



Our ref: CORP F2025/000298
Receipt No: 22255823

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23 December 2025

Removed from Disclosure Log

Dear [Removed from Disclosure Log]

Determination under the *Freedom of Information Act 1991*

I refer to your application made under the *Freedom of Information Act 1991* which was received by the Department of Primary Industries and Regions (PIRSA) on 29 September 2025, seeking access to the following:

“How many Trees are visibly infected by the Giant Pine Scale at Hope Reservoir & Elliston Reserve, Hope Valley in the recent discovery which is prompting the 1500 Tree removal.

How many Trees were infected when the first 600 were removed at the same location.

What method of discovery was used to detect the Giant Pine Scale.

How often were the Trees inspected since the first outbreak.”

Timeframe: 28/01/2019 to 28/09/2025

Pursuant to Section 13(d) of the Freedom of Information Act, on 29 September 2025, contact was made with you by PIRSA's Records Management and Freedom of Information Support Officer seeking the types of documents you are requesting.

On 7 November 2025, you were contacted again as a response had not been received and you subsequently advised that you are seeking “*any documents that answer my questions*”.

Following internal enquiries undertaken, it was established that the documents could be identified by capturing *any* documents, not *every* document, that contain the answers to your questions. Accordingly, pursuant to Section 13(d) of the Freedom of Information Act, your application became valid on 14 November 2025.

On 11 December 2025, PIRSA's Senior Freedom of Information Advisor contacted you seeking an extension to the legislative timeframe until 23 December 2025, in which you accepted.

Accordingly, the following determination has been finalised.

I have located six documents that are captured within the scope of your request.

Determination 1

I have determined that access to the following documents is **granted in full**:

| Doc No. | Description of document | No. of Pages |
|---------|---|--------------|
| 2 | Giant Pine Scale – Extra Information – June 2025 (refers to questions 1, 2 and 3 of the application) | 1 |
| 6 | SA Water - Hope Valley Reservoir Reserve - Operational plan for the removal of Giant Pine Scale infested trees (refers to questions 1, 2 and 3 of the application) | 10 |

The information removed from the above documents is outside of the scope of your request.

Determination 2

I have determined that access to the following document is **granted in part**:

| Doc No. | Description of document | No. of Pages |
|---------|---|--------------|
| 3 | Draft Minute from Giant Pine Scale Working Group to Chief Executive PIRSA, SA Water, Department for Environment and Water, Forestry SA, Department for Housing and Urban Development and Renewal SA dated 7/7/2025 re risk status of Giant Pine Scale on agency land (refers to questions 1, 2 and 3 of the application) | 3 |

The information removed from the above document is pursuant to Clause 1(1)(e) of Schedule 1 of the Freedom of Information Act which states:

“1 – Cabinet documents

(1) A document is an exempt document –

(e) if it contains matter the disclosure of which would disclose information concerning any deliberation or decision of Cabinet;”

The information removed pursuant to Clause 1(1)(e) would reveal detail of a matter considered in Cabinet.

The remaining information removed is outside of the scope of your request.

Determination 3

I have determined that access to the following documents is **granted in part**:

| Doc No. | Description of document | No. of Pages |
|---------|---|--------------|
| 4 | Giant Pine Scale Report – Hope Valley 22/23 (refers to questions 2 and 3 of the application) | 5 |
| 5 | Minute from Chief Executive, PIRSA to Minister for Primary Industries and Regional Development dated 8/11/2023 re Update on Giant Pine Scale detection at Hope Valley and Highbury, South Australia (refers to questions 2 and 3 of the application) | 4 |

The information removed from the above documents is pursuant to Clause 6(1) of Schedule 1 of the Freedom of Information Act which states:

“6 - Documents affecting personal affairs

(1) A document is an exempt document if it contains matter the disclosure of which would involve the unreasonable disclosure of information concerning the personal affairs of any person (living or dead).”

The information removed consists of the mobile telephone numbers of Departmental officers.

The term ‘personal affairs’ has been held to involve ‘matters of private concern to an individual’ and the ‘composite collection of activities personal to the individual concerned’.

As a mobile telephone number allows a person, including an officer of an agency, to be contacted outside of business hours and is information that is not ordinarily available to the public, the information is taken to concern the personal affairs of an individual.

Accordingly, it is considered that disclosure of this information would be an unreasonable intrusion into the privacy rights of the individuals concerned.

Determination 4

I have determined that access to the following document is **refused**:

| Doc No. | Description of document | No. of Pages |
|---------|--|--------------|
| 1 | Draft Parliamentary Briefing Note dated 15/9/2025 and 28/10/2025 re Giant Pine Scale (refers to questions 1 and 3 of the application) | 11 |

Access to the above document is refused pursuant to Clause 17(c) of Schedule 1 of the Freedom of Information Act which states:

“17 – Documents subject to contempt etc

*A document is an exempt document if it contains matter the public disclosure of which would, but for any immunity of the Crown –
(c) infringe the privilege of Parliament.”*

The document consists of a draft briefing note which was specifically prepared for the purpose of use in proceedings in Parliament. Disclosure of this information would infringe the privilege of Parliament.

I am unable to locate documents in response to question 4 of your application. Following internal enquiries made, I am advised of the following:

- The engagement and contracting of staff who undertook tree inspections are coordinated directly by the forestry industry.
- Industry has conducted aerial surveys of all pine trees within a 5 km radius of known infestations and carried out ground surveillance within 2 km of infected sites, with targeted inspections extending to 5 km.
- General surveillance is coordinated throughout the year via a hotline and public reports to PIRSA, with staff regularly investigating suspected detections.
- Industry also conducts at least one structured surveillance round annually, timed to align with the pest's biology and when it is easiest to detect.

If you are dissatisfied with this determination, you are entitled to exercise your right of review and appeal as outlined in the attached documentation [Making a Freedom of Information Application | State Records of South Australia \(archives.sa.gov.au\)](#), by completing the “FOI Application Form for Internal Review of a Determination” and returning the completed form to:

Freedom of Information Principal Officer
Department of Primary Industries and Regions
GPO Box 1671
ADELAIDE SA 5001

or via email PIRSA.FOI@sa.gov.au

In accordance with the requirements of Premier and Cabinet Circular PC045, details of your application, and the documents to which you are given access, will be published in PIRSA's disclosure log. A copy of PC045 can be found at http://dpc.sa.gov.au/data/assets/pdf_file/0019/20818/PC045-Disclosure-Log-Policy.pdf

If you disagree with publication, please advise the undersigned in writing within fourteen calendar days from the date of this determination.

OFFICIAL

Should you require further information or clarification with respect to this matter, please contact Ms Lisa Farley, Senior Freedom of Information Advisor on 8429 0422 or email PIRSA.FOI@sa.gov.au.

Yours sincerely



Michelle Griffiths

**Accredited Freedom of Information Officer
DEPARTMENT OF PRIMARY INDUSTRIES AND REGIONS**



GIANT PINE SCALE

Extra info – June 2025



Out of scope



Land ownership and management

- Hope Valley Reservoir is owned and managed by SAWater.
- **Out of scope**

- Elliston Reserve is Crown land dedicated as a City of Tea Tree Gully reserve.
- **Out of scope**


Current infestations

- The Giant Pine Scale Working Group recommends the removal of about 500 at risk and infested pine trees at Hope Valley Reservoir. This includes all trees in a 50-metre buffer. Only around 20-30 were identified as infested during surveillance in March 2025.
- **Out of scope**



Out of scope



Technical info

- GPS can only live for about a month with no tree material to feed on. GPS can crawl up to 50 metres.
- Quarantine periods are counted from the last time GPS is detected on site. Sites are checked at least monthly until GPS is no longer detected and generally takes 3 to 6 months, depending on residual material or pine wildlings. PIRSA assists with confirming the end of the quarantine period.
- Further surveillance is planned to be conducted by AFPA in August/September which may identify infected trees that were previously undetected due to low levels of infestation that were not detected.

MINUTE forming **ENCLOSURE** to:

TO: CHIEF EXECUTIVE, PIRSA
CHIEF EXECUTIVE, SA WATER
CHIEF EXECUTIVE, DEW
CHIEF EXECUTIVE, FORESTRYSA
CHIEF EXECUTIVE, DHUD
CHIEF EXECUTIVE, RENEWAL SA


SUBJECT: RISK STATUS OF GIANT PINE SCALE ON AGENCY LAND

The purpose of this Minute is to inform Chief Executives of the current risk status of the Giant Pine Scale (GPS) incursion on agency land in metropolitan Adelaide, and present key recommendations for decision.

BACKGROUND

GPS presents as a serious biosecurity threat to urban forest assets in metropolitan Adelaide and the surrounding Mt Lofty Ranges, SA Government owned commercial forestry estate, and nationally significant softwood plantation industry interests in the Green Triangle. Actual and potential impacts range from a reduction in greenspace, degradation of food source for local wildlife, and economic impact to industry.

Out of scope



SITUATION REPORT

Extensive visual and detector dog surveillance across metropolitan Adelaide indicates the recent (2024-25) GPS incursion was limited to four (4) sites, all within the City of Tea Tree Gully Council, except for one infested tree that was at Holden Hill.

Out of scope









The remaining site to be managed is at the government's Hope Valley Reservoir Reserve. It is estimated that approximately 50 to 100 infected trees are located within a densely forested area of the reserve. To establish an effective buffer, this would require the removal of around 500 trees. In addition, there are approximately four infected trees on the boundary of the reserve along Grand Junction Road, now presenting similar risk of spread by passing vehicles, pedestrians and cyclists, as the overhanging trees on Awoonga Road removed in late 2024. Responding to this hazard would result in the removal of a further 50 trees to create the necessary buffer.

Out of scope

Surveillance 2-5 km around all known infestations points continues in 2025-26. Tree removals will be required if further infestations are detected in the surrounding areas.

Table 1: Current GPS incursion sites – Hope Valley / Out of scope

| Site | Current situation | Expected Future situation | Worst case scenario | Key management needs |
|--|---|---|---|--|
| Hope Valley Reservoir Reserve |  |  |  | <ul style="list-style-type: none"> Quarantine restrictions and ongoing surveillance Seedling and tree removals are critical Open pathway management is critical including public access |
| Out of scope | | | | |
| <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Infestation contained Low/Mod risk </div> <div style="text-align: center;">  Infestation uncontained Mod/High risk </div> <div style="text-align: center;">  Infestation response complex & costly High/Extreme risk </div> </div> | | | | |

Out of scope



Out of scope

From a GPS lifecycle perspective, we highlight that policy decisions and implementing operational activities ahead of adult GPS females producing eggs and eggs hatching between late September to December is highly critical.

Urgent removal of infested and at-risk trees at the Hope Valley Reservoir Reserve will reduce the risk of birds spreading GPS, while restricting access or putting in place appropriate hygiene stations is necessary to prevent spread by walkers or cyclists passing by, or the possibility that contractors or staff spread GPS to other SA Water sites.

Out of scope

KEY TAKEAWAYS

Note:

1. Out of scope

2. Clause 1(1)(e)

GIANT PINE SCALE WORKING GROUP

7 / 7 / 2025

Giant Pine Scale

Giant pine scale (*Marchalina hellenica*) is a scale insect that sucks the sap of pine trees. If established, the insect threatens Australia's softwood plantation industry.

Giant pine scale (GPS) has previously been detected in SA at Dernancourt (2014/15) and North Adelaide (2016), with delimiting surveillance undertaken within a 1km buffer of each detection.

The Australian Forest Products Association provided funding to undertake surveillance for GPS in South Australia during 2019/20 and 2021/22. This work focused on the previous Dernancourt and North Adelaide detections and extended 1 km. The aim was to detect any infestations linked to the two outbreaks. The current detections at the SA Water site are approximately 1.5 km from the Dernancourt sites and did not form part of the area surveyed in 2019 to 22.

Surveillance undertaken during 2019/20 and 2021/22 involved a survey of host trees in the vicinity of previous detections at Dernancourt and North Adelaide, and a targeted survey of sites determined to be a high risk of introducing and establishing GPS. No GPS was detected during surveillance from 2019/20 or 2021/22.

From 2019 to 22 detection of infected host trees was through "specific surveillance" undertaken by trained personnel and "general surveillance" undertaken by the public, which is enabled through raising awareness of the pest (Messenger newspaper and leaflet drops) and encouraging monitoring of host trees and reporting suspect infestations to PIRSA Biosecurity.

Hope Valley Giant Pine Scale Situation 30/06/2023

Giant pine scale was detected in Hope Valley reservoir on 17 April 2023 following a report from a tree felling contractor. The pest is no longer considered eradicable and is endemic in Australia, although it is only present in Victoria following SA successfully eradicating it in 2018.

The forestry industry has prevented the spread of the pest in Victoria, and an ongoing push to continue to contain and eradicate the pest were possible. With this new outbreak in SA the, PIRSA Forestry division has led industry engagement with stakeholders to look for a collaborative approach to managing the detection. This has led the working group to provide oversight and look for funding models to support eradicating this and future detections.

It is important to note that this is not a PIRSA Biosecurity Division response and is driven by industry with support from PIRSA.

Following the detection, a preliminary survey was conducted in June 2023. The surveillance was conducted 1 km around the detection point. To date, 2496 trees have been surveyed, with 13 being infected. The infected trees were found on three species: *pinus halepensis*, *pinus pinea* and *pinus radiata*.

There are a total of 41 trees identified for removal (indicated by an X on the trunk of the tree). This includes the 13 infected trees. Removal is based on the presence of GPS and adjacent trees with canopies touching. The trees are located at the south-eastern infection site, eight at the south-western infection site, 15 at the south-western edge of the reservoir and another two infected trees on the corner of tracks 5, 6, and 7 near gate 5 surrounded by approximately three infected juveniles.

The piles of trees initially identified have been cut down and remain on-site. Appropriate treatment/management of these piles is yet to be determined by the working group.

The work to date has mapped 2496 trees over five days, including the training of SA Water and Forestry SA staff. The orange polygons (see map) have not currently been surveyed. It is estimated that an additional five days will be required to complete the GPS survey inside the SA Water site, with an additional three days to finish surveying the 1km buffer outside the SA Water site in residential areas and council-owned reserves. Noting that there are areas within the SA Water site further then 1 km from the initial detection area.

Hope Valley Reservoir Giant Pine Scale Survey - 2023



Survey - 2023 - Points

GPS Status

- Absent
- Destroyed - Absent
- Destroyed - Present
- Present
- Yet To Be Surveyed



Government of South Australia
Department of Primary Industries
and Regions



SARDI SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE

Hope Valley Reservoir Giant Pine Scale Survey - 2023



Survey - 2023 - Points

GPS Status

- Absent
- Destroyed - Absent
- Destroyed - Present
- Present
- <all other values>
- ▭ Yet To Be Surveyed



Government of South Australia
Department of Primary Industries
and Regions



SARDI SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE

Hope Valley Reservoir Giant Pine Scale Survey - 2023



Survey - 2023 - Points

GPS Status

- Absent
- Destroyed - Absent
- Destroyed - Present
- Present
- Yet To Be Surveyed
- 1km_Buffer



Government of South Australia
Department of Primary Industries
and Regions



SARDI SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE



Minute to
Minister for Primary Industries and Regional Development
Minister for Forest Industries

Ref: A6051556

| | |
|---------------|--|
| For | Noting |
| Critical Date | Routine |
| Subject | Update on Giant Pine Scale detection at Hope Valley and Highbury, South Australia |

Synopsis

Giant Pine Scale (GPS) is a pest of concern for the plantation pine industry as well as for amenity tree plantings. GPS has been detected in Hope Valley and Highbury in South Australia. PIRSA is working with other stakeholders to provide technical advice and is participating in a response team on the pest. The Department has taken the lead in developing a communication plan to guide public messaging.

Recommendations

1. That you note PIRSA is working with ForestrySA and other stakeholders to manage the risks of Giant Pine Scale and communicate this process appropriately to the public.

NOTED

Clare Scriven

Hon Clare Scriven MLC

**Minister for Primary Industries
 and Regional Development**

Minister for Forest Industries

29 / 11 / 2023

Ministerial Comments

Background

- Giant Pine Scale (GPS) is a scale insect that originates in the eastern Mediterranean region, mainly in Greece and Turkey. It feeds exclusively on plants of the family Pinaceae, which includes pines, firs and spruces.
- GPS was subject to a national eradication program from 2015 when it was discovered in South Australia and in Victoria. In 2017 it was determined that it was not possible to eradicate GPS from Australia, in part because it is a difficult pest to detect with any certainty and also because chemical control treatments were shown to be ineffective. At that time, a 1-year transition to management program was enacted to assist industry to manage GPS in Australia.
- While GPS cannot be eradicated from Australia, until earlier this year, all known cases of GPS in South Australia were thought to have been eradicated.
- After it was agreed that GPS could not be eradicated, PIRSA met with several members of the forestry industry in 2017 and agreed that controls to prevent GPS from entering South Australia from Victoria should not be instigated given that the volume of movements of forestry material would make that difficult to apply and cause unnecessary impact on the industry.
- With the movement of pine products not regulated at the border, along with previous difficulties in surveying for the pest with any certainty, it's expected that infestations of GPS will continue to be found in South Australia from time to time.
- As a result of that consultation with industry in 2017, PIRSA has however agreed to retain GPS as a regulated pest under the Plant Health Act so that people are obliged to report if infestations are found. Doing so allows the forest industry to assess new detections and take action if any pose a direct threat to forest plantations.
- This briefing builds on the information previously provided in July 2023 (A5859019).

Discussion

- On 17 April 2023, GPS was detected in pine trees in a southern area of SA Water's Hope Valley Reservoir Reserve that was not accessible to the public.
- On 11 July 2023, GPS was detected in nearby Elliston Reserve, a public recreation area at Highbury which is about 100 m from the Hope Valley Reservoir Reserve detection. This is Crown Land managed by the City of Tea Tree Gully.
- On 4 August 2023, GPS was detected in an area of Highbury Aqueduct Reserve, a public recreation area managed by National Parks and Wildlife Service SA (NPWS).
- Following this, further detections were found in a northern area of Hope Valley Reservoir Reserve near the water treatment works in an area not accessible to the public.
- Surveillance is being undertaken to determine if the pest has spread further. To date GPS has not been detected elsewhere in South Australia.
- The endemic status of the pest in Australia means that PIRSA should not initiate or fund an eradication response to this pest and management of GPS rests with land managers, landowners, and industry.
- SA Water funded the initial removal of trees (approximately 100) detected on 17 April 2023 in Hope Valley Reservoir Reserve. ForestrySA has removed the trees at Elliston Reserve, Highbury Aqueduct Reserve, and the remaining trees in the SA Water's Hope Valley Reservoir Reserve at their cost. It is understood that ForestrySA is in discussions with SA Water and DEW about cost recovery.

- A response team led by ForestrySA, which is part of the South Australian forestry sector, is meeting regularly. Seven face-to-face meetings have been held with information and actions also being addressed by representatives out-of-session.
- The response team includes representatives from ForestrySA, PIRSA, SA Water, the Department for Environment and Water (DEW) through NPWS, City of Tea Tree Gully (CTTG), Australian Forest Products Association (AFPA), South Australian Forest Products Association (SAFPA), University of South Australia, Green Triangle Forest Industries Hub (GTFIH), and an independent expert. PIRSA is providing technical advice to the response.
- A priority of the response program is to protect our forest industries and amenity tree plantings through the urgent removal of infested trees, as this is currently the best-known option for eliminating giant pine scale and preventing its spread.

Stakeholder / regional impacts, consultation and engagement

- A summary of tree removals is provided in the following table:

| <i>Land Manager</i> | <i>Location</i> | <i>Number of trees removed/date</i> |
|----------------------------|-----------------------------|--|
| SA Water | Hope Valley - South | 150 (May 2023) |
| | Hope Valley - North | 50 (Sep 2023) |
| | Hope Valley - North | 400 (Nov 2023 – underway) |
| DEW | Highbury Aqueduct, Highbury | 125 (Aug 2023) |
| CTTG | Elliston Reserve, Highbury | 188 (Sep 2023) |
| Total | | 913 |

- On 1 August 2023, PIRSA issued a media release, asking residents in the area to be vigilant and report any signs of the pest.
- On 1 November 2023, PIRSA issued a second media release about the ongoing response against the pest and plans for rehabilitation of areas affected by tree removals.

Management of key risks

- ForestrySA is playing a key role in coordinating tree removals, chipping of infested material, and grinding of stumps. The SA forestry sector recognises that while it may not be possible to eradicate the pest from Australia, there is benefit in preventing the current infestation from spreading into nearby plantations. ForestrySA has been driving the process with PIRSA providing oversight and technical support.
- The forest industry is showing ownership and leading the eradication process by committing resources and planning. SA Water is supportive of the industry’s call to eliminate GPS in South Australia.
- While the CTTG, DEW, and SA Water have assisted through the response team, they have been cautious on communications. Therefore, PIRSA’s role in providing technical information and engaging the public in reporting detections has expanded to include the development of a communications plan to support the response team.
- The initial removal of trees from the Elliston Reserve caused a level of anxiety from the public that the area would be used for housing (which is not the case).
- PIRSA is also responding to calls from the public through its Exotic Plant Pest Hotline 1800 084 881 of suspect GPS.

Financial implications

- Nil



for
CHIEF EXECUTIVE
Department of Primary Industries and Regions

8/11/2023

| | |
|----------------------------|--|
| CONTACT | Jo Collins |
| POSITION | Executive Director |
| DIVISION | Industry, Strategy and Partnerships |
| MOBILE and LANDLINE | Clause 6(1) and 8429 2190 |
| Cleared by | Rob Robinson, Director Forest Industries |

Hope Valley Reservoir Reserve

Operational plan for the removal of Giant Pine Scale infested trees

Doc 6

| | | | |
|---------------------------------|--|------------------------------|---------------------------|
| Site Name: | Hope Valley Reservoir Reserve | | |
| Site Description: | <p>The site is located on a 157ha reserve located in the City of Tea Tree Gully, approximately 10 km northeast of Adelaide. Management responsibility for the site lies with SA Water.</p> <p>There are approximately 2600 Aleppo Pine trees (<i>Pinus halepensis</i>), varying in size, within the reserve. Pre-operational surveillance was completed in August 2025 with approximately 85 trees confirmed as infested with Giant Pine Scale (<i>Marchalina hellenica</i>, GPS).</p> <p>An infested area is defined by a 50 m buffer around infested trees. Where appropriate, infested areas have been merged to form a single operational zone, with a total of 7 operational zones across the site. This approach will enable efficient clearance work and reduce operational costs (<i>Figure 1</i>). There are approximately 1500 trees that need to be felled and mulched/chipped within the seven operational zones which cover an area of 44 ha in total</p> | | |
| Area (ha) of operations: | 44 ha across 7 operational areas | Period of Operations: | Sept 25 – end of Nov 2025 |
| Key activities | <ol style="list-style-type: none"> 1. Identify infested trees and 50m buffer areas prior to operation. <ul style="list-style-type: none"> o Pre-operations surveillance was completed in August 2025 by an experienced contractor to locate GPS infestations, determine 50m buffers and delimit operational zones. o Quality assurance checks - Dog surveys team used to inspect the boundaries of operational zones and ensure no low level infestations were missed. <p style="color: red;">Out of scope</p> <div style="background-color: #cccccc; height: 300px; width: 100%;"></div> | | |
| Indicative Timeline | | | |
| Contractor requirements | | | |

Site Map:



Figure 1. GPS infested trees (red dots) and at-risk trees (green and blue dots) within a 50 m buffer (red circles) within Hope Valley Reservoir (yellow hatched). Where appropriate buffers were consolidated into operational zones (black outlines). All trees to be removed from operational zones(1-7) to prevent further spread. Map based on August 2025 surveys.

Tree removals Plan:

Summary

The operation involves the felling, stacking and mulching of infested and at-risk trees within 50 m buffers, working from the perimeter into the infested zone across 7 different operational zones in the Hope Valley Reservoir (Figure 1; Appendix 1).

Out of scope



- Using ArcGIS FieldMaps (or similar) map and mark out with an X mark all the infested trees.
- Again, use ArcGIS FieldMaps to accurately measure and identify the trees within the 50m buffer. Mark out each tree not infested within the 50m buffer with a circle (see Figure 1 and Appendix 1). These markings help to ensure that the operations stay within the buffer area (the infested zone).

Out of scope





Out of scope



Identified Site Values
Identified & Actions

| | |
|--------------------------|--------------|
| | Out of scope |
| Site Management | |
| Stakeholder Notification | |
| Budget | Out of scope |

Key Operational Contacts

Out of scope

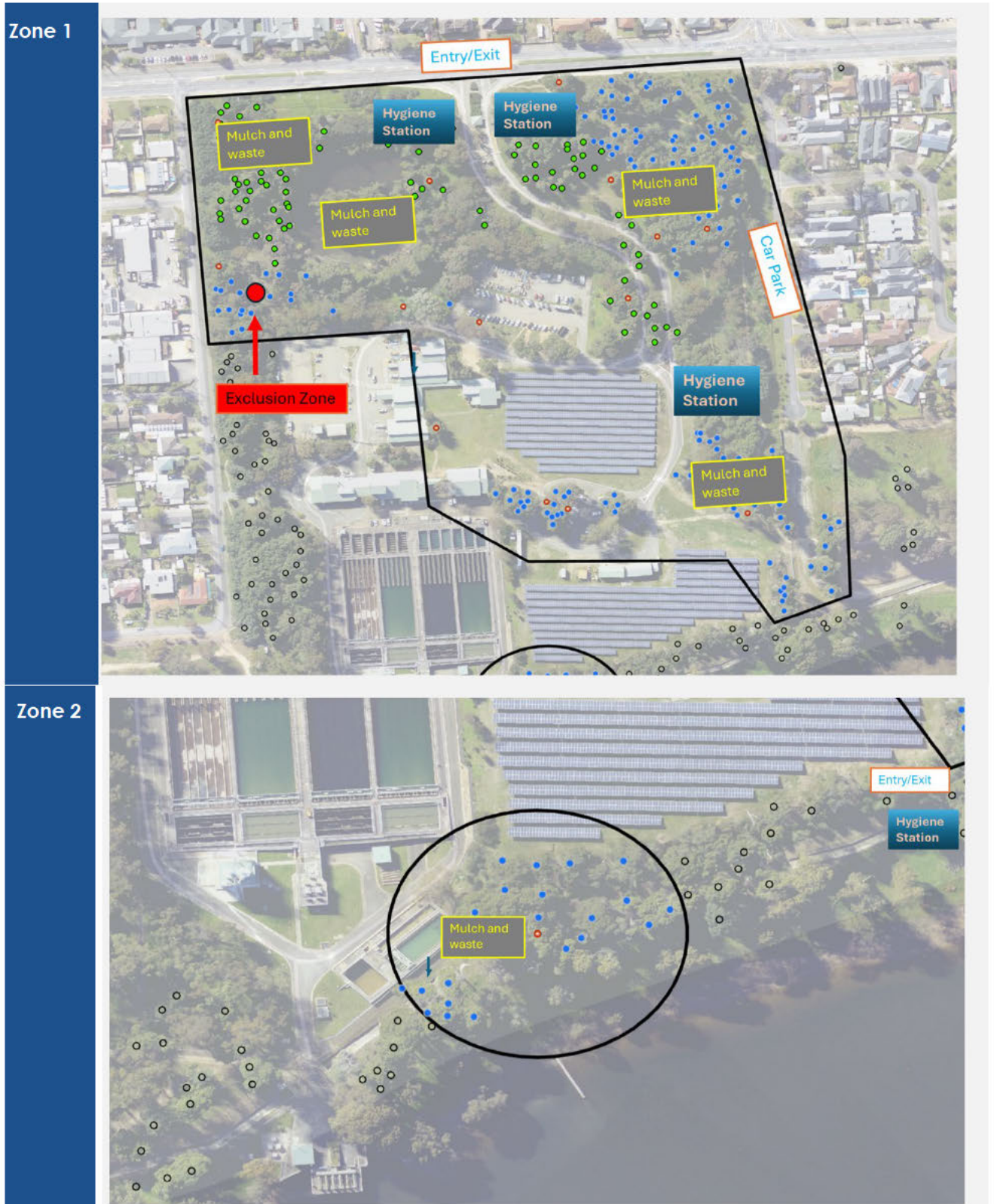
Acknowledgements

This operational plan was developed through the combined expertise provided by the following organisations:



Appendix 1. Operational zones within Hope Valley

Operations to be undertaken in order (zones 1-7).



Zone 3



Zone 4



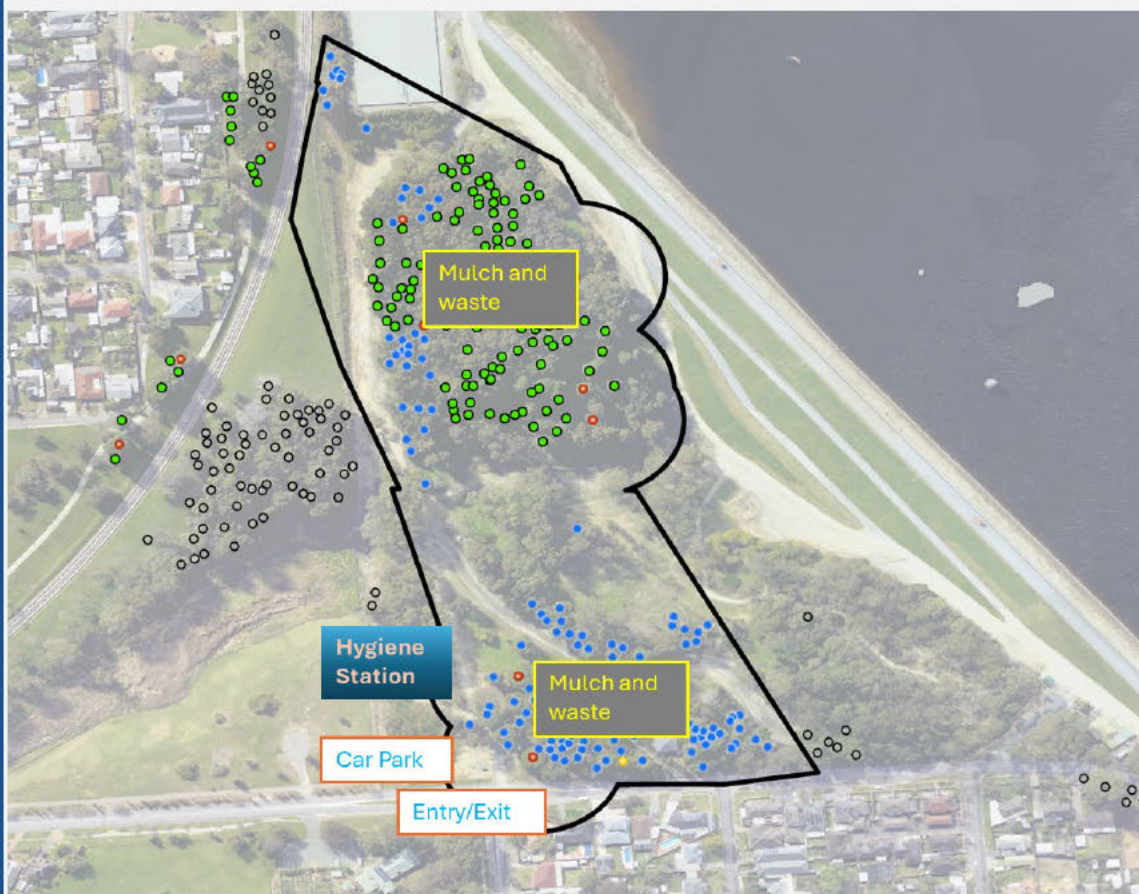
Zone 5



Zone 6



Zone 7



Appendix 2 – Relevant Giant Pine Scale information

The trees identified as infested at this site have low to moderate levels of infestation and are most likely 1st or 2nd year infestations.

From the literature and what has been observed in Australia, GPS can naturally spread approximately 40 metres per year. Further, experience from previous outbreaks indicates that trees near to infested trees are likely to harbour undetectable infestations. Putting a 50m buffer around the infested trees, will reduce the risk of inadvertently missing infested trees and/or spreading the insect during tree removal operations.

The operations used in the destruction of GPS have involved the felling, stacking and chipping of material into a confined pile in the centre of the infested/buffer zone. The buffer zone will be applied at 50m from any infested tree. The nature of the chipping is destructive to the insect but will not on its own kill all insects particularly in the first instar phase.

Giant pine scale off a viable host, can potentially survive for 25 days. Therefore, to further reduce the chances of GPS survival the chipping, mulching and piling of the wood chip is recommended. This creates significant internal temperature within the mulch and kills the insects. The guidelines provided to produce clean mulch are contained in the Australian Standard ([AS 4454 - 2012](#)) and are sufficient to kill GPS.

Figure 2 below displays the current knowledge of GPS lifecycle within Australia and shows that the first instars of the insect, once hatched from the eggs, will emerge in early November.

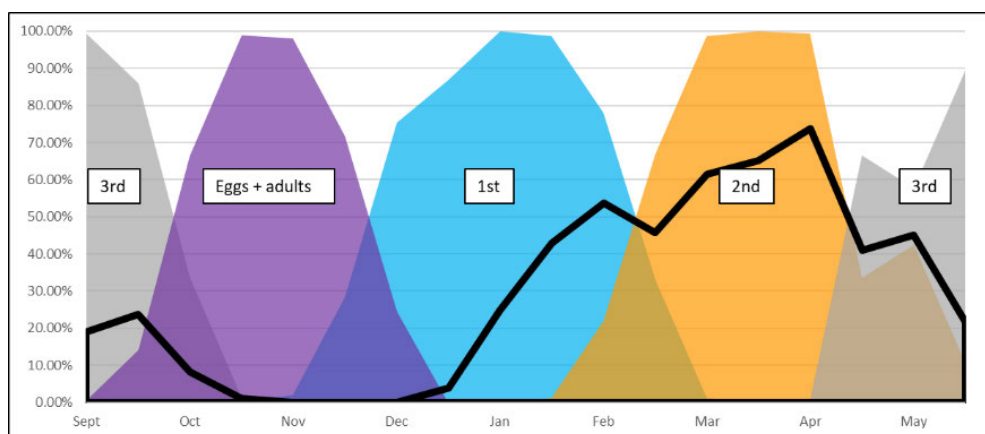


Figure 2. Graph showing results from Jaroslow et al 2023 whereby the lifecycle is displayed.