

Highbury Aqueduct Reserve

Tree removals due to Giant Pine Scale infestation Frequently Asked Questions

February 2026



The following questions have been posed by residents local to the Highbury Aqueduct Reserve. This document aims to address these questions and inform relevant stakeholders about the response to the biosecurity risk Giant Pine Scale (GPS).

What is Giant Pine Scale?

Giant Pine Scale (GPS, *Marchalina hellenica*) is an insect that sucks the sap of pine trees, posing a threat to our softwood plantation industry. GPS is native to the eastern Mediterranean region, and is known to occur in Crete, Georgia, Italy, Russia and Turkey.

The insect feeds exclusively on plants from the family *Pinaceae*, such as pines, firs and spruces. Trees that look like host species but are not affected by this pest include cypress pines, hoop pines and she-oaks. Once established, GPS causes defoliation, branch dieback, gradual desiccation, and tree death.

This pest spreads slowly without human intervention. The pest can spread quicker and travels long distances through a number of vectors including movement of infested wood, mulch and machinery, or on animals and birds.

Why remove all these trees?

Unfortunately, managing the outbreak requires tree removal. We understand that removing mature trees may be considered a significant loss, however the removal of affected trees remains the only known option for eliminating this destructive pest and preventing its spread.

Once the tree removals are complete, a restricted area will remain in place until the area has cleared a quarantine period to ensure that there is no live GPS remaining on site. Tree removal sites will be remediated, including revegetating with local native

species of trees, shrubs, and grasses when seasonal conditions are best for planting.

Why is a buffer area required around infected trees?

There are several infested trees in different locations within Highbury Aqueduct Reserve – the GPS can occur within the canopy, trunk, or base of the trees, on the inside and outside of the tree. Any detection of GPS on any pine tree requires a minimum 50m buffer area to be cleared around the susceptible pine tree - this removes host plant material available for GPS to live on. The 50m buffer areas may be extended if it is considered necessary to remove enough host plant material so that it is not available to the GPS to continue its lifecycle. The start of infestations can be hard to detect; however, one insect is able to produce over 300 eggs, so even minimal detections can quickly become large infestations.

What impact will tree removal have on the environment/wildlife and how is it being managed?

It is acknowledged that tree removal projects require the use of heavy machinery, which can impact the landscape due to its size and weight. Wherever possible, exclusion zones have been put in place around areas of important native vegetation, meaning that the machinery is to avoid those areas. Contractors have been issued with pocketbooks that identify plant species to avoid interfering with during the works. This ensures that the existing native vegetation remains intact and will provide food sources and habitat for native fauna.

As mentioned previously, areas where pine trees are being removed will be revegetated with locally native trees, shrubs and grasses. Areas at Highbury Aqueduct that have already been cleared in previous years have been revegetated with over 4,000 native trees, shrubs and grasses.



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An Operations Plan for the works has been developed, including protocols for dealing with koalas and other wildlife. This plan will be followed before and during the tree felling operation, including koala spotters to identify their presence and redirect work to another area until the koala has moved or been relocated.

By undertaking works during the GPS crawler phase, will this increase the chance of spread?

Removal of available host plant material (pine trees) as close to the time of detection is recommended. Removing the active host trees during any of the life phases of GPS dramatically reduces the chances of spread.

How are potential erosion and land slip issues being managed in our response?

Although it is planned to remove pine trees within the hillside area, the stumps and roots will be left in the ground, which will provide stabilisation of the hillside initially.

Additionally, the hillside area will be remediated, including erosion control and stabilization devices, and revegetated with locally native shrubs and grasses and mid-storey native trees, providing additional stabilisation.

Is the urban heat island effect increasing the local temperature from local deforestation and is it being monitored?

The Urban Heat and Tree Canopy Mapping Project was undertaken in 2022, using multispectral imagery, LiDAR technology and thermal imagery to map tree canopy, green spaces, built environment and urban heat islands across the entire metropolitan Adelaide footprint.

Tree canopy plays an important role in reducing urban heat, making our neighbourhoods more comfortable and liveable.

However, the benefits of individual trees need to be balanced against broader environmental and biosecurity risks. Aleppo pines are a declared weed in South Australia. The highly invasive nature of this weed impacts on local ecosystems and can present a biosecurity risk such as what is occurring now with GPS.

To support long term canopy and habitat health, comprehensive native vegetation replanting programs are already underway. These plantings will, over time, replace the removed trees and increase the biodiversity value of the area.

This new vegetation can also play a role in reducing heat, as it is not only trees that provide cooling benefits, all plants can help in cooling a space.

Adelaide's Urban Greening Strategy aims to increase metropolitan tree canopy to 30% by 2055, helping cool the city and support biodiversity.

While the loss of any tree impacts on overall canopy, removals are sometimes necessary for environmental, biosecurity or even public safety reasons.

Is the health and wellbeing of vulnerable people who live in Highbury monitored due to the urban heat island effect?

Residents concerned about health impacts from heat stress can find information about staying healthy during hot weather on the SA Health website (search Healthy in the Heat) or can register for a free Telecross REDi service to ensure vulnerable people are checked on during declared heatwaves by calling 1800 188 071 or visit TeleRedi | Australian Red Cross
<https://www.redcross.org.au/telereidi/>

City of Tea Tree Gully facilities such as the library, recreation centres and local shopping centres are available as air-conditioned spaces during heat waves.

Why do so many trees need to be removed when there are currently only 6 infected trees within Highbury Aqueduct Reserve?

There are six infested trees at various locations within Highbury Aqueduct Reserve, each requiring a minimum buffer of 50m around it to be cleared.

Action now is to minimise the ultimate impact. We want to stop the spread to avoid more trees being infected and dying. If we don't do this now, we risk more trees becoming infected and GPS spreading further and into our timber industry.

Will trees be reinstated post removal and how long before they have a decent canopy?

Tree removals that were undertaken as part of the 2023 and 2024/25 response to Giant pine scale are now complete and those areas of the reserve were re-opened to the public. The initial site remediation works are now also complete for those areas.

The remediation of the site following tree removals that were undertaken as part of the 2023 and 2024/25 response included the planting of over 4,500 seedlings of locally native plants species including a mix of tall trees, shrubs and grasses.

Species selected are suitable replacement habitat and food for native fauna including Yellow-tailed Black Cockatoos.

Areas where pine tree removals are underway will be revegetated with locally native trees, shrubs and grasses. It will take some time for the new plants and grass to become established and start to resemble remnant vegetation.

We ask for your patience while we continue to work through these challenges with the newly remediated site. We also hope to introduce further plantings in the following years once the original plantings have had a chance to colonise the reserve.

Why aren't bio controls being investigated as a solution to this problem?

There are trials underway in Victoria for a possible biocontrol, however the trials are ongoing. Currently, 17 chemicals have been trialled, but the desired level of effectiveness has not been reached.

We can't wait for these trials to conclude, and any use of biocontrol in South Australia would require relevant regulatory approvals. We need to act now to stop the spread.

Why is our strategy for controlling the spread of GPS different to Victoria?

The GPS management strategy for South Australia is the same as the one being undertaken in Victoria, however the desired outcome varies. With 50 known infected trees in SA currently, we are aiming for eradication, whereas Victoria has 6000 infected trees, and is aiming for containment.

Lessons learnt from Victoria include that GPS should be managed as soon as practically possible to

reduce the spread and impact of infestations. With no viable biocontrol available, we are removing trees to eradicate the pest.

Why didn't the first two attempts at controlling the spread of GPS work?

GPS can be difficult to detect as it can be within the canopy or inside the tree trunk. It may be that not all the GPS that was present were detected. Any new GPS detections on pine trees at Highbury Aqueduct Reserve may indicate that additional trees will need to be removed.

Our strategy is working. Surveillance has not found any new outbreaks in new areas across Adelaide or the State. It's possible the new detections from September 2025 were already at Highbury Aqueduct last year, but not visible. Detections of GPS within Highbury Aqueduct Reserve have significantly reduced from 60 in 2023, to 25 in 2024, and now to 6 in 2025.

What are the lessons learnt from previous approaches and how will this third attempt differ?

The South Australian response to GPS is ongoing, and eradication efforts will continue to prevent its spread of GPS from impacting Adelaide's parks and garden amenity trees and South Australia's \$3 billion forest industry. This may include further tree removals and may include extended buffer areas. South Australia's management strategy will continue to be adjusted if alternative effective control measures are researched and approved for implementation.

Eradication would be deemed to be achieved if there were no further detections of GPS for 3 years after the last known detection.

Why were marked trees left standing there for months, as the GPS spreading season neared?

Tree removal projects are complex and require adequate planning to ensure that operational hazards and risks are managed appropriately. The recent detection at Highbury Aqueduct Reserve occurred in September 2025, the planning for the tree removals occurred during October/November 2025 and the tree removals commenced at Highbury Aqueduct Reserve on 3rd December 2025.

It's best to cut the trees down as soon as possible after detection. The 50m buffer has been

established to mitigate the risk of infestations spreading prior to tree removal. Hygiene protocols will be in place throughout the process.

What is the current and projected toll of our native wildlife? How will this be mitigated and monitored throughout the process?

It's acknowledged that with broad scale tree removals it's possible that wildlife could be impacted. Most tree removals to date have taken place on government owned land which is managed by personnel trained and experienced in wildlife management protocols and wildlife monitoring techniques.

Prior to and during tree removal processes, both staff and contractors adhere to wildlife management protocols to ensure that any impacted wildlife are cared for.

Tree removal operations will be adjusted where necessary to avoid wildlife and to inform remediation and revegetation plans. This might include including alternative food sources and/or alternative habitats.

Please be assured that National Parks and Wildlife Service Officers are working closely with the arborists to ensure that wildlife are being cared for during the tree removal process at Highbury Aqueduct Reserve.

Will our power bills increase with the increase in our urban heat island temperatures?

Please visit the SA Power Networks website for information about assistance in paying energy bills, Financial Hardship - SA Power Networks <https://www.sapowernetworks.com.au/your-power/billing/financial-hardship/>

Is it true that most of the forests will be planted with grass and what does that mean for snake populations and our community?

Native grasses are being planted as part revegetation programs, because they are an important food source for native birds and insects. Native grasses also have long root systems that aid in soil stabilisation. Due to the cleared areas being more exposed to sunlight than they were under the pine canopy, they are experiencing increased growth of weedy grasses.

Be assured that this is anticipated and it is in our work plan to control the weeds. Brush-cutting and mowing long grass are completed as part of our annual work plan to manage grass growth.

What happens to our native birds that rely on the pine trees as a food source?

Highbury Aqueduct Reserve has been revegetated in stages for over 10 years now. The revegetation programs included native plant species that provide alternative food sources for native birds and other wildlife. Additionally, revegetation efforts will continue at Highbury Aqueduct Reserve in the future and will include native plant species that provide food and habitat for local native wildlife. There are also many available food sources for native birds in parks and reserves adjacent to Highbury Aqueduct Reserve, which will provide important refuges and food during the continued revegetation of Highbury Aqueduct Reserve. By acting now, we are preserving the unaffected pine trees as a food source for wildlife.

If our native birds really do spread GPS, will they just move to nearby pine plantations because of food source depletion in Highbury?

Native birds are known to move between many different parks and reserves, which is why continued surveillance is being regularly undertaken to ensure detection of GPS is achieved as early as possible to enable decisive action to be taken.

What happens to the koalas that frequently use the pine trees as a place to rest?

The Department for Environment and Water is aware that Highbury Aqueduct Reserve is home to several koalas. An Operations Plan for the works includes protocols for caring for koalas and other wildlife to be followed before and during the tree felling operation, including koala spotters to ensure that when koalas are present in trees, works are redirected to another area until the koala has moved on or relocated.

How do we protect ourselves against snakes fleeing into our yards?

Please visit the Department for Environment and Water's website for information about snakes and what you can do to make your property less attractive to snakes:

<https://www.environment.sa.gov.au/topics/animals-and-plants/living-with-wildlife/snakes>

Pine trees are to be felled on hillside area in close proximity to residential housing, what has been done to limit impacts to neighbouring housing?

A geotechnical report has been sought from an engineer, which has provided an insight into the hillside's stability and recommendations on future stabilisation and remediation techniques. Installation of rock protection barriers has commenced along the back of neighbouring properties to protect neighbouring fences from dislodged rocks during works. We are also working closely with the tree felling contractor to ensure the operational procedure is safe and regularly adapted to accommodate new issues as they arise.

Part of our remediation works include the installation of silt curtains and Coir logs, which will reduce erosion and collect silt to aid with revegetation works. This will help stabilise the hillside and prevent erosion issues behind neighbouring properties.

What is the Government doing to protect the value of resident's properties, which could be impacted by the tree removals changing the aesthetics of the community?

The property market determines the value of properties and various factors can influence property values, including individual personal preferences. Where some may view the tree removals as a loss, others may see them as a positive impact, improving views or aesthetics of the reserve. Although it is unfortunate that tree removals are required to manage the spread of GPS, the South Australian Government is committed to remediating and revegetating affected areas. We acknowledge that it will take several years for the revegetation to reach its full canopy height and ask for your patience while we continue to implement the required remediation and revegetation.

Ultimately, the works underway aim to save trees across Adelaide and surrounding areas by containing the spread of GPS.

Where can I get more information?

For more information about tree removals at Highbury Aqueduct Reserve, please visit the Department for Environment and Water's website:

<https://www.environment.sa.gov.au/topics/park-management/public-land-stewardship-project/highbury-aqueduct-reserve>

If you have a query about Highbury Aqueduct Reserve, please email NPWS-AMLR-PLS@sa.gov.au

For more information about Giant pine scale, please visit Department for Primary Industries and Resources website: https://pir.sa.gov.au/crops-and-plants/weeds-and-pests/emergency-and-significant-plant-pests/pests_and_diseases_of_significant_concern/giant_pine_scale