

Final Report

VegNET – Gippsland

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Food & Fibre Gippsland

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Project:

VegNET – Gippsland (VG19013)

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Summary

VegNET Phase 2.0 was delivered using an Innovation Systems approach to develop and commence implementation of a five year Regional Extension Strategy. The VegNET Gippsland Regional Development Officer (RDO) attended and actively participated in all training that was delivered on Innovation Systems approaches and Monitoring and Evaluation, which guided the RDO through the process of Strategy development. This included establishing a Regional Extension Advisory Group (REAG), which is representative of Gippsland's vegetable growing industry and includes two agronomists to provide technical advice. Through consultation with the REAG and the broader industry, the RDO identified four focus areas for development within the industry —

- On-farm biosecurity
- Protecting Gippsland's waterways
- Smarter Growing with agtech
- Building business capacity and a sustainable workforce

Through three-monthly meetings and informal feedback to the RDO, the REAG guided the development and implementation of the projects within each of these focus areas and Monitoring and Evaluation plans. While each of these focus areas are relatively broad, the projects were all designed with mechanisms to enable their focus to be refined as they are delivered.

By following an innovation systems approach, VegNET Gippsland has connected with and brought together an array of stakeholders from within the industry and the region to deploy skills and capacity as required in a focused way. This is evident in the multiple partnerships that have been integrated into each of the Strategy's projects.

It must be noted that delivery of many of the activities has been significantly impacted by restrictions enforced by the State Government of Victoria in response to the COVID-19 pandemic. However, the RDO has maintained and developed positive relationships with all of the region's levy-paying growers and post-event surveys have consistently yielded feedback which reaffirms the Strategy's focus.

On-farm biosecurity:

Within this project, two webinars were delivered (the latter in place of a planned workshop), with presentations updating growers on pests recently detected in Australia, including Fall Armyworm and Serpentine Leafminer. The latter webinar also included a webinar on reducing the risk of transmission of these pests, to complement ongoing efforts of the RDO and AUSVEG Biosecurity team to support growers to develop on-farm biosecurity plans. A discussion group is also under establishment, which will be an ongoing forum for knowledge sharing of pest and disease updates between agronomists and growers.

Smarter Growing with agtech:

The most significant activity within this project has been the establishment of a demonstration site of soil moisture monitors. This demonstration will take place over the 2021-22 peak growing season, and as well as the soil moisture monitors will also involve work conducted by Precision Agriculture.

Protecting Gippsland's waterways:

This project included a farm visit to Schreurs & Sons Middle Tarwin property to observe practices and design features that increase the efficiency of their water and nutrient use through reuse and minimising runoff into waterways, as well as how they have strengthened connections with surrounding community. Growers across Gippsland have also made considerable progress through the EnviroVeg framework which will be used to identify areas for further focus within this project. The above demonstration site will also contribute to this project, with project reference group members including representatives of the West Gippsland Catchment Management Authority and Agriculture Victoria.

Building business capacity and a sustainable workforce:

Much of this project involved establishing ongoing relationships and partnerships with other programs and agencies who can support the development of the horticulture workforce. These included partnering with Central Queensland University on their project RACE Gippsland which is establishing connections between schools and industry to build the aspiration s of local students to work in agriculture.

The RDO also supported Food & Fibre Gippsland's employment program – Connect 2 Employment – by identifying growers who may benefit from the program's support. A significant outcome of this project was a suite of twenty seven videos that showcase different jobs across four different businesses in the local industry. These have been shared on social media, and there is future plans to share these more broadly with local schools as well as integrating them into relevant courses delivered by TAFE Gippsland.

VegNET Gippsland facilitated connections with the Victorian Department of Health to increase growers' knowledge about COVID Safety in the horticulture workplace, including delivering a hybrid (in-person / online) event in early 2021. In mid-2021, two seminars (one in person, one online) which brought together a number of presentations focused on topics requested by local industry – Victoria's Workplace Manslaughter Laws, farm safety, relevant local TAFE courses, Food & Fibre Gippsland's employment program, RACE Gippsland and Agriculture Victoria's seasonal workforce support.

Keywords

VegNET; extension; biosecurity; Fall Armyworm; Serpentine Leafminer; workforce; farm safety; EnviroVeg; runoff; agtech; precision agriculture; soil moisture monitoring; Gippsland

Introduction

This is the third iteration of VegNET Gippsland which Food & Fibre Gippsland, previously the East Gippsland Food Cluster, has successfully delivered across the Gippsland region in eastern Victoria. Covering almost 42,000km², Gippsland is known for consistent rainfall particularly in the South, fertile river valleys, and in the East for its long annual vegetable growing period.

Gippsland grows more than 25% of Victoria's vegetables with sweet corn, beans, brassica and salad vegetables among the biggest crops. Seven of Australia's top ten baby leaf producers grow in Gippsland, many supplying Vegco (largest fresh cuts processor in Australia) located in Bairnsdale. Approximately 85% of vegetables used in Quick Service Restaurants (QSR) along the eastern seaboard are grown, processed, packed and distributed from Gippsland.

The region is experiencing conversion to vegetable production from other primary land uses (such as dairy). There is also an increasing presence of interstate and out-of-region growers using operations in Gippsland to achieve risk mitigation and year-round supply of seasonal vegetables.

By following an innovation systems approach as directed by Rural Consulting Group and leveraging off the existing positive relationships with growers and other industry stakeholders, the project has developed and commenced delivering a five-year Regional Extension Strategy.

Broad consultation with the industry, including but not only with the members of the Regional Extension Advisory Group (REAG), identified four areas for potential development across the industry –

- On-farm biosecurity
- Protecting Gippsland's waterways
- Smarter Growing with agtech
- Building business capacity and a sustainable workforce

Projects were established focused on each of these areas to guide the work of the VegNET Gippsland RDO for the coming five years which will involve a variety of activities. VegNET Gippsland has connected with and brought together an array of stakeholders from within the industry and the region to deploy skills and capacity as required in a focused way. This is evident in the multiple partnerships that have been integrated into each of the Strategy's projects.

The first year of delivery has reaffirmed the focus of each of these projects, and enabled them to be further refined as needed. Monitoring and evaluation of each of the activities has indicated the success of most of them in increasing awareness and knowledge and it is anticipated that further implementation of the Strategy's plans over the coming five years will be successful in achieving practice change within the industry and improved social licence from the community.

The first year of biosecurity activities focused on provision of up-to-date information about priority biosecurity threats including Fall Armyworm and Serpentine Leafminer, as well as forming a discussion group for continued information sharing amongst the industry. Participants in these activities reported an increase in knowledge and skills to identify and prevent these pests. However the perceived potential impact that they could have on Gippsland businesses varied. Those who attended an initial discussion group meeting are interested in participating in further meetings, which would support the ever-changing situation regarding biosecurity threats to the region.

The REAG identified a need to demonstrate efforts to protect Gippsland's waterways. Growers across Gippsland made significant progress through the EnviroVeg self-assessment, with 80% of the required numbers having completed this self-assessment to contribute to a Regional Report which will ultimately be used to identify positive practices and opportunities for further improvement. Growers also attended a farm walk to a property which demonstrated practices which increase water and nutrient efficiencies and protect surrounding waterways. A number of growers have implemented changes to their own properties as a result of this event, or intend to in the near future.

VegNET Gippsland established a number of partnerships to complement industry's efforts to increase workforce capacity across the region. Many of these were presented at two Workforce Forum events, with all presentations

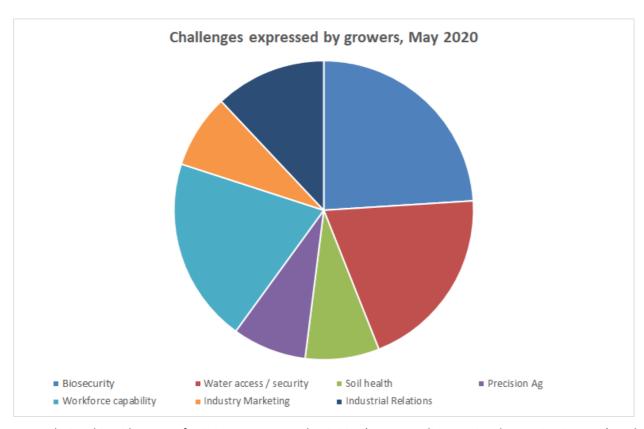
successfully increasing attendees' knowledge of the programs and resources presented. Of particular note, VegNET Gippsland has supported RACE Gippsland in the establishment of five school-industry partnerships, and the This is my Job video series has been viewed extensively over social media receiving extremely positive reactions from the four participating growers, others within the industry and the public views it has so far received online. Plans are in place for these resources to be distributed more widely in settings identified for potential employees.

Methodology

VegNET Phase 2.0 was delivered using an Innovation Systems approach to develop and commence implementation of a five year Regional Extension Strategy and associated outputs.

The Regional Development Officer (RDO) attended and actively participated in all training that was delivered on Innovation Systems approaches and Monitoring and Evaluation. This training guided the RDO through the process of Strategy development – establishment of a Regional Extension Advisory Group (REAG), identification of focus areas, and development and implementation of projects and Monitoring and Evaluation plans for each of the identified focus areas.

Consultation was undertaken of approximately half of the grower base (17 out of 32 identified levy-paying growers) to identify the most important challenges and opportunities which growers felt should be prioritised by VegNET – Gippsland.



By overlaying this with a scan of existing programs and activities (see appendix 1: Regional Extension Strategy), and further insights from other industry stakeholders, four focus areas were identified from which projects have been developed –

- On-Farm Biosecurity
- Protecting Gippsland's Waterways
- Smarter Growing with AgTech (precision agriculture and other digital technologies)
- Building Business Capacity and a Sustainable Workforce

This initial consultation also enabled the RDO to identify a number of growers to participate in the REAG who were representative of the region's industry and contributed varying perspectives and skills. Each of the major growing regions of Gippsland were represented – East Gippsland, the Macalister Irrigation District and South Gippsland –

with the members producing a variety of lines at various scales. In addition to these four growers, two agronomists are also members of this Group, one is an internal agronomist for another major growing business in East Gippsland and the second is a Sales Agronomist servicing a further three major growers. There were therefore eight individual growing businesses who had a direct representative on the REAG at its inception. During the project, one of the growers resigned from the Group as they had moved into a business already represented. There is an intention to replace this member so that the REAG is again comprised of four growers and two agronomists, however the most appropriate individual is yet to be identified.

Projects were developed around each of the four focus areas by defining the problem or opportunity and then the practice gap within the industry. By following an innovation systems approach and leveraging off existing relationships, VegNET Gippsland has brought together broad coalitions to deploy skills and capacity as required in a focused way. This is evident in the multiple partnerships that have been integrated into each of the Strategy's projects.

It must also be noted though, that the life of this project has coincided with that of the COVID-19 Pandemic. In the eighteen months of the project, Regional Victoria has been in and out of strict lockdowns seven times. As a result, engagement with growers and other stakeholders was at times compromised, particularly in the initial stages of the project, with much of the initial relationship development and consultation for the Strategy conducted over phone calls. With this in mind, the identified focus areas of the Strategy are relatively broad, with mechanisms integrated into the project plans to enable further refinement as the projects progress.

An annual workplan (see appendix 2) was developed with guidance and approval of the REAG and submitted with Milestone 103 in December 2020 for the first year of implementation. This Workplan was followed as closely as possible, but due to the aforementioned COVID-19 Pandemic, it went through many iterations as in-person activities were postponed or shifted to online formats.

Drawing on an Innovation Systems perspective has enabled VegNET Gippsland to continue to embrace opportunities for collaboration and further partnerships with other agencies and stakeholders which align with the identified focus areas of the Strategy.

Throughout this project, VegNET Gippsland has continued to strengthen relationships with Gippsland's growers and other stakeholders as identified within the Stakeholder engagement plan (see appendix 2). When possible, the RDO has met with growers in person, however this has been limited as a result of the COVID-19 Pandemic and impact of restrictions. The RDO has therefore leveraged opportunities to call growers regularly, such as to follow up on email invitations or ask for feedback from past activities.

In addition to this regular contact with individual growers, the RDO sends regular emails of importance through a mailing list of all known levy-paying Gippsland growers. It was also agreed by the REAG that reinstating a regular electronic newsletter would be beneficial and a more efficient method of distributing information of interest, as distinct from the high-priority time-sensitive information distributed via emails.

As per the Stakeholder engagement plan, the RDO has also maintained working relationships with other stakeholders identified within the plan such as the AUSVEG Communications and Engagement & Extension teams, Agriculture Victoria and the region's Catchment Management Authorities through project partnerships.

Outputs

- Regional Extension Strategy and Plans, 1 July 2020 30 June 2025 (Appendix 2)
- Establishment of a Regional Extension Advisory Group (Appendix 3)
- Project Plans, including risk registers
- Project Logics (one for each of the four Projects) (Appendices 4 to 7)
- Implementation of the Plan 1 July 2020 30 September 2021 (Appendix 8 for updated version)
- Stakeholder engagement plan (Appendix 1)
- Milestone Reports: Milestones 102, 103 and 104 were successfully submitted to the project

On-Farm Biosecurity -

- Two online webinars have been delivered in partnership with the AUSVEG Biosecurity team throughout the life of the project.
 - 1. Webinar: "Exotics and endemics: An update for Gippsland"

This webinar was delivered via zoom in partnership with AUSVEG on 19 November 2020. The presenters and the topics which each presented were -

- Madeleine Quirk (AUSVEG): Exotic Leafminers
- o Callum Fletcher (AUSVEG): Tomato Potato Psyllid
- Dr. Cliff Kinoti (Agriculture Victoria): Tomato Spotted Wilt Virus
- Dr. Helen Spafford (Department of Primary Industries and Regional Development, Western Australia): Fall Armyworm



Image: advertising flyer for webinar, shared via email and @gippygrowers Twitter

26 of the 48 individuals who registered attended the live webinar. Of these, 7 identified as growers and 7 as agronomists. Others identified as being supply chain members (n = 6), industry body representatives (n = 2), researchers (n = 3), students (n = 1). The remaining 3 participants did not respond to this question. Attendance was not restricted to only Gippsland growers and service

providers; approximately 9 of the 26 attendees are known to be from Gippsland, however there were a number of attendees from the likes of chemical companies who are likely to also service Gippsland growers directly.

 The webinar was also recorded, which each presentation being available on Youtube and subsequent views being as follows –

Exotic leafminers: 49 views

Tomato potato psyllid: 54 views

Tomato spotted wilt virus: 308 views

Fall armyworm: 24 views

2. The second webinar was originally planned to be delivered as two in-person workshops, in Lindenow and Korumburra. This workshop was to focus predominantly on the identification and planning of risk mitigation strategies against biosecurity threats. However, unfortunately due to COVID-19 restrictions and despite attempts to reschedule, the program ended up being delivered as a singular webinar with a shorter program, thus reducing this focus.

There were 28 individuals who viewed the webinar live, consisting of at least eight growers, all from Gippsland, and eight external agronomists or sales representatives who regularly service the local industry. The remaining were presenters, other AUSVEG team members, or unknown to the RDO.

The presentations, are all available online (Youtube links and views also listed) -

- Farm pest and disease risk pathway reduction (55 views since webinar)
- Serpentine leafminer and other exotic leaf miners: Gippsland update (42 views since webinar)
- <u>Fall armyworm update and preparedness in advance of summer</u> (32 views since webinar)

Farm pest and disease risk pathways reduction workshops

Lindenow & Korumburra, VIC

Join AUSVEG, VegNET Gippsland & AgVic to learn about:

- Farm pest and disease risk pathway reduction
- Owner reimbursement cost framework
- Serpentine leafminer regional update
- Fall armyworm and preparedness in advance of summer

*The workshops will be a combination of in-person and online.

Lindenow - Tuesday 24 August

11:30 am to 1:30 pm

Lindenow Hall, 150 Bairnsdale-Dargo Rd Lunch & refreshments provided

Korumburra - Wednesday 25 August

11:30 am to 1:30 pm

The Austral Hotel, 34 Bridge Street, Korumburra

Lunch & refreshments provided

Please RSVP by 19 August to Bonnie at 0407683938 or bonnie.dawson@foodandfibregippsland.com.au









Image: the delivery of the above event was changed to a singular event, fully online due to COVID-19 restrictions, delivered on the 24 August and without the Owner reimbursement cost framework presentation.

Establishment of a discussion group

In February, the AUSVEG Biosecurity Coordinator and RDO organised an opportunity for group discussion, specifically on the topic of Fall Armyworm and Serpentine Leafminer. This opportunity was made available to growers in the Mitchell River Valley and the agronomists servicing these

properties. 13 individuals attended, including 4 sales agronomists who collectively represented almost all the growing operations in the Mitchell River Valley and Macalister Irrigation District. The session was facilitated to encourage two-way information sharing, with the Biosecurity Coordinator providing an update of the national context, and then inviting growers and agronomists to share their own impressions and experience of the situation regarding both pests.



Image: Flyer distributed to growers and agronomists from the Mitchell River Valley

Due to the impact of COVID-19 restrictions, particularly the delayed delivery of the second workshop-turned-webinar in the Biosecurity project, the discussion group has not yet met again. However, plans are underway to meet as a group when restrictions enable.

- Five On-farm Biosecurity Plans: haven't yet progressed due to a number of factors
 - The Project's plan was designed so that the second of two workshops would inform the development of these plans. This was delayed until August 2021 due to the COVID-19 Pandemic, and ultimately ended up being delivered as a webinar which limited the interactivity of the sessions. It was also decided to cut down some of the content so that the program was shortened to an hour from previous plans for a two-hour agenda.
 - It was expected that the AUSVEG Biosecurity team would release a guide and/or template which
 growers could refer to following the development of these plans, but this has been delayed in its
 release.

Four growers have expressed their interest in developing plans, with the support of the RDO and AUSVEG Biosecurity team.

• Case study: although data from the EnviroVeg self-assessments indicates that there is at least one grower

with a full biosecurity management plan in place, the RDO is yet to identify which grower this is. As such, the RDO is instead planning to develop the Case Study once one of the growers listed above develops a plan.

Smarter Growing -

- A survey specifically about the industry's adoption of agtech was conducted during the development of the Strategy to inform this project (see appendix 9 for results)
- Identify and establish or showcase 1 demonstration stie, showcasing soil moisture monitoring and/or VRA

Food & Fibre Gippsland was successful in gaining additional funds as part of the Commonwealth Government's Future Drought Fund to establish a demonstration site of soil moisture monitoring technology (Appendix 10: Project Plan). Tripod Farmers' Boisdale property has been identified as the host for the demonstration (Appendix 11: Letter of Agreement) and a Project Reference Group (Appendix 12: Terms of Reference) has been established to guide the implementation of the technology and extension of the learnings from demonstration site. An inception meeting was held on-site in August 2021 and half of the soil moisture monitors were installed on the Control plot in September 2021, with the remaining monitors to be installed on the trial plot in mid-October following planting of the site.



Image: members of the Project Reference Group installing the first sensor. From L-R: Walter Chadwick (Farm Express Salads), Hugh ... (Elders Bairnsdale), Noel Jansz (Elders Bairnsdale)

An online launch of the project is also planned for October 2021, which will introduce the project to the local industry and other stakeholders. Other items in the program include –

- Overview of Gippsland practice reported through EnviroVeg (AUSVEG)
- Gippsland Lakes nutrient management and introduction of Australian Research Council project (West Gippsland CMA)
- AgVic services available to the local vegetable industry, ie. irrigation uniformity assessments, discussion group plans (Agriculture Victoria irrigation team)
- Overview of soil map of site, and potential benefits of soil mapping to increase water use and nutrient use efficiencies, and therefore minimise nutrient and sediment losses (Precision Agriculture)







Soil Moisture Monitoring demonstration launch

Growing Gippsland's Drought Resilience with technology & better soil

Join VegNET Gippsland to hear about this demonstration of CropX soil moisture sensors and how it will benefit the industry, as well as -

- An overview of Gippsland practice captured through the EnviroVeg program
- Nutrient management within the Gippsland Lakes catchment and ongoing research from the WGCMA
- Agriculture Victoria's irrigation support services available to the vegetable industry
- The potential benefits of soil mapping with Elders and Precision Agriculture







https://us02web.zoom.us/j/86467969723
Please contact Bonnie for further details
bonnie.dawson@foodandfibregippsland.com.au
or phone: 0407 683 938



West Gippsland



This program/project received funding from the Australian Government's Future Drought Fund.

Image: flyer used to promote upcoming online launch of the demonstration site

Presentation about Variable Rate Application of fertiliser

As per above, Precision Agriculture have been invited to present about soil mapping at the online Launch of the Soil Moisture Monitoring demonstration project. This will also include reference to Variable Rate Application of fertilisers.

10 monthly updates to online forum

It was intended that this online forum would be hosted on Food & Fibre Gippsland's online learning platform, KE-DI However, it has experienced significant delays, at the time of writing the VegNET Gippsland portal was nearing completion. This will be used for knowledge sharing, delivery of extension

resources and will give individual businesses access to an online training platform.

Due to this delay, VegNET Gippsland has instead used the eNews as an opportunity for disseminating updates about agtech innovation, including –

- o SoilWealth demonstration sites which feature precision agriculture
- Agerris robot developments
- National compost calculator project
- An additional opportunity related to increasing the adoption of agtech has presented itself in recent times
 to collaborate with the NBN Co's nbn Local team. The VegNET RDO is in the process of organising a
 number of localised discussions for growers to hear from the nbn Local team. It is anticipated that this
 will provide an opportunity to develop a greater regional understanding of connectivity from which
 further agtech opportunities can be pursued.

From: Bonnie Dawson
Sent: Wednesday, 29 September 2021 2:00 PM
To:
Subject: Roundtable: connectivity and cybersecurity with the nbn



You're invited to an agribusiness focussed roundtable to discuss connectivity and cybersecurity issues with the nbn, next Wednesday 3-4pm at the Long Paddock (Lindenow).

The discussion will include -

- $\bullet \quad \text{an overview of the } \textbf{nbn} \text{ system, particularly in the Lindenow Valley;} \\$
- the potential for the nbn to be used by agribusiness and agtech;
- · security of data and physical infrastructure.

Bonnie Dawson (FFG) and Alex Aeschlimann from **nbn** Local's Gippsland team will facilitate the discussion with Rob Hardie (**nbn**'s Segment Lead Agriculture) and Rebecca Moonen (**nbn**'s Security and Privacy Influence and Cyber Safety Outreach Manager) who will both be joining the roundtable virtually.

Afternoon tea will be provided

Please RSVP by Monday midday if you're able to make it or send a representative of your business along. If you're keen to participate but can't make it in person or at that time, please let me know.

Kind regards,



BONNIE DAWSON Regional Development Officer

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PO Box 857, Warragul VIC 3820

Image: screenshot of email invitation to nbn 'roundtable' discussion

Protecting Gippsland's waterways -

Regional EnviroVeg benchmarking report following completion of self-assessments by at least twelve growers

Significant progress has been made engaging growers with the EnviroVeg program. The region has benefited from visits from the national EnviroVeg Coordinator on two occasions, in March and again in May. The RDO and EnviroVeg Coordinator has met with a total of 13 individual growers in person to inform them further about the EnviroVeg program, particularly the online self-assessment and to encourage participation in the program.

Of the 28 vegetable producers in the Gippsland region that have registered to participate in the revised EnviroVeg program, 18 have commenced their online EnviroVeg self-assessment and 8 have completed the self-assessment. The Biosecurity section of the EnviroVeg self-assessment has been completed for 12 growers – it was decided to prioritise this section as a more accessible section (as it is less technical than some of the more agronomic sections) and in order to inform the Biosecurity Workshops delivered by VegNET Gippsland.

3 training sessions re water/irrigation – Lindenow, Sale, Korumburra

These training sessions have not yet been delivered due to a combination of factors, including limited opportunity to deliver in-person activities due to the COVID-19 Pandemic. It was also decided through

discussion with the EnviroVeg Coordinator to focus on the Biosecurity component of the self-assessment as a priority to inform the delivery of workshops on this topic. There has therefore been slower progress through the Land and Soils and Water components.

Field visit

A farm walk was held at Schreurs & Sons' Middle Tarwin property in April 2021, which was attended by 21 growers from Gippsland businesses, as well as representatives from the West Gippsland Catchment Management Authority (WGCMA), Agriculture Victoria and AUSVEG. The event involved a tour of the property and commentary from the Field Operations Manager, which was complemented by the perspective of the WGCMA representative, and had the aims of increasing knowledge, skills and aspirations to –

- Improve nutrient and water use efficiency;
- Protect surrounding waterways;
- o Engage with the local community.



Image: flyer distributed to invite growers to the farm tour at Schreurs & Sons' Middle Tarwin property

The farm featured in the above field visit was identified as the most appropriate example to highlight in a

proposed case study. However at the request of the grower it was decided to instead disseminate some of the many existing publications which highlight the positive practices of interest that the business has previously adopted. As such, following the farm visit the following case study featuring this business and supporting resources was disseminated to attendees and other growers across Gippsland —

- A <u>snapshot of Schreurs' property</u>, focussed on the silt traps, reuse dams and filtering vegetation, produced a couple of years ago by Southern Rural Water (SRW 2018)
- Managing waste water from intensive horticulture: a wetland system, summarises much of what the Schreurs have put into practice (NSW DPI, 2002)
- o A basic Soil Health and Water Use Efficiency factsheet (SoilWealth 2018)

Follow up monitoring and evaluation of attendees of this farm visit has assisted the RDO to identify potential businesses to feature in the next case study as per the Work Plan.

Survey – irrigation systems

The RDO is a member of a working group included the Federation University-led program What's your Food & Fibre Challenge, which is working towards a regional solution for the reuse or improved recycling of irrigation drip tape used by the local vegetable industry. This 'Challenge' was proposed to the program by Bulmer Farms, and is one of seven successful challenges which are being worked through by working groups comprised of Food & Fibre Gippsland, Federation University and other identified stakeholders. The RDO has conducted a survey of the local industry to understand

Building business capacity and a sustainable workforce

28 video case studies

The VegNET Gippsland Regional Extension Strategy instigated the production of the This is my Job video series, which benefited from funding from Jobs Victoria. Throughout 2021, twenty eight video case studies were produced featuring four growers from the Gippsland region. Four of these were introductions from business owners or senior managers representing the business, which provided their perspective of the industry and an introduction to their respective businesses. The remaining twenty four videos featured individuals of varying backgrounds, ages and education levels who introduced viewers to a diverse array of roles. See appendix 13 for description, links to each video.

These have all been posted to the Food & Fibre Gippsland website and shared across the organisation's social media platforms – <u>Facebook</u> and <u>Instagram</u>, with many also featuring on the organisation's <u>LinkedIn</u>.

The TIMJ videos have also been shared with other stakeholders, and in recent times with the Learn Local Employment Networks (LLENs) who have direct contact with secondary schools from the area. Although they haven't yet been disseminated by the LLENs, an extension plan has been developed between VegNET Gippsland and the LLENs who will share the videos through their networks and embed them in a number of their programs (as listed in the Outcomes section).



Image: Filming of the This is my job video series.

Partner to CQU's RACE program

VegNET Gippsland has agreed to partner with Central Queensland University's RACE program which is being delivered across Gippsland for 3 years (see appendix 14). To date, this involvement has resulted in the establishment of 4 industry-school partnerships between growers including Select Produce, Flavorite and Bulmer Farms and both primary and secondary schools in Maffra, San Remo, Philip Island and Mirboo North. Although most of the activities which will be delivered to support these partnership – incursions and excursions – have been delayed due to restrictions as a result of the COVID-19 Pandemic, an incursion activity was facilitated between San Remo Primary School and Select Produce in Korumburra. While students weren't able to access the paddocks or the company's facilities at this time, they were introduced to the company's products – sugar snaps and snow peas – which the Managing Director brought along.

The VegNET RDO and grower Adam Schreurs also participated in a Horticulture Careers Panel during Science Week.

• Business development seminar with a focus on workplace health and safety

COVID-Safe Planning information session:

In February 2021, VegNET Gippsland supported the Victorian Department of Health to deliver a COVID-Safe planning information session for growers.

- Seven attendees (three individuals in person, four online)
- One additional grower met with the DHHS on-farm



Image: flyer used to promote COVID-Safe Planning information session

VegNET Farm Safety & Workforce Forum:

Two seminars were delivered for growers and their HR representatives, one in-person in June 2021 and the second online in August 2021. The latter of these was originally planned to be delivered in person at Lardner Park, Drouin (West Gippsland), but was moved to an online format in the final stages of planning due to a COVID-19 Lockdown. Both seminars included presentations from the following —

- Victorian Farmers' Federation's Farm Safety program
- o RACE Gippsland
- TAFE Gippsland

- o FFG's Connect 2 Employment program
- This is my Job videos
- o Agriculture Victoria Seasonal Workforce Coordinator







This forum is to help grow, retain and look after the horticulture industry's workforce

Workplace Manslaughter & Farm Safety

An update from the VFF's Farm Safety Advisor

Building a local workforce

Updates from -

- · TAFE Gippsland's horticulture courses: training solutions
- Food & Fibre Gippsland's employment program: how it can help you to attract, train and retain quality employees
- · Agriculture Victoria: Seasonal Workforce support

Showcasing jobs in horticulture

Hear about the <u>This is my Job video series</u> and how it can benefit your business

Tuesday 22 June 11:30am to 2:30pm Criterion Hotel, Sale Lunch & refreshments provided

Please RSVP by Friday 11 June to Bonnie

Phone: 0407 683 938 or email: bonnie.dawson@foodandfibregippsland.com.au Registrations required for catering and COVID-Safe precautions











This project has been funded by Hort Innovation using the vegetable research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture com.au

Image: flyer used to promote initial Workforce Forum

In addition to these presentations, VegNET Gippsland used it as an opportunity to distribute the levy-funded "Carrot" USB sticks which had been developed as part of VG13053: *Developing vegetable industry occupational health and safety resources* (6 USBs). These USB sticks are pre-loaded with a suite of workplace health and safety files including detailed guidelines, information and assessment tools.



Image: depiction of "Carrot" USB

Attendee numbers -

First (in-person) forum: 18 attendees (9 growers + other stakeholders & presenters)

Online forum: 10 attendees (4 growers + other stakeholders & presenters); plus 4 views of the recording



Image: VFF Representative presenting to attendees of the Workforce forum about Workplace Manslaughter and Farm Safety, June 2021.

Networking event for new entrants

This event has not been delivered due to the uncertain environment resulting from the COVID-19 Pandemic. It is hoped that it will instead be delivered following the coming 2021-22 growing season

Online forum for new entrants

As per above, unfortunately the Food & Fibre Gippsland online platform — KE-DI — has experienced significant delays. However, with the VegNET Gippsland portal nearing completion, this platform will enable networking between members. Businesses will be asked to nominate new entrants to create individual logins, who will be invited to a specific group — "Fresh faces of the vegetable industry". As well as the technical delays with this roll-out, it is anticipated that this online forum will be best introduced to the target new entrants via an in-person event, as per above.

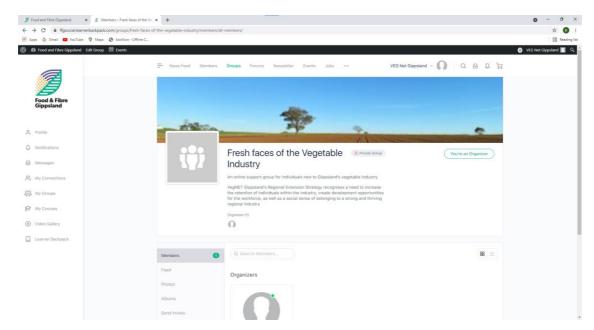


Image: screenshot of KE-DI platform which will host online group for new entrants.

• Survey re TAFE Gippsland's Production Horticulture traineeship

Although TAFE Gippsland were unable to provide exact numbers or details of training workplaces, indications are that only one vegetable levy-paying business currently enrols trainees in the local Production Horticulture traineeship. It was therefore decided to invite TAFE Gippsland to participate in the VegNET Workforce Forums which were delivered in June and August 2021 to increase growers awareness of this and other relevant courses.

Outcomes

On-farm biosecurity -

What Changes are Sought	Who	VegNET 2	2 outcom	es			
from the M&E plan							
80% of growers and service	At least 10 growers, as	There wa	ıs an ovei	all incre	ase post	-event (as compared to before) to attendees' awareness about
providers who view the	well as agronomists	the prese	ence of Se	erpentin	e Leafmi	ner in A	ustralia of 24%, however survey responses indicate that
presentations increase their	and service providers	there wa	s decreas	e in the	awarene	ss abou	t the presence of Fall Armyworm in Australia of 8% (from
awareness (Knowledge) of the	from across Gippsland	100% to	92%).				
presented pest, disease and		Please no	ote that t	he ques	tion spec	ifically a	sked whether viewers were aware that the pests are
weed threats.		present i	n Austral	ia, not a	bout awa	reness	about the pest generally.
80% of growers and service	At least 10 growers, as	There wa	s an incr	ease of	3% (from	75% to	83%) of participants who are concerned about the
providers who view the	well as agronomists	potential	impact c	of Fall Ar	myworm	on thei	r business, and there was also an increase of 8% (from
presentations have an	and service providers	75% to 8	3%) of pa	rticipan	ts who ai	e conce	erned about the potential impact of Serpentine Leafminer
increased concern of these	from across Gippsland	on their l	ousiness.	Howev	er, there	was als	o an increase of 9% of participants who indicated they
biosecurity threats & sense of		were not	concern	ed abou	t the pot	ential in	npact of these pests on their business following the
responsibility to prevention		presenta	tions.				
incursions (Attitude)							
80% of attending growers and	At least 10 growers, as	The prop	ortion of	attende	es whose	e capaci	ty to identify the presented pests changed was not
agronomists report an	well as agronomists	measure	d directly	(as indi	vidual re	sponses	to the pre-event and post-event surveys weren't directly
increased capacity to identify	and service providers	linked). I	However,	there v	vas an ind	rease p	ost-event (as compared to before) to both the average
these pests & disease and	from across Gippsland	and med	ian of att	endees'	awarene	ss of ea	ch of these pests (on a scale of 1 to 5).
implement appropriate			Serpentir		Fall Army	worm	
preventive biosecurity			Leafmine Before	r After	Before	After	
measures.		Average	2.5	3.62	3.08	3.85	
		Median	3	4	3	4	
To develop a shared	At least 10 growers	Following	g one disc	cussion	group me	eting, o	n a scale of 0 to 10, where 0 was no new knowledge and
knowledge of the most	and/or agronomists	10 was a	significar	nt amou	nt of nev	/ knowle	edge, attendees developed a level of 9.18 in new
prevalent pests, weeds or	from across Gippsland	knowledge about the content delivered. The format of the meeting was two-way information					
disease across Gippsland, and		sharing between AUSVEG representatives, growers and agronomists.					
share ideas for preventative							

actions and skills at a farm and		
regional level.		
Encourage accountability	At least 10 growers	All attendees of the first discussion group meeting indicated that they are interested in participating
(Attitudes) to one another to	and/or agronomists	in further meetings, indicating their commitment to continue learning and sharing information
uphold a strong regional	from across Gippsland	about biosecurity threats. All respondents of the survey also indicated that they would take some
biosecurity level (Aspirations),		form of follow up action as a result of the meeting.
developing further pride in		20% (2 of 10) indicated that they would change their approach to an option spoken about.
Regional food provenance.		80% (8 of 10) indicated that they would seek more information or training.
80% of discussion group	At least 10 growers	Outcome not reportable as yet.
members report having an	and/or agronomists	
increased sense of	from across Gippsland	
responsibility to uphold a		
strong regional biosecurity		
level practice changes to		
prevent biosecurity incursions.		
To encourage other growers	Growers who do not	Case study not yet developed
to develop and implement	yet have an on-farm	
their own on-farm biosecurity	biosecurity plan	
plan (Aspirations).	developed	
To provide ideas for other	Growers who do not	Case study not yet developed
growers to consider for their	yet have an on-farm	
own operations	biosecurity plan	
	developed	
The case study may also be	Consumers	Case study not yet developed
used to promote the efforts of		
Gippsland growers to		
consumers		
5 growers commit to	5 growers who do not	4 growers have committed to developing and implementing an on-farm biosecurity plan over the
developing and implementing	yet have an on-farm	next year.
an on-farm biosecurity plan	biosecurity plan	
each year.	developed	
80% of growers participating	Growers registered	Not yet delivered.
in this training report	with the EnviroVeg	
increased knowledge of	program	
practices included in		
EnviroVeg self-assessment.		

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80% of growers participating	Growers registered	Not yet delivered.
in this training report	with the EnviroVeg	
increased aspirations to adopt	program	
practices necessary to fulfil		
component in self-		
assessment.		
60% of growers participating	Growers registered	Not yet delivered.
in this training make at least	with the EnviroVeg	
one practice change in	program	
relation to biosecurity over		
the life of the project.		

1 Presentations about exotic, notifiable or problem pests, diseases or weeds -

- Fall Armyworm
- Serpentine Leafminer

The following outcomes are reported following a pre- and post-survey which was presented to participants in the online Workshop.

Change in awareness about the presented pests

The workshop was successful in increasing the number of participants who were also aware of the detection of Serpentine Leafminer from 8 to 11.

While responses prior to the workshop indicated that all participants were already aware that Fall Armyworm had been detected in Australia, there was one respondent who following the presentation was stated they were unaware of the presence of Fall Armyworm. It is possible that this shift occurred for one of two reasons -

- One respondent joined the workshop midway through and therefore did not respond to the questions beforehand. They may not have known of the presence of Fall Armyworm in Australia prior to the workshop, nor learnt of it from the presentations.
- Alternatively, one respondent may have become less certain about the presence of Fall Armyworm in Australia as a result to the
 presentation. While this is unlikely, the presentation did emphasise that at the time of the workshop Fall Armyworm was not understood
 to be present in Gippsland, having retreated in the colder months, so the respondent may have misconstrued the question to apply it only
 to our own region.

Change in concern and sense of responsibility

The workshop was successful in increasing concern about the potential impact that both Fall Armyworm and Serpentine Leafminer might have on the participants' businesses, from the percentage of those being concerned about the potential impact of both increasing from 58% to 75% of respondents. However, as a result of the workshop there was also an increase from one to two respondents who are not concerned about the impact either pest will have on their business.

Change in knowledge and skills to identify SLM and FAW

The workshop was successful in increasing the knowledge and skills of participants to identify both Serpentine Leafminer and Fall Armyworm. Respondents knowledge and skills to identify Serpentine Leafminer increased by 27.4%, and their knowledge and skills to identify Fall Armyworm increased by 15.4%.

Change in knowledge to prevent incursions of SLM and FAW

The workshop was successful in increasing the knowledge and skills of participants to prevent both Serpentine Leafminer and Fall Armyworm. Respondents knowledge and skills to identify Serpentine Leafminer increased by 11%, and their knowledge and skills to identify Fall Armyworm increased by 14.2%. However, with an average response of 3.38 (on a scale from 1 to 5) there is potential for further develop this knowledge and the skills to optimally prevent Fall Armyworm and Serpentine Leafminer.

2 Establishment of discussion group -

An initial meeting of agronomists and growers interested in sharing knowledge about priority pests in the region in February 2021. Nine out of 11 respondents indicated that they are interested in participating in further in-person discussion group style events. Three of these respondents also indicated that they would be interested in being part of an online discussion group. In-person meetings will be prioritised as an opportunities for information sharing initially, but once the group has defined its purpose an online forum will be offered as an additional opportunity.

The post-event survey, which was answered by 11 out of the 14 attendees, indicated that the discussion was extremely relevant to those in attendance, with an average response of 9.55/10 to the question "how relevant to you and your enterprise would you rate today's discussion?", indicating that there was a readiness to learn and participate in ongoing discussion on the topics which were presented.

The information presented provided an extremely high level of new knowledge and understanding to the respondents, with the average response being 9.18 on a scale of 0 to 10.

3 On-farm biosecurity plans

As far as the RDO is aware there has not yet been an increase in the development of on-farm biosecurity plans. However, there has been in an increase in growers who have installed Biosecurity Signage on their properties, with the RDO having distributed signage to eight growers across the region. This has been an opportunity to instigate conversation about Biosecurity Planning, with at least four of these growers indicating that anticipate benefit and intend to develop On-farm Biosecurity Plans.

Hort Innovation – Final Report: VegNET Gippsland (VG19013)



Image: Biosecurity signage installed at Condoluci Produce, Leongatha

Building workforce capability –

What Changes are Sought	Who	VegNET 2 outcomes
from the M&E plan		
To shift public perceptions	Gippsland public; FFG	28 videos have been viewed a total of 5,045 times (viewed for at least one minute) through the
about the array of roles	social media audience;	original post shared by Food & Fibre Gippsland's facebook page. A shift in public perceptions has
available in the vegetable	Local media outlets.	not yet been monitored. However it is hoped that these many views have increased the public's
industry		awareness of the array of roles available in the industry.
		"Definitely putting Bulmer Farms on the map as an employer of choice. Great work team"
		"This is really inspiring. Well done" (re Brooke, Hussey & Co)
		"a champion for our industry"

To increase the number of expressions of interest received for job opportunities with Gippsland vegetable growing operations. Participating growers report a 10% increase in the number of expressions of interest received for job opportunities each year.	Growers and jobseekers	Participating growers have not yet reported an increase in the number of expressions of interest received for job opportunities. However, each of these growers is optimistic that with time and wider dissemination of the videos that they will have their desired impact.
5 schools report using the videos to inform students about the job opportunities in the vegetable industry each year	Schools	Dissemination through school networks planned for coming year.
GRAEP reports using the videos to inform 20 jobseekers about the industry each year.	GRAEP & Employment agencies	Videos have been made available to Job Actives across the region – via Food & Fibre Gippsland's employment program – who have shown them to jobseekers to create interest in the industry. Exact number of jobseekers not available. The videos have also been shown to participants of pre-employment training programs delivered
		through Learn Locals (neighbourhood houses) across the region. The videos were shared with these agencies and networks via the vimeo links. Although viewers
		can't be identified (nor the number of individuals viewing a video together), each of the videos have been viewed through these links between 13 and 56 times. The average number of views the videos have received on this channel has been 27 times.
VegNET Gippsland facilitates connections between the CQU project and at least 5 vegetable growers each year	Growers & schools	5 businesses have been connected with RACE Gippsland
VegNET Gippsland contributes content towards 1 new learning module which is made available to STEM teachers.	VegNET Gippsland & RACE Gippsland	Not yet delivered, scheduled for November 2021

Hort Innovation - Final Report: VegNET Gippsland (VG19013)

To increase the retention of	New industry entrants	Online su	Online support network not yet delivered.											
new entrants to the industry														
80% of attendees report an increase in knowledge and skills presented at the seminar.	Growers and HR representatives	individua there wa	The proportion of attendees whose knowledge and skills changed was not measured directly (as individual responses to the pre-event and post-event surveys weren't directly linked). However an there was an increase to both the average and median of attendees' knowledge and skills of each of the topics post-event (as compared to before).											
		Workplace Farm Safety FFG's RACE TAFE Gippsland Employment Gippsland Program			This is my Job videos									
		Before After Before After Before After Before Before		Before	After	Before	After							
		Average	4.89	8.2	5.21	8	5.21	7	3	8.2	4.52	7.8	5.89	7.2
		Median	5	8.5	6	8	5	7	2	9	4	8.5	6	7.5
70% of attendees indicate that they intend to remain in the industry for at least another year.	New industry entrants	Not yet d	elivered											

1 Video case studies showcasing different job opportunities (28 produced)

1b Dissemination of videos

Each of the four participating businesses have been given direct access to the videos to have the option to download them and integrate them in their own Employment resources. Each of the growers have provided extremely positive feedback from the videos, as per below –

"The videos have been wonderful. We have shared them extensively on our social media platforms, we use them in our group interview presentations and have the links attached to our job advertising.

The feedback we have received has been amazing, everyone is really impressed, particularly when holding online interviews it has given a really good insight into the business without having the candidates on site.

Can't speak any higher to the content and quality. Once again thank you for allowing us to participate they have proven very valuable." (Sue llett, HR Manager, Flavorite)

"We are using the videos on our web site they should be up in a few weeks time we've built more into the site and so its taken a little longer. Once you see our web site we have a section "Join Our Business" and the videos are centre of that page. I do think it's a very positive initiative and will certainly encourage potential employees to consider this industry. It also give our customer a perspective they did not have before on what we do. Its been good." (Jeremy Haw, Owner, Hussey & Co)

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Each of these videos has been shared from the Food & Fibre Gippsland Facebook page, which has 3,219 Followers.

The most relevant metrics resulting from the sharing of each of the videos are as per below –

	TOTAL of 27 posts	AVERAGE for each video
1- minute video views (each video is between 1 and 2 minutes long)	5,045	202
Engagements (Reactions + Shares + Comments)	3,119	125
Reactions	2,382	95
Shares	212	8
Comments	525	21
Reach (how many times the post appeared in someone's feed)	46,511	1,860

Although the intended outcome to increase awareness of these roles cannot be definitively analysed by this data, the number of engagements for many of these videos indicate that there have been a high number of individuals who have seen them and are therefore likely to have learnt something positive about the career opportunities which exist within the industry. See appendix 13 for Facebook metrics for each video

1c. Dissemination and use of case studies by schools –

A plan has been developed for the three Local Learning & Employment Networks (LLENs) of the region to disseminate the videos to secondary schools, in particular their careers and vocational education programs. These connections evolved out of the exiting partnership between VegNET Gippsland and RACE Gippsland, but took longer to establish than anticipated, so as a result plans to disseminate the TIMJ videos through these networks have only just been developed, as follows –

- 1. Share online through each of the LLENs Facebook pages
 - South Gippsland and Bass Coast LLEN (615 followers)
 - <u>Baw Baw Latrobe LLEN</u> (414 followers)
 - Gippsland East LLEN (296 followers)
- 2. Dissemination through existing Careers Networks which bring together teachers in each shire
- 3. Embed the videos in each LLENs' programs
 - Reimaging the Future program, where students will be introduced over the next 3 years to STEAM careers through school visits, excursions and immersive programs.
 - I am Ready program, which supports secondary school students with a learning barrier or disability to learn work readiness skills and

be provided with opportunities for support work experience.

- CATCH program

In addition to local schools, TAFE Gippsland's Head of Agriculture has reported that they intend to show the TIMJ video series to students of the Certificates IV in Horticulture, Production Horticulture, Agriculture and other relevant short courses towards the end of the school year. They also intend to use them at the beginning of these courses to introduce students to the industry.

2 Partnership with CQU "Raising Aspiration in agriculture: Careers & Education" (RACE) project

2a Connections established between RACE and vegetable growers

Much of RACE Gippsland's programs have been delayed due to the COVID-19 pandemic, however the following connections have been established, and where the activity has been delivered outcomes are presented –

Grower	Involvement in which component of RACE Gippsland	
Schreurs & Sons (Adam Schreurs)	Participation in Science Week Careers in Horticulture webinar	Although initially targeting Gippsland schools, the online nature of this activity enabled schools from across the country to participate. A total of at least 132 students participated in the live session, however only 1 of the 12 schools were from the Gippsland region (Bairnsdale Secondary College)
Bulmer Farms Teacher Professional Development module		Not yet delivered due to COVID-19 restrictions
	Industry-School Partnership	Not yet delivered
Select Produce Teacher Professional Development module		Not yet delivered due to COVID-19 restrictions
	Industry-School Partnership	Approximately 26 primary school students heard about Select Produce, their produce and the careers available within the industry
Flavorite	Industry-School Partnership	Not yet delivered

Hort Innovation – Final Report: VegNET Gippsland (VG19013)

Hussey & Co	Industry-School	Not yet delivered
	Partnership	



Image: students from San Remo Primary School participating in an incursion with Select Produce, Korumburra

HORTICULTURE CAREERS PANEL



Bonnie Dawson

Regional Development & Extension Officer (VegNET)



Bon Manley

Flower Farmer (Bon in the Garden)

Adam Schreur

Celery, Leek & Baby Leaf Greens Grower (Schreur & Sons)







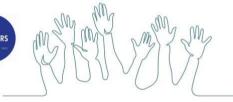


Image: Bonnie Dawson, RDO and Adam Schreur, Schreurs & Sons participated in an horticulture Careers Panel.

4 Seminars focused on human resource management and business development skills

COVID-Safe Planning information session:

4b Changes in knowledge and skills, and proportion who changed

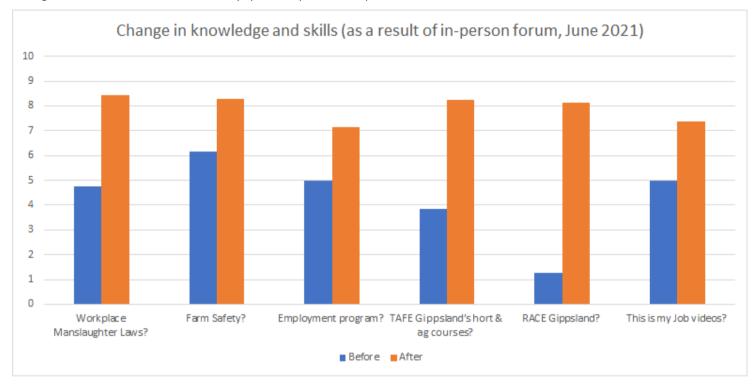
Follow up of three of the attendees ten weeks following the session provided anecdotal feedback that it was a valuable session, that it increased their knowledge and understanding of the requirements.

4c On the night of the information session attendees were presented with a survey modelled on the Adoption Continuum Tool. This was answered by three of the seven attendees. 100% of the responses received indicated that the session was successful at increasing growers' intent to adopt the practices – mostly government requirements. Each of the attendees who were surveyed ten weeks following the seminar felt they had applied this knowledge and understanding sufficiently for the Government requirements of the time.

VegNET Farm Safety & Workforce Forum:

4b Changes in knowledge and skills, and proportion who changed

Each of the presentations were successful in increasing attendees' (in-person and online) knowledge and skills about the topics which they presented about. The following data is taken from results to surveys pre- and post- the in-person forum.



4c Practice change or intent to change as a result of seminar

Workplace Manslaughter Laws and Farm Safety

A representative from the VFF's Making our Farms Safer team presented about both the new Victorian industrial manslaughter laws and applying farm safety principles to one's business. The presentation was particularly effective at increasing attendees' knowledge and skills of the manslaughter laws, with an increase of 35.6%. It was also effective at prompting growers to take further action to support necessary changes within their business. A phone survey of attendees was conducted three months after the seminar and one grower reported that as a direct result of the seminar they had had the VFF's Making our Farms Safer team visit their operation to present to Team Managers about the Manslaughter Laws. Another two businesses reported that they intend to also connect with this program to increase others' knowledge of this topic within their businesses, as well as have their existing processes and systems reviewed.

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TAFE Gippsland

Survey responses demonstrated that there was a low level of knowledge about the relevant course offerings of the local TAFE institute prior to this presentation and the presentation delivered by TAFE Gippsland was effective at increasing this by 44%. It is understood that this forum has directly resulted in at least one further grower reaching out to TAFE Gippsland to discuss traineeship options, with two other conversations already underway prior to the forum.

RACE Gippsland

RACE Gippsland is a new program only established in late 2020, so there was a low level of knowledge about it prior to the forum. The presentation resulted in an a 68.8% increase in attendees' knowledge and skills. As outlined earlier, there are five growers now linked in with the RACE Gippsland program.

Protecting Gippsland's Waterways -

What Changes are Sought	Who	VegNET 2 outcomes
from the M&E plan		
At least 10 growing operations will complete their EnviroVeg self-assessments online annually.	Growers registered with EnviroVeg	8 Gippsland growers have completed their self-assessment in the past twelve months, with 18 having commenced the process.
To further identify priorities of this project.	VegNET RDO	Awaiting full regional report.
80% of those who complete the self-assessment show improvement from year to year.	Growers registered with EnviroVeg	To be measured from the second year.
80% of growers who participate in the training report increased knowledge and skills relating to the training content (on-farm management of water, nutrients and chemicals, soil health and biodiversity).	Growers registered with EnviroVeg	Not yet delivered

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80% of growers who	Attendees of farm visit	100% of growers who responded to the initial post-event survey reported an increase in new
attend each field visit		knowledge, skills and ideas about the following, with the average response listed as (where 1 is not
report an increase in		at all and 10 is a huge amount) –
their knowledge and		Nutrient & water use efficiency: 7
aspirations to		 Protection of surrounding waterways: 8
implement best practice soil,		Engaging with the local community: 8.33
water and		
nutrient management.		71% of growers surveyed six months following the event (7 businesses surveyed out of the 11
		represented) indicated that the event increased their aspirations to improve their nutrient and
		water use efficiency and protect surrounding waterways.
To increase the	Gippsland growers	Case study not yet delivered
knowledge and		
aspirations of growers		
to adopt practice		
change (via case study).		

1 At least ten growers complete their EnviroVeg self-assessment each year

Approximately 85 per cent of Gippsland's levy-paying vegetable growers (28 growing businesses) are registered to participate in the revised EnviroVeg program. Of those growers that have registered their interest in the EnviroVeg program, 18 have commenced their online EnviroVeg self-assessment, with 8 having completed the full self-assessment. Of particular note, the Biosecurity section of the EnviroVeg self-assessment has been completed for 12 growers.

While there isn't yet sufficient data for a full regional report to be de-identified, a selection of practices have been captured by the program and are attached as an appendix 15 (confidential). Of particular interest are practices relating to water and irrigation management and biosecurity. For instance, it can be seen that only half of the growers have biosecurity signage installed. Therefore, the VegNET Gippsland RDO will continue to distribute signage to growers when conducting grower visits. The detail contained in the regional report will also contribute to further refining the focus of workshops and identification of practices for change. This initial regional report will also serve as a baseline from which to measure practice change on an annual basis.

3 Annual field visit to a property which has adopted positive soil, water or nutrient management practices

3b Proportion of participants who change knowledge, skills and aspirations

Responses to the paper survey which was distributed at the event were minimal and incomplete to deduce immediate or intended outcomes relating to change in knowledge, skills and aspirations. Responses to these questions were received from nine out of the twenty one attendees and clearly indicated that the content of the day was relevant, with an average relevance score of 8/10.

A survey sent out to attendees immediately after the event only received 3 responses, but the responses indicated that the activity was moderately successful at providing new knowledge, skills and ideas to attendees to increase nutrient and water use efficiency (with an average response of 7 on a

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scale of 0 to 10) and very successful at providing new knowledge, skills and ideas to attendees to protect surrounding waterways and engage with the local community (with average responses of 8 and 8.33 on a scale of 0 to 10, respectively).



Image: Adam Schreurs describing the benefits from grasses and reeds planted in their drains.

Additional anecdotal feedback gathered that was received at the event and from follow-up phonecalls included –

[Key messages taken from the event] were "simple activities & improvements"

"Farmers are very conscious of protecting the environment. Willing to incorporate best practice into their system."

"Learnt ways to treat water and sediment"

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"including the CMA's perspective was really valuable, to hear about the broader context of what Schreurs were achieving"

"It was really good. The set up of the farm was quite different so very interesting... it was also a good networking opportunity and Adam was very generous to share their practices with us".

Six months following the event a phone survey of seven of the businesses which attended (out of 11 businesses, or two thirds of those that were represented) indicated that the event was successful at instigating at least two large businesses to implement changes, particularly relating to the design of their drainage. Each of the other growers who were surveyed stated that the event was successful at increasing their awareness of ways in which they could increase nutrient and water use efficiencies and protect surrounding waterways. One of these growers in particular, indicated that it drew their attention to the potential impacts of considerable nutrient loss from their property and that they intend to apply this knowledge to its design at the next opportunity for infrastructure design and development. Two other growers reported that as a result of the day they intend to increase their plantings of native species in order to capture sediment and nutrients and therefore protect the waterways surrounding their properties. However, challenges resulting from the COVID-19 pandemic have so far prevented this additional work to be undertaken.

Smarter Growing -

What Changes are Sought	Who	VegNET 2.0 outcomes
from the M&E plans		
80% of growers who view	At least ten growing	Presentation not yet delivered
presentation report	operations view each	
increased knowledge about	presentation (online	
the availability of different	or in person)	
precision agriculture or		
digital technology and their		
application.		
At least 10 growers report	To be distributed to	No outcomes reportable as yet.
that they have adopted,	all other Gippsland	
or are planning to	growers	
adopt precision agriculture	electronically(using	
or other digital technologies	Food &Fibre	
throughout the project	Gippsland's Customer	
(further to what they	Relationship	
already use).	Management (CRM)	
	system).	
15 growers report an	Other interested	No outcomes reportable as yet.
increase in knowledge and	growers, particularly	
skills required to adopt	those in same area	
	and similar crop.	

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various ag tech over the		
life of the project.		
5 growing operations report	Other interested	No outcomes reportable as yet.
adopting precision	growers, particularly	
agriculture over the life of	those in same area	
the project.	and similar crop.	
At least 8 growers report	Interested growers;	No outcomes reportable as yet.
increased knowledge about	service providers.	
the availability of different		
ag tech and their		
application.		

Monitoring and evaluation

Individual Project Logics and M&E Plans were developed for each of the four projects, with guidance from Rural Consulting Group. The outcomes listed above were derived from these M&E Plans.

Relevance:

The innovation systems approach followed throughout this phase of VegNET has enabled for regular monitoring and feedback to be provided to the Strategy, particularly through engagement with the REAG.

In addition to these structured mechanisms, informal feedback throughout the feedback from REAG members and other growers and stakeholders has reaffirmed and refined the focus of VegNET Gippsland's Regional Extension Strategy.

Given the relatively short period over which these projects have been implemented (approximately twelve months) and the considerable disruption caused by the COVID-19 Pandemic, there has so far only been a very small amount of reportable practice change, however all activities have been successful in increasing knowledge and awareness of the topics explored.

Effectiveness:

Due to the short-term nature of this project, many of the expected outcomes of the Strategy have not yet been delivered. However, feedback and refinement of each of these projects has reinforced that they are all on a positive trajectory to achieve these outcomes.

Below is an analysis of the four individual project logics (appendices 4 to 7) and this trajectory of change -

Building business capacity and a sustainable workforce:

- Partnership with CQU's RACE Program: although COVID has delayed the delivery of many of their
 activities, the RACE Gippsland program is on track to increase integration of horticulture into the school
 system, with the establishment of four school-industry partnerships, and the inclusion of VegNET
 Gippsland and tours to vegetable farms integrated into their professional development programs.
 Through the involvement of growers in these activities, knowledge of opportunities for growers to engage
 with schools has already been increased, which it is hoped will ultimately lead to more individuals being
 employed in the local industry.
- This is my Job videos: 27 videos were produced which have been effective at increasing the public's awareness of the array of jobs involved in the industry, as is demonstrated by the metrics available from sharing these videos on social media channels, particularly Facebook. This suite of videos is now available for Gippsland's vegetable growers, particularly the four featured businesses, to utilise in their own recruitment strategies. Plans have also now been developed for these videos to be disseminated more broadly by strategically embedding them in local school and vocational education programs as advised by the three Learn Local Education Networks (LLENs) in Gippsland. Responses from these videos so far indicate that by sharing these videos widely and through multiple avenues they will have a positive impact on the public's perception of the industry as potential workplace, and will therefore hopefully result in more individuals aspiring to work within the industry.
- Survey re uptake of TAFE Gippsland's Production Horticulture traineeship: results of this survey have
 informed the RDO that although there is some historical tension between the industry and the TAFE,
 there is also a simple lack of awareness about this traineeship. TAFE Gippsland was therefore invited to
 present to the industry at the VegNET Gippsland Workforce forum in order to increase this awareness.
- Network for new entrants online network + annual event: neither of these activities have yet been delivered on due to COVID-19 restrictions and delays imposed on the rollout of KE-DI (F&FG's online learning platform).

Smarter Growing with AgTech:

- Trial site demonstrating agtech: as described in previous sections of this Report, a trial site demonstrating soil moisture monitors has recently been established, which intends to increase the adoption of this technology.
- Annual field days/presentation providing overview of available AgTech: the above trial site will involve
 two events, one an online webinar to launch the trial, and a second event at the end of the peak growing
 season in 2022 to share learnings from the trial with the local industry, which will be delivered in-person
 as long as COVID-19 restrictions permit. If successful, these activities will increase attendees knowledge
 of some available agtech.

Biosecurity:

- Presentations for growers and advisors on specific pests & disease: two webinars were delivered which focused on on-farm biosecurity and featured Fall Armyworm and Serpentine Leafminer. They were both delivered in partnership with AUSVEG, as well as representatives from Agriculture Victoria. VegNET Gippsland was therefore successful at providing both of these agencies an opportunity to engage directly with the industry. While they were both successful at increasing growers' awareness of the featured pests, they were only moderately successful at increasing their skills to identify these pests. With the loosening of COVID-19 restrictions, VegNET Gippsland intends to plan additional activities focused on identification of these pests, which will also reinforce the advised process for reporting notifiable pests and disease, as well as the Emergency Plant Pest Response Deed. Anecdotal feedback following the second biosecurity webinar highlighted an ongoing appetite for regular pest and disease updates for the region.
- Discussion group (with sales agronomists and interested growers): an initial discussion group event was
 delivered in February 2021, with all attendees expressing interest and a desire for further such events.
 Anecdotal feedback following the second biosecurity webinar also emphasised the relevance of a
 proposed discussion group as an avenue for ongoing knowledge sharing to develop a more
 comprehensive awareness of these pest and disease pressures at a regional level.
- Case study to showcase an on-farm biosecurity plan: According to the EnviroVeg self-assessment data, there is at least one grower within the Gippsland region who has a complete on-farm biosecurity management plan. However, the RDO is yet to identify which business this applies to, so this case study has not yet been developed. Failing identification of this existing plan, VegNET Gippsland will feature the process of supporting one of the four growers who have expressed an intent to develop a plan.

Protecting Gippsland's Waterways:

- Completion of EnviroVeg self-assessments on online portal, particularly the Land and Soil, Fertiliser and Soil Additives, Chemicals, Water and Biodiversity components: eight of Gippsland's growers have now completed their EnviroVeg self-assessments; once ten growers from the region complete this phase, a full regional report will be developed from which VegNET Gippsland can identify practice gaps and priorities for change that will complement efforts to increase water use efficiency, reduce runoff and therefore protect Gippsland's waterways.
- Focused EnviroVeg training sessions covering Nutrition & Soil Health, Water Usage and Biodiversity: as per above, these will be developed in the near future, once sufficient numbers complete their self-assessments (two more than at the time of writing).
- Involvement with WGCMA/AgVic through membership in the Lake Wellington Sustainable Irrigation Group: VegNET Gippsland continues to be an active member of the Lake Wellington Sustainable Irrigation Group and has a standing agenda item, presenting updates about the Strategy to the group on a regular basis. This involvement has enabled relationships to be strengthened with the West Gippsland Catchment Management Authority (WGCMA) and Agriculture Victoria, both of whom are now members of the Project Reference Group for the Soil Moisture Monitoring demonstration site, with the intention of

this increasing engagement between growers, the region's irrigation extension team and irrigation best practice programs and incentives.

- Field visit: the field visit to Schreurs & Sons was successful at increasing growers' awareness and knowledge of practices and farm design features that reduce nutrient and sediment runoff, with two growers reporting that they have already implemented changes within their properties and at least two other growers reporting that they intend to do so.
- Case study describing positive practice change: one of these growers has been identified as a case study
 which will describe the implementation of these changes (particularly re-designing their drainage
 systems), and measuring the anticipated benefits of reducing sediment and nutrient runoff.

Process appropriateness:

How well have intended beneficiaries been engaged in the project?

Of the 30 vegetable growers in the Gippsland region identified as levy-payers, 20 (66.67%) of them were directly involved in one or more of VegNET Gippsland's activities throughout VG19013. In addition to this, the RDO has been in direct contact (phone or in person) with 27 (90%) of them, having visited 24 out of the 30 (80%) at least once.

Although Gippsland has a relatively small number of individual growing businesses, given the scale of some of these businesses – 7 out of the 10 largest salad growing businesses in Australia have a footprint in Gippsland – the scale of VegNET Gippsland's potential impact is larger than it may seem.

To what extent were engagement processes appropriate to the target audience/s of the project?

The VegNET Gippsland RDO uses a number of engagement methods to maintain and develop these relationships with Gippsland's growers – email, phone and grower visits. In addition, upon consultation with the REAG it was decided to distribute a regular eNews. This is an opportunity to share regional updates and opportunities with the grower database that are drawn from Food & Fibre Gippsland activities, other local networks, as well as the national vegetable industry communications program (VG18000).

Recommendations

As illustrated above, the focus and intent of VegNET Gippsland's Regional Extension Strategy has been supported through the activities and feedback received from the industry throughout the life of this project. It is therefore recommended that implementation of these projects is continued.

Refereed scientific publications

Not applicable

References

Not applicable

Intellectual property, commercialisation and confidentiality

Not applicable

Acknowledgements

VegNET Gippsland acknowledges all industry members who contributed input into the Regional Extension Strategy, particularly past and current REAG members —

- Alex Keith (Bulmer Farms)
- Noel Jansz (Elders Bairnsdale)
- Michael Evans (previously Dicky Bill Farming)
- Matt Zagami (Avagrow Farms)
- Steven Covino (Covino Farms)
- Frank Nobile (Select Produce)
- Nicola Pero (Food & Fibre Gippsland)
- Julian Hill (Food & Fibre Gippsland)
- Jason Hingston (Hort Innovation)

As described throughout this report, a major strength of the VegNET Gippsland Regional Extension Strategy is the integration of various partnerships, to whom the project also owes significant thanks –

- AUSVEG Biosecurity team
- RACE Gippsland (Central Queensland University)
- West Gippsland Catchment Management Authority
- Agriculture Victoria's irrigation extension team
- EnviroVeg program (AUSVEG)
- Connect 2 Employment (Food & Fibre Gippsland)

Appendices

- 1. Stakeholder Engagement Plan
- 2. Regional Extension Strategy and Project Briefs
- 3. REAG Terms of Reference
- 4. Project Logics Biosecurity
- 5. Project Logics Waterways
- 6. Project Logics AgTech
- 7. Project Logics Workforce
- 8. Workplan (2020-2021)
- 9. AgTech survey results
- 10. Demo site Project Plan
- 11. Soil Moisture Monitoring demonstration Letter of Agreement
- 12. Project Reference GrTerms of Reference
- 13. Summary of This is my Job videos
- 14. MOU with RACE Gippsland
- 15. EnviroVeg Report (submitted separately, as not for wider circulation)

Appendix 1





Stakeholder Engagement Plan

(1) Who: Organisation and key contact person	(2) Relationship status ES: Existing strong ED: Existing develop P: previous (inactive) N: New	(3) Engagement opportunity (role)	(4) Benefits of engagement	(5) Partnership constraints (if any) and how these will be addressed	(6) Communication and engagement strategies
Gippsland's vegetable levy-paying growers	ED – ES	They are the target of most activities within all projects, and are intended to be directly and positively affected by all outcomes.	Effective engagement is the most critical requirement for the implementation of the VegNET Strategy. Past VegNET projects have demonstrated that growers who the Industry/Regional Development Officer (IDO/RDO) has developed a strong relationship with, are more likely to participate in project activities and implement practice changes. These relationships also provide a feedback loop, between the growers, RDO and Hort Innovation beyond the members of the REAG, to ground truth, inform project activities and provide feedback to Hort Innovation about other levy investments.	Diversity between growers – they range in size, product, capacity and willingness to change. There are a number of growers who express scepticism regarding the value received from their levy investments. A strengths-based engagement approach is drawn upon to develop relationships with each grower from a positive foundation. Without having support to send regular eNews, basic emails become the only method to share written information with growers. There is a risk that this will result in either an overabundance of emails, or useful information which would otherwise be included in an eNews not being shared.	The RDO will make direct contact with every grower at least every three months. Identified levy-paying growers will be invited to participate in VegNET activities as identified in the workplans (most activities will hold relevance for every grower). The Food & Fibre Gippsland Customer Relationship Management (CRM) software will be used to hold details of each business and track the relationship, as well as engagement of the business with other F&FG projects. Emails are sent by the RDO regularly with resources and information that is identified as significant or particularly useful. Growers who are also (F&FG) members receive a regular eNews from the organisation (approximately monthly).





Cippsiana					
Irrigating growers	ED	Target of 'Water Use' project;	Potential to change practices or technology to achieve better environmental outcomes, and/or better demonstrate their water use.	Most causes of water insecurity are predominantly out of the control of growers and influence of the VegNET RDO.	Identify irrigating growers in database
Larger growers - Management - HR representatives	ED	Workforce project, particularly annual seminars, and workforce videos	Likely to have more resources available for workforce development, and participation in video development	Although relationship may already exist with grower, unlikely to exist directly with HR representative	Seek direct engagement with employees responsible for worker recruitment and capacity building/training, to optimise participation in workforce project
South Gippsland Pea growers	ED	There are at least five medium – large pea growers in the South Gippsland region.	These growers contribute a considerable portion of the country's snow and other pea production. Direct engagement with them will ensure they have access to relevant VegNET activities and resources, optimise the feedback loop between the industry and Hort Innnovation ensuring relevance for their levy investments.	Since development of strategy, have identified that there is a deficit of R&D specifically focused on peas & beans. The Gippsland strategy may also be seen to not be offering much relevance to these growers as they don't irrigate, unlike the rest of the region's growers. Relationship with some of these growers is less developed than with the rest of Gippsland's industry.	The RDO will offer grower visits to South Gippsland on a monthly basis (this may be less if growers are time-poor during busier times of the year). Direct contact with each of these growers is vital to further develop the relationship. Applicability of project activities and resources will need to be considered for this segment of the industry.
Hort Innovation	ED	Regional Extension Manager (REM) – Jason Hingston	Transparent communication and an effective relationship should minimise the issues or risks relating to the project, as well as optimise knowledge and resource sharing.	This is still a developing relationship as the REM is new to the role and the RDO is relatively new to the industry.	Regular contact with Jason, particularly regarding any issues or risks relating to the project.
AUSVEG Biosecurity team - Callum Fletcher - Madeleine Quirk	ES	Collaboration on Biosecurity project — On-Farm Biosecurity Planning support 'Expert' voices of Vegetable Leafminer and Tomato Potato Psyllid Psyllid	Current knowledge about latest Exotic Leafminer and Tomato Potato Psyllid research; Connected into further networks such as the Plant Health Australia	AUSVEG Biosecurity Team is funded to provide services and resources to whole country, so may have limited time. Involvement in the development of the Gippsland strategy and biosecurity project plan.	 Collaborative planning of activities that are delivered together (ie. webinars) Reciprocate support by extending any relevant activities that Callum, Maddy or team are delivering





Area Wide Management of vegetable disease project team (VG16086, Agriculture Victoria) - Dr Cliff Kinoti - Dr Fiona Constable	ED	The AWM project team provide an identification service of viral and bacterial disease; can provide updates of recently identified incursions of vegetable diseases in the local area	Existing relationship with VegNET Gippsland and some growers in the region. Specialist skills in identification of bacterial and viral diseases; Information may contribute to identifying regional pest & disease concerns.	The COVID-19 pandemic has limited the AWM team's direct engagement with growers. Not all growers are aware of the identification service.	Request input into the prioritisation of disease for VegNET Gippsland's biosecurity project Continue to share information about the identification service provided by the AWM team
VegNET Victoria - Dimi Kyriakou (RDO) - CJ Wilkens - Carl Larsen	ES	Similar focus areas have been identified in their strategy – Sustainability and Water Use Efficiency	Existing relationship and regular contact between RDOs. Close proximity means that each region experiences some similar challenges and strengths	Differences in organisational structures means delivery approach may vary between two organisations.	 Identify synergies in project plans. Cross-promote relevant activities, such as those with biosecurity or environmental focus.
VegNET Tasmania - Ossie Lang (RDO)	ED	Similar focus areas have been identified in their strategy – Precision agriculture and Biosecurity	Close proximity and similar climate mean that each region experiences some similar challenges and strengths	Differences in organisational structures means delivery approach may vary between two organisations.	Identify synergies in project plans. Cross-promote relevant online activities, such as those with biosecurity focus.
Frank Nobile, Select Produce	ES	Member of REAG; snowpea grower; located South Gippsland	Managing Director of large operation; strong strategic	Tensions exist between Select Produce and other nearby snowpea operations	As a member of the REAG, Frank will be consulted about decisions relating to the Regional Extension Strategy
Michael Evans	ES	Member of REAG; previous farm manager	Michael is particularly passionate about promoting job opportunities to the local community and schools, and implementing more sustainable practices. Experience with SoilWealth project as previous farm manager of Mulgowie.	Michael has recently changed workplaces.	As a member of the REAG, Michael will be consulted about decisions relating to the Regional Extension Strategy
Steven Covino, re workforce insights	ED	Member of REAG, Director of Covino Farms, large mixed-produce vegetable operation in Central Gippsland	Experience managing large operation and exploring ideas re long-term workforce development for the industry. Particular interest in Water Use project and collaboration with other agencies.	Possible disconnect between perspective as Director of large operation compared to experience of smaller operations	As a member of the REAG, Steven will be consulted about the design and implementation of the Regional Extension Strategy





Matt Zagami	ED	Snowpea farmer, Far East Gippsland, member of REAG	Currently exploring innovative growing techniques; interest in promoting industry to local community as a career opportunity.	Matt's operation was significantly impacted by the 2019-20 bushfire season, so has been operating on a minimal scale throughout 2020.	As a member of the REAG, Matt will be consulted about the design and implementation of the Regional Extension Strategy
Noel Jansz	ES	Member of REAG; highly regarded Agronomist; Provides guidance as to local issues, practice gaps	Noel works with a number of growers from Central and East Gippsland, with an interest in sustainable growing and regenerative practices.	Commercial sales agronomist; need to balance request for strategic guidance as compared to chargeable agronomic advice	As a member of the REAG, Noel will be consulted about decisions relating to the Regional Extension Strategy
Alex Keith, Bulmer Farms	ED	Agronomist of Bulmer Farms; member of REAG	Representative of large vegetable growing operation in East Gippsland;	Technical insight, particularly relating to IPM; also representative of another of Gippsland's biggest growers.	As a member of the REAG, Alex will be consulted about decisions relating to the Regional Extension Strategy
Bulmer Farms - Andrew: Managing Director - Karen: Human Resources	ES	Managing Director, Bulmer Farms, East Gippsland; Board member of Food & Fibre Gippsland	Bulmer Farms have been significantly involved in VegNET Gippsland activities at all stages of the project; Bulmer Farms employ Production Horticulture trainees annually		Involvement of Bulmer Farms in Workforce project, Alex is a member of the REAG so will be consulted about the design and implementation of the Regional Extension Strategy
SoilWealth project (AHR & RMCG) and Gippsland trial site - Dr Kelvin Montagu	ED	Oversees after SoilWealth trial at Mulgowie, Maffra	Highly knowledgeable and renowned in relation to cover cropping, tillage practices and irrigation of vegetable crops	Kelvin is based in NSW.	Identify and extend resources relevant to VegNET Gippsland Strategy.
Mulgowie - Scott Botten	ED	SoilWealth trial site	Willing participant	Recent staff turnover → Scott hasn't been involved in trial site for long	Meet with Dr Kelvin Montagu and Scott Botten after the peak harvest season to plan a site visit.
Stuart Grigg, independent agronomist	ED	Highly regarded Agronomist; Provides guidance regarding local issues, practice gaps	Stuart works with a number of growers across Victoria. He has previously been involved in a number of levy-funded R&D projects (including SoilWealth project). Independent from sales outlets.	Commercial agronomist; need to balance request for strategic guidance as compared to chargeable agronomic advice	Regular catch ups; test relevant projects with Stuart (AgTech, Water Use)
EE Muir agronomists	ED	Major retail outlet which services most Gippsland vegetable growers	Far-reaching influence.	Sales agronomists; unable to disclose much information due to confidential growing practices	Consult about biosecurity concerns; Invite participation in activities such as Biosecurity presentations, discussion group.





Adam Schreur (Schreurs & Sons)	ED	Demonstration of silt traps, wetlands etc. Variable Rate application	Highly respected. Adam is very willing participant / case study	Already feature as case study many times over. Example may be too far-reaching / seem unattainable for some growers	Follow up on previous conversation proposing field visit to Schreurs' Middle Tarwin property. Reciprocate by maintaining relationship with Adam by extending relevant resources.
Danielle Park, EnviroVeg Coordinator	ES	EnviroVeg Coordinator; Danielle has also provided guidance into the design of the Regional Extension Strategy and the water use project.	EnviroVeg has been integrated into the Water Use project plan.	Growers have varying perspectives regarding the potential value of EnviroVeg program	EnviroVeg Coordinator regularly shares information for extension to Gippsland vegetable imdustry and consideration for VegNET Strategy. Clear project planning, including scheduling of EnviroVeg training well in advance.
West Gippsland Catchment Management Authority – Shayne Haywood (Land and Biodiversity Manager) & Anthony Goode (Land Programs Coordinator)	ED	WGCMA is involved in requests for amendments to irrigation access and licencing.	Existing relationship resulting from participation in the Lake Wellington Sustainable Irrigation Group	WGCMA has previously expressed concern regarding expansion of the vegetable industry in Central Gippsland.	Continue to stay engaged by sharing progress report from VegNET Strategy and CMA Regional Catchment Strategy at the LW-SIG meetings.
East Gippsland Catchment Management Authority	N	EGCMA manages natural resources in East Gippsland, including Mitchell River and the Gippsland Lakes, which are impacted by the vegetable industry	Established relationship with growers in Mitchell River valley	Have previously reached out to EGCMA, but limited enthusiasm to engage with VegNET Gippsland.	Request opportunity to present to CMA about relevant VegNET – Gippsland activities. le. potential soil moisture monitoring trial
Port Philip Westernport Catchment Management Authority	N	PPWCMA manages natural resources in the far west of Gippsland.	The PPWCMA has an established relationship with EnviroVeg and AUSVEG Victoria through their project Schools on Farms.	Only a small area of PPWCMA is part of Gippsland	Request opportunity to present to CMA about relevant VegNET – Gippsland activities. le. potential soil moisture monitoring trial
Westernport Catchment Landcare Network (WPCLN)	ED	WPCLN facilitate an Organic Vegetable and Fruit Growers discussion group	May capture emerging growers who have not previously been included in VegNET Gippsland activities	Not all members are vegetable levy-payers	Use network to invite participation of Gippsland growers to VegNET activities
Agriculture Victoria irrigation team – Alexis Killoran (acting), Sarah Killury (maternity leave)	ED	Team delivers support On-farm irrigation program to farmers in the Macalister Irrigation District; opportunity to extend this support to vegetable growers and collaborate on Water Use project	Existing relationship resulting from participation in the Lake Wellington Sustainable Irrigation Group AgVic	Limited to the MID at this stage. Have had limited engagement with the vegetable industry so far; financial support that is	Continue to stay engaged with team by sharing updates at the LW-SIG meetings.





				available not as significant for vegetable growers	
Southern Rural Water	N	Potential to involve SRW in Water Use project SRW also conducting the Southern Victoria Irrigation Development (SVID) study, exploring potential for expansion of irrigation districts.	Existing connection with SRW Environmental Advisor (Becky van Baalen), through participation in LW-SIG		Becky van Baalen to provide query SRW's previous engagement with vegetable growers. F&FG is participating in the SVID study, VegNET Gippsland RDO to stay updated through engagement with Julian Hill
Gippsland Regional Agrifood Employment Programme (GRAEP) - Julie Tuhi	ES	This programme provides support workplaces to employ local jobseekers in the Agrifood sector.	Already has established relationships with some major growers. Julie seeking other opportunities to expand the programme's reach and delivery.	Jobseekers limited to Australian residents (not backpackers or migrant workers).	Regular contact with Julie and use of F&FG's CRM to keep upto-date re each other's engagement with growers. Diligent planning of the video case study project and clear role distinction.
Central Queensland University - Dr. Amy Cosby	ED	Delivering RACE program which has been integrated into VegNET Gippsland's Workforce project to establish connections between industry and schools across Gippsland	Effective partnership will result in approximately 1000 students each year being more informed about the vegetable industry and local opportunities	Project plan not yet clear	Participate in planning meetings; Clear and regular contact between VegNET and CQU; Invite interested growers' involvement from start.
WorkSafe	N	Deliver presentation to management and human resource representatives to Workforce project's annual seminar	Involving WorkSafe in information provision will provide growers with opportunity to be proactive and receive accurate and current information about Workplace OHS laws.	Not clear what services they are able to provide and if there is a cost	Request their participation in seminar in advance; Identify local representative and maintain relationship by catching up annually, if possible.
Employment agencies	N	To be provided with video case studies to use as a resource to inform jobseekers about job opportunities in industry.	Potential to shift perspectives of jobseekers' about the vegetable industry	Jobseekers likely to be long-term unemployed and many unlikely to be committed to remaining in the industry. Relying on agencies to keep data for M&E Plan	Request Julie Tuhi (GRAEP) introduce VegNET Gippsland to employment agencies through provision of case study videos
Schools (years 9-12)	N	To be provided with video case studies to use as a resource to inform students about job opportunities in industry.	Potential to shift perspectives of young people about the vegetable industry	Relying on schools to keep data such as number of times videos are used and notable responses for M&E Plan	Initially use existing networks of RACE program to distribute to participating schools. Make direct contact with other secondary schools in the region by reaching out to Careers teachers/advisors.





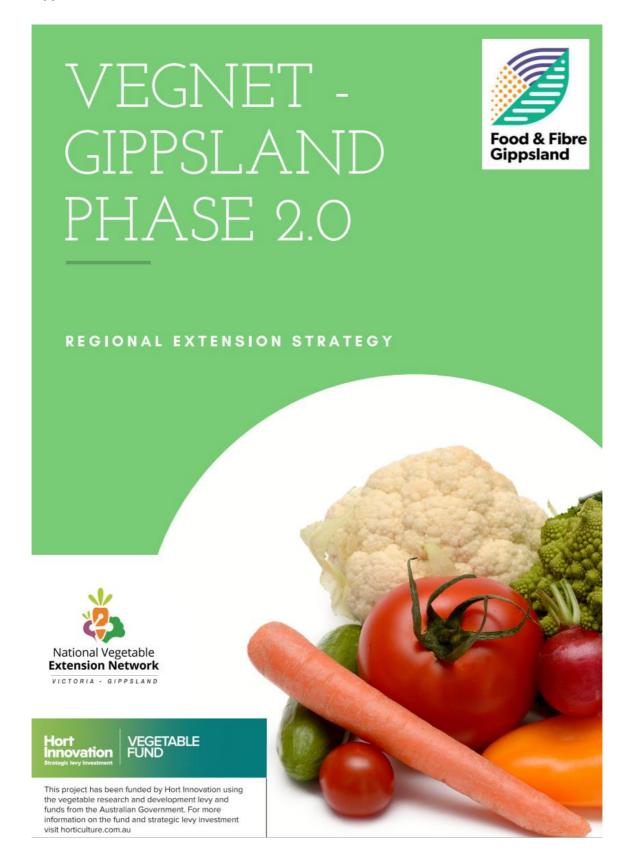
Federation University	N	Potential for collaboration on Biosecurity and AgTech projects.	May be provide the local industry with access to additional research capacity, emerging information and resources; Fed Uni reportedly eager to be more involved in industry.	Involvement in activities such as trials would likely add a layer of complexity. Diligent project planning, clear role distinction, outcomes and funding agreements necessary.	Existing relationship with Food & Fibre Gippsland – request introduction from F&FG CEO.
TAFE Gippsland	P	Delivers Production Horticulture traineeship.	Local provider; existing relationship with Food & Fibre Gippsland	Traineeship has not had significant uptake for undetermined reason	Existing relationship with Food & Fibre Gippsland – request introduction from F&FG CEO or Ben Gebert.
Dr Julian Hill, Food & Fibre Gippsland - Project Manager, KE-DI system - Representing F&FG in bid for Resilience & Drought Hubs	ES	Project Manager overseeing the development of online forum (KEDI) which has been integrated into Workforce, Biosecurity and AgTech projects Gippsland node of Resilience & Drought Hub likely to stimulate further activity which will support production systems and provide opportunity for further collaborations relevant to Water Use and AgTech projects.	Significant knowledge about other Food & Fibre Gippsland activities which have the potential to involve the industry. Access to government networks.		As a member of the REAG, Julian will be consulted about the design and implementation of the Regional Extension Strategy
Greg Hall, Precision Ag	ED	Horticulture Sales Manager, Precision Agriculture P/L. Potential for Precision Agriculture to provide technology for a demonstration site.	Greg has proactively reached out to VegNET – Gippsland to suggest collaboration. Provides innovative precision agriculture services to industry	Commercial enterprise, need to ensure that other precision agriculture providers are also considered equally. Involvement in horticulture so far limited.	Informal catch ups to understand to seek interest in supporting VegNET — Gippsland. If Precision Agriculture become involved in projects, diligent project planning required to ensure clear objectives, role distinction, funding agreements.
Other agtech suppliers	N	Suppliers of agtech that may be demonstrated as part of Smarter Growing project. Greater implementation of agtech is likely to have positive impact on production efficiencies, yields, precision and environmental impacts.	Developing direct relationships with agtech suppliers will aid the project to provide growers with upto-date information and resources about the availability and relevance of agtech technologies.	Commercial interests may be challenging for the RDO to navigate and maintain unbiased relationships.	Conduct scan of companies and technologies available to vegetable growers in Gippsland (using Literature Review VG16009 and SoilWealth VG16078 resources as a starting point)
AgChem Companies	P	Critical suppliers to the industry	Developing direct relationships with agchem companies will contribute to the RDO's	Commercial interests may be challenging for the RDO to	Leverage off existing relationship with companies who participated in East





			understanding of the industry, particularly relating to current pest and disease issues and innovative growing practices	navigate and maintain unbiased relationships.	Gippsland Vegetable Innovation Days (EGVID)
Seed Companies	P	Critical suppliers to the industry	Developing direct relationships with seed companies will contribute to the RDO's understanding of the industry, particularly relating to current product trends	Commercial interests may be challenging for the RDO to navigate and maintain unbiased relationships.	Leverage off existing relationship with companies who participated in EGVID
AUSVEG Communications team	ES	Delivering National vegetable industry communications program (VG18000)	Regular communication outputs with national reach	Not all growers decide to read their outputs	Quarterly contribution to Vegetables Australia with VegNET – Gippsland update. Develop media and communications plan for each project to promote all activities through AUSVEG Weekly Update and social media channels.
Jody O'Brien, Head of Communications, Membership and Marketing, Food & Fibre Gippsland	ES	Established connections with local media outlets Coordinates Food & Fibre Gippsland social media channels Established relationship with Food & Fibre Gippsland members, including approx. 10 vegetable growers	Access to media outlets and social media channels for public promotion of activities and industry achievements	Limited connections with industry publications, however thorough media planning would ensure that these outlets are also included in media distribution lists where relevant	Jody to provide guidance with development of media and communications plans for each VegNET Gippsland project. Provide update of VegNET Gippsland activities and media requirements in monthly catch ups. Regular informal contact through Food & Fibre Gippsland channels.
Local media outlets Newspapers — - Bairnsdale Advertiser - Latrobe Valley Express - Gippsland Times (Central Gippsland) - Sentinel-Times (South Gippsland and Bass Coast) Radio — - ABC Gippsland Radio	ES (through F&FG channels)	Promotion of VegNET Gippsland activities and achievements to local community	ABC Gippsland and local communities have far-reaching audience amongst farming community. Avenue to inform local community about local vegetable industry and its achievements.	Cannot guarantee that each of these outlets will pick up stories. Possibility that industry will be criticised (ie. in relation to workforce issues)	Develop media and communications plan (with guidance from F&FG Communications Manager – Jody O'Brien) for each project to ensure that activities are communicated to the local community as appropriate.

Appendix 2



CONTEXT

Situated in the south-east corner of the continent, Gippsland covers 41,556 km2 of Victoria. Twenty-eight per cent of this land is used for agricultural purposes. It is the wettest region in the state, however this varies considerably across the region as a result of its topography and climatic variability.

Gippsland is the region of second highest vegetable production value in Australia. The region produces 9% of Australia's vegetables for human consumption (excluding Melons, Mushrooms, Onions, Potatoes, and Tomatoes) (ABS 2018).

There are three key growing regions in Gippsland.

- · Mitchell River valley (Lindenow and surrounds): alluvial soils, irrigation access
- Macalister Irrigation District: emerging production area as old dairy farms convert to vegetable farms, and home to large vegetable producers
- · South Gippsland: cooler, reliable rainfall for crops of lower profit margin (i.e. peas)

There is also significant protected cropping in the Baw Baw Shire, predominantly of tomatoes but also capsicum and eggplants.

2018-19 Production value

According to the Horticulture Statistics Handbook, Gippsland is one of the country's key growing areas of -

- Lettuces (both Head Lettuce and Leafy Salads inc baby spinach)
- Peas
- Beans
- · Carrots, and
- · Sweet Corn.

However, ABS data shows that the region also contributes significant value to other categories not specified.

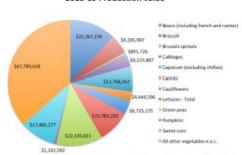


FIGURE 1: Australian Bureau of Statistics, 2019 & 2020

Gippsland produce has a reputation for good resource stewardship (Invest Gippsland 2020). The region will become hotter and drier in the coming years, but it will increase in importance for food production as an area with relatively reliable rainfall and secure water access when compared to other regions across southern Australia (DELWP 2015)

FOOD & FIBRE GIPPSLAND AND VEGNET

- Food & Fibre Gippsland has delivered the levy-funded extension project: VegNET since 2016.
- VegNET contributes to Outcome 5 of Hort Innovation's Strategic Investment Plan 2017-21: Improved industry capabilities for innovation and adoption.
- Activities included face-to-face visits and delivery of R&D, forums, connections to other levy-funded projects and regional strategies, an online presence on social media.
- F&FG Mission: to lead sector capacity building, innovation and knowledge dissemination (F&FG 2020)
- 'Clean and Green' is fundamental to a Gippsland Trusted Provenance TM which is currently being delivered by Food and Fibre Gippsland.



FIGURE 2: Main growing regions, Gippsland

An informal phone survey was conducted to build on previous understandings of the issues that concern growers across Gippsland, and the potential value that VegNET Gippsland can bring.

Growers access levy-funded resources to varying degrees - some growers expressed that they feel they receive no value from their levy investment and don't use any of the resources produced by Hort Innovation or its projects. Others believe that they read "almost everything that is released". There is no correlation between bigger or smaller operations using these resources.



ENVIRONMENTAL MANAGEMENT

Gippsland has the highest rainfall in Victoria, although there is huge variation across the whole region. Despite this, water security is constantly the major issue or concern expressed by most growers across Gippsland. However this is not always due to a lack of water availability, but limited access because of licencing constraints. Other areas such as the Mitchell River Valley require greater water storage capacity.

Better management of soils is also an area of potential improvement to increase water holding capacity, as well as reduce erosion and soil carbon loss.

With waterways flowing into significant natural assets, including RAMSAR Wetland sites the Gippsland Lakes and Corner Inlet, there is significant concern about the impact of increased irrigation and nutrient runoff as a result of the growing vegetable industry. Therefore, water access is tightly controlled.

WORKFORCE CHALLENGES

In 2018-19, the average farmer (all commodities) in Latrobe - Gippsland was 56 years of age and 77% of all Australian farmers were male. Growers report that it is challenging to recruit a local workforce, particularly for manual roles. Instead, many who fill these roles are part of the Seasonal Worker Program and Pacific Labour Scheme, often hired through Labour Hire Companies.

When surveyed, growers remain concerned about the impact of the Horticulture Award on labour affordability, often overshadowing other grower needs and opportunities. Despite Hort Innovation not being in a position to advocate on behalf of growers, it is necessary to acknowledge and discuss the challenges, and refer the grower to other industry bodies such as AUSVEG or National Farmer's Federation.

EXCESS PRODUCE

Nationally, over 2 million tonnes of food is thrown out before it reaches the consumer (Fight Food Waste CRC 2019) and a core reason why Food & Fibre Gippsland is a formal participant in Fight Food Waste CRC. Analysis is currently underway regarding a high-tech vegetable processing facility for Gippsland which could provide new revenue streams for growers through value-add opportunities.

REGIONAL SERVICE SCAN

What is currently being done in this area?	Who, where, and for how many is this work targeted?	What changes are sought from this work?	How will these changes benefit the target audience?
Environmental Management (inc. water	use, soil health, precision agriculture)		
Implementation of the EnviroVeg program	All levy-paying vegetable growers across Australia	Continuous improvement of environmental management through annual completion of the Best practice framework	Increase the awareness of sustainable best practice across all facets of the operation
SoilWealth: demonstration sites, case studies, webinars etc	All levy-paying vegetable growers across Australia, and technical advisors of vegetable growers. Demonstration site in Central Gippsland, trialling strip tillage	Increased adoption of best practices to build soil health (ie. cover cropping, precision agriculture, nutrient management)	The project aims for growers to experience better economic outcomes through the adoption of these best practices
VegNET involvement in the Lake Wellington Sustainable Irrigation Group (LW-SIG) and the implementation of the Lake Wellington Land and Water Management Plan	Vegetable growers in the Lake Wellington Catchment (approximately 30% of Gippsland's growers have farms in the Catchment, predominantly in the Macalister Irrigation District)	Implementation of the LWLWMP, which aims to reduce nutrient exports to the Gippsland Lakes by – - Improved irrigation practices - Improved drainage infrastructure - Improved nutrient management	Improved irrigation, drainage and nutrient management will improve water use efficiency and nutrient use efficiency as well as contribute to protecting natural capital in the area. Engagement with the LWLWMP will bode well with authorities.
Gippsland Irrigation Expo (every three years)	All Gippsland irrigators (predominantly dairy)	Adoption of improved irrigation technologies and practices	Improved water use efficiency. More advanced technologies likely to reduce labour requirement.
*Field Walk: Optimising the benefits of vermiculture in commercial-scale vegetable growing (VG15037)	Field walk was held in Maffra in 2019 for interested Gippsland growers.	Increase awareness, knowledge and aspirations to increase worm populations on local commercial vegetable farms.	Increased use of vermiculture in commercial vegetable farms will increase the fertility of soil, potentially decreasing input costs.
AgTech			
*Adoption of precision systems technology in vegetable production (VG16009): case study farms & literature review	The project developed significant evidence for PA implementation in vegetable systems	Increase in awareness, knowledge and adoption of PA technologies available to the vegetable industry.	The literature review, factsheets, case studies, webinars, videos and podcast 'Outputs' of the project will continue to be available to build the awareness and knowledge of growers.
*Research on robotics, vision systems and sensors (VG12104, VG15024)	Research projects to test robotics and precision agriculture innovations for the industry. Likely to be of most interest to large operations.	Awareness of technology development, and opportunity for grower input.	Successful development of these technologies will ultimately improve efficiencies and accuracy of decisionmaking.

Biosecurity and pest and disease manage	ement				
Area Wide Management (AWM) of vegetable diseases: virus and bacteria (VG16086) identification service	All growers in Gippsland have been invited to engage with the Victorian AWM team.	Accurate identification of bacterial and viral diseases in crops.	Increased awareness and identification skills and knowledge of diseases will contribute to better management and prevention of further transmission.		
AUSVEG Biosecurity team	All levy-paying vegetable growers across Australia	Development of on-farm biosecurity plans Increased knowledge and skills to prevent and identify Vegetable Leafminer, Tomato Potato Psyllid	Prevention of incursions will reduce crop and financial losses.		
Agronomist advice	Some growers have internal agronomists, others use Sales Agronomists from local retailers (ie. Elders or EE Muir)	Agronomists advise growers with their nutrient application, and pest and disease management	Effective and efficient nutrient application and pest and disease management should increase yields and profits.		
Various identification guides	Growers, agronomists and other advisors of	Increase in knowledge of potential pests and disease	Increase in the ability of growers to proactively plan to prevent these potential pests and disease, and accurately identify issues in their crops.		
New Market Opportunities					
AUSVEG Vegetable Industry Export Program (VG16061)	Levy-paying growers with production capacity to export.	Increase readiness of producers to export Increase access of producers to export markets	Increase in sales through access to export market		
F&FG Export program	Gippsland small and medium agrifood businesses	Increase capability for SMEs to export This project will support the development of a Gippsland Trusted Provenance brand and strengthen the regional identity of Gippsland produce	Increased readiness to export Increased market diversity Improved market prospects through increased recognition of Gippsland produce		
Hi-tech food processing hub (F&FG Smart Specialisation)	Ultimately all Gippsland vegetable growers, particularly bigger operations with surplus produce	Development of hi-tech food processing hub, which could process surplus vegetables into products such as nutraceuticals.	Opportunity for additional income stream		
*CSIRO Food Waste research (VG15076)	Research to potentially benefit all vegetable growers across Australia	Increased awareness of the potential alternative markets for excess produce	Research to inform development of additional income stream		
Healthy eating / local food initiatives – - Food for All Latrobe Valley - Baw Baw Food Movement	Local communities within the Baw Baw Shire and Latrobe City –	Increased consumption of fruit and vegetables by better knowledge of the health benefits of vegetable	Increased sales of vegetables.		

	 Local food producers wanting to collaborate with community programs ie. food redistribution Marginalised populations and those participating in community programs ie. community gardens 	consumption, and awareness of the food system.	
The Fruit & Vegetable Consortium	This is an advocacy group, targeting their efforts towards the government, to ultimately impact the whole Australian population.	Increased action to improve Australia's fruit and vegetable consumption	Increased sales of vegetables.
Workforce Capabilities & Industrial Relat			
*Leadership Development Program (Growing Leaders)	Younger managers	Increase the leadership knowledge and skills of current and future leaders across the industry.	More effective leadership and management across businesses. Improved potential for successful succession planning.
Frontier Leadership Fund	Leaders at all levels of horticulture businesses across the country	Increased opportunities for leadership development	Increase the leadership knowledge and skills of current and future leaders across the industry.
TAFE: Production Hort Certificate (III)	Potential entrants to the industry, across Gippsland, numbers limited to available trainee positions across Gippsland vegetable growing operations	Increased numbers of new entrants to the industry. Increased knowledge and skills of these new entrants.	Increased knowledge and skills of employees. Potentially increased retention of new entrants.
Gippsland Regional Agrifood Employment Programme (GRAEP) (F&FG)	Workplaces seeking new employees Local job-seekers	Support provided to new employees Financial support provided to workplaces to employ and train GRAEP participants Filling of vacant positions with sustainable employees	Financial support provided to workplaces will decrease losses for businesses putting on new staff. Effective employment will lead to a more sustained workforce.
Workforce Training and Innovation Fund program (F&FG digital engagement platform)	Initially, F&FG members All agrifood businesses across Gippsland	Improved capacity for workplace knowledge development, including induction and compliance training. Increased knowledge sharing (a broad array of topics) within and between businesses.	Increased access to training, potentially decreasing costs such as travel. Potential to increase traceability of produce. Networking and increased knowledge sharing may have an array of benefits – Sharing of resources which can decrease costs.

			Strengthened regional brand identity.
			Increased opportunities to collaborate
			for market access.
VegPRO online portal (legacy project of	All levy-paying growers, especially new	Introduce new entrants to the industry	These resources may support growers
VegPRO)	entrants who	and increase knowledge and skills of	to ensure induct new employees into
 VegPRO VegInductions 		basic workplace health and safety and	their workplace, minimising workplace
 Handling Fresh Produce 		handling skills	health and safety risks.
Schools in Farms (AUSVEG Vic)	Schools and farms in Victoria,	School students' increased awareness of	Increased interest from school students
	predominantly Port Philip Westernport	career pathways in vegetable industry	about career opportunities is likely to
	CMA		increase the pool of potential
			employees in the future
*GippyAg programme (F&FG, 2019)	More than 700 school students	School students' increased awareness of	Increased interest from school students
	28 Teachers participated in professional	career pathways in vegetable industry	about career opportunities is likely to
	development	Teachers' increased knowledge of	increase the pool of potential
		agriculture to integrate into STEM	employees
		education	
Industry-body advocacy activities	Advocacy efforts targeting Government	Covers issues, including Labour and Visa	Increased affordability and access to
(AUSVEG; NFF Horticulture Council)	policy-makers	requirements	appropriate workers.

^{*}past activity or published resource

REGIONAL SERVICE GAPS ANALYSIS

What is missing in this area?	What would change if we addressed this gap?	Who, where and how many would benefit?	How will these changes benefit the target audience?		
Environmental Management (inc. water	use, soil health, precision agriculture)				
Engagement between AgVic / Catchment Management Authorities and vegetable industry Active progress through EnviroVeg	Increased participation in government programs such as On-farm Irrigation and Nutrient Program More vegetable growers would complete the self-assessment online	Likely to be focussed on those in the Macalister Irrigation District Growers who are registered with EnviroVeg	Decision makers are likely to have an increased understanding of the industry. Benchmarking against themselves is likely to increase growers' aspirations to improve practices.		
Local monitoring of nutrient run-off by the industry	Greater understanding of the extent of the perceived problem	Those who irrigate, particularly those whose properties drain into protected waterways (Lake Wellington Catchment, Mitchell River, Bunurong Coastal landscape)	Increased capacity to advocate for water rights		
Wider application of improved soil management practices - Engagement with operations on farm (beyond managers)	Less erosion and nutrient runoff impacting waterways	Those who do not already cover crop or have not already adopted strip tillage.	 More efficient water use (either less water required or higher yields) Retention of top soil and organic matter 		
AgTech					
Local case studies demonstrating PA (beyond just the use of GPS)	 Increased awareness of precision agriculture technologies available to vegetable industry and their application in local contexts Increase the adoption of Precision Agriculture technologies such as soil moisture monitoring and variable rate application (VRA) of fertilisers and irrigation 	Growers with similar operations who are considering adopting PA (ie. similar crops, locations or irrigation operations)	 Increased awareness of available technologies will likely lead to increased aspiration to adopt PA. Increased adoption of PA technologies such as soil moisture monitoring and VRA should result in more effective and efficient use of irrigation water and fertilisers. Adoption of alternative technologies such as robotics would 		
Regional sensors useful to the local vegetable industry	Increased access to data such as soil moisture, localised weather data, nutrient runoff measures.	Growers of a specific region, up to 12 different operations from any one investment.	Better informed decision-making		
Biosecurity and pest and disease manag	ement	•			

Awareness of regional pest and disease	More informed biosecurity extension,	All growers, as well as agronomists	Knowledge sharing will lead to more
threats	training and planning to prevent or		effective prevention of incursions
	minimise incursions.		
Consistent best practice hygiene	Less incursions of exotic and endemic	All growers, particularly those not	Preventing incursions will result in less
management / on-farm biosecurity	pests and disease	already engaged with the AUSVEG	crop and financial losses.
planning		biosecurity team	
Workforce Capabilities & Industrial Relat	tions		
Regional business benchmarking	Better understanding of local	All growers in Gippsland, particularly	This better understanding will be able
(similar to Vegetables WA project)	production and financial benchmarks	those interested driven towards	to measure business performance and
		continuous improvement and business	facilitate more strategic and informed
		growth	business decisions.
Stronger and sustained activities with	Increased interest in the industry from	- Potential employees	- An increased number of
existing employment services / schools	potential new entrants.	 Workplaces seeking more 	expressions of interest in job
to promote the industry as an appealing		permanent workers	opportunities are likely to increase
career pathway		- School students	the standard of applicants.
			 Increased interest from new
			entrants in the industry will
			increase retention of new entrants.
Opportunities for ongoing development	Increased knowledge and skills for	All employers, particularly larger	Increased capability to implement best
of business development and human	optimal business development and	businesses or those in a transition stage	practice business management
resource management skills and	human resource management	(ie. passing from one generation to the	strategies.
knowledge (ie. succession planning,		next)	
WorkSafe compliance)			



Veg Net 2.0 Annual Workplan and Gantt chart

Annual workplan

Project Plan	Outputs	Project links or collaboration	Team members	Extension content			
On-Farm Biosecurity	- 2 Presentations	 AUSVEG team Area wide management of vegetable diseases: viruses and bacteria (AWM) team (VG16086) VegNET Victoria – Northern, Western and South Eastern VegNET Tasmania Agronomists who service growers of the region (internally employed by growers, independent consultants, and Sales Agronomists from E.E. Muir, Elders and Landmark) Agriculture Victoria Federation University – collaboration opportunities to be explored 	 Bonnie Dawson – VegNET Gippsland (Regional Development Officer) Callum Fletcher, AUSVEG (webinar presenter; Biosecurity Coordinator) Maddy Quirk, AUSVEG (webinar presenter) Dr. Cliff Kinoti, AgVic (webinar presenter) Dr. Helen Spafford (Department of Primary Industries and Regional Development WA) 	 Individual support provided to growers from AUSVEG Farm Biosecurity Project for development of On-farm Biosecurity Plans Fall Armyworm "What to look for" video National Fall Armyworm webinar (AUSVEG & Syngenta) Gippsland-focused Fall Armyworm webinar (recorded November 2020) Vegetable Leafminer factsheet (MT16004) Gippsland-focused Exotic leafminers (recorded November 2020) Tomato Potato Psyllid factsheet (MT16018) Gippsland-focused Tomato Potato Psyllid webinar (recorded November 2020) Gippsland-focused Tomato Spotted Wilt Virus webinar (recorded November 2020) AWM research (VG16086) 			



			Gippsland
			- Project Case study (to be produced
			January 2021)
Smarter Growing	 Presentation about Variable Rate Application of fertiliser Identify and establish or showcase 1 demonstration site, showcasing soil moisture monitoring and/or VRA 10 monthly updates to 	 Agronomists, particularly Noel Jansz (Elders) and Stuart Grigg (SG Ag-Hort Consulting) SoilWealth project team (RMCG & AHR) Food Agility CRC Federation University Soil CRC 	- Bonnie Dawson, RDO - Identified agents - SoilWealth factsheet VG16009 resources (QDAF), particularly - VR case study - Getting started in Precision Agriculture video - Variable Rate technology in vegetables video
Water Use	online forum Regional EnviroVeg benchmarking report following completion of self-assessments by at least twelve growers Training sessions re water/irrigation — Lindenow, Sale, Korumburra Field visit to Schreurs & Sons 1 case study	 VegNET Tasmania EnviroVeg West Gippsland Catchment Management Authority (WGCMA) East Gippsland Catchment Management Authority (EGCMA) Port Philip and Westernport Catchment Management Authority (PPWCMA) Agriculture Victoria Southern Rural Water Lake Wellington Sustainable Irrigation Group Drought Resilience Hubs SoilWealth project 	 Bonnie Dawson, RDO Danielle Park, AUSVEG (EnviroVeg Coordinator, training deliverer) Anthony Goode & Shayne Haywood, WGCMA Alexis Killoran, AgVic SoilWealth seasonal climate outlook (Summer 2020) SoilWealth soil moisture monitoring tools SoilWealth soil health & water use efficiency factsheet



Workforce	-	5 video case studies	-	Gippsland Regional	-	Julie Tuhi (Gippsland	-	VegPRO Career Pathways Guide
	-	Partner to Central		Agrifood Employment		Regional Agrifood	-	VegPRO WHS Carrot stick USB
		Queensland University's		Programme (Food & Fibre		Employment Program,	-	Learnings from AUSVEG Vic
		(CQU) Raising Aspirations		Gippsland)		Food & Fibre Gippsland)		'Schools on Farms' pilot and Food
		in Careers and Education	-	WorkSafe		development of videos		& Fibre Gippsland/CQU's Gippy Ag
		 Gippsland (RACE) 	-	Business managers	-	Jody O'Brien (Food &		project
		Program (project plan	-	Schools		Fibre Gippsland)	-	TAFE Gippsland Certificate 3 in
		and details yet to be	-	TAFE Gippsland		development of videos		Production Horticulture
		finalised)	-	Employment agencies	-	Dr Amy Cosby (Central		(traineeship)
	-	Online forum for new	-	Fed Uni		Queensland University)	-	Hort Frontiers Fund
		entrants	-	Labour Hire Companies		RACE Program		
	-	Business development			-	Dr Julian Hill (Food &		
		seminar focussed on WHS				Fibre Gippsland) online		
	-	Networking event for				platform		
		new entrants						
	-	Results and analysis from						
		survey re access to TAFE						
		education						



Gantt chart

Example Gantt chart for contract and operational outputs. Edit and complete for VegNet 2.0 outputs.

Output	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
Contract											
Milestones		103					104				190
Program logic											
M&E plan											
Stakeholder											
engagement											
plan											
Annual											
workplan											
REAG											
Meeting											
RDO Team											
meeting											
Workplan											
progress											
M&E plan											
progress											
Workplan											
2021/22											
Final report											
Operational				811 -			0.1				
On-farm	Webinar	Establish	Write case	Pilot	Formalise		On-farm	Support for 5	Support for 5	Support for 5	
Biosecurity		discussion	study,	Discussion	Discussion		biosecurity	on-farm	on-farm	on-farm biosecurity	
		group	featuring on- farm	group (Lindenow)	group		planning workshop	biosecurity plans	biosecurity plans	plans	
			biosecurity	(Lindenow)			workshop	piaris	piaris	piaris	
			planning								
Smarter			platiting	Exploring						AgTech Expo	
Growing				AgTech expo						Agreciiexpo	
S. Olling				idea (instead							
				of							
				demonstration							
				site)							

Food & Fibre Gippsland

										Cippsiant	-
		Establish online forum		Online forum still under development. Calendar of posts under development.	Monthly update of online forum. Included in eNews as online forum still under development.	Monthly update of online forum Included in eNews as online forum still under developm ent.	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum
Water Use						Schreurs & Sons site visit				Write case study	
					Visit from Danielle Park Support growers through EnviroVeg	Support growers through EnviroVeg	Support growers through EnviroVeg	EnviroVeg training			
Workforce	Develop and film video case studies	Develop and film video case studies	Develop and film video case studies	Develop and film video case studies; Delivered COVIDSafe info night	15 videos have been filmed; approx. 10 more still to be filmed	Finish video case studies	HR seminar – further WHS content				
		Establish online network	Establish online network			Establish online network	New entrant networking event; Establish online network	Establish online network			
	Survey re Traineeships	Survey re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeshi ps					

STRATEGY FOCUS AREAS...

As a result of the regional scan, gap analysis and grower consultation, the following four focus areas have been identified as priorities for the VegNET Gippsland Regional Extension Strategy 2020-2025.

All of the concerns expressed above are somewhat influenced or the result of the public's perception of the industry's practices. Efforts to improve the public's perception of the industry will underpin each of these focus areas.

Creating a communication loop on biosecurity issues -

Despite continual impact of crop disease and pests and threat of exotics, many local growers report not accessing levy-funded resources either at all or minimally. To address this, VegNET Gippsland will create stronger links and a communication loop with local Agronomists, with the intention of elevating awareness, driving access to levy-funded resources, and increasing regional understanding of biosecurity issues and adoption of prevention strategies.

Improved Environmental Management -

Water security, an ongoing major concern to Gippsland growers is often a result of limited availability, but also relative to restrictive water licensing and access despite availability of sufficient volumes. While VegNET Gippsland may not be able to influence change to this, improved environmental management will enhance water use efficiency, holding capacity, and waterway health. VegNET Gippsland will support growers to progress through the industry levy-funded environmental program – EnviroVeg.

One-off capacity-building opportunities have been available to local growers in recent years, though participation has been less than desired. VegNET Gippsland will strengthen connections with the AgVic Extension team and encourage growers to access services to improve irrigation technologies and water-use efficiencies. Sharing such positive changes with AgVic and the Catchment Management Authority will promote the local vegetable industry as proactive and conscientious about waterways impact and broader environment.

Smarter Growing -

Although there are a number of Hort Innovation research projects on various technologies, including robotics, visual systems and sensors, many Gippsland farmers only adopt GPS machinery related Precision Agriculture. This strategy will invest in extending these Hort Innovation projects and existing resources to growers to promote maximum awareness of precision agriculture system opportunities. The project will also explore possibilities for implementation of these systems regionally, in order to reduce financial burden and optimise access.

Increasing workforce capability -

Whilst some of the challenges expressed by growers - ie. affordability of labour - do not fall within the remit of VegNET Gippsland, there is also regional concern of the effectiveness and sustainability of a local workforce. Regionally, there have been fragmented efforts to improve perceptions of career prospects within the industry, and develop opportunities for the local community to access relevant training and enter the industry. This strategy will support the local industry by creating and strengthening these opportunities, with a long-term vision of advancing the capability of the workforce to improve efficiencies and increase profits.

Appendix 3





Regional Extension Advisory Group Terms of reference

The Project

Food & Fibre Gippsland has been funded by Hort Innovation to deliver VegNET Gippsland between 1 April 2020 and 30 September 2021. Food & Fibre Gippsland is the industry lead collaborative force creating opportunities for a prosperous and sustainable Gippsland Food & Fibre sector. It is a not-for-profit industry led organisation which facilitates a range of innovative initiatives in partnership with government, researchers, and community.

VegNET Gippsland is one of ten vegetable extension projects delivered to vegetable levy-payers across Australia. The objective of VegNET Phase 2 is to develop and initiate a Regional Extension Plan and associated project plans focused on high priority areas identified by growers. It will deliver user defined activities focused on targeted and measurable practice change to support profitability and sustainable growth of Australian vegetable businesses. It contributes to Outcome 5 of the Vegetable Strategic Investment Plan (SIP) 2017-2021: Improved industry capabilities for innovation and adoption, which is critical for achievement of all other Outcomes of the SIP.

This phase of VegNET will be delivered using an Innovation Systems approach, with the role of the VegNET Regional Development Officer (RDO) being a broker to involve the right people from the Gippsland region to design and deliver a localised, grower-informed extension plan.

The key outcomes of VegNET Phase 2 will be:

- · Increase in grower awareness of vegetable R&D levy investment
- Increase in stakeholder access to levy funded research findings and outcomes
- · Increase in stakeholder engagement in extension events
- Extension programs delivered, based on stakeholder engagement plans
- Increase in grower knowledge, attitudes, skills and aspirations in identified best management practices and innovations relevant to the region
- Increase in growers positively changing practices due in part to vegetable R&D levy investments.

Group purpose

- To oversee the development and implementation of a Regional Extension Strategy to ensure it meets the needs of the vegetable industry regionally, including growers, advisors, extension providers and other key stakeholders
- 2. To provide regional input into the Regional Extension Plans
- To be a conduit between growers, research, extension and the private sector both within and across regions
- Ensure the regional VegNET 2 project stays focussed on required outcomes including review
 of progress and effectiveness in Regional Extension Plan implementation every 3 months
- 5. Act as a 'sounding board' to the RDO





Group structure

The REAG is to be comprised of -

- A minimum of 3 growers who represent a cross section of the regional grower base and must not be solely drawn from the delivery partner's own Board.
- · 2 technical advisors. I.e. researchers, agronomists
- VegNET Regional Development Officer (RDO)
- · Hort Innovation project manager

Skill and knowledge areas that will support the REAG roles and responsibilities include:

- Governance
- Stakeholder engagement
- Strategic thinking
- Extension
- Innovation
- Planning
- · Marketing for events purposes
- Business Development
- Online technologies
- · Networks within the vegetable industry and value chain

Membership

- 1. Jason Hingston (Regional Extension Manager, Hort Innovation)
- 2. Julian Hill (Food & Fibre Gippsland)
- 3. Bonnie Dawson (VegNET Regional Development Officer, Food & Fibre Gippsland)
- 4. Frank Nobile (Select Produce)
- 5. Steven Covino (Covino Farms)
- 6. Matt Zagami (Avagrow Farms)
- 7. Noel Jansz (Horticultural Agronomist, Elders)
- 8. Alex Keith (Agronomist, Bulmer Farms)

Roles

Chair (to be appointed annually): VegNET RDO, to be reviewed each meeting and grower chair to be appointed once in person meetings recommence

Secretary: VegNET RDO (Bonnie Dawson)

Meetings

The Regional Extension Advisory Group agrees to meet every three months on the second Tuesday (unless otherwise agreed), either online or in person.

8 December 2020

9 March 2021

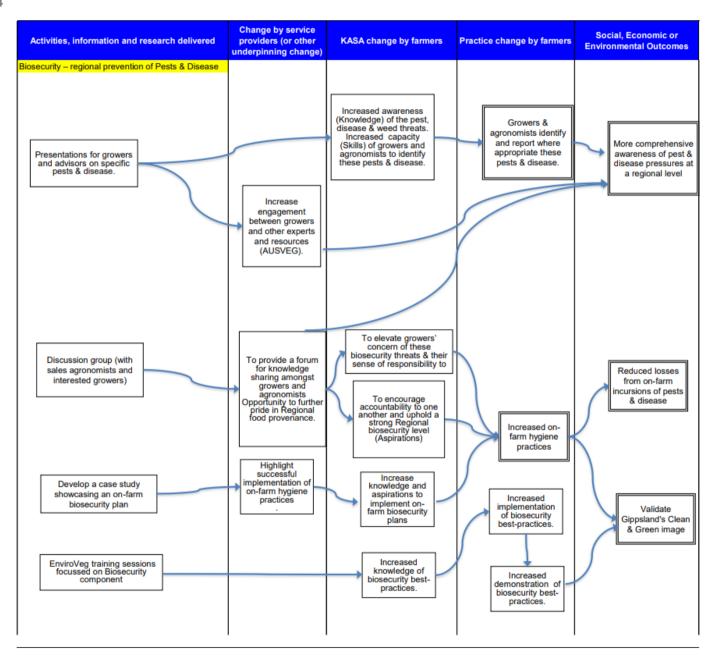
8 June 2021

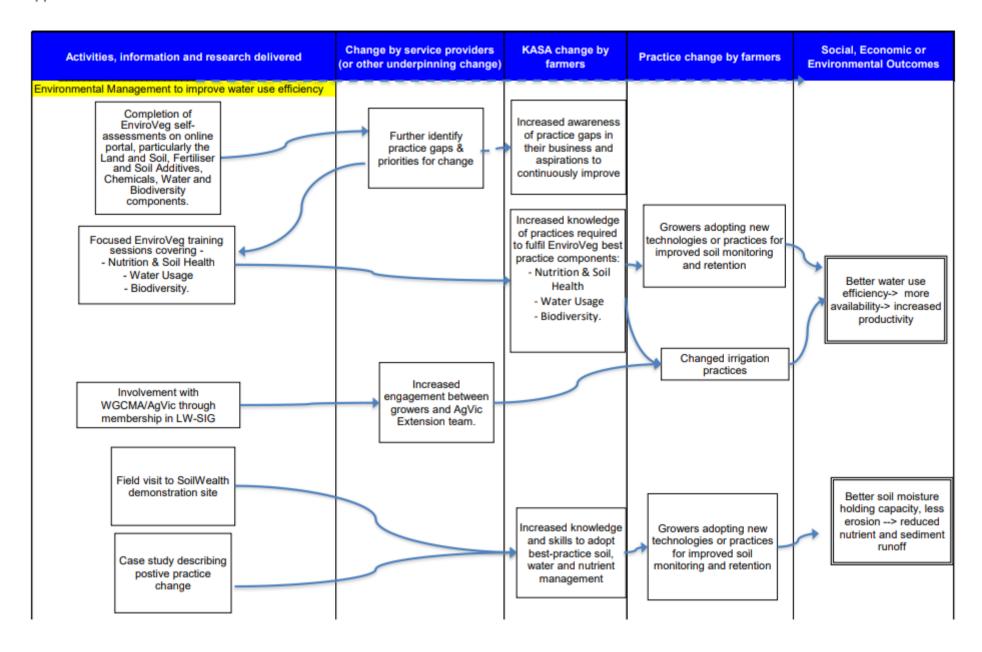
14 September 2021

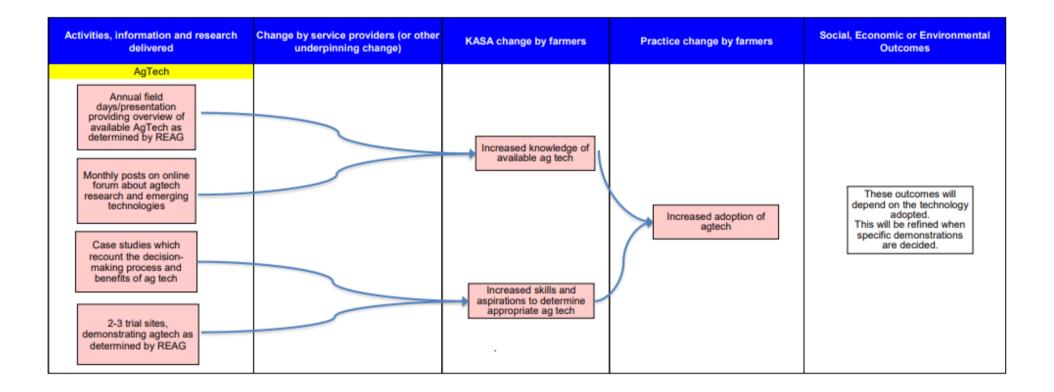
Review

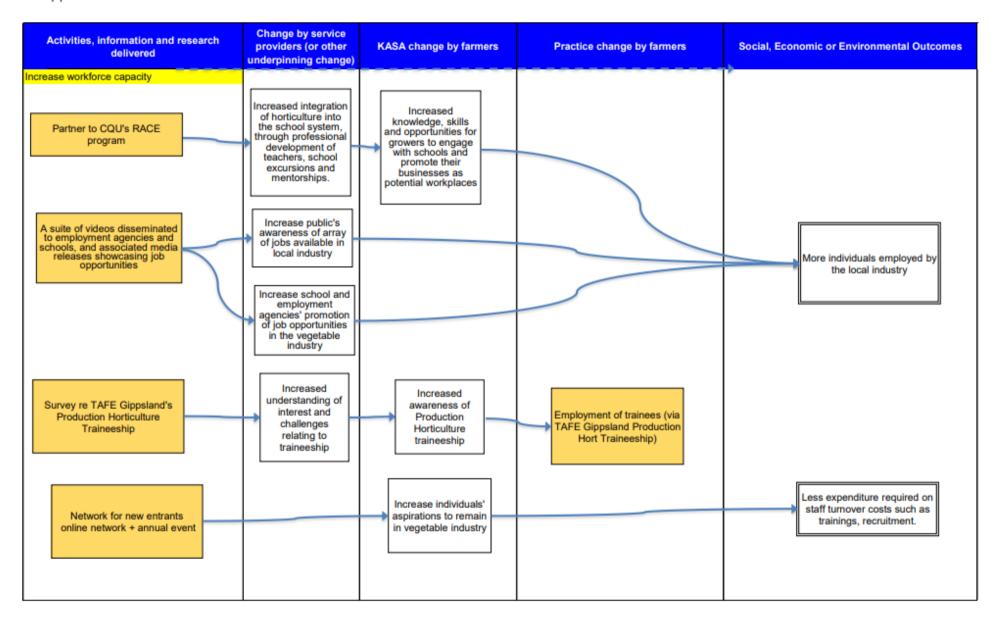
The REAG Terms of Reference will be reviewed annually.

Appendix 4











Veg Net 2.0 Annual Workplan and Gantt chart

Annual workplan

Project Plan	Outputs	Project links or collaboration	Team members	Extension content
On-Farm Biosecurity	- 2 Presentations o 1 webinar, November 2020 (endemic and exotic pests & disease) o 1 workshop / seminar planned for May 2021 (On-Farm Biosecurity Planning) - Establishment of discussion group - 5 On-farm Biosecurity Plans - One case study showcasing development of an On-farm Biosecurity Plan	 AUSVEG team Area wide management of vegetable diseases: viruses and bacteria (AWM) team (VG16086) VegNET Victoria – Northern, Western and South Eastern VegNET Tasmania Agronomists who service growers of the region (internally employed by growers, independent consultants, and Sales Agronomists from E.E. Muir, Elders and Landmark) Agriculture Victoria Federation University – collaboration opportunities to be explored 	 Bonnie Dawson – VegNET Gippsland (Regional Development Officer) Callum Fletcher, AUSVEG (webinar presenter; Biosecurity Coordinator) Maddy Quirk, AUSVEG (webinar presenter) Dr. Cliff Kinoti, AgVic (webinar presenter) Dr. Helen Spafford (Department of Primary Industries and Regional Development WA) 	 Individual support provided to growers from AUSVEG Farm Biosecurity Project for development of On-farm Biosecurity Plans Fall Armyworm "What to look for" video National Fall Armyworm webinar (AUSVEG & Syngenta) Gippsland-focused Fall Armyworm webinar (recorded November 2020) Vegetable Leafminer factsheet (MT16004) Gippsland-focused Exotic leafminers (recorded November 2020) Tomato Potato Psyllid factsheet (MT16018) Gippsland-focused Tomato Potato Psyllid webinar (recorded November 2020) Gippsland-focused Tomato Spotted Wilt Virus webinar (recorded November 2020) AWM research (VG16086)



				Gippsland
				- Project Case study (to be produced January 2021)
Smarter Growing	Presentation about Variable Rate Application of fertiliser Identify and establish or showcase 1 demonstration site, showcasing soil moisture monitoring and/or VRA 10 monthly updates to online forum	 Agronomists, particularly Noel Jansz (Elders) and Stuart Grigg (SG Ag-Hort Consulting) SoilWealth project team (RMCG & AHR) Food Agility CRC Federation University Soil CRC VegNET Tasmania 	- Bonnie Dawson, RDO - Identified agents	 SoilWealth factsheet VG16009 resources (QDAF), particularly VR case study Getting started in Precision Agriculture video Variable Rate technology in vegetables video
Water Use	 Regional EnviroVeg benchmarking report following completion of self-assessments by at least twelve growers 3 training sessions re water/irrigation – Lindenow, Sale, Korumburra Field visit to Schreurs & Sons 1 case study 	 EnviroVeg West Gippsland Catchment Management Authority (WGCMA) East Gippsland Catchment Management Authority (EGCMA) Port Philip and Westernport Catchment Management Authority (PPWCMA) Agriculture Victoria Southern Rural Water Lake Wellington Sustainable Irrigation Group Drought Resilience Hubs SoilWealth project 	 Bonnie Dawson, RDO Danielle Park, AUSVEG (EnviroVeg Coordinator, training deliverer) Anthony Goode & Shayne Haywood, WGCMA Alexis Killoran, AgVic 	 EnviroVeg program and self-assessments (VG Customised training with EnviroVeg Coordinator SoilWealth seasonal climate outlook (Summer 2020) SoilWealth soil moisture monitoring tools SoilWealth soil health & water use efficiency factsheet



Workforce	-	5 video case studies	-	Gippsland Regional	-	Julie Tuhi (Gippsland	-	VegPRO Career Pathways Guide
	-	Partner to Central		Agrifood Employment		Regional Agrifood	-	VegPRO WHS Carrot stick USB
		Queensland University's		Programme (Food & Fibre		Employment Program,	-	Learnings from AUSVEG Vic
		(CQU) Raising Aspirations		Gippsland)		Food & Fibre Gippsland)		'Schools on Farms' pilot and Food
		in Careers and Education	-	WorkSafe		development of videos		& Fibre Gippsland/CQU's Gippy Ag
		- Gippsland (RACE)	-	Business managers	-	Jody O'Brien (Food &		project
		Program (project plan	-	Schools		Fibre Gippsland)	-	TAFE Gippsland Certificate 3 in
		and details yet to be	-	TAFE Gippsland		development of videos		Production Horticulture
		finalised)	-	Employment agencies	-	Dr Amy Cosby (Central		(traineeship)
	-	Online forum for new	-	Fed Uni		Queensland University)	-	Hort Frontiers Fund
		entrants	-	Labour Hire Companies		RACE Program		
	-	Business development			-	Dr Julian Hill (Food &		
		seminar focussed on WHS				Fibre Gippsland) online		
	-	Networking event for				platform		
		new entrants						
	-	Results and analysis from						
		survey re access to TAFE						
		education						



Gantt chart

Example Gantt chart for contract and operational outputs. Edit and complete for VegNet 2.0 outputs.

Output	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
Contract											
Milestones		103					104				190
Program logic											
M&E plan											
Stakeholder											
engagement											
plan											
Annual											
workplan											
REAG											
Meeting											
RDO Team											
meeting											
Workplan											
progress											
M&E plan											
progress											
Workplan 2021/22											
Final report											
Operational											
On-farm	Webinar	Establish	Write case	Pilot	Formalise		On-farm	Support for 5	Support for 5	Support for 5	
Biosecurity	Webillal	discussion	study,	Discussion	Discussion		biosecurity	on-farm	on-farm	on-farm	
biosecurity		group	featuring on-	group	group		planning	biosecurity	biosecurity	biosecurity	
		8.000	farm	(Lindenow)	8.00p		workshop	plans	plans	plans	
			biosecurity	(2			польтор	pions	piono	picitis	
			planning								
Smarter				Exploring						AgTech Expo	
Growing				AgTech expo							
				idea (instead							
				of							
				demonstration							
				site)							



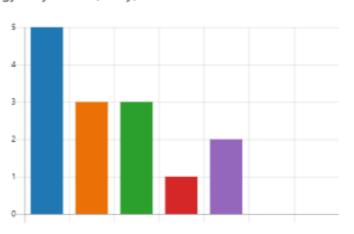
										Cippsiani	
		Establish online forum		Online forum still under development. Calendar of posts under development.	Monthly update of online forum. Included in eNews as online forum still under development.	Monthly update of online forum Included in eNews as online forum still under developm ent.	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum	Monthly update of online forum
Water Use						Schreurs & Sons site visit				Write case study	
					Visit from Danielle Park Support growers through EnviroVeg	Support growers through EnviroVeg	Support growers through EnviroVeg	EnviroVeg training			
Workforce	Develop and film video case studies	Develop and film video case studies	Develop and film video case studies	Develop and film video case studies; Delivered COVIDSafe info night	15 videos have been filmed; approx. 10 more still to be filmed	Finish video case studies	HR seminar – further WHS content				
		Establish online network	Establish online network			Establish online network	New entrant networking event; Establish online network	Establish online network			
	Survey re Traineeships	Survey re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeships	Survey of employers and TAFE re Traineeshi ps					

Use of Precision Agriculture across Gippsland



1. What Precision Agriculture (PA) technology do you use (if any)?





2. Do you believe your operation would benefit from utilising more PA technology than you already do?





3. If so, is there a specific type of technology that you're interested in?

Latest Responses

5

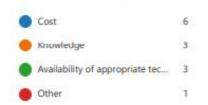
Responses

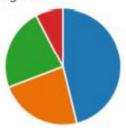
"More soil moisture monitoring, nutrient monitoring, water flow monit...

"Variable rate and crop imagery"

"crop sensing imagery - weeding"

4. Are any of the following barriers preventing you from doing so?





5. What growing operation are you from? (this question is optional)

3 Responses Latest Responses
"Schreurs (over the phone)"
"AvaGrow Farms"





Growing Gippsland's Drought Resilience with Technology and Better Soil Project Overview & Milestones



Activity	Start Date	End Date	Other Comments	Reporting
To include work health and safety, site access and biosecurity risk management procedures to be developed and agreed with property owner. Soil sampling, soil analysis, crop rotation plans identified Soil moisture probes secured, installation occurs, and calibration completed.	June 2021	September 2021		First Milestone (August 2021): • Evidence of meeting with interested Landholder • Letter of Agreement b/w Landholder Second Milestone (January 2022): • Demonstration site plan • EM38 Mapping (Precision Agriculture report) • Data reporting plan (personnel, responsibilities & schedule)
Benchmark data captured at the beginning of the program to identify on-farm practices. The tool being used to capture practice information is the EnviroVeg selfassessment.	June 2021	September 2021	The EnviroVeg will produce a regional report outlining current practices within the Gippsland region	Second Milestone (January 2022): Regional EnviroVeg report as of September 2021 Review of existing soil moisture monitoring projects

Local growers and advisors to be invited on-site Demonstration of soil moisture sensor technology Presentation from soil moisture technology supplier Presentation of benchmarking data VegNET - Gippsland to introduce communications and extension plan	September 2021		Emphasis on inviting other industry stakeholders?	Second Milestone (January 2022): Promotional flyer of event; Promotion of Communication Plan Supporting extension materials distributed
Communications and Engagement strategy, including regular social media updates and newsletter distributed via VegNET – Gippsland and West Gippsland CMA networks, presenting - • Summary of soil moisture data • Overview of current practice at site • Any decisions to change practice because of soil moisture reading	October 2021	February 2022	The objective of this activity is to provide a demonstration of soil moisture probes and real-time use of their data to growers in the Gippsland vegetable growing region.	Second milestone (January 2022): • Social media updates; • Fortnightly newsletter; • Evidence of in-person extension Final milestone (August 2022): • Social media updates; • Fortnightly newsletter; • Evidence of in-person extension • Summary case study of project
Local growers and advisors to be invited on-site VegNET – Gippsland to present summary of data and findings from summer growing season	April 2022			Final Milestone (August 2022): • Promotional flyer of event; • Summary case study provided to attendees

Report on decisions and practices made at demonstration site throughout summer growing season because of soil moisture data Conduct survey to compare water use efficiency from previous summer Capture awareness, attitude and level of confidence among growers in relation to the soil moisture technology. Investigate drought resilience implications	March 2022	April 2022	Final Milestone (August 2022): • Evaluation Report — ○ Evaluation of demonstration site (objective 1) ○ Evaluation of regional practice change using EnviroVeg framework (objective 2)
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Food & Fibre Gippsland Inc.

PO Box 857, Warragul VIC 3820 ABN: 27 546 137 219 Registration: A0105635W

LinkedIn: linkedin.com/foodandfibregippsland Facebook: facebook.com/foodandfibregippsland www.foodandfibregippsland.com.au



4 August 2021

LETTER OF AGREEMENT

Growing Gippsland's Drought Resilience with Technology and Better Soil

We are pleased to advise Food & Fibre Gippsland has been successful in its application for the *above* noted Future Drought Fund - NRM Drought Resilience Grants. Thank you for your interest in participating in this project and look forward to collaborating with you as a partner provider.

Proposal details are:

Grant Activity ID	4-G372AU3
Proposal Title	Growing Gippsland's Drought Resilience with Technology and Better Soil
Years funded	2021 – 2022

Establishment of the program requires confirming your formal participation and agreement on:

- conduct and management of the grant is governed by the requirements of the Commonwealth FDF program (grant attached)
- you will support Food & Fibre Gippsland to meet its obligations under the Grant Agreement and Grant Guidelines (as appropriate)
- you will assist Food & Fibre Gippsland to establish a monitoring site and other commitments (eg. participation in Project Reference Group; host on-site Final Event to extend results to industry) set out in the Project Plan [attached]
- you will notify Food & Fibre Gippsland of any change in circumstances which may impact participation in the project

- Food & Fibre Gippsland representatives will:
 - · abide by all company OH&S requirements when undertaking work at the proposed site
 - abide by all company directions when undertaking work at the proposed site
 - have the relevant insurance to undertake work at remote sites, subject to agreement with the owner of those sites
 - activities undertaken by the project may be conducted under terms of specific agreements dealing with intellectual property and other relevant matters as outlined in the grant
- you will only issue publications or communications regarding the project with prior written approval of Food & Fibre Gippsland

We would be most grateful if you could acknowledge your agreement by signing and returning this document via email to bonnie.dawson@foodandfibregippsland.com.au

Yours sincerely

Nicola Pero: For and on behalf of Food & Fibre Gippsland

cc: Bonnie Dawson

OTHER ORGANISATION CERTIFICATION

I accept the terms of participation in the Growing Gippsland's Drought Resilience with Technology and Better Soil project: Tripod Farmers / Farm Express Salads:

Position: Divertor





Growing Gippsland's Drought Resilience with Technology and Better Soil

The Project

This project will centre around a demonstration of soil moisture sensors for Gippsland's vegetable industry. It will provide an opportunity for intensive vegetable growers to experiment with using soil moisture sensors in the context of short-cycle crops, a setting which has not seen much adoption of the technology. The project will provide regular updates to the local industry summarising the data and observations from the site through a fortnightly newsletter, the use of social media, as well as face-to-face extension delivery. Any decisions or changed practices by the host grower will also be communicated to the readers and interested industry stakeholders. Using soil moisture monitoring is likely to result in more efficient use of water and a decreased risk of nutrient and sediment runoff into waterways as a result of over or under watering.

Project Purpose

To build drought resilience among Gippsland's vegetable producers and concurrently work to reduce the risk of damaging nutrients and sediment finding their way into the Gippsland Lakes.

Project Purpose

- To increase adoption of soil moisture monitoring technology
- To increase engagement between Gippsland's vegetable industry, Agriculture Victoria and West Gippsland Catchment Management Authority

Group purpose

- · To provide guidance and insight of multiple perspectives to the Project Manager.
- To provide multiple communication avenues to extend project findings.

Group membership

The Project Reference Group will comprise of -

Name	Role	Organisation	Description of role
Bonnie Dawson	Regional Development Officer – VegNET	Food & Fibre Gippsland	Project Manager
Walter Chadwick	Farm Manager	Tripod Farmers / Farm Express Salads	Host Landholder





Julian Hill	FDF Victoria Program Manager - Gippsland Node	Food & Fibre Gippsland	Provide strategic oversight
Noel Jansz	Agronomist	Elders	Technical Advisor / Supplier
Danielle Park	EnviroVeg Coordinator	AUSVEG	Support regional-level evaluation through EnviroVeg self-assessments
Anthony Goode	Land Programs Coodinator	West Gippsland Catchment Management Authority (WGCMA)	Water and land management advice, to minimise impact on waterways / WGCMA representative to broker knowledge between industry and government department
Alexis Killoran	Regional Manager Irrigation – South East	Agriculture Victoria (South East)	Irrigation advice, particularly to optimise water use / Agriculture Victoria representative to broker knowledge between industry and government department

Roles

Chair: VegNET RDO

Secretary: rotating around other group members

Meetings

As indicated, two meetings will be onsite (COVID-19 restrictions dependent). Remaining meetings will be decided depending on group's preference.

Thursday 19 August 2021

Thursday 16 September 2021 (on-site meeting)

Thursday 18 November 2021

Thursday 20 January 2022

Thursday 24 March 2022 (inc Extension event onsite)

Funding

This project has been funded by the Commonwealth Government of Australia, through the Future Drought Fund: Natural Resource Management (NRM) Drought Resilience Program – Grants and has been integrated into VegNET Gippsland's Regional Extension Strategy.

This is my job video series – Vegetable industry

All videos can be found at www.foodandfibregippsland.com.au/this-is-my-job

Flavorite (Warragul)

Consider a career in Horticulture:

Chris, Chief Operating Officer. Main farm based in Warragul. Most products sold through major supermarkets. More than 500 staff from all over the world. Enormous amounts of roles in the business – technical people, skilled labourers, IT programmers etc. A lot of on-the-job training, so attitude is more important than the skills you have. Sustainability is a key pillar with their production system a way to feed the world without degrading the environment.

https://vimeo.com/538613809

https://www.facebook.com/FoodandFibreGippsland/videos/451740995935199/

1-minute video views	534
Engagements	299
Reactions	207
Shares	33
Comments	59
Reach	5,709

Packing team:

Evita, middle-aged woman, CALD background, has worked at Flavorite for 15 years. Early starts (6am), early finish (3pm). People from different countries and backgrounds, all very friendly. Good pay and development opportunities, interesting work. Enjoys it very much!

https://vimeo.com/538612844

Crop Tech:

Nina, middle-aged woman, CALD background. Has worked up from manual labour as a Crop Care Technician, started as a backpacker. Enjoys watching crop grow – the whole process. Very friendly and caring atmosphere, relaxed but work hard. Career progression available at Flavorite for dedicated and passionate people.

https://vimeo.com/538613225

Integrated Pest Management team:

Jamie, young Australian male. No two days the same. Research, crop care, pest management. Previously worked at Hungry Jacks while studying a Bachelor of Science, however doesn't see a degree as necessary as most knowledge developed on the job.

https://vimeo.com/536166867

https://www.facebook.com/FoodandFibreGippsland/videos/154922459804868/

1-minute video views	158
Engagements	100
Reactions	80
Shares	6
Comments	14

Decelo	1 722
Reach	1,/23

Logistics Leading Hand:

Jack, young Australian male. Gets products out. Lots of problem solving. Get to meet lots of new people from all walks of life every day. So much more than working on a farm on your hands and knees in the dirt. Flavorite will teach you what you need to know to progress, and always opportunity to change roles if you work hard.

https://vimeo.com/538612402

Crop Care Tech:

Richelle, young CALD woman. Studied Accountancy, but started working here eight years ago and loves it. Pruning, "winding" and deleafing the crops, lots of different jobs. Full-time work, early starts, early finish. Working with plants is therapeutic and good for the planet.

https://vimeo.com/536158231

https://www.facebook.com/FoodandFibreGippsland/videos/801394020775424/

1-minute video views	208
Engagements	127
Reactions	97
Shares	16
Comments	14
Reach	2,130

Trolley Driver & Picker:

Riu, young CALD male. Pick and transport products, but then may help other departments like packing room or crop workers.

Satisfying work, fun trolley driving! Environment is very comfortable and enables good life-work balance. Everyone is very helpful and treats you like family.

https://vimeo.com/536146494

https://www.facebook.com/FoodandFibreGippsland/videos/527815845273568

1-minute video views	91
Engagements	62
Reactions	50
Shares	7
Comments	5
Reach	1,127

Bulmer Farms (Lindenow)

Consider a career in Horticulture:

Andrew, Managing Director. One of Australia's largest babyleaf producers, supplying domestic markets. More than manual labour in the field. Great industry to be in - fun, exciting, dynamic. Team that feeds the nation. Welcome diversity and all ages.

https://vimeo.com/528614145

https://www.facebook.com/FoodandFibreGippsland/videos/3756246751141316

1-minute video views	540
Engagements	345
Reactions	269
Shares	36
Comments	40
Reach	5,829

Packhouse General Hand:

Geoff, older Australian male. Crate washing, mostly outdoors. Everyone takes pride in the product and business. A good job, outdoors a lot of the time, great environment and happy people.

https://vimeo.com/528616342

https://www.facebook.com/FoodandFibreGippsland/videos/230058802206322/

1-minute video views	97
Engagements	54
Reactions	44
Shares	6
Comments	4
Reach	2,222

Quality Control Trainee:

Tilly, young Australian female. School leaver. Checks produce is fit for consumption and maintains company reputation. Loves who she works with – everyone is super kind. Loves early start. Enjoys being on her feet all day and contributing to something that matters. Horticulture is such a large process involving so many different jobs, all very interesting.

https://vimeo.com/528638034

https://www.facebook.com/FoodandFibreGippsland/videos/1166301320468081/

1-minute video views	369
Engagements	204
Reactions	158
Shares	6
Comments	40
Reach	3,032

Apprentice:

Lucas, young Australian male. 14 month apprenticeship which can lead down lots of pathways. All sorts of tractors and machinery to drive – loves them! Got into it out of Year 11 VCAL. Great, and big, team – everyone has their different roles and helps each other out. "If you're in Year 11, have a go!"

https://vimeo.com/528637772

https://www.facebook.com/FoodandFibreGippsland/videos/782293922693969/

1-minute video views	311
Engagements	232
Reactions	163

Shares	13
Comments	56
Reach	2,121

Crop Development Manager:

Nick, young Australian male. Has worked at Bulmer Farms for 6 years, started as an Apprentice. Manages staff, but still gets to do some tractor driving. Enjoys "feeding the world". Lots of fun and a lot of opportunity – lots of different pathways. "Great to come to work and actually enjoy what you do"

https://vimeo.com/528637916

https://www.facebook.com/FoodandFibreGippsland/videos/786604798917851/

1-minute video views	271
Engagements	201
Reactions	163
Shares	12
Comments	26
Reach	2,408

Training Manager:

Lee, older Australian male. Biggest myth is that there is "nowhere to go in horticulture". Lots of different opportunities to work your way up into managerial roles. People who have adaptability, good work ethic, life experience. Love the people, and fresh air.

https://vimeo.com/528637636

https://www.facebook.com/FoodandFibreGippsland/videos/281832276904941/

1-minute video views	42
Engagements	24
Reactions	21
Shares	2
Comments	1
Reach	526

Human Resources Manager:

Karen, middle-aged Australian woman. No day is average. Recruiting the right people for the business and supporting them in their roles. Best thing is variety in the role. Need to be flexible, things are always changing in the industry. Engages with people from lots of different backgrounds and walks of life.

https://vimeo.com/528636267

https://www.facebook.com/FoodandFibreGippsland/videos/1108121469684726/

1-minute video views	310
Engagements	129
Reactions	95
Shares	8
Comments	26
Reach	2,060

Agronomist:

Alex, young Australian female. University graduate (Bachelor of Science in Ag), but most knowledge is learnt on the job so if you have a willingness to learn you'll enjoy it. Always learning, always new technologies. Putting a lot of different elements together to ensure good produce.

https://vimeo.com/528613009

https://www.facebook.com/FoodandFibreGippsland/videos/242408324261003/

1-minute video views	44
Engagements	21
Reactions	17
Shares	3
Comments	1
Reach	658

Hussey & Co (Newry)

Consider a career in Horticulture:

Warrick, General Manager on Hussey & Co. Babyleaf producers, sell into markets and retailers across Australia and one of the biggest exporters of babyleaf salads. Gippsland a fantastic growing business. Always looking for flexibility, dedication, passion and energy. Trust, sense of humour and accountability to the team.

https://vimeo.com/542529409

https://www.facebook.com/FoodandFibreGippsland/videos/3015833738737853/

1-minute video views	94
Engagements	26
Reactions	21
Shares	4
Comments	1
Reach	879

Seeder:

Katie, young Australian female. Transferred from dairy. Tub washer \rightarrow forklift driver \rightarrow seeder. Learnt how to drive a tractor on farm. "Women bring attention to detail, and are a finer touch!" Enjoys who she works with and that she doesn't take work home with her.

https://vimeo.com/542530856

https://www.facebook.com/FoodandFibreGippsland/videos/270456461459334/

1-minute video views	58
Engagements	25
Reactions	20
Shares	2
Comments	3
Reach	1,049

Tractor Operator:

Brooke, young Australian female. Transferred maths and calculating skills from nursing. Job is forever changing, always opportunity to learn something new.

https://vimeo.com/542529086

https://www.facebook.com/FoodandFibreGippsland/videos/4426953480648741/

1-minute video views	129
Engagements	81
Reactions	57
Shares	1
Comments	23
Reach	776

Land Prep team:

Kelsie, young Australian female. "A woman can do anything a man can do! There's always help around ..." Hopes to ultimately take her skills overseas. A whole new way of life, lots of fun and lots to learn with really great people.

https://vimeo.com/542528935

https://www.facebook.com/FoodandFibreGippsland/videos/535367447468732/

1-minute video views	22
Engagements	4
Reactions	3
Shares	0
Comments	1
Reach	356

Diesel Mechanic:

Nick, young Australian male. Did his apprenticeship in the Trucking / Mining industry. Large variety and always different machinery to work on. Enjoys seeing the process involved in producing food.

https://vimeo.com/542529781

https://www.facebook.com/FoodandFibreGippsland/videos/871295507074317/

1-minute video views	22
Engagements	6
Reactions	6
Shares	0
Comments	0
Reach	324

Maintenance Manager:

Brian, middle-aged Australian male. Variety of tractors and implements to work on. After working in many other environments, this favourite. Varied hours.

https://vimeo.com/542529613

https://www.facebook.com/FoodandFibreGippsland/videos/553077302746825

1-minute video views	125
Engagements	90
Reactions	68
Shares	2
Comments	20
Reach	820

Harvest Manager:

Will, middle-aged Australian male. Didn't know anything about lettuce before this job, uses Microsoft Excel everyday, learnt computer skills from gaming, enjoys being outside as well as inside in his role. "If you put hard work in, there's lots of opportunities on the farm"

https://vimeo.com/542529246

https://www.facebook.com/FoodandFibreGippsland/videos/1033110283763434/

1-minute video views	34
Engagements (= reactions + shares + comments)	7
Reactions	7
Shares	0
Comments	0
Reach	343

Schreurs & Sons (Middle Tarwin)

Consider a career in Horticulture:

Adam, Director. Third generation family business. Grows celery, leeks, baby spinach and rocket. Supplies all major supermarkets, fresh produce markets and export. Need for really broad skill base needed in their roles – there's a place for every skillset. Lots of technology and automation being developed. Great lifestyle – working outside in fresh air.

https://vimeo.com/551351648

https://www.facebook.com/FoodandFibreGippsland/videos/793606458249725/

1-minute video views	574
Engagements	521
Reactions	424
Shares	32
Comments	65
Reach	5,038

Truck Driver

Steve, older Australian male. Days change quickly. Day's work is outlined in app. Schreurs & Sons have supported Steve to get his truck licence in recent times. Long hours but not hard work. Comfortable and happy at the end of the day — "life's good!".

https://vimeo.com/551351543

https://www.facebook.com/FoodandFibreGippsland/videos/500007794684016/

1-minute video views	198
Engagements	164
Reactions	104
Shares	3
Comments	57
Reach	1,309

Harvest Team Leader

Nom, middle-aged Asian female. Worked at Schreurs & Sons since 2005. Start at 6am, finish at 4:30pm. Lots of different languages within the team, but everyone can work together and enjoys it! Good physical work, good for the body, team is like a family. "I like my job, very happy!"

https://vimeo.com/551351425

https://www.facebook.com/FoodandFibreGippsland/videos/520480868962285/

1-minute video views	32
Engagements	14
Reactions	13
Shares	1
Comments	0
Reach	407

Field Operations Manager

Shane, middle-aged Australian male. Oversees crops, and seed sowing. Pretty flexible days, "runs his own race." A career change since working for consultants on the road a lot. Has been able to bring along skills and knowledge for the business. Now positive attitude and a positive company. "If you're willing to have a go, they'll get behind you"

https://vimeo.com/551351755

https://www.facebook.com/FoodandFibreGippsland/videos/180312550650810/

1-minute video views	40
Engagements	15
Reactions	13
Shares	1
Comments	1
Reach	417

Field Operations Officer

Lachie, young Australian male. Previously completed his diesel mechanic apprenticeship. Decided to change roles to be outside and have more variety in his work. Feels like he's working with his mates everyday. Still able to play footy and have a life outside of work.

https://vimeo.com/551713321

https://www.facebook.com/FoodandFibreGippsland/videos/318733639814874/

1-minute video views	722
Engagements	363
Reactions	277
Shares	18
Comments	68
Reach	4,969

Harvest Operations Team

John, young Australian male. Previously worked in hospitality and retail, but now can drive most machinery on the farm and loves it. Proud of being part of such a big farming business. Enjoys seeing their products on supermarket shelves. There's a job there for anyone.

https://vimeo.com/552634810

https://www.facebook.com/FoodandFibreGippsland/videos/178986387450612/

1-minute video views	20
Engagements	5
Reactions	5

Shares	0
Comments	0
Reach	279

Memorandum of Understanding

Central Queensland University, a body corporate established under the Central Queensland University Act 1998 (Qld) (CQUniversity)

and

Food & Fibre Gippsland Inc

each referred to as a "Party" to this Memorandum of Understanding.

This memorandum of understanding relates to the activities listed below and/or the research project entitled: "RACE Gippsland"

Raising Aspirations in Careers and Education - Gippsland (RACE - Gippsland) will deliver a range of hands-on, interactive and engaging activities to primary and secondary students focused on building student capacity in STEM, digital technologies, agribusiness, manufacturing and food and fibre concepts, which: Raise awareness and increase motivation to pursue one of the vast range of careers across the agricultural supply chain

- Build their knowledge of, and increase their aspirations to undertake further education pathways
- Enhance their life-skills (e.g. communication, resilience, problem solving) by exposing them to potential employers and industry role models.

1 PURPOSE

- 1.1 The overall intent of this MOU is to articulate the intended spirit of collaboration and cooperation between the parties in relation to the abovementioned research project. It is expected that this MOU will:
 - a) facilitate the sharing of knowledge and information among the parties,
 - b) enhance collaboration among and between the parties,

- c) result in the establishment of an effective working relationship between the parties,
 and
- d) result in the establishment of activities which meet shared objectives of the parties.
- 1.2 This MOU is not binding and the parties do not intend that it or any part of it be binding.

2. Objectives

- Increase access to food and fibre learning opportunities for primary and secondary school students in Gippsland
- 2.2 Raise aspirations of primary and secondary school students through improving their knowledge of future pathways and career options in the Gippsland agrifood industry
- 2.3 Establish and enhance engagement and connections between primary and secondary school students and teachers with the food and fibre industry and the broader Gippsland community

Execution

- This Memorandum of Understanding commences on signing and continues until 30 June 2023.
- 3.2 This Memorandum of Understanding may be renegotiated at any time during the period of the agreement.
- 3.3 Any changes to the Memorandum of Understanding must be documented with copies of the changes provided to both parties.
- 3.4 The University representative responsible for the management and implementation of this Memorandum of Understanding will be [Dr Amy Cosby (Research Fellow – Agritech Education and Extension)] of Central Queensland University and for [Food & Fibre Gippsland], [Bonnie Dawson].

4. CQUniversity undertakes to be responsible for:

- 4.1 Development and execution of the RACE Gippsland project activities including:
 - 4.1.1 Learning modules developed and made freely available on a dedicated website
 - 4.1.2 Agri-tech Roadshows for primary and secondary school students
 - 4.1.3 Teacher Professional Development Workshops
 - 4.1.4 Industry-School partnership excursions
 - 4.1.5 Food and Fibre Social Entrepreneurship Program
- 4.2 Research and evaluation of the RACE Gippsland project activities
- 4.3 Reporting of RACE Gippsland activities and outcomes to the project partners and other stakeholders

5. Partner Organisation] undertakes to be responsible for:

- 5.1 Assist with dissemination of RACE Gippsland project activities and outcomes through their networks
- 5.2 Identify opportunities for collaboration and facilitate introductions that will assist delivery of the RACE Gippsland project
- 5.3 Attend and participate in quarterly project meetings via zoom to receive project updates and provide CQU RACE Gippsland team with feedback and suggestions to improve program delivery

6. Intended Outcomes:

- 6.1 Students improve their agrifood discipline specific knowledge and self-efficacy for 21st century skills required for future career development in the agrifood industry.
- 6.2 Students report increased awareness, motivation and interest in pursuing further study and consideration of a career in agrifood related fields
- 6.3 Teachers report an increase in knowledge and positive perceptions of food and fibre concepts, food and fibre careers, and the confidence to integrate these in their classroom activities
- 6.4 Industry ambassadors report an increased sense of connection and confidence to form collaborative partnerships with local schools, and derive a sense of satisfaction from the impact of these collaborative partnerships

7. The parties agree that:

- 7.1 This is not a legally binding document and its provisions do not create rights, obligations or duties for either party.
- 7.2 If the parties do determine that they will enter into specific projects together, these will be the subject of contractual arrangements to be determined and agreed between them.
- 7.3 The document merely records the mutual intentions of the parties in relation to their intention to develop a relationship together in the specified areas.

8. Signatories:	
Signed on behalf of Food & Fibre Gippsland	Inc
Me	22-03-2021
Signed	Date
Nicola Pero	Chief Executive Officer
Name (Please print)	Position
Signed on behalf of CQUniversity:	
Signed	Date
C. Steen	13/05/2021
Name (Please print)	Position
Prof Grant Stanley	Vice-President (Research)

Submitted separately (not for wider circulation)