

Discussion Paper for the Proposed Victorian Fruit Fly Strategy 2021-2025



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Published by Agriculture Victoria, Department of Jobs, Precincts and Regions, 1 Spring Street Melbourne Victoria 3000
Telephone (03) 9651 9999

September 2020

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GLOSSARY

Action Plan – *Managing Fruit Fly in Victoria Action Plan 2015-2020*

AIDA – *Agricultural Industry Development Act 1990*

CBA – Cost Benefit Analysis

DAWE – Commonwealth Department of Agriculture, Water and Environment

EPPRD – *Emergency Plant Pest Response Deed*

GSPFA – Greater Sunraysia Pest Free Area

IDC – Industry Development Committee

Medfly – Mediterranean fruit fly (*Ceratitidis capitata*)

NFFC – National Fruit Fly Council

NFFS – *National Fruit Fly Strategy 2020-25*

NPHS – National Plant Health Surveillance

PFA – Pest Free Area

Qfly – Queensland fruit fly (*Bactocera tryoni*)

INTRODUCTION

DEVELOPING A STRATEGY

Scope

The purpose of this discussion paper is to support Agriculture Victoria's consultation with stakeholders on the proposed strategy for the management of fruit fly in Victoria.

This discussion paper comprises three parts:

- Part A – Strategy Context: describes the context of the strategy;
- Part B – Proposed Strategy: outlines the proposed strategic direction; and
- Part C – Background Information: summarises the recent history and basis for the policy position

This discussion paper summarises Victoria's recent history of fruit fly management and considers the future strategic direction for management of fruit fly. It addresses the most appropriate management approach for both exotic and established species of fruit fly; and how industry, community and local governments can work together to minimise the impacts of fruit fly to protect and grow access to horticultural markets. Importantly, it also considers Victoria's responsibility as a significant contributor to the national fruit fly system.

The proposed strategy will span a four-year period from 2021-2025. It will be based on best practice biosecurity principles and studies that have informed the policy position.

Agriculture Victoria is seeking stakeholder feedback as to whether the proposed strategy addresses priority issues at regional, state and national levels. In addition, it seeks input from stakeholders on how they and government can best work together to address the future management of fruit fly in Victoria.

Victoria is party to, and supports, a range of national initiatives that address fruit fly issues of national interest, including research, development and extension activities. The proposed strategy will not replicate, but rather, will complement existing national strategies. Related strategies and agreements are detailed in the Background Information section.

Why is a Victorian Fruit Fly Strategy needed?

The management of risks and impacts of fruit fly is critical for a thriving horticulture industry. How Victoria manages fruit fly has implications not just for Victoria but for other jurisdictions, and for Australia's horticulture exports more generally. While Victorian industries and communities work locally – in the three key horticultural regions of Sunraysia, Goulburn Murray Valley and Yarra Valley – Victoria is part of a national system that works collectively to support domestic and international market access opportunities.

The *Managing Fruit Fly in Victoria Action Plan 2015-2020* (the Action Plan), was extended for an additional year by the Minister for Agriculture, Jaclyn Symes MP, and focused on industry, community and government stakeholders working together to improve the management of fruit fly. The Action Plan concludes on 30 June 2021 and given that Queensland fruit fly is now an established pest in Victoria, it is appropriate that stakeholders will lead area-wide management with support from government where appropriate.

What will a new Victorian Fruit Fly Strategy achieve?

The proposed strategy emphasises shared responsibility with government investing in, and leading work on exotic species, research, development and extension, as well as providing the regulatory tools to support market access opportunities for trade that is impacted by fruit fly. Importantly, the strategy will demonstrate Victoria's commitment to participating in the national fruit fly system which is focused on nation-wide prevention and eradication of exotic species and local management of established species. Additionally, the proposed strategy aims to build upon the success of the Action Plan and the valuable regional networks that champion area-wide management of fruit fly.

Who are the stakeholders of the Victorian Fruit Fly Strategy?

Stakeholders are identified as those with an interest in the management of fruit fly in Victoria. Identified stakeholders include but are not limited to:

Victorian Groups

Agribusiness Yarra Valley
Cobram and District Fruit Growers
Fruit Growers Victoria
Goulburn Murray Valley
Governance Group
Harcourt Growers Association
Horticulture Industry Network
Landcare Victoria
Melbourne Market Authority
Murray Valley Winegrowers
Olives Victoria
Sunraysia Governance Group
Swan Hill Summer Fruits
Victorian Cherry Association
Victorian Farmers' Federation
Victorian Strawberry Industry
Development Committee
Wine Victoria
Yarra Valley Governance Group

National Groups

Apple and Pear Australia Limited
Australian Horticultural Exporters
and Importers Association
Australian Nashi Growers
Association
Australian Processing Tomato
Research Council
Australian Table Grapes
Association
AUSVEG
Berries Australia
Canned Fruit Industry Council of
Australia
Citrus Australia
Dried Fruits Australia
Horticulture Innovation Australia
National Fruit Fly Council
Summerfruit Australia

Commonwealth and State Governments

Department of Agriculture, Water
and the Environment
New South Wales Department of
Primary Industries
South Australian Department of
Primary Industries and Regions
Tasmanian Department of Primary
Industries, Parks, Water and the
Environment

Local Governments

Campaspe Shire Council
Gannawara Shire Council
Greater Shepparton City Council
Mildura Rural City Council
Moira Shire
Strathbogie Shire
Swan Hill Rural City Council
Yarra Ranges Shire

How can I contribute to the development of the Victorian Fruit Fly Strategy?

Written Submissions

Agriculture Victoria will send this document directly to identified stakeholders (listed above). All direct recipients are invited to share this document more broadly to any interested parties who may want to contribute.

Agriculture Victoria invites interested parties to provide written feedback on the issues addressed in this Discussion Paper. You may provide feedback on one, some, or all of the questions raised throughout this Discussion Paper or you may wish to raise other relevant matters as part of your written submissions. (Note there are questions throughout the paper and a summary of all questions in Appendix 1).

Submissions must be received by **5:00pm Wednesday 4 November 2020**

Via email to: cpho.admin@agriculture.vic.gov.au

Or posted to: Chief Plant Health Officer's Unit, Agriculture Victoria, 475 Mickleham Road, Attwood, Victoria 3049

If you have any questions, please contact Tara Hewitt, Senior Project Officer Plant Health

Email: tara.n.hewitt@agriculture.vic.gov.au

Phone: 0437 296 743

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Next Steps

Consultation Sessions

Consultation sessions will be held in November 2020. Further information about the sessions will be provided as soon as possible to all identified stakeholders and those who provided written submissions. Due to the current COVID-19 restrictions there is uncertainty as to how the sessions will be delivered. If it is not possible to meet in-person, the sessions may be delivered online.



PART A. STRATEGY CONTEXT

FRUIT FLY

Fruit fly is a horticultural pest

Fruit flies cause damage to produce when a female fly 'stings' a ripe or over-ripe piece of fruit in order to lay her eggs. Larvae feeding on the fruit weaken the fruit structure which promotes rotting and dropping. The original sting site may also allow the introduction of bacteria and other pests, which can further damage the fruit.

Fruit fly species

There are more than 50 exotic species of fruit fly that are of potential economic significance or quarantine concern to Victoria. However, the most significant species are Mediterranean fruit fly (Medfly) and Queensland fruit fly (Qfly). At present Victoria remains free of Medfly despite its presence elsewhere in Australia. Qfly is an established pest in Victoria.

Fruit fly host plants

Fruit flies have the potential to impact on a broad range of horticultural crops. Individual species may be host specific or have multiple hosts plants. This broad host range, including native plants for some species, makes management more challenging. The key horticultural crops in Victoria affected by fruit fly include stonefruit (e.g. apricots, peaches and cherries); pomefruit (e.g. apples, pears); citrus (e.g. oranges, mandarins); grapes; berries; and tomatoes.

HORTICULTURE IN VICTORIA

There are approximately 5,000 horticulture producers in Victoria, employing around 11,000 people. The horticulture industry in Victoria is worth over \$3 billion and exports are worth \$1.6 billion per year. At least \$1 billion of these export crops are fruits and vegetables that are susceptible to fruit fly.

The *Victorian Food and Fibre Export Performance Report 2018-19* reported that the 2018-19 Victorian horticulture season to be highly successful. A summary is provided in Table 1 and key achievements include:

- Exports increased by 38 per cent to be valued at \$1.6 billion. China was the major market for Victorian horticultural exports increasing by 133 per cent and accounting for 36 per cent of the total value of horticulture exports.
- Table grapes had a record-breaking year reaching over half a billion dollars in exports. Victoria exported 91 per cent of Australia's table grapes in 2018-19. Table grape exports were valued at \$504 million (up 43 per cent) on 2017-18. China was the largest market for table grapes valued at \$199 million (up 39 per cent on 2017-18).
- Citrus exports increased by 10 per cent in value due to better market prices with volumes maintained. In the year ending June 2019, more than 104,000 tonnes of fresh citrus were exported with a value of \$162 million. Citrus exports were dominated by naval oranges (\$143 million).
- Summerfruit and cherries have seen a 51 per cent increase by value. Australian cherries obtained high prices due to outstanding quality.
-

Table 1. Victorian horticulture exports since 2015¹

Produce	2014-15		2015-16		2016-17		2017-18		2018-19	
	\$ million	'000 tonnes								
Table grapes	224	85	340	110	349	109	351	110	504	293
Dried grapes	8	2	16	4	16	4	18	5	24	5
Citrus	77	69	104	84	120	89	147	104	162	104
Stone fruit	42	12	53	14	46	12	68	17	102	23
Pome fruit	12	8	24	14	15	9	24	16	22	13
Other fruit	5	2	8	3	9	3	7	3	6	2
Processed fruit	2	1	4	1	4	1	10	2	11	2

¹ Extract from the *Victorian Food and Fibre Export Performance Report 2018-19*

THREAT OF EXOTIC FRUIT FLY TO VICTORIA

There are a number of ways that exotic fruit flies could arrive in Australia and Victoria. The most likely scenario is for fruit flies to be transported in shipments of imported fruits or vegetables. To address this risk of introduction into Australia, the Department of Agriculture, Water and the Environment (DAWE) assesses risks and regulates pathways and commodities for the importation of fruit fly hosts. Approved treatments are applied if required.

Additionally, public awareness campaigns, passenger declarations and border inspections for international travellers address the risk of individuals bringing fruit fly infested fruits and vegetables into Victoria. Domestically, Victoria has restrictions and conditions in place to ensure that Medfly and other exotic species are not introduced into the state from other jurisdictions. (From a Victorian perspective and for the purpose of this paper and the proposed strategy, Medfly which is present in Western Australia, is considered an exotic species.)

Exotic fruit fly being introduced and becoming established in Victoria would have a detrimental impact on horticultural production and market access, affecting produce quality, and leading to increased production costs.

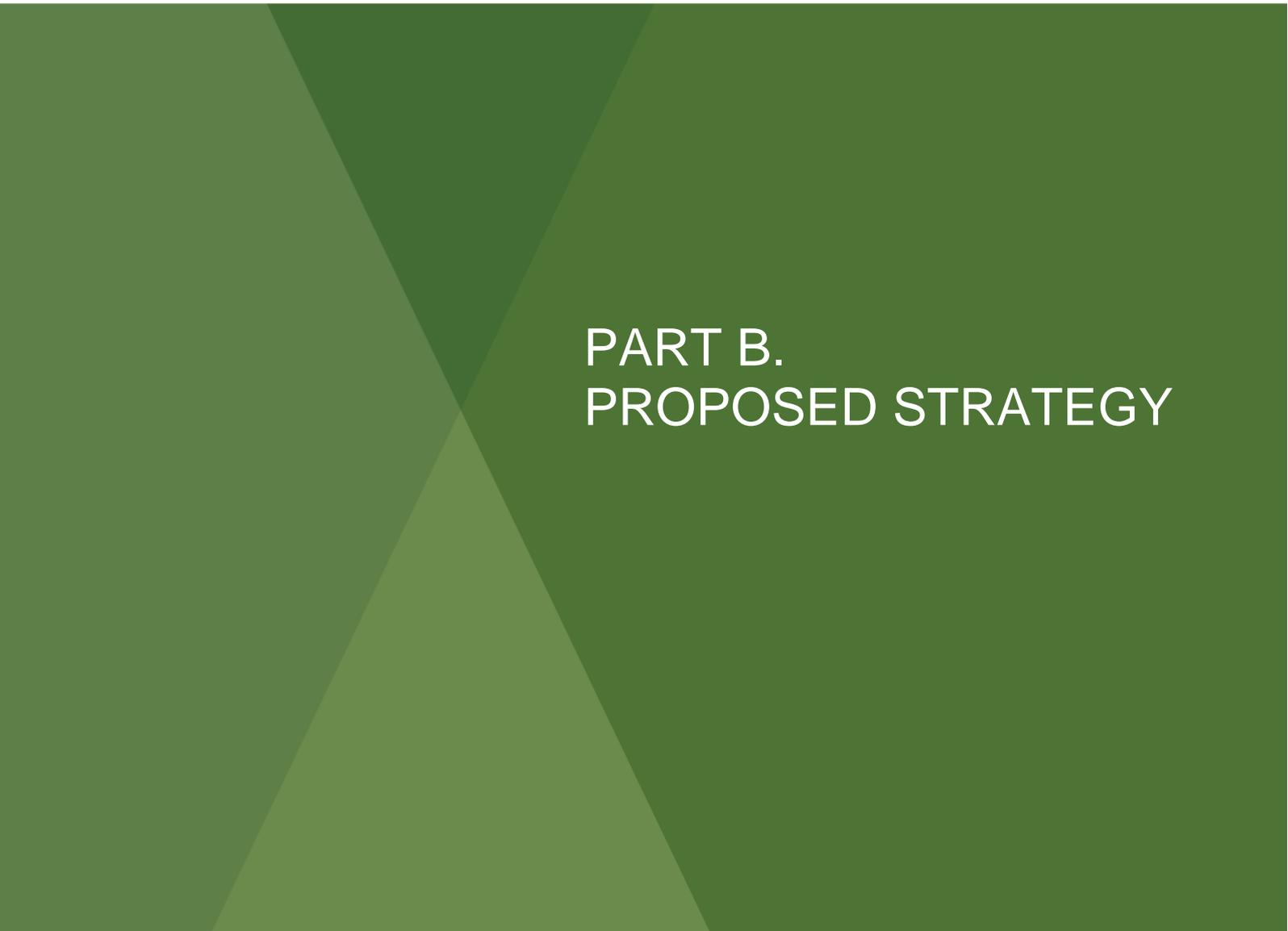
QUEENSLAND FRUIT FLY IN VICTORIA

Qfly is a sub-tropical species which is native to Queensland that has established across New South Wales and Victoria.

Prior to 2013, Qfly work was focused on eradication efforts. As a result of ongoing and increasing outbreaks of Qfly in Victoria, on 1 July 2013, in consultation with industry bodies, the Victoria Government deregulated the movement of Qfly host material into and within the state with the exception of the Greater Sunraysia Pest Free Area. This change was implemented in recognition of the high cost of eradication and the associated impact of regulation for horticulturalists.

Since 2013 Victoria has been transitioning from government-led regulation and eradication efforts to a shared responsibility model in recognition that Qfly is now established in Victoria. Under this model industry and community work in partnership with government to manage the impacts of fruit fly in their local region. At the time, additional resources were applied to supporting industry in the delivery of area-wide management programs to improve market access and reduce management costs to growers.

Beyond the horticulture industry, fruit fly also impacts home and community gardens, limiting the ability of individuals to enjoy home grown produce. Equally, urban host plants/ trees that are not effectively managed can be a source of fruit fly populations that impact neighbouring farms. Management of Qfly to the required level across all properties, including backyards, remains a significant and important challenge for local communities.



PART B. PROPOSED STRATEGY

POLICY POSITION

Agriculture Victoria's current policy position is based on best practice biosecurity principles and has been informed by a range of analyses. To establish the policy position Agriculture Victoria has also considered other key factors including:

- the existing national strategies and intergovernmental agreements
- the status of fruit fly in Victoria and across Australia
- the threat of exotic fruit fly
- the impacts of fruit fly as a horticultural pest, including on-farm and impacts on trade and market access
- the benefits and beneficiaries of regional area-wide management
- the industry and government's ability/capacity to respond to fruit fly incursions.

Principles

Fundamental principles

- Management of fruit fly in Victoria is a shared responsibility between the Victorian government, fruit fly impacted industries and the broader community.
- Agriculture Victoria's primary responsibilities are leading responses to exotic species (i.e. preparedness, prevention and eradication) and facilitating domestic and international market access.
- Management of established pests, such as Qfly, is the responsibility of landowners. Established pest management is most effective where industry and community work collectively; government may also invest where a commitment to collective action is demonstrated.
- Delivery of on-farm and community actions for established fruit fly species is best led by fruit fly impacted industries, local councils and community stakeholders.
- Victoria has a responsibility to contribute to the national fruit fly system.
- The priority for the Victorian government's fruit fly trapping network is early detection of exotic species and to support area freedom claims.
- An effective state-wide fruit fly management system requires contributions (including activity delivery) by all stakeholders in a coordinated manner so there is minimal duplication and all efforts are recognised
- Government funding decisions must consider return on investment, risk creators and beneficiaries.

Key assumptions

- The extensive host range of fruit fly, degree of host susceptibility and timing of harvests presents unique management needs in different regions
- Fruit fly can be managed effectively on-farm and through pre- and post-harvest treatments, as demonstrated by increasing horticultural exports throughout the period of Qfly establishment in Victoria.
- Implementation of the Action Plan has raised awareness and established structures that support area-wide management of Qfly off-farm in the broader community.
- The regionally specific action plans showed a significant, tangible benefit in the off-farm management of Qfly.
- The utilisation of effective treatment protocols (pre- and post-harvest) has enabled produce from the Greater Sunraysia region to continue to be traded successfully despite the PFA not being recognised by international export markets.
- Industry and other stakeholder surveillance for exotic and established species may be integrated with government data to support market access.

PROPOSED STRATEGIC OBJECTIVE AND ACTIVITY AREAS

Overview

The proposed strategy guides Victoria's approach to the management of fruit fly. It provides for Agriculture Victoria's focus on managing the risk of exotic incursions (including Medfly) by prioritising preparedness and prevention activities and strengthens shared responsibility in the management of Qfly. To develop the proposed strategy, Agriculture Victoria has considered:

- the performance of the horticulture sector
- the threat posed by exotic fruit fly species (including Medfly)
- the established status of Queensland fruit fly
- principles of best practice biosecurity
- related strategies and agreements
- information provided by studies and analyses
- the local, national and international landscapes
- stakeholder relationships.

The strategy also aligns with the *National Fruit Fly Strategy 2020-2025*. This is important because Victoria operates as part of a national system to support domestic and international trade and market access.

The proposed strategic objective and activity areas are outlined in Figure 3.

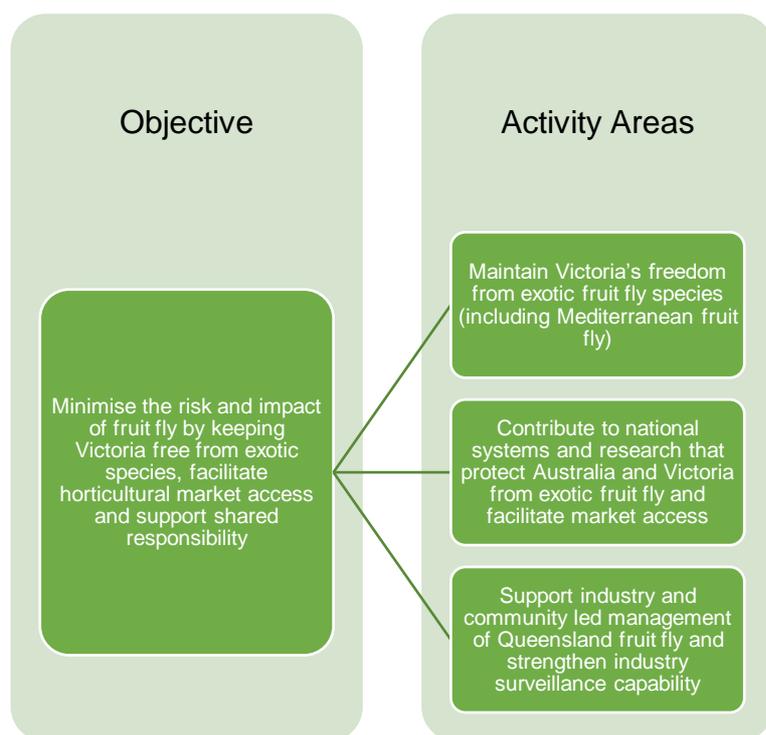


Figure 3. Outline of strategic objective and three activity areas

Question 1

What are your views on the proposed strategic objective and the three activity areas?

ACTIVITY AREA 1: MAINTAIN VICTORIA'S FREEDOM FROM EXOTIC FRUIT FLY SPECIES (INCLUDING MEDITERRANEAN FRUIT FLY)

The outcomes and activities under Activity Area 1 are mostly led by government with support from stakeholders. It should be noted that Agriculture Victoria's core business includes a broad range of activities that will achieve the outcomes of Activity Area 1, which are already being delivered to minimise the risk and impact of fruit fly on Victorian horticulture. These activities along with new strategic projects will contribute to the overarching strategic objective.

These activities align with the NFFS Priority Areas 1, 3, 5, 6 and 7.

Preparedness and Response

Outcome: Victoria is able to effectively respond to exotic fruit flies and maintain market access

Diagnostic Services	Victoria's technical expertise and equipment capability is maintained and improved.
Reference Collections	Victoria's insect collection maintains relevant specimens to facilitate diagnosis and support market access requirements.
Simulation Exercises	Victoria's response systems and people are 'mission ready' and regularly tested and practiced through functional activities.
Contingency Plans	Appropriate contingency plans are in place for all significant fruit fly species for Victoria to ensure a consistent and effective response.
Medfly Planning	Victoria has an agreed response strategy in place and resources determined to enable an effective response to a Medfly detection.
Torres Strait Exotic Fruit Fly Eradication	Victoria provides financial and technical contributions to the national eradication of exotic fruit flies from the Torres Strait to protect Victorian industries.

Surveillance

Outcome: Early detection of exotic species facilitates effective response and claims of pest status are validated

Trapping Network	Victoria's trapping network provides confidence for early detection of exotic species and supports pest status claims for market access.
Investigating Public Reports	Reports of suspect exotic fruit flies are encouraged, and Agriculture Victoria effectively and rapidly undertakes appropriate investigations.
National Plant Health Surveillance	The Victorian component of the national plant health surveillance program (targeted to ports of entry/high risk sites) is effectively delivered.
Urban Plant Health Network	Biosecurity awareness in urban environments is enhanced to facilitate increased reporting of suspect pests, including fruit fly.

Strategic Project - Future of the Greater Sunraysia Pest Free Area (GSPFA)

Outcome: Victoria is able to make an informed decision about the future of the GSPFA

Agriculture Victoria is leading a collaborative project with the New South Wales Department of Primary Industries and DAWE, to determine the future of the GSPFA.

The GSPFA was established in 2007. In 2014, the governments suspended the area freedom status and ceased Qfly eradication activities for approximately 200 outbreaks in the area at the time. Area freedom status has not been reinstated.

The project considers that reinstatement of the GSPFA would initially require significant, coordinated government and industry investment to attempt eradication of Qfly. Should eradication be successful, a continued effort would be required to sustain the pest free status for several years before it may be recognised as a PFA for market access.

Note: This review is due to be completed by June 2021 and is subject to consultation with stakeholders.

Strategic Project - Optimising the Victorian Fruit Fly Trapping Network

Outcome: Victoria is able to make informed decisions to optimise the trapping network to strengthen surveillance for exotic species

Agriculture Victoria is undertaking a review of the fruit fly trapping network. The trapping network in Victoria has evolved to meet changing levels of risk, needs of stakeholders and status of pest freedom across regions. The review was initiated in the interest of best practice and continuous improvement. The objective is to ensure that Victoria's trapping network is fit for purpose and provides the best protection for Victoria.

Any re-design of the trapping network will be primarily focussed upon early detection of exotic fruit fly, including the increasing threat of Medfly. The current trapping network also targets high risk sites of entry as part of the *National Plant Health Surveillance* (NPHS) program. The requirements of the NPHS will be maintained under any re-design of Victoria's trapping network.

Note: This review is due to be completed by June 2021 and is subject to consultation with stakeholders.

Question 2

How do you think you could support government to maintain Victoria's freedom from exotic fruit flies?

Question 3

What is your view on the future of the Greater Sunraysia Pest Free Area?

Question 4

What is your view on how to optimise Victoria's fruit fly trapping network?

ACTIVITY AREA 2: CONTRIBUTE TO NATIONAL SYSTEMS AND RESEARCH THAT PROTECTS AUSTRALIA AND VICTORIA FROM EXOTIC FRUIT FLY AND FACILITATE MARKET ACCESS

The outcomes and activities under Activity Area 2 will be predominantly led by government with participation from stakeholders, particularly for the domestic quarantine and market access outcomes. It should be noted that Agriculture Victoria's core business includes a broad range of activities that will achieve the outcomes of Activity Area 2, which are already being delivered to minimise the risk and impact of fruit fly on Victorian horticulture. These activities along with research projects already underway and new strategic projects will contribute to the overarching strategic objective.

These activities align with the NFFS Priority Areas 1, 3, 4, 5, 6, 7, 8

Domestic Quarantine and Market Access

Outcome: Treatment and movement of plant and plant products in and out of Victoria is effectively regulated

Regulation	Victoria delivers effective and efficient regulation including Interstate Certificate Assurance; application of the Code of Practice and phytosanitary treatment standards; administration of the online Plant Quarantine Manual and industry notification processes.
Proof of Freedom	Victoria delivers an area freedom program for Medfly covering legislation, awareness, surveillance and corrective action. Treatment and host list for Medfly importation orders are maintained.

International Market Access

Outcome: International market access is actively facilitated by Agriculture Victoria

Manage Relationships	Victoria builds and maintains relationships with DAWE, peak industry bodies, and trading partners
Facilitate Trade	Victoria supports DAWE in making technical assessments to facilitate trade
National Partnerships	Victoria works collaboratively with the Commonwealth and State and Territory governments, industry and community stakeholders

Research Projects - Projects underway at Agriculture Victoria Research

Outcome: Surveillance, diagnostics and management is improved through development and application of new technologies and practices

- A national biocontrol program to manage pest fruit flies in Australia
- Parasitoids for the management of fruit flies in Australia
- Qfly trapping in Table Grapes
- New Integrated Pest Management tools for insect pests of biosecurity significance
- Phenology, demography and distribution of fruit flies (Metabarcoding and LAMP)
- Post factory pilot for SITPlus
- Mortality of Qfly in cherries following hydrocooling and packhouse surveillance
- Host suitability of strawberry and Rubus for Queensland fruit fly
- Boosting diagnostics for plant production industries (Spotted wing drosophila)

Question 5

What are your views on Victoria's contribution to the national fruit fly system?

Question 6

How do you think you can best support the national fruit fly system and market access?

ACTIVITY AREA 3: SUPPORT INDUSTRY AND COMMUNITY LED MANAGEMENT OF QUEENSLAND FRUIT FLY AND STRENGTHEN INDUSTRY SURVEILLANCE CAPABILITY

The outcomes and activities under Activity Area 3 will be most appropriately led by industry, community and local government – with support from the state government. These activities along with proposed strategic projects may contribute to addressing regional and local priorities and the overarching strategic objective.

These activities align with the NFFS Priority Areas 2, 3, 5, 7 and 8.

Government Funding

It is important to note that any government investment for area-wide management programs post 1 July 2021 will be subject to funding under the State Budget process.

Sustainable Funding Models

Sustainable funding mechanisms available for industries to secure funds for biosecurity activities, that could be used for plant biosecurity initiatives, including Qfly area-wide management programs include:

- state or regionally focused levy-funding mechanisms are enabled under Victoria's *Agricultural Industry Development Act 1990* (AIDA). The AIDA is administered by the department and normally directed towards industry specific, state or regionally based industry development issues, including biosecurity outcomes; or
- voluntary contributions which are driven by coordinated groups of like-minded businesses where a subscription arrangement is set up to support activities of an industry association or its initiatives.

Regional Programs

Outcome: Industry and community have ownership of area-wide management priorities and have capability to deliver regional programs

Area-wide Management	Support regional stakeholders to continue area-wide management programs
Sustainable Funding	Facilitate access to a sustainable funding model for regional priorities

Community Awareness

Outcome: Increase community awareness of fruit fly risks, impacts and management

Awareness Campaign	Develop and promote education materials for off-farm and private garden management
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Strategic Project - Sustainable Funding for Regional Programs

Outcome: *The horticulture industry in Victoria has a sustainable funding model that provides for shared contribution to area-wide management of Qfly across the three key horticulture regions of Greater Sunraysia, Goulburn Murray Valley and Yarra Valley*

In response to the Evaluation of Action Plan and the Transition Plans provided by the Governance Groups around the value of regional areawide management programs, Agriculture Victoria is committed to support industry and local government to establish a sustainable funding model. The model may include both financial and in-kind resources that support area-wide management objectives for the regions.

Note: This project is subject to consultation with stakeholders.

Strategic Project - Industry Surveillance Model

Outcome: *The horticulture industry has a surveillance system that increases the identification and reporting of fruit fly (and other plant pests) by horticulturalist and primary producers to deliver a biosecurity service that protects the horticulture industry*

In response to findings from independent analyses, that highlighted the importance a trapping network that covers production areas to help support management decisions, and the inherent value of strengthening exotic surveillance, Agriculture Victoria is proposing to develop an industry surveillance model for horticulture. The program would be delivered by Agriculture Victoria, in collaboration with major horticultural companies, a network of private consultants and primary producers.

Note: This project is subject to a feasibility study and consultation with stakeholders. Development would likely commence in 2022.

Question 7

How important do you think area-wide management programs are in your region?

Question 8

What governance structure do you think would work best for area-wide management?

Question 9

What type of funding model do you think would work best for your region (or all regions)?

Question 10

What/ how could your organisation contribute (financial or in-kind) to area-wide management?

Question 11

What do you think of, and how could you support, an industry surveillance model?

Question 12

What are the most important topics for community awareness campaigns?



PART C. BACKGROUND INFORMATION

BEST PRACTICE BIOSECURITY

Investment Principles

The Generalised Invasion Curve for pest management (Figure 2) shows the invasion continuum and the associated gradient of return on investment for management of pests. Investment in actions relating to prevention and eradication will provide a greater economic return than investments focussed on containment and long-term control. Nonetheless, not all prevention and eradication efforts are successful, and therefore containment and long-term control may be required. For significant pests such as fruit fly, there are likely to be varying roles for governments, industries and other stakeholders across the invasion curve.

Government investment in pest activities utilises the invasion curve principles, with a key focus on prevention and eradication. This includes conducting early detection surveillance, implementing risk mitigation measures on high-risk pathways and maintaining emergency response capability. In addition, governments have a significant role in containment given they have the legislative powers to implement movement conditions on high risk pests, commodities and risk pathways. Industries also contribute to prevention and eradication through on-farm biosecurity planning and preparedness activities, participating in surveillance, reporting of suspect exotic species and by raising awareness of key pest threats among growers and the supply chain.

Long-term control activities have traditionally been the remit of industries and landowners, with examples of government investment in community/industry led actions demonstrating valuable support for beneficial outcomes.

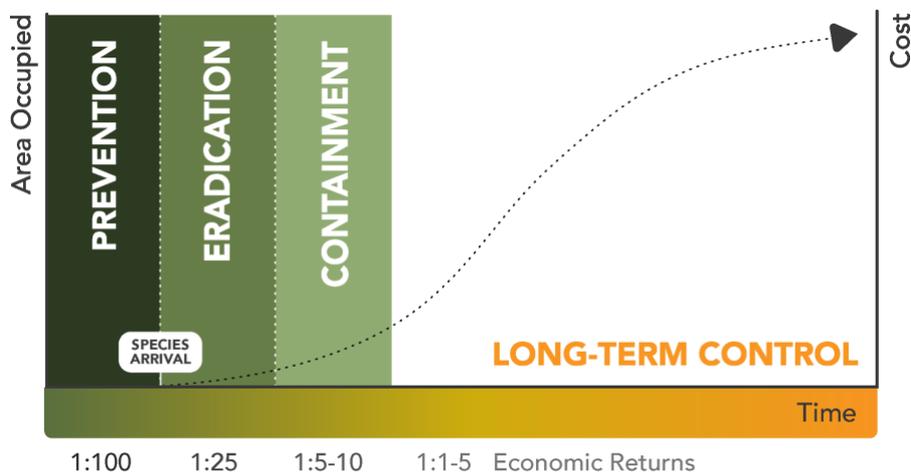


Figure 2. Generalised Invasion Curve for pest management, showing appropriate actions at each stage²

Beneficiaries

Generally, government investment identifies risk creators and beneficiaries, and identifies whether significant benefits are achieved from avoided future impacts of the pest if government does not intervene. Cost recovery from risk creators or beneficiaries of these avoided impacts is assessed in proportion to the risk created or benefits received. This is the principle under which the *Emergency Plant Pest Response Deed* (EPPRD) operates, which many Victorian horticultural industries are signatories to.

Regarding fruit fly in Victoria, there is a shared responsibility by government who is best placed to limit risks and respond to incursions and industry and the broader community, who are beneficiaries. Community beneficiaries are less well defined, particularly in the management of off-farm plants and trees that could host fruit fly populations and impact neighbouring farms.

Sharing costs and benefits has been given significant attention recent years. For example, Access Economics (2012) identified a 60:40 to 70:30 industry: government cost sharing ratio for collective approaches to managing Qfly in the Greater Sunraysia Pest Free Area. This reflected the status of Qfly at the time (i.e. it was not considered an established pest) and recognised that the broader community was at least a partial beneficiary of eradication efforts.

More recent analysis clearly identifies Qfly as an established pest in Victoria. Consistent with this and principles associated with the EPPRD, Qfly has become a business as usual management issue for industry and the community. The role for government reflects this with its focus on providing credible management information, supporting targeted research and development priorities and facilitating trade and market access to Qfly sensitive markets.

² Source: Invasive Species Centre

Exotic fruit fly risk management

Exotic fruit fly poses a significant biosecurity threat to the community and a range of industries involved in the cultivation, distribution and marketing of Victorian-produced fresh fruit and vegetables. Absence of exotic fruit fly benefits horticulture industries, enabling them to trade with few impositions, reduced management or on-farm costs, and benefits the consumer who can buy fresh fruit and vegetables on demand, and grow sensitive crops in domestic and amenity locations.

Established fruit fly management

Economic studies show that the main beneficiaries of Qfly management are primary producers. Horticultural businesses realise premium returns for selling produce into Qfly sensitive domestic and international markets. Other jurisdictions also benefit from state-wide management and post-harvest treatment of Qfly as this suppresses populations and helps to prevent spread to states that are fruit fly free. As an established pest, management of Qfly should be considered a business as usual cost of production for horticultural enterprises.

Off-farm issues

Public and local communities, both rural and urban, benefit from area-wide management of fruit fly. Fruit flies can impact home and community gardens, undermining the benefits of home-grown produce. Effective management of fruit fly ensures home and community gardeners can grow their own produce. Managing fruit fly populations and hosts plants/trees off-farm is also important to reduce impacts on neighbouring farms.

NATIONAL STRATEGIES AND AGREEMENTS

National Fruit Fly Strategy

The *National Fruit Fly Strategy 2020-2025* (NFFS) has recently been finalised by the National Fruit Fly Council (NFFC) in consultation with a broad range of stakeholders. The purpose of the strategy is to provide a national framework for governments, industry and research providers and funders to advance fruit fly management in Australia. Importantly it is hoped the strategy can help to strengthen coordination of regional or commodity-specific fruit fly plans and their contribution to the national system. The NFFS has four key objectives:

- Maintain Australia’s freedom from exotic fruit fly
- Minimise the incidence and spread of fruit fly
- Implement national systems that support market access
- Facilitate a cooperative and committed national approach to fruit fly management.

The NFFS states that national coordination of fruit fly management is aligned with the broad strategic framework for plant biosecurity, spearheaded by the *Intergovernmental Agreement on Biosecurity* which cascades into a range of plant specific national strategic plans. These strategies include the *National Plant Biosecurity Strategy*, *National Plant Biosecurity Diagnostic Strategy* and the *National Plant Biosecurity Surveillance Strategy*. State based strategies, such as the subject of this discussion paper, also have important linkages with NFFS. These relationships are shown in Figure 1.

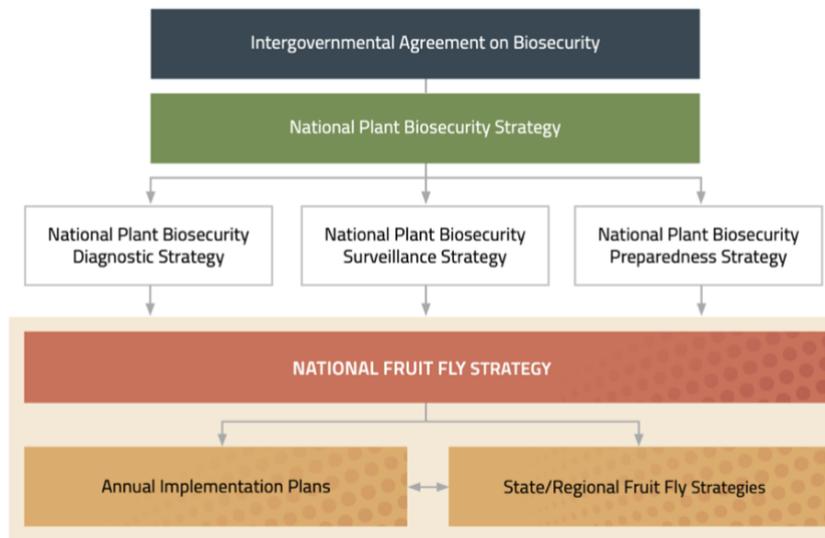


Figure 1. Linkages between National strategies and agreements and state/ regional strategies³

³ Extract from the *National Fruit Fly Strategy 2020-2025*

Intergovernmental Agreement for Fruit Fly

The *Intergovernmental Agreement on Strengthening Australia's Fruit Fly Management System* contributes to strengthening the national fruit fly management system with a focus on funding research, development and extension activities that will be of national benefit. All state, territory and Commonwealth governments are signatories to the agreement.

Key principles include that biosecurity is a shared responsibility, and that decisions are science-based and funded by all participants according to the risks created and benefits gained. The agreement states that a nationally coordinated management system will protect farm productivity and profitability, grow Australia's access to key international markets, support regional jobs, and safeguard our unique environment and way of life.

The objective of the agreement is as follows:

- Australia, including its external territories, will remain free from exotic fruit fly species that affect other parts of the world.
- The parties will actively manage established and native fruit fly species to limit their distribution and ensure regions of Australia remain free of these species.

The agreement sets out the expected contribution from states and territories towards a research, development and extension program, and the co-funding and administration by the Commonwealth Government to support the delivery of a strengthened national approach to managing fruit fly.

East West Distribution Principle

The East West Distribution Principle articulates (in broad terms) that Medfly is absent from the eastern states of Australia and Qfly is absent from Western Australia⁴. As such, the principle provides recognition of pest freedom (respectively) for eastern and western states and territories. Horticulture industries in Australia obtain market access benefits because of the acceptance of the east west distribution of fruit flies by trading partners.

CURRENT PROGRAMS IN VICTORIA

Fruit Fly Action Plan and Grants Program

In 2015, the Victorian Government introduced the Action Plan that aimed to improve government, industry and community collaboration and embed a shared responsibility model for Qfly management. Since 2015, grants totalling \$8.6 million have been paid to deliver area-wide management programs across Victoria's three key horticultural regions, Greater Sunraysia, Goulburn Murray Valley and the Yarra Valley, and to raise state-wide awareness of Qfly management issues.

The Action Plan and grants were due to conclude on 30 June 2020 however, the Victorian Government extended the program for an additional 12 months to provide program continuity while the new strategic direction is finalised in consultation with stakeholders. The Action Plan and grants program will now conclude on 30 June 2021.

Greater Sunraysia Pest Free Area for Queensland Fruit Fly

The GSPFA was established in 2007. It recognised the horticultural production region spanning part of north west Victoria and south west New South Wales to be free of Qfly. This allowed produce to be sent to countries such as Japan, the USA and New Zealand, without the need for in-transit treatment, providing cost-effective export outcomes.

The GSPFA was voluntarily suspended in 2014. This occurred upon agreement of industry and government, due to the number (approximately 200) and regularity of outbreaks in the area. Unless renewed, the current order for the GSPFA will lapse in July 2021.

Since the establishment of Qfly in Sunraysia, the government has continued to work with industry to secure domestic and international trade and market access opportunities. This occurs under treatment protocols including chemical treatments, fumigation, and cold disinfestation.

In July 2014, at the request of industry, the Victorian and NSW governments established the GSPFA Industry Development Committee (IDC) for a four-year term. The IDC was empowered to charge a levy to citrus fruit, stonefruit and table grape producers in the Greater Sunraysia region in return for the provision of services to eradicate Qfly.

In April 2018, a poll to continue the order for another four years failed to secure the minimum voter turnout. In September 2018, the grower groups confirmed that they would not request to re-establish the order for the eradication of Qfly in Greater Sunraysia.

⁴ The absence of Mediterranean fruit fly in all Australian states and territories except Western Australia (with the exception of the Ord River Irrigation Area), and the absence of Queensland fruit fly in Western Australia (with Tasmania and South Australia free of both pests).

INDEPENDENT ANALYSES

Agriculture Victoria commissioned a range of analyses and reviews to inform decision making for the future management of fruit fly in Victoria.

Cost Benefit Analysis on Queensland Fruit Fly

Since 2009, several Cost Benefit Analyses (CBA) have been undertaken for Victoria and/or regions of the state and these have shown various benefits and costs associated with Qfly management strategies. More recently a CBA was undertaken by Deloitte Access Economics (2019) to evaluate Qfly management options associated primarily with establishing Pest Free Areas (PFAs). It considered the following scenarios:

- base case of meeting state and national obligations only (i.e. for trade, phytosanitary certification etc)
- base case plus community support through government led state-wide and regional action plans (RAPs)
- base case plus establishing PFAs.

The analysis concluded that RAPs focussing on controlling the pest in key areas rather than complete eradication of Qfly, provided the most cost-effective outcome for Victoria. Such programs were likely to be effective in reducing pest pressure at a lower cost than PFAs, while reducing pest pressure, associated crop damage and private Qfly management costs. The costs of establishing and maintaining a PFA were estimated to be twice as high as any benefits obtained (avoided crop damage, avoided on farm management costs and reduced phytosanitary treatment).

In comparison, the regionally specific action plans showed a significant, tangible benefit. In particular, they showed that on average, cover spray costs were around \$150 per hectare across crop types, or about half of the anticipated cost of cover sprays under the Base Case. Other benefits indicated integrated pest management was also more viable. This translated to a Benefit Cost Ratio of around 4.5:1 and industry also reported that this was a significant benefit as far as market access was concerned.

However, due to the relatively short duration of RAPs and limited data, further evaluation is required to fully understand the longer-term benefits and costs of such initiatives. Victoria's Action Plan was also the subject of a separate evaluation process, as outlined in the following section.

Evaluation of the Managing Fruit Fly in Victoria Action Plan

An evaluation of the Action Plan was commissioned by Agriculture Victoria and undertaken by First Person Consulting in 2019. The evaluation found that the program has increased awareness of management techniques and greater coordination of fruit fly activities between government, industry and the community. For example, in feedback, most stakeholders noted an increase in industry and community engagement in fruit fly management. Most industry representatives reported a change to awareness and uptake of best practice approaches to fruit fly management, and a diversification of the management techniques used to control fruit fly populations on their properties.

Regional Action Plans facilitated the development of local and region-specific collaboration and action among affected stakeholders. Feedback from stakeholders indicated that the Action Plan contributed to effective fruit fly management. For example:

- community and industry stakeholders acknowledge that they have a shared responsibility to manage Qfly, particularly on their properties
- most stakeholders reported that collaboration and coordination has increased as a result of the Action Plan
- the Action Plan governance model has been recognised as important to fostering collaboration and coordination
- stakeholders indicated that their community has become more involved in fruit fly management as a result of work done through the grants program.

Governance Groups Transition Plans

In 2019, with the Action Plan and associated grants program nearing completion, Agriculture Victoria requested Transition Plans from the Greater Sunraysia, Goulburn Murray Valley and Yarra Valley Governance Groups. Consistent across all three transition plans was support for an area wide management approach for Qfly. The objective being to reduce pest pressure, reduce on-farm costs, minimise use of chemical treatments, and avoid crop losses.

The groups highlighted the importance of surveillance to inform targeted management. Greater Sunraysia and Yarra Valley prioritised surveillance as the highest priority; to inform targeted suppression activities. Further, Goulburn Murray Valley noted that surveillance informed population prevalence and movement; with surveillance data actively applied to on-farm management decision making by growers. A strong focus on community awareness was a common theme across the Transition Plans. Particularly the need for ongoing communication with the community to minimise the risk of off-farm populations impacting farms.

The value of the three Regional Coordinator roles and the work they do within and across the regions was strongly emphasised. All groups noted the preference for government funding of regional area-wide management to continue.

REFERENCES

Managing Fruit Fly in Victoria Action Plan 2015-2020, November 2015, Copyright State of Victoria

National Fruit Fly Strategy 2020-25, National Fruit Fly Council (2020), Plant Health Australia, Copyright Plant Health Australia 2020

Victorian Food and Fibre Export Performance Report 2018-19, December 2019, Copyright State Government of Victoria 2019

Intergovernmental Agreement on Strengthening Australia's Fruit Fly Management System, 2019, Department of Agriculture, Water and the Environment

Queensland Fruit Fly: Agriculture Victoria Final Report 2019, October 2019, Copyright Deloitte Access Economics. Deloitte Touche Tohmatsu

Fruit Fly Action Plan Evaluation Report, October 2019, First Person Consulting Pty Ltd

APPENDIX 1 – SUMMARY OF CONSULTATION QUESTIONS

1. What are your views on the proposed strategic objective and the three activity areas?
2. How do you think you could support government to maintain Victoria's freedom from exotic fruit flies?
3. What is your view on the future of the Greater Sunraysia Pest Free Area?
4. What is your view on how to optimise Victoria's fruit fly trapping network?
5. What are your views on Victoria's contribution to the national fruit fly system?
6. How do you think you can best support the national fruit fly system and market access?
7. How important do you think area-wide management programs are in your region?
8. What governance structure do you think would work best for area-wide management?
9. What type of funding model do you think would work best for your region (or all regions)?
10. What/ how could your organisation contribute (financial or in-kind) to area-wide management?
11. What do you think of, and how could you support, an industry surveillance model?
12. What are the most important topics for community awareness campaigns?