

MEPA

Mount Nebo & Mount Glorious Environment Protection Association
End of Financial Year Partners' Report 2022-2023

Strategic Weed Management Project

Moreton Bay Regional Council



Queensland Dept. of Transport & Main
Roads



Queensland Parks & Wildlife Service



Informative report to: Nikki Boyd MP (State Member for Pine Rivers)

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Executive Summary

This report covers MEPA's weed clearance and bush regeneration activities over the past 12 months – for the period ending June 2023. It includes work along approximately 40 km of road reserves, and a further 20 km of Energex easements and other public land in the Brisbane Forest Park / Southern D'Aguilar Range area. Both funded and volunteer weed clearance activities are recorded.

Current partners contributed a total of \$45,500 p.a. towards improved integrated management of the area. Of this, \$20,500 was cash contribution used to employ contractors for a lot of the weed mapping and eradication work. Additional weed mapping, monitoring, detailed follow-up work, project management, and volunteer contributions make up the rest of the project budget.

This on-ground weed control work is conducted in conjunction with broader community education, engagement and training activities in the Mt Glorious, Mt Nebo, and Jolly's Lookout area aimed at the conservation of scenic amenity and biodiversity in this high conservation-value area.

The high-profile Weed Partnership itself presents a "strategic approach" to weed management in the sense that it:

- (a) focuses on weeds of concern (i.e. those of highest threat); and
- (b) concentrates on areas from which weeds establish and subsequently spread (i.e. road and power corridors, and private gardens).

A Record Wet Season

The partnership is moving into its eighteenth year of funding. The year was again marked by good rainfall, with continued high soil moisture levels. Weed growth was again remarkably strong – especially Morning Glory.

With rising costs, control of *Dyschoriste depressa* in parts the project area is no longer possible due to its cryptic nature and consequent time required for control. A triage approach is now in place to hold the weed below the Mt Glorious Rd/Mt Nebo Rd intersection – thus protecting the higher areas around Mt Glorious to limit impacts on Mt Glorious Spiny Crayfish habitat. (Recent survey work has identified this "red listed" species in catchments below Mt Nebo Rd between the Mt Glorious Rd intersection and Mt Nebo but control of *Dyschoriste* in the road reserve along this section is currently not feasible.)

Unfortunately, the health of wet sclerophyll forests continues to decline with severe lantana infestations and Bell Miner Associated Dieback.

General Background

The natural bushland area that comprises Brisbane Forest Park between The Gap and Lake Wivenhoe, is one of Brisbane's most critical nature-based tourism assets. The relative health of native vegetation in the road corridors and adjoining power corridors is critical to the value of this outstanding asset. Effective management of these corridors is therefore seen as having critical priority because of its tourism value, as well as it being the point where existing and future pest management issues are likely to emerge. Good management of the corridors creates a critical

environmental buffer for both the National Parks, adjoining water catchment areas, and private landholders living in the area.

Building on many years of voluntary work by the communities of Mt Glorious and Mt Nebo, and the Mt Nebo and Mt Glorious Environment Protection Association (MEPA) in particular over the last five years, a successful partnership has been built to promote a more coordinated management system for the area's road and power corridors, public lands and private properties.



***Euastacus setosus* (Mt Glorious Spiny Crayfish) – IUCN “red listed species” at Mt Glorious**
Photo: Ollie Scully



E. setosus burrow (L) and State-funded surveying of the steep creeklines (R)
at Mount Glorious
Photos: Ollie Scully, Ian Witheyman

Current Partners: 2022-2023

MEPA	\$20,000 (in kind)
Moreton Bay Regional Council	\$13,000
Transport and Main Roads	\$7,500
Queensland Parks and Wildlife Service	\$5,000 (in-kind)

Ongoing Partners: 2023-2024

We are currently renewing contracts with all partners above (with ongoing talks with BCC to encourage their management of their section of road reserve along lower Mt Nebo Rd).

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Acknowledgements

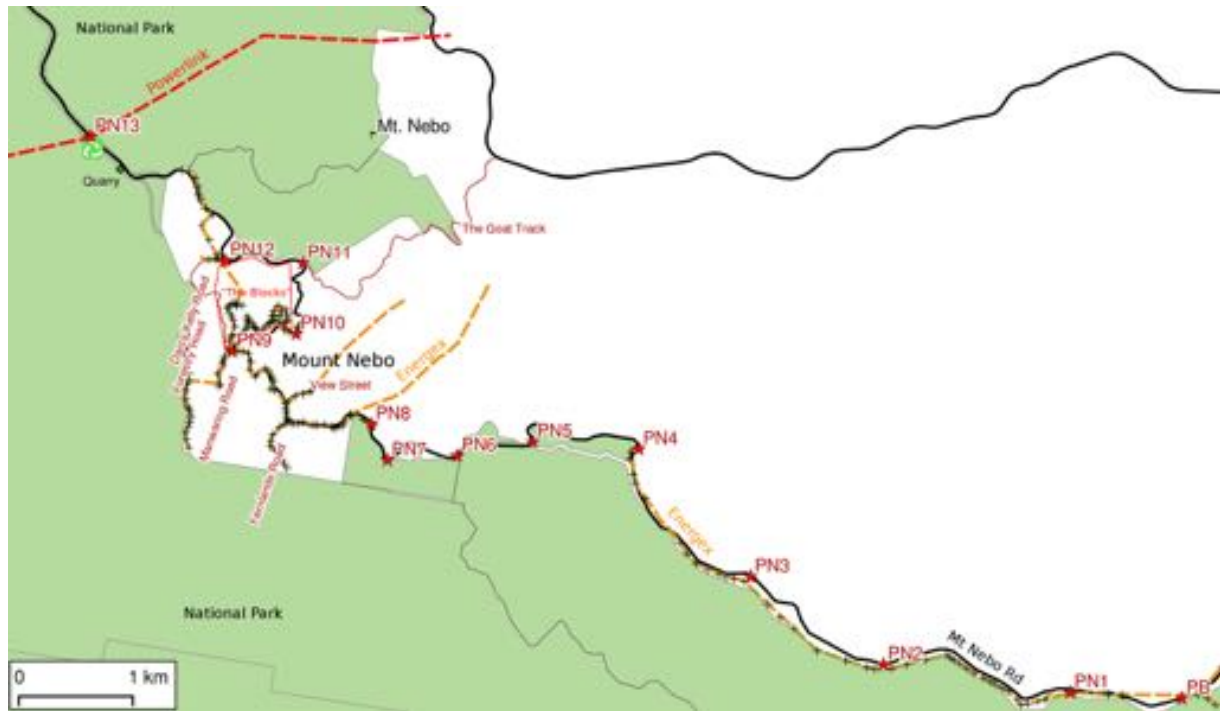
This report was produced with information supplied by and with the assistance of MEPA office bearers, MEPA volunteers & weed contractors. QPWS is ever-helpful in a number of ways, facilitating access to Park areas and sharing important on-ground information to assist in optimising outcomes in respect of weed control.



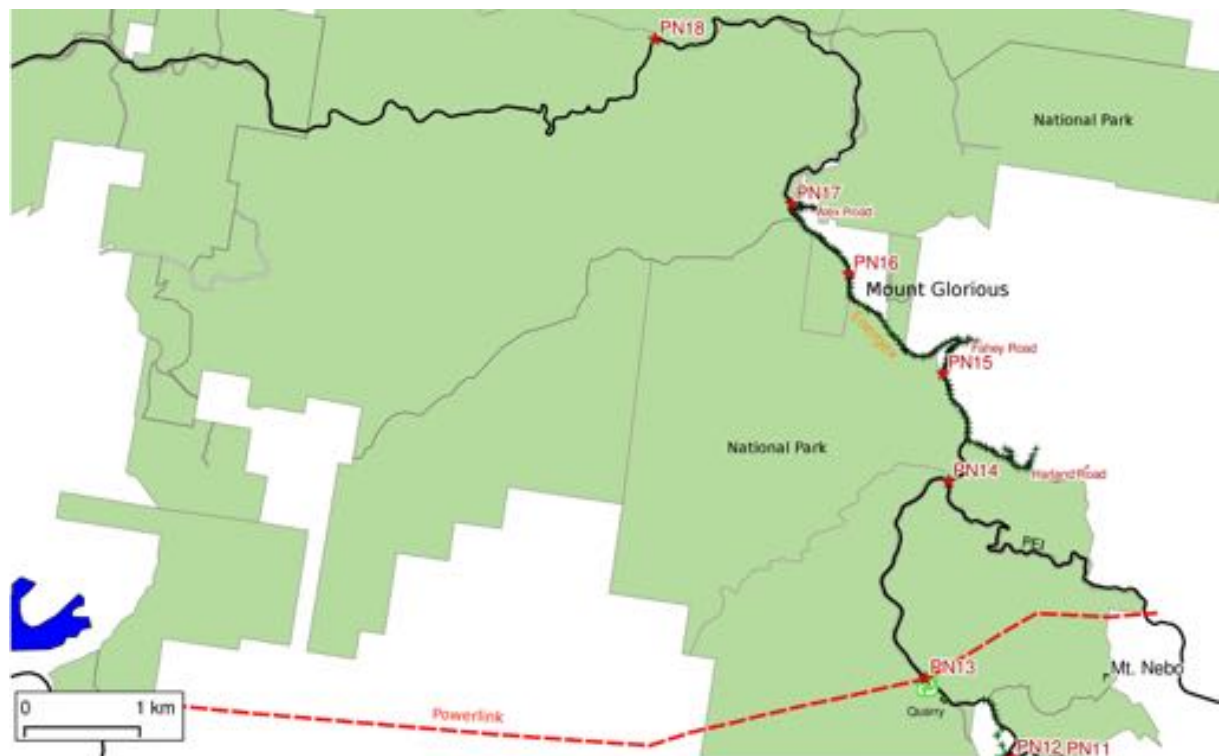
Kahili Ginger rhizomes – dug out, Mount Glorious

Report Date: 24th June, 2023

Maps



Map 1 – Mt Nebo Rd Section (PB–PN8), Mt Nebo section (PN8–PN13 & village roads)



Map 2 – Westridge section (PN13–PN15), PEI section, Harland Rd section, Mt Glorious section (PN15–PN17) including village roads, Northbrook Parkway section (PN17–PN18).

Weeds Notes



MBRC: Mt Nebo Rd (PB-PN8)

Map 1 on page 7 (PB-PN4; PN5-PN8).

Weed management

Project started	2006
MBRC funded	2006–present
MEPA volunteer and/or other funding sources	2006–present

Special Site Notes

- PB to PN8 – Mt Nebo Rd

In 2007 a Cassia control project was commenced to control Cassia within the road reserve. This has greatly reduced the abundance of this weed (despite very bad 2019/20 2021/22 summer seasons). MEPA continues Cassia removal in this area and along many other MBRC road reserves with encouraging results to date.

- PN4-PN5 – Jollys Lookout

In 2022, due to costs rising faster than MBRC funding, some triaging has been implemented. With invasive plants on the north-facing slopes of Jollys Lookout running *away* from national park areas, it was decided that this section could no longer be maintained free of weeds.

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Broad Leaf Paspalum, Chinese Elm, Crucifix Orchid, Groundsel, Jacaranda, Kahili Ginger, Leucaena, Molasses Grass, Mother-in-Laws Tongue, Mother-of-Millions, Ochna, Paspalum (Common or Giant), Purple Top, Silver Leaf Desmodium, Singapore Daisy, Succulents (various), Polka Dot plant.

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Black Eyed Susan – limited extent (PN1 to PN4), adjacent to private land.

Easter Cassia – especially PN2 to PN4.

Cats Claw Creeper – limited extent (PN7).

Creeping Lantana – PN2 to PN3.

Euphorbia – along spoon drains in slasher zone.

Glycine – Large area in adjacent private land (PN4 to PN5); also at intersection of Mt Nebo and Mt Glorious roads.

Macrotyloma – PN2 to PN3.

Madeira Vine – limited extent (near PN7).

Morning Glory – adjacent to private land (PN2, PN4, PN5). Maintaining buffer with Park. Infestation near PN7 now eradicated.

Siratro – appearing along private land boundary (PN2 to PN3). Also, downhill from Jolly's Lookout (PN4 to PN5).

Whisky Grass – few plants occasionally found.

White Passion Vine – a “sleeper” weed that exploded (and was controlled) across a very wide range this season.

Long-term weeds

Strategy: these weeds are widespread along the D'Aguilar Range; treatment is limited to reducing further impact on native vegetation and where possible, restricting growth of the infestation.

Dyschoriste – along spoon drains in slasher zone. (Sadly, current funding now limits control.)

Green Guinea Grass – large infestation near PB on steep slope.

Lantana

Rhodes Grass – introduced at recent road work site, PN1. Currently eradicated.

Signal Grass – widely dispersed (PB to PN5) but mostly near PN1 & PN4. (Sadly, current funding now limits control.)



MBRC: Mount Nebo

Mt Nebo Rd (PN8-PN13) and village side roads.

Map 1 on page 7 (PN8-PN13).

Weed management

Project started	2006
MBRC funded	2006–present
MEPA volunteer and/or other funding sources	2006–present

Special Site Notes

- PN6 to PN7 – Boombana section, D'Aguilar NP, Mount Nebo

SEQC funded work to control invasive Ochna (2017-8) spreading into Boombana from the road reserve. The work here has removed 95% of the Ochna (including some very large shrubs). Volunteer work is ongoing.

- PN10 to PN11 – Near PN10 (Bailey's Corner)

Several years ago the former Pine Rivers Shire Council (now MBRC) began funding Madiera Vine control work in this area through MEPA. Originally, this site was a major Madeira Vine infestation. It is the likely source of all the Madeira infestations downhill in the upper reaches of the Dawson Creek catchment. This work is ongoing.

- PN11 to PN12 – Manorina section, D'Aguilar NP, Mt Nebo

This site is on the northern road side of the upper Dawson Creek catchment area and borders on Manorina National Park. It was originally an Envirofund site, and subsequently received funding for invasive Ochna control from SEQ Catchments (2015-6). This northern side of the road reserve has undergone extensive weed control and re-planting, and is now in excellent shape with regard to weeds. Given this site's proximity to the National Park and its position at the head of the Dawson Creek catchment, MEPA is working to restore for this site to near-pristine condition in the future. The southern side of the road reserve remains problematic.

- PN13 – Quarry near Mount Nebo Transfer Station

This site has been used as a Council dump site for fill. Fill disposed of at this site by the former Pine Rivers Shire Council road engineering crews up until early 2007 had contained Madeira Vine. MEPA is contracted to MBRC Roads to control weeds on this and a similar site at the 11km mark, Mt Nebo Rd, and one at the bottom of Mt Glorious Rd.

- PN13 – Mount Nebo Transfer Station

MEPA runs the weed management contract to control and eradicate weeds around the Transfer Station grounds. With funding from MBRC Waste Department, control at this crucial, top-of-catchment site is progressing well.

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Arundo Grass, Cassia, Chinese Elm, Groundsel, Kahili Ginger, Large Leaf Privet, Loquat, Mossman River Grass, Ochna, Passionfruit, Pigeon Grass, Strelitzia, Umbrella Tree, Wild Tobacco, White Moth Vine, Yellow Bells.

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Balloon Vine – limit extend, appears to be eradicated.

Broad Leaf Paspalum – chiefly Forestry Rd, View St. & Manwaring Rd.

Cats Claw Creeper – Forestry Rd (opposite Taylors Break: identified 2008-2010).

Madeira Vine – Now mostly limited to The Blocks & PN10-PN11.

Molasses Grass – limited extent.

Morning Glory – several infestations around the village – now chiefly limited to The Blocks.

Mother-of-Millions – originally several infestations around the village and at Fill site.. Now mostly confined to The Blocks.

Polka Dot plant – mostly eradicated except at The Blocks & PN10-PN11.

Signal Grass – mostly confined to Mt Nebo village.

Singapore Daisy – mostly eradicated except at The Blocks.

Long-term weeds

Strategy: in the Mt Nebo village area significant populations of these weeds exist on private property, thus complicating effective control on public land. Treatment is generally limited to maintaining the slasher zone to limit seed transport and minimising further impact on native vegetation. MEPA has a long standing community weed awareness program.

Basket Asparagus – Below the Blocks.

Bauhinia – Below the Blocks.

Black Eyed Susan – mostly limited to The Blocks, but small infestations elsewhere.

Cape Honey Suckle – The Blocks, Manwaring Rd. & Darcy Kelly Rd.

Dyschoriste – found in slasher zone. Funding constraints now mean control between Mt Nebo Village and the Transfer Station is no longer practical.

Glycine Vine – Just west of Nebo State School.

Green Guinea Grass – substantial infestations in places along Mt Nebo Rd, minimal elsewhere.

Jacaranda – few street trees.

Lantana

Tipuana Tipu – few street trees.

Weed management

Project started	2006
MBRC funded	2006–present
MEPA volunteer and/or other funding sources	2006–present

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density. With rising costs outstripping funding, this section is managed by volunteers. Unfortunately, Dyschoriste control along this section is no longer deemed practical without additional funding.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Easter Cassia, Chinese Elm, Crofton Weed, Green Guinea Grass, Kahili Ginger, Morning Glory, Signal Grass, Singapore Daisy, Polka Dot plant, Tipuana Tipu, Wild Tobacco, Whisky Grass, White Moth Vine, White Trumpet Lily (*Lilium longiflorum*),

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Broad Leaf Paspalum – scattered plants.

Glycine – scattered outbreaks near Mt Nebo and Mt Glorious roads.

Mother-of-Millions – one site of limited extent. Now appears eradicated. Ongoing monitoring.

Silver Leaf Desmodium – scattered outbreaks north of Westridge Lookout.

Siratro – scattered outbreaks near Mt Nebo and Mt Glorious roads.

Long-term weeds

Strategy: these weeds are widespread along the D'Aguilar Range; treatment is limited to reducing further impact on native vegetation and where possible, restricting growth of the infestation.

Dyschoriste – found in slasher zone. Funding constraints now mean control between Mt Nebo Village and the Transfer Station is no longer practical.

Lantana

White Passion Vine – a “sleeper” weed that exploded in recent years (esp. in wetter areas).



TMR: Mt Glorious Rd, PEI Section

Map 2 on page 7.

Weed management

Project started	2006
Qld Dept. of Transport & Main Roads funding	2013–present
MEPA volunteer and/or other funding sources	2006–present

Special Site Notes

A large and high-threat outbreak of Morning Glory adjacent to and along the banks of the South Pine River is currently being brought under control with funding from TMR. This work is difficult (in very rough country), on-going and will still take some years to complete.

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Broad-leaf Paspalum, Cats Claw, Creeping Charlie, Easter Cassia, Glycine, Green Guinea Grass, Purple succulent (*Callisia fragrans*), Signal Grass, Silver-leaf Desmodium, Mother of Millions, Madeira Vine.

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Dyschoriste depressa

Glycine

Molasses Grass – a single occurrence (~600m²) on a very steep slope/cliff; nearly eradicated.

Morning Glory – special site mentioned above.

Pigeon Grass

Rubella squarrosa

Siratro

Whisky Grass – minimal.

White Passion Vine – scattered.

Long-term weeds

Strategy: these weeds are widespread along the D'Aguilar Range; treatment is limited to reducing further impact on native vegetation and where possible, restricting growth of the infestation.

Lantana



MBRC: Harland Rd (and side roads)

Map 2 on page 7.

Weed management

Project started	2006
MEPA volunteer	2006–present
MBRC fire mitigation zone funding	2010–2017

Special Site Notes

The south side of Harland Road is the subject of an integrated weed & fire management project. This area has been established as a *fire mitigation zone* which has resulted in the removal of the mid-story vegetation. MEPA was originally contracted by the Moreton Bay Regional Council (MBRC) to maintain this area but that work has now been taken in-house by Council. MEPA has reverted to weed control in this road reserve that is in near-pristine condition, abutting rainforest slopes above the headwaters of the South Pine River.

Initial condition

Most weeds listed below were originally identified as scattered over much of the area.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Black Eyed Susan, Broad Leaf Paspalum, Callisia fragrans, Callisia repens, Dyschoriste depressa
Green Guinea Grass, Groundsel, Kahili Ginger, Lantana, Ochna, Passionfruit, Signal Grass, Silver
Leaf Desmodium, White Passion Vine.



TMR: Mt Glorious Rd, Mt Glorious to The Summit (PN14-PN17).

Map 2 on page 7.



Fahey Rd, Alex Rd and Attunga Lane

Map 2 on page 7.

Weed management

Project started	2006
Qld Dept. of Transport & Main Roads funding	2013–present
MBRC funding	2006–present
MEPA volunteer and/or other funding sources	2006–present

Special Site Notes

- PN14 to PN17 – PEI intersection to Alex Rd

This section above the Mt Glorious/Mt Nebo Rd intersection is being very closely monitored for *Dyschoriste depressa* and *all* occurrences are treated. The aim is for *total control* of the weed in areas >500m to protect the Mt Glorious Spiny Crayfish habitat in wet, Bangalow Palm creek lines.

- PN15 to PN16 – Mount Glorious

This area includes 2km of community revegetation originally funded by a Main Roads Grant (\$10,000) building upon a small project using Main Road's volunteers and Envirofund financial support and included intensive voluntary activity. This is also an Adopt-a-Road site.

This 2 km strip has been cleared of Lantana and re-vegetated to “show-case” the Bradley Method of bush restoration. This method involves concentrating on the healthy areas of bush and gradually extending the boundary of the healthy areas.

- Fahey Road – Mount Glorious

This area includes a large Cats-Claw creeper infestation. Treatment of the Cats-Claw is on-going on a regular basis. The infestation is old and will require many years of ongoing follow-up work.

Treatment also continues on a number of other weeds such as Chinese Elm – mostly juvenile within the road reserve but some mature trees exist on adjacent private land.

Funding (2016-7) from SEQ Catchments for special catchment protection (Cedar Creek catchment) has significantly improved outcomes here.

- Alex Road – Mount Glorious

The end of Alex Road (bordering with D'Aguilar National Park) included numerous invasive weeds. As a result of a weed clearance and re-vegetation program by local volunteers this area is now pristine. The general road reserve continues to be monitored by MEPA volunteers.

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Basket Asparagus, Bauhinia, Black Eyed Susan, Broad Leaf Paspalum, Buddleia, Dyschoriste depressa, Easter Cassia, Chinese Elm, Morning Glory, Ochna, Succulents (purple), Strelitzia, Wild Tobacco, White Trumpet Lily (*Lilium longiflorum*).

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Cats Claw Creeper – PN15 to PN16 (minimal), Fahey Rd (substantial).

Crofton Weed – Mt Glorious Rd, opp. Alex Rd.

German Ivy – PN15 to PN16.

Green Guinea Grass – mostly eradicated.

Kahili Ginger – isolated outbreaks in wet forest areas.

Laurel Clock Vine – single plant (PN15-PN16) being treated with Arsenal herbicide injection.

Madeira Vine – PN15 to PN16, Attunga Ln.

Montbretia – Quality St.

Parrot Lilly – Quality St.

White Moth Vine – persistent in southern areas of Mt Glorious Village.

White Passion Vine – a “sleeper” weed that exploded in recent seasons.

Long-term weeds

Strategy: in the Mt Glorious village area significant populations of these weeds exist on private property, thus complicating effective control on public land. Treatment is generally limited to maintaining the slasher zone to limit seed transport and/or otherwise minimising further impact on native vegetation. MEPA has a long standing community weed awareness program.

Cape Honey Suckle – Fahey Rd.

Large Leaf Privet – PN15 to PN16, Alex/Attunga

Lantana

Small Leaf Privet – PN15 to PN16, Fahey Rd, Alex/Attunga.

Polka Dot plant – Fahey Rd, Mt Glorious Rd in Village.



MBRC: Northbrook Parkway (PN17-PN18)

Map 2 on page 7.

Weed management

Project started	2006
Qld Dept. of Transport & Main Roads funding	2013–present
MBRC funding	2006–2016
MEPA volunteer and/or other funding sources	2006–present
SEQC funding	2012–13

Initial condition

Most weeds listed below were originally identified as scattered over much of the area and/or having infestations of high density.

Results

Eradicated weeds

(or those now reduced to extremely low levels)

Strategy: aiming for complete eradication.

Devils Fig, Glycine, Green Guinea Grass, Johnson Grass, Siratro, Wild Tobacco.

Critical weeds

Strategy: these weeds are aggressive and require continual treatment and monitoring.

Broad Leaf Paspalum – scattered.

Crofton Weed – scattered.

Kahili Ginger – Lepidozamia Track entrance.

Palm Grass – isolated outbreak just south of Wivenhoe Outlook.

Signal Grass – small area at Wivenhoe Outlook.

White Passion Vine – scattered occurrences.

Long-term weeds

Strategy: these weeds are widespread along the D'Aguilar Range; treatment is limited to reducing further impact on native vegetation and where possible, restricting growth of the infestation.

Lantana

Wandering Jew
