capel is at Figure 6, with the Shire's approximate location circled.

The Shire's access to both highways allows for efficient movement of agricultural goods, and also provides excellent access for suppliers and distributors to markets via major infrastructure including Bunbury Port, Busselton Airport, and the Perth metropolitan area via the under-construction Bunbury Outer Ring Road (BORR) (see section 9).

These efficient transport links, along with the Shire of Capel's location as a funnel for the majority of agricultural production from the major production areas south and south east of Bunbury moving to Perth, make it a logical place for an agribusiness precinct supporting the agricultural industry in the South West.

Figure 6 - Map of the South West's major roads and connections to the Shire of Capel



Source: Main Roads WA, 2013.

²⁶ AgDots and Hach discussions with a variety of separate agricultural stakeholders in the South West from the beef, dairy and horticulture industries, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

5.2. Key finding #2 - Clear demand exists for new best practice sale yards

The need for relocated, new fit-for-purpose sale yards to replace the Boyanup yards is well established.²⁷ Demand persists for sale yards facilities within this region, with stakeholders indicating the efficiency of selling stock from the South West catchment through the Shire of Capel rather than through Muchea or Mt Barker. Maintaining sale yards close to their current location is crucial for aggregating cattle herds, supporting feedlots, aiding small producers in competitive sales, and potentially serving as a transit point for a variety of destinations. Stakeholders indicated the new sale yards should incorporate the following considerations.²⁸

Animal welfare - stakeholders emphasised achieving high standards in sale yard design to focus on animal welfare, such as soft flooring and shade. Learning from past mistakes in similar facilities will be crucial to achieving optimal outcomes for animals.

Distance to market – cost of moving livestock to the markets is considerable and becomes uneconomical for producers even over relatively small increases in distance. The new sale yards should therefore be located reasonably close to the current Boyanup site to ensure producers' transport costs are maintained at approximately the same level as currently incurred.

Planning and site location considerations - distance from population centres is critical to maintain a social license to operate. Appropriate buffers from noise, dust, and odours should be used, and site location should consider potential future residential developments. Incorporating tree buffers for carbon credits and ensuring suitable topography for drainage and water management is achievable. Access to water supply, proximity to workforce, appropriate zoning, amenities, and robust internet are also critical factors when selecting an appropriate location.

Capacity – the new yards should be capable of handling 2,500 - 3,000 head of cattle per day, with the yards designed for enhanced efficiency and the facilitation of multiple vendor sales on any given day.

Multi-species – the yards should be capable of processing multiple species including cattle, sheep, and potentially pigs and horses. This will require specific design considerations to meet biosecurity requirements that prevent cross contamination of diseases.

Dairy calf pens - purpose built pens should be provided with adequate room for very young dairy calves.

Sustainability and ESG – incorporate water reuse, carbon-neutral operations, waste recycling, and energy efficiency throughout the site.

Transport efficiency and linkages - Seamless connectivity to major road networks (including Bunbury Port, Busselton International Airport, and the Bunbury Outer Ring Road) is highly preferable to enable easy access for larger transport configurations including B-triple road trains (RAV 7s).

Overnight holding yards for livestock can alleviate immediate transfers to feedlots post-sale, thereby reducing transport costs and driver fatigue.

²⁷ Shire of Capel Request for Quotation, Agribusiness Precinct – Phases 1, 2 and 3 – Demand and Site Identification, August 2023, p 9.

²⁸ This feedback came from multiple engagement sessions by Hatch and AgDots conducted with stakeholders in November 2023, including attending a sale at the Boyanup yards, conducting a community workshop, and numerous other targeted one-on-one engagement sessions. Please refer to Consultation List for full list of stakeholders engaged with.

Biosecurity - stakeholders expressed a need for strong biosecurity measures, including washdown facilities which are essential for disease control.

Technology and design – incorporate technology-based yard infrastructure to automate National Livestock Identification System tracking used for identifying individual livestock.

Other facilities - integrate retail, office, and educational spaces at the public interface, while segregating industry entrances and parking areas.

Ownership models - Stakeholders discussed a range of potential ownership models, including a cooperative structure.

As well as clear demand for new best practice sale yards, there is consensus that the existing sale yards in Boyanup should be moved. This is due to land use conflicts the site creates including issues relating to odour, noise, dust and effluent disposal, as well as constraining development of fully serviced residential land. Relocating the sale yards has the potential to create new residential lots at R20 and R30 density in Boyanup, depending on land arrangements, with straightforward access to existing infrastructure to provide headworks.

5.3. Key finding #3 - A variety of agricultural business types could anchor an agribusiness precinct in the Shire of Capel

An anchor tenant in a precinct serves as a prominent, large-scale entity that attracts other businesses, and helps drive economic development within the precinct. Hatch's previous work in the economic development space has demonstrated that attracting an anchor is typically one of the key requirements for successfully instigating a precinct.

Consultation with industry stakeholders for this report indicated a variety of different types of large businesses across several different agricultural industries could potentially act as an anchor for an agribusiness precinct in the Shire of Capel:

Service kill abattoir - Producers expressed a strong need for a service kill abattoir and independent boning rooms in the South West to help support minor meat producers efficiently process their livestock in smaller batches, thereby maintaining quality control and customisation for their bespoke brands while ensuring regulatory compliance.

Red meat abattoir – major interstate or overseas processors could become established at an agribusiness precinct in the Shire of Capel if the market fundamentals and right supports were in place, particularly given the likely growth opportunities in sheep slaughtering given the pending cessation of the live sheep exports.

Milk powder plant – a factory making powdered milk could take advantage of the Shire of Capel's close proximity to major dairy herds.

Horticulture processing – an agribusiness precinct in the Shire of Capel could take advantage of its wide variety of nearby major horticulture areas to provide a range of services, including consolidated packing sheds, and common-user facilities such as juicing facilities and processing equipment that helps reduce costs for producers.

Grains processing – The Shire of Capel could host a range of grain-related opportunities in an agribusiness precinct such as oat processing, plant protein production, and grain biofuel manufacturing.

Please note that all the above options are considered in more detail in sections 6 through 9.

It is likely a variety of the above anchors could co-exist in the precinct if an appropriate site is chosen. While there is clearly a wide range of potential focusses and anchor tenants for the precinct, the presence of the relocated cattle sale yards means any non-cattle related industries would be required to be separated by internal buffers within the precinct. This is an important fact to consider during the site selection process.

To determine an appropriate anchor tenant, an Expression of Interest process could be run once a final site has been selected and appropriate funding secured to develop the site to a state where it is ready for industry investment.

5.4. Key finding #4 - The agribusiness precinct can host a wide variety of supporting businesses and facilities

As well as a major facility anchor, an agribusiness precinct can host a wide variety of supporting agricultural businesses, creating synergies and productivity gains through their proximity, common user infrastructure, and shared supply chains. Many of these businesses are likely to be ‘agnostic’ to what type of agricultural business acts as an anchor for the precinct. A summary of some of these business types is below.

Logistics – encompasses the planning and execution of all activities necessary to manage and move goods through the supply chain. Due to its excellent transport links and strategic location (see section 5.1), the Shire of Capel would make an excellent location for an agricultural logistics hub. Potential logistics businesses and capabilities at the agribusiness precinct include containerisation facilities, warehousing, cold storage, and lay down facilities for the storage, organisation, and preparation of goods for dispatch.

Value-add processing - involves transforming raw agricultural produce into higher-value products. Industries engage in processes such as canning, freezing, drying, packaging, brewing and distilling, thereby increasing the shelf life, convenience, and appeal of the food products. Given the South West’s reputation for high quality produce, as well as established wine and beer manufacturing, value-add processing could be a logical addition to the agribusiness precinct.

Education, research, and workforce training – these could all occur on-site at an agribusiness precinct and create strong benefits for the precinct and South West agricultural sector. The precinct could foster innovation, drive research and development, and offer multiple types of education from cutting-edge research to practical hands-on learning. Integrating R&D facilities, tertiary education institutions, and vocational training within an agribusiness precinct would create strong knowledge transfers and economic growth while helping secure a workforce for the precinct and its industries.

Agricultural support businesses and facilities – potentially includes truck wash down facilities, fuel depots, truck driver support services such as dining and overnighting facilities, agricultural services stores (typically run by Elders or Nutrien), meeting rooms, and social facilities such as cafes.

Please note these industries and businesses are considered in more detail in section 11.

When selecting a site for the precinct, spatial considerations for these variety of businesses must be considered to ensure there is adequate room for their development and growth over the long term.

5.5. Key finding #5 - The agribusiness precinct can showcase leading technology and circular economy approaches

A circular economy has closed-loop value chains that promotes reusing, repairing, refurbishing, and recycling in order to reduce waste and regenerate natural systems.²⁹ These approaches are designed to help address worldwide issues like climate change, biodiversity loss, waste, and pollution. Potential circular economy approaches that could be used at an agribusiness precinct in the Shire of Capel are listed below.³⁰

Closed-loop water management – create water recycling systems to treat and reuse water, as well as targeting climate resilient sources. This will be critical to managing waste runoff created from cleaning cattle waste from the sale yards and help prevent contamination of nearby water sources. Rainwater harvesting systems could collect and store rainwater and help maintain adequate water supplies.

Waste re-use - integrate waste re-use into operations to minimise environmental impact and maximise resource efficiency. Organic waste from farming activities like crop residues or animal manure is repurposed as biofuel, compost or biofertilisers. In particular, waste-to-energy facilities that allow some businesses to make their own biogas used for power generation on-site is likely to have strong potential.

Circular supply chains – exchange by-products and waste materials with local business to create a closed-loop supply chain and create value out of waste products.

Circular Packaging – use packaging that supports reuse by businesses and customers of the precinct.

R&D into emerging circular economy practices – conduct on-site research into zero waste farming, product life extension, farm to table supply chains, and using advanced technologies such as sensors, drones, and satellite imagery to optimise farming practices.

²⁹ Ellen Macarthur Foundation, [What is a Circular Economy](#), website, last accessed January 2024.

³⁰ Centre for Entrepreneurial Agri-Technology, [Agriculture and the Circular Economy](#), website, last accessed January 2024.

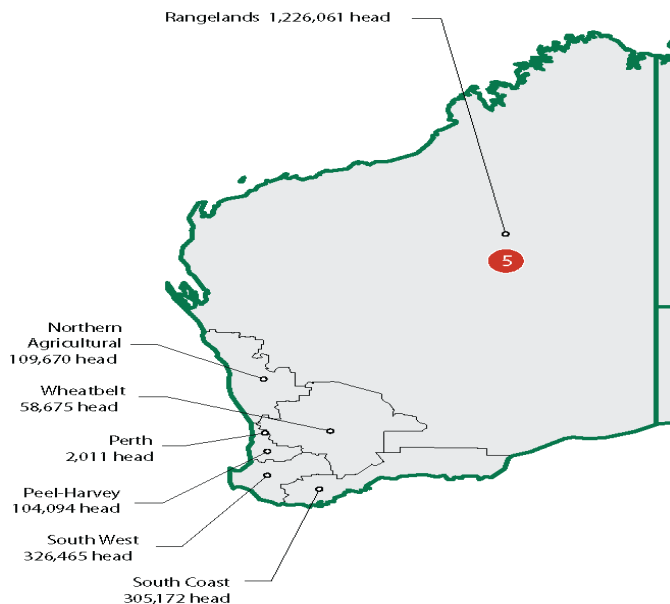
6. Beef and lamb industries (red meat) in the South West

6.1. Current industry

Cattle industry

The cattle industry in the South West is a significant part of the state's agricultural sector. The state has a herd of approximately two million head of beef cattle, of which 326,000 are in the South West, plus 104,000 in Peel-Harvey and 305,000 in the South Coast, noting this data includes beef and dairy cattle (Figure 7). Cattle and calves account for 14.6% of the South West's agricultural commodities by value at \$125.3m per year.³¹

Figure 7 - WA cattle numbers by region as at 2021



Source: Adapted from [Meat and Livestock Australia](#), 2021.

The South West region is known for its smaller scale operations, with average herd sizes under 500 head per producer. The region operates with higher stocking rates than other regions in WA due to more reliable rainfall, longer growing season, and better quality forages. Cattle are grazed on pastures including annual rye grasses, subterranean clover and sub-tropical perennial grasses.³²

²⁹ Australian Bureau of Agricultural and Resource Economics, [ABARES regional dashboard](#), for Bunbury area, last accessed December 2023.

³² Department of Primary Industries and Regional Development, [The Western Australian beef industry website](#), last accessed December 2023.

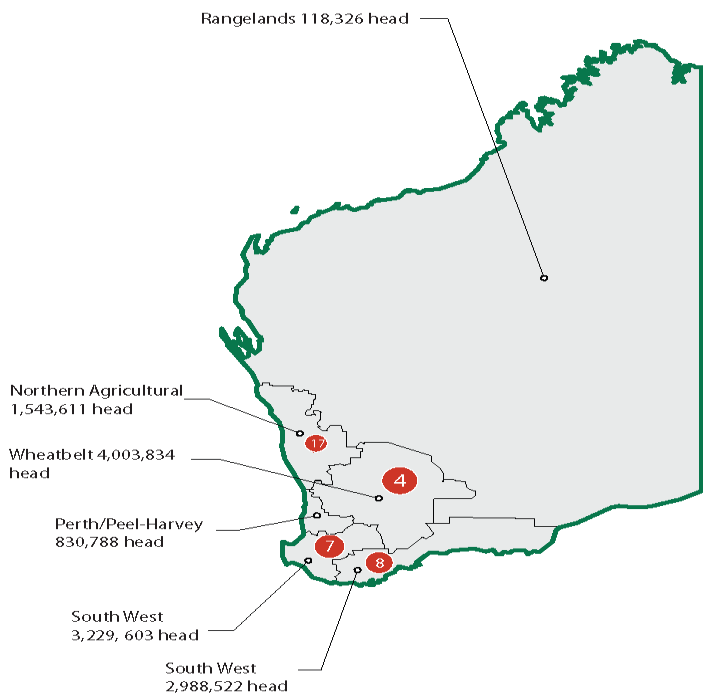
The South West has a diverse cattle herd which makes it more challenging for processing, as the lack of uniformity of cattle species can lead to challenges in standardising production methods, timing, and meeting specific market demands. The South West may therefore potentially face challenges attracting major overseas processing investors without changes to herd composition.³³

Sheep industry

The WA sheep industry plays a significant role in the state’s economy with 2021-22 accounting for 43% of the value of all livestock industries in WA. Similarly to cattle, the sheep industry in the South West is a significant part of the state’s agricultural sector. The state has a herd of approximately 12.7 million sheep, of which 3.3 million are in the South West, plus 830,000 in Peel-Harvey and 2.9 million in the South Coast, and 4 million in the Wheatbelt (Figure 8). Sheep and lambs account for 4.6% of the South West’s agricultural commodities by value at \$39.8m per year.³⁴

In 2022 the total slaughter of sheep in WA reached 3.8 million, consisting of 69% lambs and 31% adult sheep. Lamb slaughter has steadily increased since 2012, with sheep slaughter maintaining relatively steady. The value of WA lamb export has consistently increased from \$128.2 in 2010 to \$430.5m in 2022, with an average increase of 19% in lamb exports.³⁵

Figure 8 – WA sheep numbers by region as at June 2021



Source: Adapted from [Meat and Livestock Australia](#), 2021.

³³ AgDots and Hatch discussions with Stakeholder Working Group members, November 2023.

³⁴ Australian Bureau of Agricultural and Resource Economics, [ABARES regional dashboard](#), for Bunbury area, last accessed December 2023.

³⁵ Department of Primary Industries and Regional Development, [The Western Australian sheep and wool industries website](#), last accessed December 2023.

Feedlots

A feedlot is a type of animal feeding operation where livestock, such as cattle or sheep, are intensively managed and fed primarily grains in a relatively small area until they are ready for processing or export. Feedlots are used to intensively manage and feed livestock to fatten them quickly and efficiently for market, as well as providing a steady rate of livestock to abattoirs for slaughter, thus helping facilitate constant production.

While there is no publicly available list of feedlots, the majority of feedlots in southern WA are in the Great Southern, where land is relatively cheap and grain readily available.³⁶

Red meat processing

The South West region is home to several major red meat abattoirs including Harvey Beef, V & V Walsh, Western Meat Packers and Dardanup Butchering Company. These abattoirs play a crucial role in the beef and sheep industry, processing the region's livestock for both domestic consumption and export. These are major processing facilities - for example, V & V Walsh can process 5000 sheep and 400 cattle per day.³⁷ A variety of smaller abattoirs in the South West also slaughter a wide variety of species including mutton, goat, pork, deer and poultry.³⁸

Live exports

Live exports are also important to the WA's agricultural economy, with Fremantle Port acting as a significant hub for live exports from the southern part of the state. 31,000 tons of live sheep and 25,000 tons of cattle and calves were exported during 2022-23, the bulk of which are likely to be from the Wheatbelt, Peel, and South West.³⁹ Note that Bunbury Port does not currently handle live exports (see section 10.3).

Live exports are currently being considered by both State and Federal governments, with the Federal government committing to ceasing all live sheep exports noting no date has yet been set.⁴⁰ The state government is also considering alternative locations for live exports of cattle to align with the development of Westport, which will see Fremantle port cease acting as a port of trade except for cruise ships and visiting military ships over the longer term.⁴¹

³⁶ AgDots and Hatch Discussions with Leon Giglia, National Livestock Manager, Nutrien, November 2023.

³⁷ V&V Walsh [website](#), last accessed December 2023.

³⁸ See, for example, [Beaufort River Meats website](#), last accessed 2023.

³⁹ Fremantle Ports, [Annual Trade Review website](#), last accessed December 2023.

⁴⁰ Sydney Morning Herald, [Government MP says end date to live exports must be fast-tracked](#), September 2023.

⁴¹ Media Statement, [Preferred design and location for new container terminal unveiled](#), November 2023.

6.2. Future demand and opportunities

There are multiple market opportunities for WA red meat to export into south east Asia (Japan, South Korea and Malaysia) and the US. There is a strong desire from stakeholders to develop a South West beef brand that can compete globally, seizing the opportunity to develop a provenanced beef product with quality product differentiation based upon the unique production system of the region. To achieve this, it will be important to address industry disaggregation in terms of types of herd, and size of producers.⁴²

The sheep industry is likely to restructure following the pending cessation of the live sheep trade. If the sheep flock stays at a similar size to present, there will be an additional need for processing lambs and mutton on-shore. This may then attract an additional processor to WA, or provide an opportunity for an existing processor to relocate or develop an additional site in the South West.

6.3. Potential role of an agribusiness precinct in the Shire of Capel

There is strong potential for a red meat agribusiness precinct in the Shire of Capel that would incorporate the relocated cattle sale yards. Stakeholders identified the following key potential components of such a precinct.⁴³

Service kill abattoir - A service kill abattoir is a facility that slaughters and processes animals specifically for individual farmers or producers rather than for commercial sale or distribution.

Producers expressed a strong need for a service kill abattoir and independent boning rooms in the South West to help support smaller producers to efficiently process their livestock in smaller batches, thereby maintaining quality control and customisation for their bespoke brands while ensuring compliance with regulations. This service would allow for producers' specific needs to be met without requiring large-scale processors which are reluctant to process smaller numbers of livestock.

Abattoir - Opinions differ on whether there is currently the requirement for additional large scale red meat processing facilities in the South West. None of the processors consulted indicated they were looking for a greenfields site opportunities to expand, although some noted they could increase through-put with some capital upgrades on existing sites.⁴⁴ However, it is possible new players from interstate or overseas could become established at an agribusiness precinct in the Shire of Capel if the market fundamentals and right supports were in place. There is likely to be growth opportunities in sheep processing due to the planned changes to the live sheep trade.

Livestock handling - The precinct could include feedlots for cattle in preparation for live export, and an interim transit facility for weighing and moving cattle to these areas.

Value-add - There is currently little value-adding or secondary products manufactured in the region. A precinct could potentially produce products such as pet meat, rendering, hides and biofuels.

⁴² AgDots and Hatch discussions held with a wide range of beef industry stakeholders, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

⁴³ This feedback came from multiple engagement sessions by Hatch and AgDots conducted with stakeholders in November 2023, including attending a sale at the Boyanup yards, conducting a community workshop, and other targeted one-on-one engagement sessions. Please refer to Consultation List for full list of stakeholders engaged with.

⁴⁴ Confidential discussions with AgDots and South West meat processors, November 2023.

South West red meat brand and growth plan – As noted above, stakeholders consistently identified the need for red meat growth plan for the South West to provide a clear vision for industry.

The plan would require a whole of value chain approach, including developing a strong and distinctive brand for South West beef. The agribusiness precinct in the Shire of Capel could act as an anchor and “front door” for such a brand, and host a dedicated officer for promoting the plan and liaising with potential investors.

7. Dairy industry in the South West

7.1. Current industry

WA's dairy industry is primarily located in the South West of the state, particularly Harvey, Scott River, Nannup, Margaret River, and Denmark. These regions host a total herd size of approximately 54,000 cows on 135 dairy farms, producing around 364 million litres of milk per annum and contributing four per cent of Australia's total milk production. Dairy processing consists of three key companies, along with a number of small businesses.⁴⁵ The domestic market forms the main customer base of the WA dairy industry, with dairy products consumed as either fresh milk or short shelf-life products.⁴⁶

7.2. Future demand and opportunities

Global dairy consumption is witnessing an annual increase of approximately 18 billion litres, largely driven by Asia's evolving dietary preferences, robust economic growth, and population expansion. The WA dairy sector, which as noted above is predominantly engaged in fresh milk production for local consumption, holds significant potential for enhancing milk exports to Asia through alternative models. Achieving this would necessitate substantial investment across the supply chain, encompassing innovations in farm production, manufacturing, new product development, and market expansion.⁴⁷

7.3. Potential role of an agribusiness precinct in the Shire of Capel

Stakeholders consulted for this report identified a milk powder plant as potentially playing a role in an agribusiness precinct in the Shire of Capel. Powdered milk is dehydrated milk that can be reconstituted into a liquid milk product. Powdered milk's advantages include longer shelf life, no need for refrigeration, and portability. This could also potentially be broadened into products such as baby formula, which is typically made from cows' milk but modified to suit a baby's nutritional needs. Given historical scandals in Asia regarding poisonous baby formula,⁴⁸ the South West's providence for creating such a product would likely help establish strong demand in countries where trust in local products is limited.

Stakeholders indicated the capital required to establish a milk powder plant is approximately \$100m. Such a facility could take advantage of the Shire of Capel's close proximity to major dairy herds, as well as the region's clean and green reputation to help market its products overseas.⁴⁹

⁴⁵ WA Farmers, [Dairy website](#), last accessed December 2023.

⁴⁶ Department of Agriculture and Food, [Investment Opportunities in Western Australia's Dairy Industry](#), p 5.

⁴⁷ Department of Agriculture and Food, [Investment Opportunities in Western Australia's Dairy Industry](#), p 5.

⁴⁸ The Straits Times, [China's lethal milk scandal reverberates a decade later](#), January 2019.

⁴⁹ Confidential discussions with AgDots and South West dairy processors, November 2023.

8. Horticulture in the South West

8.1. Current industry

Horticulture plays a major role in the South West's agricultural production, with the region identified as a high quality seasonal fruit and vegetable producer.⁵⁰ Of horticultural value for WA, Manjimup holds 29% of the total value of fruit production, while Harvey has 20% of the total value of vegetables, with the South West region producing over half a billion dollars in horticulture products annually.⁵¹ It is also notable the following types of horticulture produce are grown within a 1.5 hour drive of the Shire of Capel:

- All of the top 10 fruits by value, except bananas.
- All of the top 10 vegetables by value, except tomatoes.⁵²

Value of significant horticulture production for LGAs within 1.5 hours of the Shire of Capel is shown at Table 2, and the top 10 types of fruit and vegetables produced in WA is shown at Figure 9 and Figure 10 respectively.

Table 2 – Value of significant horticulture production for LGAs within 1.5 hours of the Shire of Capel, 2020

Local Government Area	Annual production value
Manjimup	\$236.3m
Harvey	\$147.1m
Busselton	\$92.6m
Donnybrook- Balingup	\$47.6m
Nannup	\$35.7m
Augusta-Margaret River	\$31.5m
Total value	\$590.8m

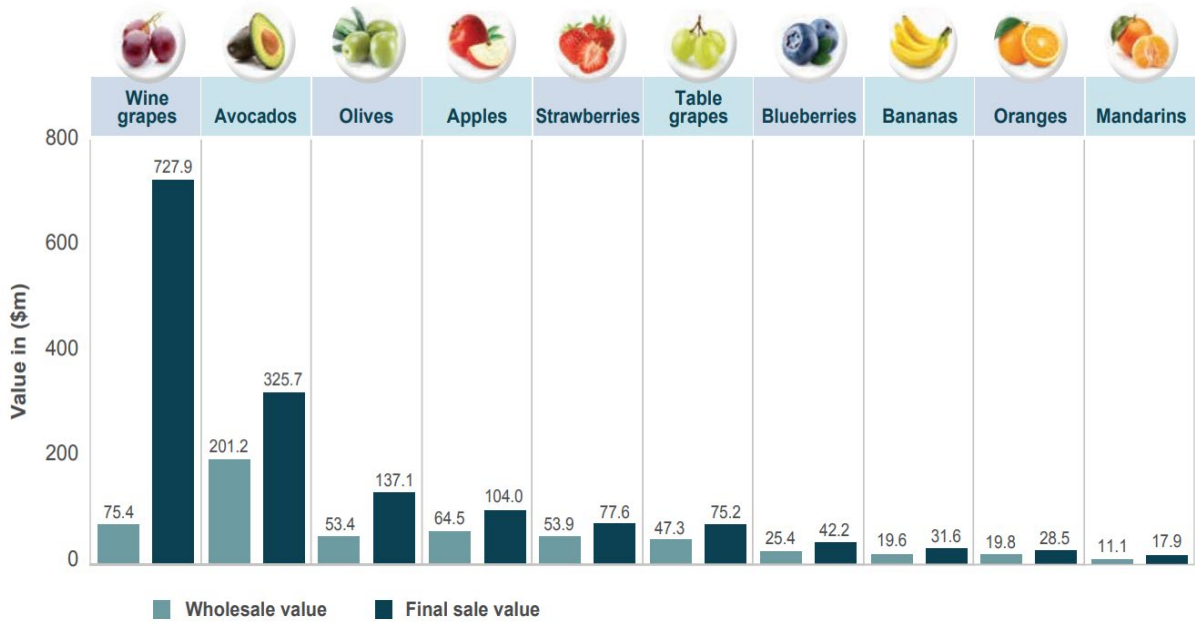
Source: AgDots analysis based on [Situation Analysis of horticulture in WA](#), 2020.

⁵⁰ South West Development Commission, [Agriculture & Food website](#), last accessed December 2023.

⁵¹ AgDots analysis based on [Situation Analysis of horticulture in WA](#), 2023.

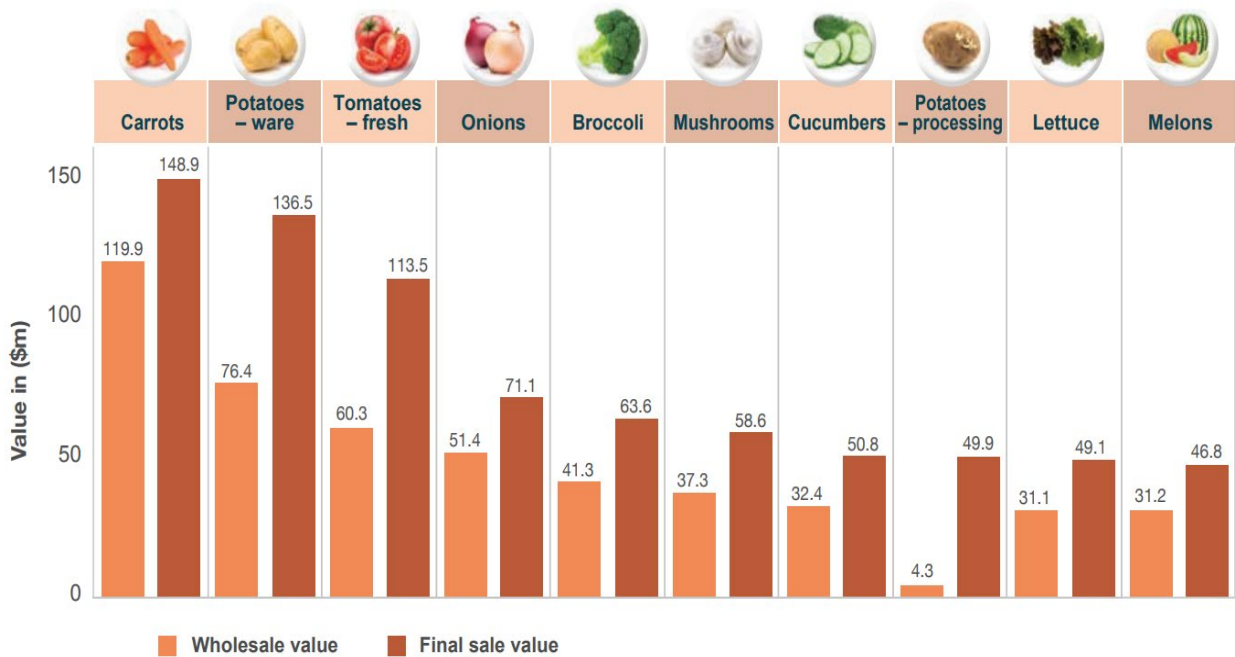
⁵² Hatch analysis based on [Situation Analysis of horticulture in WA](#), 2023. Calculations based on average journey time between the LGA's regional centre and the town of Capel.

Figure 9 - Final sale value of top 10 WA fruit products



Source: [Situation Analysis of horticulture in WA](#), 2020.

Figure 10 - Final sale value of top 10 WA vegetable products



Source: [Situation Analysis of horticulture in WA](#), 2020.

The Shire of Capel is well positioned to capitalise on current horticultural products traversing the region. The Shire is well connected to the nearby major production areas of Manjimup, Harvey and Busselton, with the majority of produce coming from WA’s largest horticultural region, Manjimup, likely to be driven up South West Highway through Boyanup en route to markets in Perth (see Figure 6).

8.2. Future demand and opportunities

Stakeholders consulted for this report identified three major trends indicating strong potential for horticulture expansion in the South West.

Water – both a major driver and a potential constraint. While a drying climate represents a strong risk to current horticulture practices in the South West, consultation indicated major new water sources may become available in the South West in the medium term (further information cannot be provided due to confidentiality issues). Changes to production methods, such as covered cropping and vertical farming, would also create major reduction in water uses while increasing or maintaining yields, as well as potentially expanding crops such as berries.⁵³

Local consumption - DPIRD is currently attempting to identify WA-produced horticulture crops which may be able to compete with imports from overseas or interstate. In particular, an opportunity may exist to replace a portion of imported frozen fruit and vegetables where local production can compete with imported products. With consumers preference for locally grown fruit and vegetables increasing, and backed by campaigns such as Buy West Eat Best, this may create a significant increase in demand for local horticulture products.⁵⁴

Exports – WA’s “clean and green” reputation could help boost international exports of horticultural products, particularly if supply chains are improved to ensure timeliness of delivering products to markets. This would also help address the issue of limited wholesale buyers in the Australian market, and potentially helping achieve higher prices for producers.

8.3. Potential role of an agribusiness precinct in the Shire of Capel

Processing of horticultural crops has declined in WA due to a lack of competitiveness caused by our small market scale, geographical separation, and short supply window throughout the year. However, these issues can potentially be addressed with the right approach. Stakeholders consulted for this report identified the following potential opportunities for a horticulture-focused agribusiness precinct in the Shire of Capel.⁵⁵

Consolidated packsheds - a packshed is a facility where harvested horticulture produce is sorted, cleaned, and packed for distribution or sale. Stakeholders suggested there is a need for consolidation of packsheds to be able to run highly efficient export operations that reduce production costs. This is particularly the case for apples and stone fruit, but could also apply to other fruits like avocados and new emerging crops such as kiwi fruit. Produce from the major southern production areas such as Manjimup could be packed at an agribusiness precinct in the Shire of Capel if the precinct presented a clear advantage, such as creating economies of scale that led to decreased processing costs. This would require consolidation of smaller packsheds and operations, a process that would need to be led by industry.

⁵³ Eden Towers, [website](#), last accessed December 2023.

⁵⁴ AgDots and Hatch discussions with multiple horticulture industry stakeholders, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

⁵⁵ AgDots and Hatch discussions with multiple horticulture industry stakeholders, November 2023. Please refer to Consultation List for full list of stakeholders engaged with.

Common-user juicing facilities - some juicers indicated they no longer process apples because of a mould that sometimes occurs, whereby a single bad apple can cause an entire batch of juice to become unsellable. Improved facilities could blend large quantities of juice to dilute the mould levels that meet required health standards (something not available in current facilities). Other possibilities created by a new precinct with state of the art juicing equipment include high pressure processing to extend juice shelf life to 60- 90 days, and pureeing equipment to create baby food.

Common-user processing equipment – this could potentially include freeze drying and irradiation facilities to extend shelf life or increase food safety to export standards.

Improved supply chains – horticulture products are typically high volume with low margins. It is therefore important to move produce as efficiently as possible and minimise transaction points and transport links. For example, having packsheds and cold storage facilities co-located could create major efficiencies.

9. Grains in the South West

9.1. Current industry

Although grain growing in the Shire of Capel is relatively minor compared to its other agricultural industries (see Figure 2), the Shire is in close proximity to the Wheatbelt South region and upper Great Southern, both of which are major grain-growing areas. The main grains produced in these areas include wheat, canola, barley, oats, lupins, and field peas. The Shire's location plays a strategic role in the transportation and export of these grains, with Bunbury port exporting 1.5 million tons of grain in last 12 months.⁵⁶

9.2. Future demand and opportunities

Grain production in the South West and neighbouring regions is unlikely to substantially increase over time. This is due to the large areas of land required for broadacre farming already being constrained, pressure on land usage for other purposes such as carbon farming and forestry, and decreasing rainfalls (see section 4). However, grain production in Wheatbelt South and Great Southern is likely to remain a major agricultural focus in those areas, with considerable transport of grain still occurring through the Shire of Capel. For example, the Bunbury Port master plan uses an assumption grain shipments will increase by 50% for its long term planning scenarios.⁵⁷

9.3. Potential role of an agribusiness precinct in the Shire of Capel

Given the breadth of grains grown nearby and transported through the region, there are a range of grain-related opportunities an agribusiness precinct in the Shire of Capel could host.⁵⁸

Oat processing – The lower central wheatbelt and upper great southern is a key area for oat production in WA. Given this, the Shire of Capel could be a logical location to develop an oat mill, or oat research specialisation facility.

Pasture – Stakeholders consulted for this report identified a need for additional pasture growth in the South West. The precinct could make a strong base for a pasture seed company, with the possibility of collaborating with on-site research and development facilities.

Plant proteins - global demand for plant protein is currently anticipated to reach a CAGR of 7.3% from 2023 to 2032.⁵⁹ The Shire of Capel could play a role in processing and extracting proteins from available grains.

Pasta, bread and noodle manufacturing – utilise the abundance of grains traversing the area to reduce supply chain costs for inputs.

⁵⁶ Southern Ports, [Bunbury trade data website](#), last accessed December 2023.

⁵⁷ Southern Ports, [Port of Bunbury port master plan](#), 2022, p 21.

⁵⁸ Discussions with AgDots and grain industry representatives, November 2023.

⁵⁹ Yahoo Finance, [Global Plant-Based Proteins Market Size to Surpass USD 24.1 Billion by 2032](#), December 2023.

Grain biofuels – grains such as canola could be refined and developed in clean fuels for a variety of uses.

Seconds processing - “seconds” typically refers to crops that are not high enough quality for sale on markets, but are still suitable for some use or sale. An agribusiness precinct in the Shire of Capel could specialise in using seconds from one, or a variety of, crops and be turned into a variety of products, including biofuels and animal feed.

10. The Shire of Capel’s transport and freight and infrastructure

As noted in section 5.1, the Shire of Capel is well located for an agribusiness precinct, due to its strategic positioning linking agricultural producers with major infrastructure that allows efficient distribution to markets. This section examines how an agribusiness precinct in the Shire of Capel could leverage the South West’s key supply chain infrastructure to help tap export markets and increase productivity.

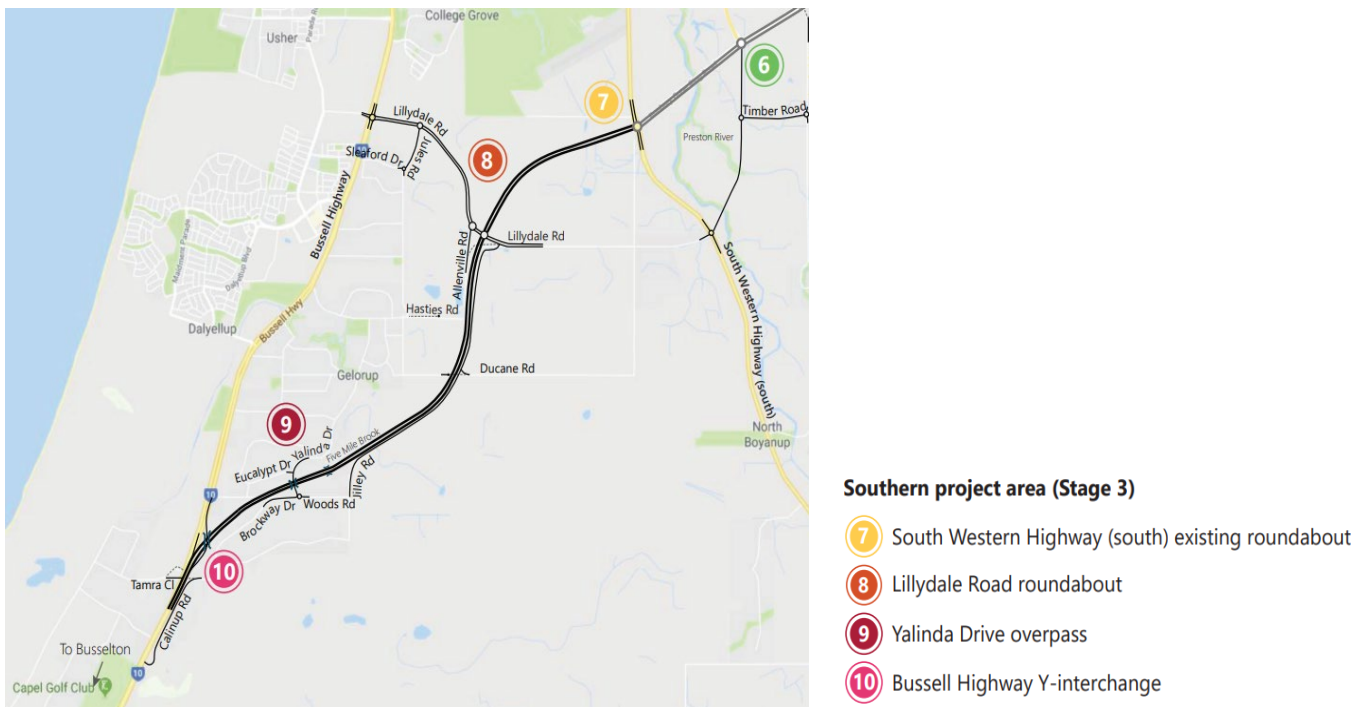
Please note that logistics consideration for an agribusiness precinct in the Shire of Capel is at section 11.1.

10.1. Bunbury Outer Ring Road (BORR)

The construction of the BORR is a significant development for the Shire of Capel. The development consists of a 27km four lane, high standard road linking Forrest Highway (to the north including Perth) to Bussell Highway and South West Highway (to the south and south west) without travelling through Bunbury.⁶⁰

Due for completion in late 2024, the BORR will improve the movement of vehicles by allowing them to skirt Bunbury, considerably reducing journey times. The BORR will also improve access to Bunbury Port, Fremantle Port, Busselton Airport, and Perth, thereby providing enhanced freight logistics within the region.⁶¹ A map of the BORR where it will traverse the Shire of Capel is at Figure 11.

Figure 11 - Map of Bunbury Outer Ring Road that will traverse the Shire of Capel



Source: [Main Roads WA](#), 2023.

⁶⁰ Main Roads WA, [Bunbury Outer Ring Road website](#), last accessed December 2023.

⁶¹ Main Roads WA, [Bunbury Outer Ring Road website](#), last accessed December 2023.

The BORR is significant for an agribusiness precinct's potential in the Shire of Capel. As well as improving freight time to markets, the BORR will form part of the RAV 7 network. RAV 7s, commonly known as B-triple road trains, are large trucks hauling three trailers, which allow for large amounts of freight to be hauled by a single vehicle and driver, thereby reducing freight costs.

Currently, none of the Shire of Capel is linked to the RAV 7 network. Triple road trains are required to be broken down at designated road train assembly areas into smaller configurations such as to B-double road trains (RAV 4s). This is due to various factors such as road infrastructure limitations, safety concerns, or specific regulations, noting that some B-triples are currently permitted in the Shire of Capel by special permit along specified routes. The process of reconfiguring a road train from a B-triple to B-double incurs labour costs for skilled mechanical work and involves temporarily idling equipment, which can contribute to underutilisation and storage challenges, impacting operational efficiency and expenses for transportation companies.

During consultation with Hatch for this report, industry repeatedly cited the desirability for B-triple road trains to be able to directly access an agribusiness precinct without the need to be broken down into smaller configurations. Locating an agribusiness precinct with direct access to the BORR and its RAV 7 network should therefore be considered when determining a location for the precinct.

10.2. Busselton airport

Busselton-Margaret River Airport (Busselton Airport) has recently undergone significant developments to enhance its capacity. Historically known as a regional airport, Busselton has expanded its facilities to accommodate larger aircraft including Boeing 737s. Jetstar now operates three direct passenger flights per week from Busselton to both Melbourne and Sydney, as well as a variety of closed charter flights for FIFO workers accessing remote mine sites.⁶²

No freight is currently shipped from Busselton airport. This is due to the expense of including freight on Boeing 737s which typically do not have sufficient room for cargo besides passengers' belongings. However, a master plan is currently being developed for the airport which would see upgrades to the terminal, including customs and tailgate facilities that could facilitate international freight inspections. This raises the possibility of freight being carried to markets on international flights, made possible given the considerably larger cargo holds typically found on planes used for international flights. If progressed, the first international flights are likely to be to Singapore in approximately 2029.⁶³

Freight on international passenger flights would still be limited compared to dedicated freight flights. This indicates that agricultural freight from Busselton airport is initially likely to be low volume but high cost items, potentially including marron, truffles, and niche horticulture products.⁶⁴ Over the longer term and as supply chains become better established, this may lead to dedicated freight flights shipping agricultural products to a variety of market directly from Busselton airport.

⁶² Busselton-Margaret River Airport, [Flight Schedules website](#), last accessed December 2023.

⁶³ Discussions with Tony Nottle, CEO of City of Busselton, December 2023.

⁶⁴ Hatch discussions with Tony Nottle, CEO of City of Busselton, December 2023.

10.3. Bunbury Port

Bunbury Port serves as a pivotal hub for diverse imports and exports associated with the South West's mining, agriculture and forestry industries. While key exports include critical minerals such as lithium, mineral sands, and grains, the port also handles imports such as fertilisers, petroleum products, and general cargo (potentially including wind turbines in the near future).

The port benefits from being well connected to rail and road links, which allows trade products to be easily distributed across the South West.⁶⁵

While the Port has handled live cattle exports as recently as the 1990s, the required infrastructure to handle this trade no longer exists.⁶⁶ The Livestock Export Relocation Supply Chain is currently underway, and is examining shifting live animal trade from Fremantle to other ports in WA. It is possible that Bunbury port will be recommended to re-commence live animal exports. The review is due to return its findings in 2024.⁶⁷

Bunbury port does not have containerisation facilities, with all container shipping from the South West driven by truck for export via Fremantle. There are no plans for adding containerisation facilities to Bunbury port. Consequently, Bunbury port is unlikely to play a role in shipping containerised agricultural products from the South West to export markets.⁶⁸

Roll On, Roll Off (RORO) imports consists of freight that can be driven, including agricultural machinery such as tractors, headers, trucks and utes. Currently all RORO freight arrives in WA through Fremantle Port. However, the State Government is considering alternative locations for RORO as part of development of Westport, which will see Fremantle port cease acting as a port of trade except for cruise ships and visiting military ships over the longer term. Bunbury Port is being considered as an alternative home for RORO over the long term.⁶⁹ Southern Ports, which operates Bunbury Port, has informally indicated to Hatch that it would support a RORO laydown area in an agricultural precinct in the Shire of Capel, due to limited land availability around the port itself for hosting such a facility.⁷⁰ If this occurred, it would help support the precinct becoming a major agricultural hub for the South West and beyond.

⁶⁵ Department of Planning, Lands and Heritage, [Bunbury-Geopraphe Sub-regional Strategy](#), 2022, p 49.

⁶⁶ Hatch discussion with Lee Smith, CEO Southern Ports, December 2023.

⁶⁷ AgDots discussions with AgKnowledge, November 2023.

⁶⁸ Hatch discussion with Lee Smith, CEO Southern Ports, December 2023.

⁶⁹ Media Statement, [Preferred design and location for new container terminal unveiled](#), November 2023.

⁷⁰ Hatch discussion with Lee Smith, CEO Southern Ports, December 2023.

11. Other potential industries in an agribusiness precinct in the Shire of Capel

An agribusiness precinct can host a wide variety of agricultural businesses, creating synergies and productivity gains through their proximity, and shared infrastructure and supply chains. This section examines some of these potential businesses, noting that most are likely to be ‘agnostic’ to what type of agricultural business acts as an anchor tenant for the precinct.

11.1. Logistics

While freight focuses specifically on the physical transportation of goods, logistics encompasses the planning and execution of all activities necessary to manage and move those goods through the supply chain. Good transport connections are critical for efficient logistics, noting that the Shire of Capel’s transport connections and infrastructure are discussed at section 9.

Containerisation is an important part of logistics, as it involves standardisation of cargo that can be transported globally by truck, rail, or ship. As Bunbury Port has no plans for containerisation, any containers of agricultural products coming from the agribusiness precinct in the Shire of Capel would be transported by road to Fremantle Port or Westport.⁷¹

Warehousing in an agribusiness precinct involves the provision of specific storage facilities for various types of agricultural products, depending on the businesses in the precinct. Warehouses are designed to accommodate the safekeeping of products before distribution or further processing, and can vary in size and configuration based on the specific needs of the individual businesses.

Cold storage is a common type of warehousing in agribusiness precinct. Cold storage is a specialised type of warehouse that maintains specific low temperatures suitable for storing perishable food and beverages. This type of storage is equipped with refrigeration or freezing systems to preserve the quality and extend the shelf life of temperature-sensitive products. Cold storage facilities can be categorised into refrigerated storage (maintaining temperatures above freezing), frozen storage (maintaining temperatures below freezing), and specialised storage for specific temperature-sensitive items.⁷²

Cold storage facilities are essential in ensuring the integrity of goods that require controlled temperature environments throughout the supply chain, from production to distribution. Cold storage can be food-specific (such as for packaged meat), but can also contain a mix of food products that are already packed and processed, and ready for distribution to wholesalers or supermarkets branches. Cold storage therefore typically represents a key link in the supply chain where distribution changes hands from the agricultural sector to retail sector.⁷³ Many stakeholders interviewed for this report identified the need for additional cold storage capacity in the South West.

⁷¹ Hatch discussion with Lee Smith, CEO Southern Ports, December 2023.

⁷² Refrigerated Warehouse & Transport Association of Australia, [Australian Cold Chain website](#), last accessed December 2023.

⁷³ Refrigerated Warehouse & Transport Association of Australia, [Australian Cold Chain website](#), last accessed December 2023.

11.2. Value-add food and beverage processing

Value-added food processing involves activities that transform raw agricultural produce into higher-value food products. Industries engage in processes like canning, freezing, drying, packaging, and creating ready-to-eat meals, thereby increasing the shelf life, convenience, and appeal of the food products.

Value-added beverage manufacturing involves processes that enhance raw materials into higher-value products, often through refining, flavouring, brewing, or distilling, thereby increasing their market appeal and utility.⁷⁴ Given the South West's reputation for high quality produce, as well as established wine and beer manufacturing, value-add processing could be a logical addition to the agribusiness precinct.

11.3. Waste re-use

Agribusiness precincts create, and have access to, large amounts of waste. Modern precincts integrate waste re-use into operations to minimize environmental impact and maximise resource efficiency. Organic waste from farming activities like crop residues or animal manure is repurposed as biofuel, compost or biofertilisers, enriching soil health and fertility onsite or for nearby farms.

Abattoirs, which create large amounts of animal manure, can use this waste to produce biogas, serving as a renewable energy source for the precinct's needs. Waste-to-energy technologies such as anaerobic digestion or thermal treatment convert organic waste into biogas or heat, powering operations within the precinct and potentially benefitting neighbouring communities by reducing reliance on conventional energy sources. A number of abattoirs in Australia are operating under their own power produced from the processor's animal waste.⁷⁵

11.4. Education, research and workforce training

Creating an agribusiness precinct that fosters education, research and AgTech holds immense potential for the Shire of Capel. Such a precinct could foster innovation, drive research and development, and offer diverse educational programs. Multiple types of education can be integrated into such a precinct, from cutting edge research institutions to practical hands-on learning.

By integrating R&D facilities, tertiary education institutions, and vocational training programs within an agribusiness precinct, several benefits emerge:

Knowledge Transfer - Seamless knowledge transfer between academia and industry fosters innovation and promotes the adoption of cutting-edge technologies in the agricultural sector.

Workforce Development - Tailoring education and training programs to industry needs creates a skilled workforce that can address specific challenges faced by the agribusiness sector.

⁷⁴ Department of Primary Industries and Regional Development, [Food Industry Innovation website](#), last accessed December 2023.

⁷⁵ See, for example, CST, [CST and NH Foods Australia's Queensland waste-to-energy project receives international IChemE energy and sustainability accolades - CST Wastewater Solutions](#), last accessed December 2023.

Economic Growth - A well-established education hub can attract investment, talent, and opportunities for businesses, leading to overall economic growth in the region.

Research and Development (R&D) and start-up support

R&D facilities could help drive an agribusiness precinct in the Shire of Capel by driving innovation, offering technological advancements, and enhancing local agricultural productivity by developing resilient farming methods tailored to the region's unique challenges and needs. The precinct could leverage collaborative partnerships by bringing together experts from various fields such as biotechnology, environmental science, and data analysis to create a precinct that fosters a holistic approach to agricultural challenges. The interdisciplinary collaboration could help lead to breakthroughs in areas such as crop resilience, precision farming and sustainable resource management.

In order to facilitate farmer-led collaborative research, the agribusiness precinct can foster partnerships between academic researchers and industry experts to accelerate the translation of research findings into practical applications, benefiting the agricultural sector directly. In order for this to be successful it is crucial to attract a diverse range of entities such as developers, start ups, incubators and accelerators. These entities will provide the necessary support and resources to drive an agriculture-focused innovation ecosystem anchored by the precinct.

The precinct could potentially leverage Western Australia's competitive advantages in AgTech such as oat production.⁷⁶ Pasture seed research is also a potential focus area to support the South West's cattle industry, with Soils West and Murdoch University's animal research centre strong potential partners given their focus areas and expertise. The South West already hosts a range of strategic R&D facilities which could also be partnered with, such as the Manjimup Horticultural Research Institute which works closely with the horticultural industry to improve productivity and better understand the consumer market.

Tertiary Education

Incorporating education opportunities within the agricultural precinct provides the opportunity for specialised courses tailored to agribusiness within the precinct can attract students interested in pursuing careers in agriculture, meshing hands-on learning with cutting edge research. There is potential for a university to operate a satellite campus within the precinct that operate both as a teaching and research institution. Students can be inspired throughout their education to explore, design and develop transformational solutions to local "real world" agricultural industry problems.

TAFE and vocational training

Vocational training at the precinct would allow for the development of critical hands-on agricultural skills to be taught, and provide apprenticeships which showcase opportunities for students to gain valuable experiences from local farmers. The courses could be modelled on and/or complement courses offered by South West TAFE at locations such as Albany and Manjimup with flexible training options.⁷⁷ The precinct has the opportunity to offer short term courses, workshops and certifications that align with practical skills that are required within the agricultural industry.

⁷⁶ Grains Research & Development Corporation, [Growing a Future for Oats website](#), last accessed December 2023.

⁷⁷ See, for example, South West TAFE, [AHC30116 Certificate III in Agriculture website](#), last accessed December 2023.

11.5. Agricultural support businesses and facilities

A variety of agricultural support businesses are likely to be located at an agribusiness precinct in The Shire of Capel. The following businesses were consistently raised during consultation with industry undertaken by Hatch for this report.

- Waste-to-energy – as noted above, there is strong potential for waste to energy facilities that can help power the precinct and reduce environmental impact.
- Truck wash down facilities – allows for cleaning of trucks and other vehicles that transport goods. These facilities are crucial for biosecurity measures as they help remove animal waste, soil, organic matter, seeds, pests, and potential pathogens that might be present on vehicles, reducing the risk of introducing harmful elements into new areas or environments.
- Truck fuel depot and service station – to refuel the large number of trucks using the facilities for both suppliers and distributors.
- Truck driver facilities – including rest areas, dining facilities, and overnight facilities.
- Road train assembly area – to allow B-triples and B-doubles to be reconfigured on-site as required (assuming the agribusiness precinct is located on the RAV 7 network).
- Agricultural services store – typically run by Nutrien or Elders, these stores sell a range of farming supplies such as fencing materials and fertiliser. This could also potentially include agricultural machinery stores for large items such as tractors, headers, trucks and utes if RORO freight moves from Fremantle to Bunbury Port (see section 10.3).
- Biofuel manufacturing – produced from grain seconds or timber waste.
- Meeting rooms – available for hire to conduct business on-site for those without a permanent presence in the precinct.
- Social facilities – providing facilities such as cafes and gathering areas can provide farmers with social infrastructure that can help do business, as well as being used for purely social reasons. Mental health providers may also play a role in the precinct to help address the pressures many farmers face.

12. Conclusion

The Shire of Capel is preparing and implementing a plan to realise the development of an agribusiness precinct within the Shire of Capel district which houses replacement of the existing cattle sale yards in Boyanup. The purpose of this report detailed the current and future demands and opportunities that exist in the agriculture, logistics and transport sectors, with this information used to inform site selection and focus industries of the agribusiness precinct.

The report found that hosting a new agribusiness precinct would create significant benefits to the Shire of Capel. As well as new opportunities for economic diversification, job creation, and value-add and export products, there is potential to attract new workforce, promote best practice, and develop new industries such as waste-to-energy businesses.

Next steps for the project are to find a suitable site for an agribusiness precinct that is suitable to host the range of industries that could become established. Information developed for this report will be used to influence this process to ensure an optimum site is found that maximises the agribusiness precinct's full potential.

13. Consultation list

This section lists stakeholders that Hatch and AgDots engaged with to inform this report and help shape planning for an agribusiness precinct in the Shire of Capel.

AgDots and Hatch also liaised with numerous stakeholders during a sale at the Boyanup cattle sale yards, and then hosted a well-attended community workshop at the Hugh Kilpatrick Hall in Boyanup, on 3 November 2023. This ensured a wide range of views were captured from industries currently using the sale yards, and other community representatives.

AgDots and Hatch also attempted to contact a small number of other industry stakeholders but did not receive responses. Despite this, a wide range of views were captured that will help drive the project going forward.

A list of stakeholder engaged with is below.

Stakeholder Working Group

Mike Norton

Kevin Sorgiovanni

Peter Trefort

Tracey Hodgkins

Barbara Dunnet

Growers Groups

Stephen Brown – CEO, Vegetables WA

James Bowie - Chair Western Beef Association, Cattle Australia Board

Peter Clifton –Sustainable Agriculture Lead, South West NRM

Jennifer Riseley – Marketing and Project Coordinator, Southern Forests Food Council

Bronwyn Walsh – Development Manager, Citrus WA

Red Meat Industry

Rhys Devitt - Operations Manager, V&V Walsh Meat Processors and Exporters

Brian Pittendreigh - General Manager, Dardanup Butchering Company

Dean Hubbard, Livestock and Wool Manager – West, Elders

Leon Giglia - National Livestock Manager, Nutrien

Mark Talbot -Wedderburn Park (Member Livestock Transport Association)

Jeisane Accioly – Executive Officer, Western Beef Association

Nicola Parker – Western Beef Association and Dairy WA Farmers Federation

Ed Riggall – Farm Consultant, Ag Pro Management

Dairy Sector

Gemma Longford – Western Dairy

Horticulture Sector

Jenny Mercer - Managing Director, WA Farm Direct

Jamie Craig - Gold Kiwi Fruit

Mark Scott - Nannup Fresh

Helen Newman - Berries WA

Simon Moltoni - CEO, WA Potatoes

Grain and Feed Sector

Brianna Peake - Chief External Relations, CBH Group

Chris Tyson - WA Regional Manager, Bunge

Ashley Weise – 3 Farmers, Chair Oats Council, Director Grains Industry WA

David Plant – General Manager, Milne Agrigroup

Transport and Logistics

Lee Smith – CEO, Southern Ports

Tony Nottle – CEO, Shire of Busselton

Marianne Kintzel – Executive Officer, Refrigerated Warehouse and Transport Association of Australia

Government Agencies

Adrian Parker – Director, Department of Primary Industries and Regional Development

Trina Anderson – Project Manager, Department of Primary Industries and Regional Development

Pat Page - Department of Primary Industries and Regional Development

Ash Clements – Director, South West Development Commission

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