BMT WBM

Port of Brisbane Annual Weed Survey - 2014

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Port of Brisbane Annual Weed Survey - 2014

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Synopsis: **This report provides the results of the 2014 Annual Weed Monitoring conducted at the Port of Brisbane.**

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Executive Summary

Annual weed monitoring surveys have been conducted at the Port of Brisbane (PBPL) since 2001 with the aim of identifying priority weed species, including declared plants and species listed by the Australian Quarantine Inspection Service (AQIS).

All weed species recorded in the survey areas at PBPL are widespread in the Brisbane region and south-east Queensland bioregion. No AQIS-listed species have been recorded. In terms of composition and distribution, woody weeds, vines and groundcovers of the survey areas have remained relatively stable over the monitoring period with some new weed species recorded in 2014. Minor species fluctuations over the monitoring period are probably a result of seasonal effects and/or survey effort.

Given the disturbed nature of the survey areas, weeds are most prevalent in the groundlayer which is also a reflection of the higher richness in groundcover species in the region. No introduced aquatic macrophyte weed species have been recorded in the PBPL lands. This is likely to be due to brackish to saline conditions of the waterbodies limiting the establishment of exotic macrophytes common in the region.

As the weed species recorded in the survey areas are widespread in Brisbane and the south-east Queensland bioregion they will be difficult to control and are unlikely to be eradicated from PBPL lands. However, it is recommended that PBPL focus weed control efforts in the following areas to fulfil landholder obligations under the *Land Protection (Pest and Stock Route Management) Act 2002* (LP Act) and within the Brisbane City Council (BCC) and to reduce potential future costs associated with delaying weed removal:

- following any earthworks all disturbed sites be sprayed and monitored for follow-up weed control
- integrated weed management with current and future industrial landholders in the vicinity of Port West Drain
- increased weed control efforts in the Port Gate Drain to reduce potential future weed control costs and possible waterway blockages.

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1 Introduction

1.1 Background

Annual weed monitoring surveys have been conducted at the Port of Brisbane (PBPL) since 2001. The aims of the surveys are to monitor the introduction and spread of priority weed species on PBPL lands and to recommend management and control measures as required. Priority weeds targeted in the surveys include plant species considered to be exotic or invasive particularly those listed by the Australian Quarantine Inspection Service (AQIS), declared species listed under the *Land Protection (Pest and Stock Route Management) Act 2002* (LP Act) and environmental weeds listed by the Brisbane City Council (BCC). AQIS listed weed species are specifically targeted because of their potential to enter the country via containers and other materials shipped and unloaded at the PBPL.

Weed monitoring was undertaken on PBPL lands from 2001 to 2013. Surveys were conducted at Lucinda Drain from 2001-2013, with surveys at Port Gate Drain commencing in 2007. In response to a potential weed incursion threat from imported vehicles, weed survey sites at the Car Precinct and T1-3 Overflow Area were included in the monitoring program in 2008. In 2013 Port West was included in the survey area due to the identification of pest species by stakeholders.

No AQIS-listed weed species have previously been recorded at PBPL. Eight declared pests (listed as class 2 or 3 under the LP Act) have previously been recorded including Broad-leaf Pepper Tree (*Schinus terebinthifolius*), Lantana (*Lantana camara*), Groundsel (*Baccharis halimifolia*), Prickly Pear (*Opuntia stricta*), Chinese Elm (*Celtis sinense*), Camphor laurel (*Cinnamomum camphora*), Fireweed (*Senecio madagascariensis*) and Giant Parramatta Grass (*Sporobolus fertilis*). A further 13 species listed under BCC weed categories have also been recorded in the survey sites. All weed species recorded at PBPL are widespread in degraded sites and coastal habitats of south-east Queensland.

BMT WBM Pty Ltd was commissioned to undertake the weed monitoring program of PBPL lands for 2014. This report details the results of the 2014 weed survey for Lucinda Drain, Port Gate Drain, T1-3 Overflow and Car Precinct areas and Port West Drain.

1.2 Scope of Works

Weed surveys were conducted in April 2014 at Lucinda Drain, Port Gate Drain, T1-3 Overflow and Car Precinct and Port West Drain. The scope of works for the weed survey included the following:

- Identify species declared or listed by AQIS, LP Act or BCC
- Monitor the occurrence and abundance of exotic invasive species
- Assess the extent of exotic invasive species
- Report the findings of the current survey
- Undertake a comparative analysis of the 2013 and 2014 survey results
- Provide recommendations for on-going weed management.

2 Methodology

In accordance with previous monitoring surveys, weed inspections along the Lucinda, Port Gate and Port West Drains and the T1-3 Overflow and Car Precinct areas were undertaken in the post-summer months in April, 2014. The survey was conducted by a BMT WBM botanist and an environmental scientist.

2.1 Targeted Weed Species

Targeted species included the following:

- AQIS identified 'weeds of interest' within the Port of Brisbane area, based on potential threats to both natural and agricultural systems (refer to Appendix A).
- Exotic species declared under the LP Act
- Species listed by BCC as environmental weeds.

2.2 Techniques

The weed survey used the random meander technique for recording all exotic and invasive species with the survey sites. All surveys were conducted on-foot to ensure that extensive coverage of the survey site was achieved. Incidental observations of targeted weed species outside the survey sites were also recorded. The location of all targeted weed species observed were recorded on handheld GPS and visual assessments of weed density and/or percentage vegetation cover were recorded. Weed identification was undertaken on site. Samples of weed species unable to be identified *in situ* were pressed for later verification.

2.3 Survey Sites

The weed survey along Lucinda Drain consisted of recording exotic and invasive species within a 2 m wide transect along the entire length of the drain's eastern bank. A visual inspection of the western bank was taken from the eastern bank. Sites on the western bank unable to be inspected thoroughly from the eastern bank were inspected on foot.

The weed survey along Port West Drain consisted of recording exotic and invasive species within a 2 m wide transect along the entire length of the drain's eastern bank. A visual inspection of the western bank was taken from the eastern bank.

The weed survey along the southern section of the Port Gate Drain south of Howard Smith Drive consisted of recording exotic and invasive species within a 2 m wide transect along the entire length of the drain's eastern bank. A visual inspection of the western bank was performed from the eastern bank. The plant survey along the northern section of the Port Gate Drain consisted of recording exotic and invasive species within a 2 m wide transect that traversed the entire length of the drain's western bank. A visual inspection of the eastern bank was performed from the western bank.

The weed survey in the T1-3 Overflow area consisted of recording exotic and invasive species within a 2 m wide transect along the entire eastern, northern, western and southern boundaries of the hardstand area and along both banks of the constructed drain just north of the hardstand area.

The weed survey of the Car Precinct Area consisted of recording exotic and invasive species within the easement between the railway and the western boundary of the hardstand area and the banks of the lake adjacent to the previous Visitors Centre site.

2.4 Survey Limitations

Whilst every effort has been made to identify targeted weed species in the PBPL survey sites, the detectability of plant species and the ability to accurately identify these in the field varies with seasonal and climatic conditions which influence the presence of reproductive features (flowers, fruits and seeds) which are useful, and in some cases essential, for species identification. Consequently, the survey conducted should not be regarded as conclusive that targeted AQIS, LP Act, or BCC targeted weeds do not occur within the survey sites or surrounding lands.

3 Results

3.1 Lucinda Drain

3.1.1 Site Description

Lucinda Drain is a constructed channel located east of Lucinda Drive on the eastern edge of the Port. It provides drainage for stormwater run-off from hardstand areas to the north and discharges through the Lucinda Weir into Boat Passage.

The channel banks support planted and naturally recruited shrubs and trees comprised of a mix of local terrestrial species such as *Casuarina* spp., *Ficus* spp., *Hibiscus tiliaceus, Melaleuca* spp., *Callistemon* spp., and *Macaranga tanarius*. Introduced shrubs are also widespread and the groundcover is dominated by exotic grasses (refer below). The tidal channel does not support any extensive aquatic macrophytic or littoral vegetation. Extensive mangroves and saltpan lie to the east of the drain associated with the intertidal flats of Boat Passage.

The western bank of the drain adjacent to Lucinda Drive undergoes regular maintenance involving mowing and weed spraying. Poor access along the eastern bank of Lucinda Drain limits regular maintenance but weeds are reportedly removed on an annual basis (RPS, 2013).

Figure 3-1 Lucinda Drain

3.1.2 Weeds

Appendix B and C and Figure 3-2 provide the results of the 2014 weed survey for Lucinda Drain. The following observations were made:

- No AQIS-listed species were recorded within or directly adjacent to Lucinda Drain
- Three Class 3 declared species listed under the LP Act were recorded including: *Schinus terebinthifolius, Cardiospermum grandiflora* and *Lantana camara*

- Fourteen Class R weeds listed by BCC were recorded at Lucinda Drain. These species are well established across Brisbane and are a moderate threat (BCC, 2014). The management objective for Class R weeds is to reduce the population as part of routine maintenance (BCC, 2014). Species recorded included *Schinus terebinthifolius, Senna pendula* var. *glabrifolia, Ipomoea cairica, Macroptilium atropurpureum, Ficus elastic, Cenchrus echinatus, Chloris gayana, Melinis repens, Megathyrsus maximus* var. *maximus, Cardiospermum grandiflora, Datura sp., Solanum seaforthianum, Solanum nigrum* and *Lantana camara.*

The RPS (2013) report does not provide abundance data for individual species therefore it cannot be determined if, and where, a particular species may be spreading and/or recruiting. However, the 2014 data records the size-class for woody species and estimates of groundcover which can be used in ensuing surveys to detect patterns of recruitment and spread of individual species.

The dominant woody weed recorded at Lucinda Drain was *Schinus terebinthifolius*. Twenty-nine individuals were recorded on the banks of Lucinda Drain ranging in height from 0.5m to 6m, indicating that mature individuals occur but that successful recruitment of seedlings is taking place.

Other woody weeds recorded included six mature *Lantana camara,* averaging 2.0m in height, and two mature *Senna pendula* var. *glabrata,* averaging 1.5m in height. One mature *Datura ferox* was also noted. Sparse vines (<5% cover) were recorded in the survey area including *Ipomoea cairica, Cardiospermum grandiflorum* and an individual *Solanum seaforthianum*.

The groundcover averaged 60% cover and was dominated by the exotic grass *Chloris gayana*. Other groundcovers included *Megathyrsus maximus* var. *maximus, Macroptilium atropurpureum, Bidens pilosa, Melinis repens, Ageratum houstonianum, Tridax procumbens* and *Commelina benghalensis.* Isolated patches of *Cenchrus echinatus* averaging 90% cover were also recorded on the eastern bank.

No aquatic macrophyte weed species were recorded. The brackish to saline conditions of the channel limits the establishment of exotic macrophytes known from the region.

Datura sp., *Solanum seaforthianum* and *Cenchrus echinatus* were not recorded at Lucinda Drain in the previous survey (RPS, 2013). In addition, *Opuntia* sp., *Ricinus communis* and *Leucaena leucocephala* were recorded at Lucinda Drain in the 2013 survey (RPS, 2013) but were not noted in the current survey effort. These differences in records are probably a reflection of the random-meander survey technique rather than actual presence and absence of the species. Anomalies with survey coverage can be overcome with the establishment and monitoring of permanent plots, however this approach generally results in reduced coverage over the entire sample area.

Title:

Lucinda Drain Weed Survey Results 2014

Figure: 3-2

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3.2 Port West Drain

3.2.1 Site Description

Port West Drain, located north of Lytton Road approximately 4km south-west of the Port, comprises a narrow intertidal channel fringed with mangroves dominated by mature *Avicennia marina*. The channel is bounded to the west by extensive mangrove forest and cleared land for industrial purposes lie to the east. Re-construction works of the Port West Drain have recently been undertaken, however there is no scheduled maintenance work (including weed removal) for the Port West Drain (RPS, 2013).

Figure 3-3 Port West Drain - East

3.2.2 Weeds

Appendix B and D and Figure 3-4 provide the results of the 2014 weed survey for Port West Drain. The following observations were made:

- No AQIS-listed species were recorded within or directly adjacent to Port West Drain
- *Baccharis halimifolia* listed as Class 2 under the LP Act was recorded
- Three Class 3 declared species (LP Act) were recorded including: *Schinus terebinthifolius, Asparagus plumosus* and *Lantana camara*
- Two Class C weeds listed by BCC were recorded including *Baccharis halimifolia* and *Asparagus plumosus.* The management intent of Class C weeds, which are well established in Brisbane, is containment and reduction (BCC, 2014)
- Thirteen Class R weeds listed by BCC were recorded including: *Schinus terebinthifolius, Lantana camara, Senna pendula* var. *glabrifolia, Ipomoea cairica, Ricinus communis, Macroptilium atropurpureum, Neonotonia wightii, Rivina humilis , Chloris gayana, Melinis repens, Megathyrsus maximus* var. *maximus, Sorghum halepense* and *Solanum nigrum.*

- The BCC Class SIL weed *Gomphocarpus physocarpus* was recorded. SIL listed weeds are currently in review.

The intertidal lands vegetated with dense mangrove forest to the west of the channel limits extensive weed establishment in this area. However, the eastern riparian corridor adjacent to the cleared industrial land supports a mix of exotic shrubs and groundcovers which extend to under the mangrove canopy, but only occur to the high tide mark.

The dominant woody weed recorded at Port West Drain was *Baccharis halimifolia*. Approximately 139 individuals were recorded on the eastern banks of Port West Drain. More than 50% of these were seedlings.

Other woody weeds recorded included (in order of abundance):

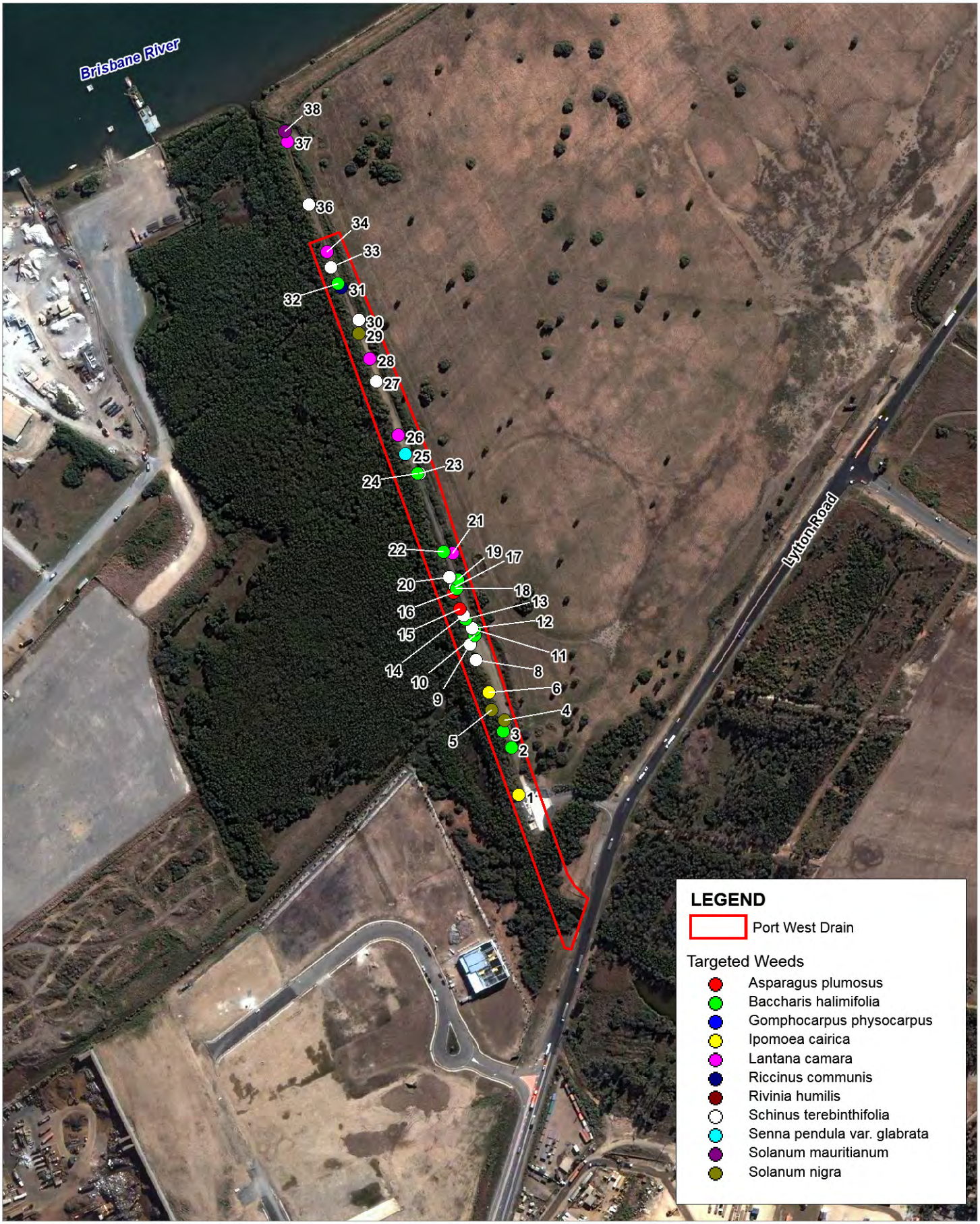
- 83 *Schinus terebinthifolius* ranging from seedlings (0.5m in height) to adults (3m in height)
- 70 *Senna pendula* var. *glabrata* ranging from seedlings (0.5m in height) to adults (4m in height)
- 50 *Rivina humilis* seedlings restricted to one location
- 26 *Gomphocarpus physocarpus* restricted to one location
- 17 *Lantana camara* ranging from seedlings (0.2m in height) to mature individuals (2.5m in height)
- 5 *Solanum nigra* mature individuals
- 3 mature *Ricinus communis*
- 2 mature *Solanum mauritianum.*

Sparse vines (<5% cover) were recorded in the survey area including *Asparagus plumosus, Ipomoea cairica, Macroptilium atropurpureum, Neonotonia wightii* and *Passiflora suberosa.*

The groundcover averaged 90% cover and was dominated by the exotic grass *Megathyrsus maximus* var. *maximus.* Other groundcovers included *Chloris gayana, Macroptilium atropurpureum, Bidens pilosa, Melinis repens, Ageratum houstonianum, Tridax procumbens* and *Commelina benghalensis.*

No aquatic macrophyte weed species were recorded given the brackish to saline conditions of the channel.

Asparagus plumosus, Macroptilium atropurpureum, Phytolacca octandra and *Solanum mauritianum* were not recorded at Port West Drain in the previous survey (RPS, 2013). In addition, *Agave* sp., *Senecio madagascariensis* and *Leucaena leucocephala* were recorded at Port West Drain in the 2013 survey (RPS, 2013) but were not noted in the current survey effort. These differences in records are probably a reflection of survey coverage. *Rivina humilis* seedlings recorded in 2014 are likely to be a new weed outbreak for the survey area.



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Port West Drain Weed Survey Results 2014

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3.3 Port Gate Drain

3.3.1 Site Description

Port Gate Drain located in the south-west section of the PBPL lies to the south of Boat Passage in the vicinity of Howard Smith Drive. It collects stormwater run-off from the adjacent hardstand areas and drains into (and partially receives) the tidal waters in Boat Passage. The banks of the drain are constructed of concrete, gravel and/or compacted earth, which limits extensive vegetation growth. The tidal reaches of the drain support sparse fringing Grey Mangrove (*Avicennia marina*) seedlings, with a sparse groundcover of *Phragmites australis, Schoenoplectus validus* and *Fimbristylis* sp.. Outside the tidal zone the banks support a sparse groundcover of exotic grasses and shrubs.

It is understood that Port Gate Drain undergoes regular maintenance (including mowing and spraying for exotic species) which is facilitated by the PBPL (RPS, 2013).

Figure 3-5 Port Gate Drain

3.3.2 Weeds

Appendix B and E and Figure 3-6 provide the results of the 2014 weed survey for Port Gate Drain. The following observations were made:

- No AQIS-listed species were recorded within or directly adjacent to Port Gate Drain
- *Baccharis halimifolia* listed as Class 2 under the LP Act and Class C by BCC was recorded
- Three Class 3 declared species (LP Act) were recorded including: *Schinus terebinthifolius, Cinnamomum camphora* and *Cardiospermum grandiflora*
- Ten Class R weeds listed by BCC were recorded including: *Schinus terebinthifolius, Ricinus communis, Leucaena leucocephala, Macroptilium atropurpureum, Cinnamomum camphora,*

Chloris gayana, Melinis repens, Megathyrsus maximus var. *maximus, Sorghum halepense* and *Cardiospermum grandiflora*

- Two Class SIL weeds listed by BCC were recorded including: *Gomphocarpus physocarpus* and *Passiflora foetida*

The dominant woody weed recorded at Port Gate Drain was *Schinus terebinthifolius* where approximately 72 individuals were recorded. More than 50% of these were seedlings.

Other woody weeds recorded included (in order of abundance):

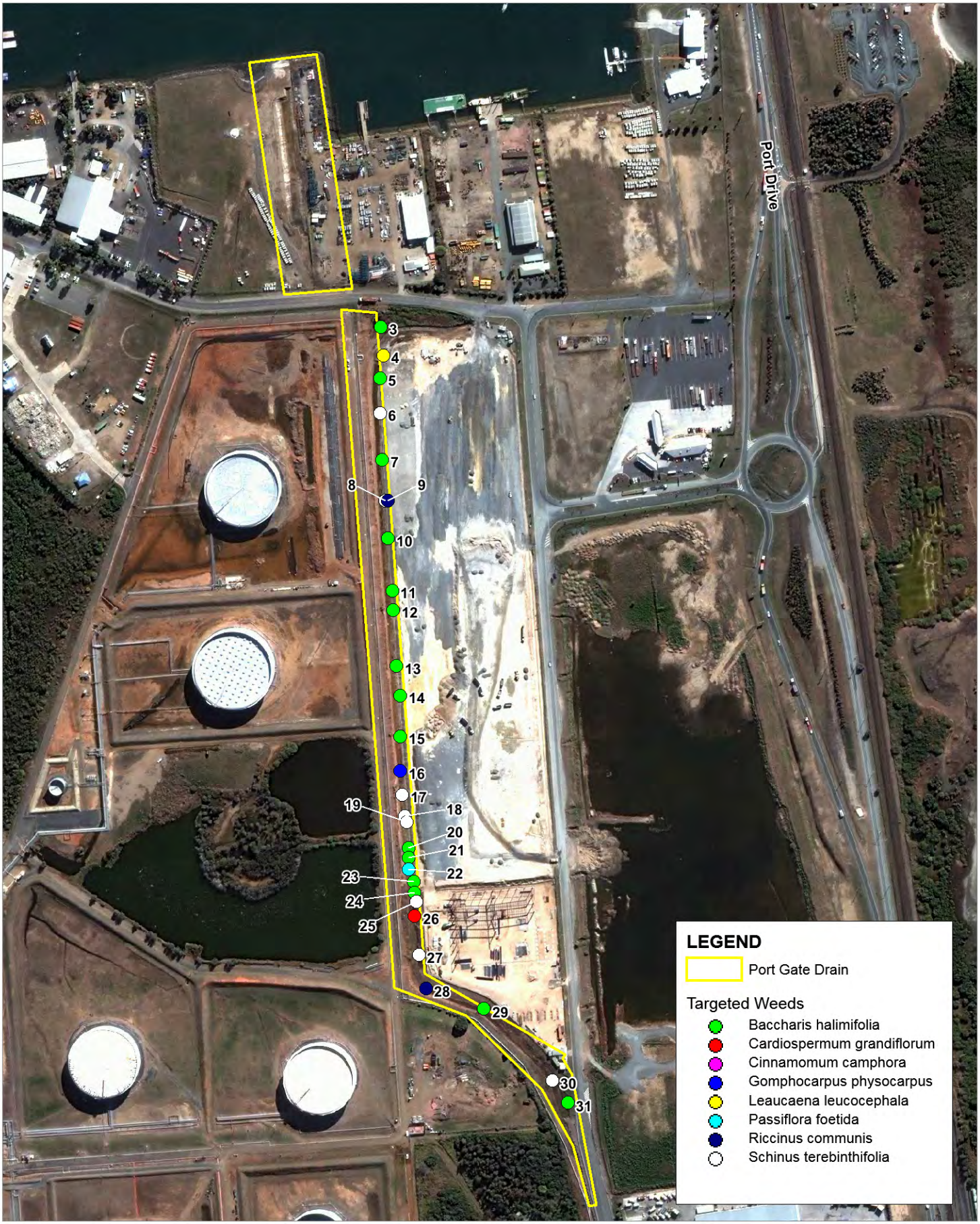
- 31 *Baccharis halimifolia* from seedlings (0.5m in height) to adults (2m in height)
- Three *Ricinus communis* seedlings
- Two *Cinnamomum camphora* seedlings
- Two *Leucaena leucocephala* seedlings
- One mature *Gomphocarpus physocarpus.*

Sparse vines (<5% cover) were recorded in the survey area including *Macroptilium atropurpureum, Passiflora foetida* and *Cardiospermum grandiflorum*.

The sparse groundcover was limited by the constructed concrete and compacted earth banks. The most widespread species included *Melinis repens, Chloris gayana, Bidens pilosa, Macroptilium atropurpureum, Digitaria ciliaris, Megathyrsus maximus var. maximus, Paspalum distichum* and *Sorghum halepense.*

No aquatic macrophyte weed species were recorded given the brackish to saline conditions of the channel.

Phytolacca octandra, Cardiospermum grandiflora and *Ricinus communis* were not recorded at Lucinda Drain in the previous survey (RPS, 2013). In addition, *Solanum nigra* and *Lantana camara* were recorded at Port Gate Drain in the 2013 survey (RPS, 2013) but were not noted in the current survey effort. These differences in records are probably a reflection of survey coverage.



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Port Gate Drain Weed Survey Results 2014

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3.4 T1-3, Car Precinct and Constructed Lakes

3.4.1 Site Description

The T1-3 and Car Precinct areas east of Port Drive at the Port of Brisbane store imported vehicles and as such are potential vectors for newly introduced weed species.

The T1-3 survey area extends around the car parking hardstand and includes a constructed drain to the north. The survey area consists predominantly of regularly maintained lawn which receives stormwater overflow from the hardstand. Landscaped garden beds front Port Drive. The constructed drain in the northern section consists of a concrete channel which is designed to pipe stormwater runoff into the Brisbane River.

The Car Precinct survey area lies to the south and west of the hardstand vehicle storage area. The survey area consists predominantly of regularly maintained lawn which receives stormwater overflow from the hardstand.

The T1-3 and Car Precinct sites are separated by the Queensland Rail freight line and a cleared and regularly mowed easement. Constructed lakes lie south of the Car Precinct.

It is evident that the T1-3, Car Precinct, railway easement and lands surrounding the lakes undergo regular maintenance including mowing, and it is understood these areas are regularly sprayed for weeds (RPS, 2013).

Figure 3-7 Rail Easement and Constructed Lake

3.4.2 Weeds

Appendix B and G and Figure 3-8 provide the results of the 2014 weed survey for the T1-3, Car Precinct and Constructed Lakes. The following observations were made:

- No AQIS-listed species were recorded within or directly adjacent to the survey areas
- Two Class 2 declared species (LP Act) were recorded including: *Baccharis halimifolia* and *Senecio madagascariensis*

- Three Class 3 declared species (LP Act) were recorded including: *Schinus terebinthifolius, Lantana camara* and *Tamarix aphylla*
- The BCC Class C weed *Baccharis halimifolia* was recorded
- Thirteen Class R weeds listed by BCC were recorded including: *Senecio madagascariensis, Schinus terebinthifolius, Lantana camara, Agave* sp., *Ipomoea cairica, Ricinus communis, Macroptilium atropurpureum, Cenchrus echinatus, Chloris gayana, Melinis repens, Megathyrsus maximus* var. *maximus, Datura* sp. and *Solanum nigrum*
- The SIL listed BCC weed species *Tamarix aphylla* was recorded.

The survey areas around the car parking sites, including the rail easement, are regularly mown and maintained and do not support diverse or abundant weed species. The riparian corridor of the constructed lake supports a high density of weeds common throughout the Brisbane region.

The dominant woody weed recorded in the survey areas was *Schinus terebinthifolius* where approximately 136 individuals were recorded, predominantly around the constructed lakes. More than 50% of these were mature individuals.

Other woody weeds recorded included (in order of abundance):

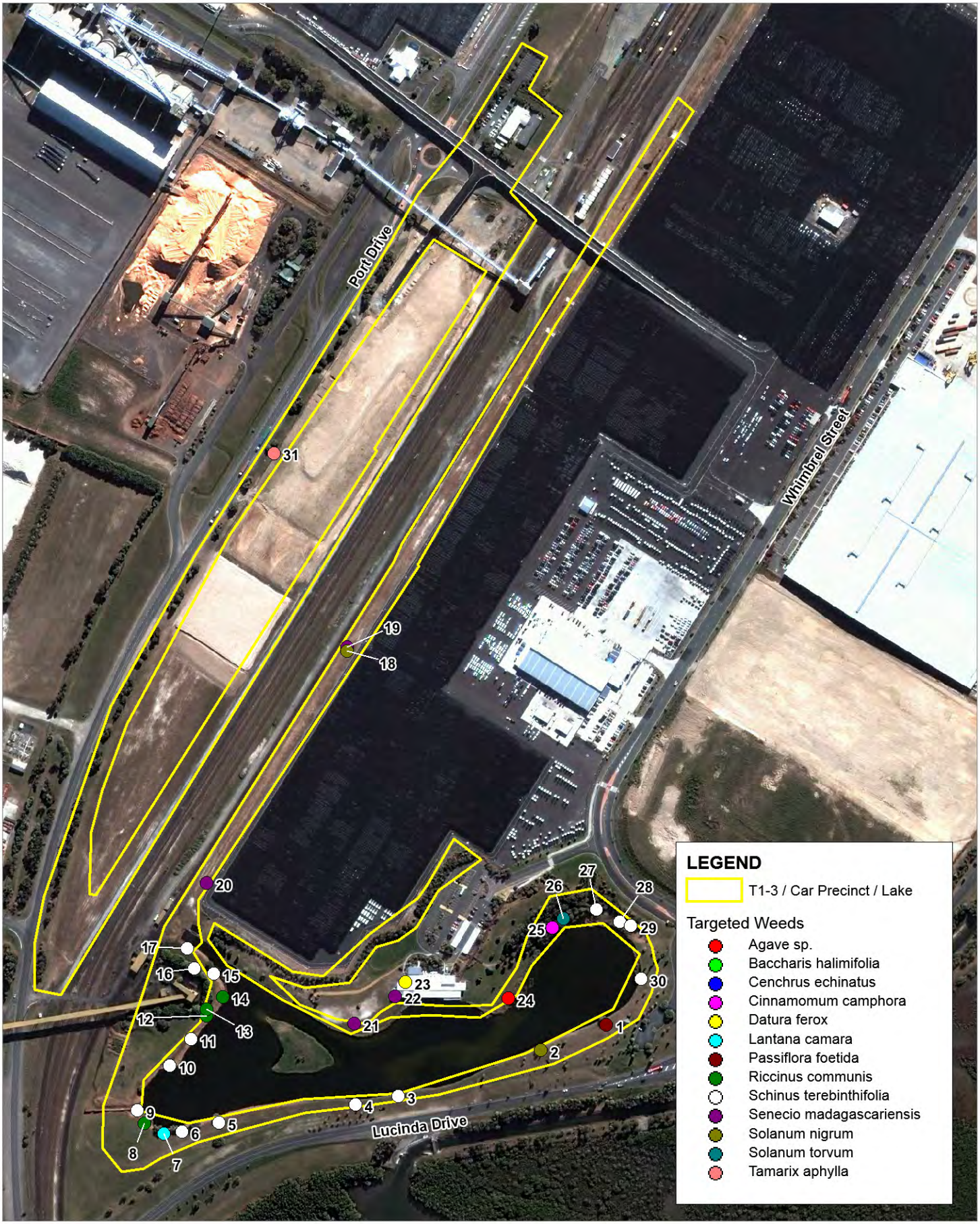
- 54 mature *Baccharis halimifolia*
- 16 mostly mature *Ricinus communis*
- 10 mature *Solanum torvum* and 1 seedling
- Two *Lantana camara*
- Two *Solanum nigra*
- One *Cinnamomum camphora* seedling
- One mature *Datura ferox*
- One mature *Tamarix aphylla.*

Sparse vines (<5% cover) were recorded in the survey area including *Macroptilium atropurpureum*.

The sparse groundcover was limited by the regular maintenance and mowing. The most widespread species included *Megathyrsus maximus var. maximus, Paspalum* spp., *Melinis repens, Chloris gayana, Bidens pilosa* and *Cenchrus echinatus.* Approximately 22 *Senecio madagascariensis* were recorded in the cleared rail easement and adjacent to the northern edge of the lake.

No aquatic macrophyte weed species were recorded.

Phytolacca octandra, Cenchrus echinatus and *Tamarix aphylla* were not recorded in the survey areas in the previous survey (RPS, 2013). In addition, *Leucaena leucocephala* was recorded in the survey areas in the 2013 survey (RPS, 2013) but were not noted in the current survey effort. These differences in records are probably a reflection of survey coverage.



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T1-3, Car Precinct, and Lake Weed Survey Results 2014

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4 Discussion

With the exception of the western bank of the Port West Drain, the weed survey sites within the PBPL are highly disturbed and therefore prone to weed invasion. Given the nature of the Port, PBPL lands are also susceptible to the import of new weed species. However, all the weeds recorded at PBPL are widespread in the Brisbane region and no AQIS listed species were detected.

In terms of weed composition and distribution, the survey areas have remained relatively stable over the monitoring period with minor areas of recruitment and some new weed records noted in 2014. Minor species fluctuations over the monitoring period are also likely to be a result of seasonal effects and/or survey effort. The dominant weed species recorded on PBPL lands included:

- Woody weeds: *Schinus terebinthifolius* and *Baccharis halimifolia*
- Vine cover: generally low (0<5% cover) in all survey areas and dominated by *Cardiospermum grandiflorum, Asparagus plumosus, Ipomoea cairica, Macroptilium atropurpureum, Neonotonia wightii, Passiflora suberosa* and *Passiflora foetida.*
- Ground cover: generally high cover (50-90%) given the disturbed nature of the survey areas and dominated by the exotic grasses *Megathyrsus maximus* var*. maximus, Chloris gayana*, and *Melinis repens*.

The highest weed species diversity was recorded in the groundlayer, which is a reflection of the higher richness in groundcover species in the region and the disturbed nature of the survey sites.

No introduced aquatic macrophyte weed species were recorded. The brackish to saline conditions of the channels limits the establishment of most exotic macrophytes recorded in the region.

The lack of species abundance data in the RPS (2013) report makes it difficult to determine if, and where, a particular species may be spreading and/or recruiting. However, sites of seedling establishment were observed and noted in the 2014 survey for future comparative assessments.

In terms of weed composition and distribution Lucinda Drain has remained relatively stable over the past decade. However, there is some recruitment of *Schinus terebinthifolius* on the banks. This is a widespread species in and directly adjacent to littoral habitats of the Brisbane region and will be difficult to control on PBPL lands. An outbreak of the groundcover *Cenchrus echinatus* at a site on the eastern bank appears to be related to recent earthworks or ground disturbance. It is recommended this outbreak be treated. It is also recommended that following any earthworks on or adjacent to the banks of Lucinda Drain, all disturbed sites be sprayed and monitored for follow-up weed control.

A new species record for PBPL was recorded along the eastern banks of Port West Drain where recruitment of *Rivina humilis* seedlings was noted under the mangrove canopy, but above the high tide mark. This species has been previously recorded in the region (refer Appendix G for Wildlife Online Extract, DSITIA). Other species successfully recruiting in and adjacent to this mangrove zone above the high tide mark included *Baccharis halimifolia, Schinus terebinthifolius, Senna pendula* var. *glabrata* and *Lantana camara*. This survey area lies directly adjacent to cleared lands

for future industrial precincts, therefore weed control in this area will be difficult to achieve and will require integrated management from all relevant landholders. The conservation values of this area are restricted to the intertidal lands supporting dense mangrove forest. However, unless cleared or disturbed, these intertidal habitats are not susceptible to degradation by weed invasion spreading from PBPL lands.

The Port Gate Drain is a highly modified channel of low ecological value. No new weed species of management concern were recorded in the channel. However, extensive recruitment of *Schinus terebinthifolius* and *Baccharis halimifolia* was noted, particularly in the sediment deposition beds in the bend of the channel. Whilst both species are well established in the region and will be difficult to control, and are unlikely to be eradicated, it is recommended that PBPL conduct more regular weed control efforts in this channel to avoid potential blockages in the bend and overflow following flooding. Removing woody species whilst they are still small will also reduce future costs associated with mature shrub and tree removal.

Whilst the regularly mowed grasslands and channels surrounding the imported vehicle precincts may be vulnerable to imported weeds, no new species were detected. The declared plant *Senecio madagascariensis* was restricted to this area and the constructed lakes within the PBPL. This species is widespread in disturbed habitats of the Brisbane region. The declared plant *Tamarix aphylla* was also restricted to a landscaped bed on Port Drive directly adjacent to the vehicle storage area. This species has been previously recorded in the region (refer Appendix G for Wildlife Online Extract, DSITIA). There is no evidence that this individual is recruiting but it is recommended that it be removed to avoid potential future spread.

As the weed species recorded in the survey areas are widespread in Brisbane and the south-east Queensland bioregion they will be difficult to control and are unlikely to be eradicated from PBPL lands. However, it is recommended that PBPL continue weed control efforts to fulfil landholder obligations under the LP Act and within BCC and to reduce potential future costs associated with delaying weed control, particularly the removal of woody shrubs and trees. Based on the 2014 weed survey and a review of the annual monitoring results conducted over the past 13 years, it is recommended that PBPL focus weed control efforts in the following areas:

- following any earthworks all disturbed sites be sprayed and monitored for follow-up weed control
- co-ordinating weed management with current and future industrial landholders in the vicinity of Port West Drain
- increased weed control efforts in the Port Gate Drain to reduce potential future weed control costs and possible waterway blockages.

5 References

Brisbane City Council (2014). Weed Classification. http://weeds.brisbane.qld.gov.au/weed-classification, accessed August, 2014.

RPS Australia East Pty Ltd (2013). Annual Plant Assessment Port of Brisbane. Report Prepared for the Port of Brisbane, July 2013.

Wildlife Online Data. Extract Date: 22/04/2014. Prepared by the Queensland Department of Science, Information Technology, Innovation and the Arts.

Appendix A AQIS Target Weeds

Family	Botanical Name	Common Name	Author	Comments
ACANTHACEAE	Asystasia gangetica subsp. micrantha	Chinese Violet	(Nees) Ensermu	Rubber, coffee, oil-palm plantations, environmental weed.
	Blechum pyramidatum	Browne's Blechum, Green Shrimp Plant, Blackweed	(Lam.) Urb	Pastures, gardes, disturbed areas, rainforest understoreys.
ASTERACEAE	Austroeupatorium inulaefolium	Austroeupatorium	(H.B.K.) King & Robinson	Tea, rubber, rosella and other plantation crops; roadsides; environmental weed in secondary forests.
	Bidens biternata	Yellow Flowered Blackjack, Five Leaved Blackjack	Merr. and Sherff.	Weed of disturbed and cultivated areas, paddy fields.
	Chromolaena odorata	Siam Weed, Christmas Bush	(L.) King & Robinson	Pastures, oil palm, rubber, coffee, cashew, fruit, maize, forestry. Toxic to livestock. Major environmental weed: secondary forests, roadsides, disturbed sites.
	Hieracium aurantiacum	Orange Hawkweed	CRC Weed Management	Potential threat to alpine country and temperate tablelands of eastern Australia.
	Hieracium pilosella	Mouse-eared Hawkweed	DPIW, TAS	Major weed in pasture and native vegetation and is a serious threat to grasslands and alpine environments.
	Hieracium praeltum	King Devil	-	-
	Mikania micrantha	Mile-a-Minute	H.B.K.	Cocoa, coconut, orchards, rubber, oil palm, sugarcane, vegetables, upland rice, pastures; serious environmental weed
BORAGINACEAE	Cordia curassavica	Black Sage	Roem. and Shult.	Environmental weed.
CAPPARIDACEAE	Cleome rutidosperma	Fringed Spider Flower	Weeds Australia	Environmental weed of crops.
CHENOPODIACEAE	Bassia scoparia	Kochia	CRC Weed Management	Invades crops and pastures.
CYPERACEAE	Cyperus teneristolon	-	CRC Weed Management	Semi-arid agricultural crops and damp grasslands. Environmental weed.
	Schoenoplectus juncoides	-	(Roxb.) Palla	Rice, freshwater and tidal swamps.
	Trianoptiles solitaria	Subterranean Cape Sedge	CRC Weed Management	Grows in seasonally damp areas.
EQUISETACEAE	Equisetum ramosissimum	Horsetail, Scouring Rush	Desf. subsp. debile (Vauch.) Hauke	Rice terraces and bunds, tea plantations.
EUPHORBIACEAE	Croton hirtus	-	L'Herit	Rubber plantations; crops including mung beans, peanuts, soybeans, papaya, vegetables and tobacco.
FABACEAE	Mucuna pruriens	Velvet Bean, Cow-Itch	DC.	Weed of pastures and a wide range of dryland crops; smothering habit

Family	Botanical Name	Common Name	Author	Comments
				and ability to climb to tree tops makes a significant potential environmental weed. Irritant hairs can kill livestock if ingested and cause severe skin reaction if touched.
HALORACEAE	Myriophyllum spicatum	Eurasian Watermilfoil	L.	Serious weed of lakes, water-storages, canals and rivers. Affects fish and shellfish production and recreational use of water bodies
HYDROCHARITACEAE	Lagarosiphon major	Lagarosiphon	CRC Weed Management	Aquatic plant that can dominate freshwater lakes, dams and slow-moving streams.
LAMIACEAE	Clerodendrum chinense	Stickbush, Glory Bower, Honolulu Rose, Spanish Jasmine	(Osbeck) Mabb.	Disturbed forests, roadsides, gardens, pastures, plantations, environmental weed.
	Leucas aspera	Pansi-pansi, Feng Chao Cao	(Willd.) Link	Fields, dandy grasslands, wasteland, roadsides, overgrazed areas.
LIMNOCHARITACEAE	Limnocharis flava	Yellow Bur-head, Yellow Sawah Lettuce	(L.) Buchenau	Serious weed of rice and wetlands. Used as a green vegetable.
LYTHRACEAE	Rotala indica	Toothcup	(Willd.) Koehne	Rice fields, river banks, ditches and moist environments
MELASTOMACEAE	Clidemia hirta	Koster's Curse, Soap Bush	(L.) D. Don.	Cocoa, tea, coconut, oil palm and rubber plantations, cultivated areas, pastures, secondary forest and woodlands; other disturbed sites.
	Miconia calvescens	Miconia, Velvet Tree	DC.	Coastland, disturbed areas, natural forests, planted forests, riparian zones, scrub / shrublands, urban areas, wetlands.
MIMOSACEAE	Acacia karroo	Karroo Thorn	DPIF	Rangelands and open grasslands, suppresses the growth of agricultural productivity.
	Neptunia plena	Water Dead and Awake, Water Sensitive	(L.) Benth.	Wetlands, swamps and marshes, water-logged or flooded areas.
NYCTAGINACEAE	Boerhavia erecta	Erect Tar Vine	L.	Peanuts, sorghum, rice and other annual crops; weed of cultivated land, pastures and coastal environments.
OROBANCHACEAE	Aeginetia indica	Ye Gu	L.	Parasitizes bamboo shoots and crops such as rice, maize and sugarcane. Grassy lowlands, wet, swampy ground, forests, roadsides.
	Orobanche ramosa	Branched Broomrape	DAFF	Serious pest of crops and pastures.
PIPERACEAE	Piper aduncum	Spiked Pepper, False Karva	L.	Karva crops, grazing lands, abandoned gardens.
POACEAE	Digitaria insularis	-	(L.) Mes ex	Pineapples; unpalatable weed of

Family	Botanical Name	Common Name	Author	Comments
			Ekman	pastures, headlands,
	Echinochloa glabrescens	A barnyard grass	Munro ex Hook. f.	Rice, maize.
	Eragrostis japonica	Japanese Lovegrass, Pond Lovegrass	(Thunb.) Trin.	Arable lands and rice fields.
	Imperata conferta	Cogongrass, Lalang Jawa	(Presl.) Ohwi	Coconut, roadsides, hillsides, streams and trails in dense or open forest.
	Leptochloa chinensis	Red Sprangletop, Feathergrass	(L.) Nees.	Rice, cotton, soybean, maize, sugarcane, pineapple, sweet potato, vegetables, peanuts, tea, bananas.
	Nasella tenuissima	Mexican feather Grass	Territory and Municipal Services	Pastures and native grasslands. Highly invasive.
	Sacciolepis interrupta	-	(Willd.)	Rice, irrigation channels, wetlands. Potential environmental weed.
RUBIACEAE	Paederia foetida	Lesser Malayan Stinkwort	L.	Sugarcane, secondary forest; climbs over shrubs and trees - potential environmental weed.
SALVINIACEAE	Salvinia cucullata	Salvinia	Roxb.	Rice, waterways, wetlands.
SCROPHULARIACEAE	Limnophila sessiliflora	Ambulia, Asian Marshweed, Shi Long Wei	(Vahl) Blume	Ponds, swamps, rice fields, wet places along streams.
	Striga asiatica	Witchweed	(L.) O. Ktze.	Serious root parasite on rice, maize, sorghum, sugarcane, millet; also on some broadleaf crops including sunflower, tomatoes, some legumes.

Appendix B Weed Species Records for Port of Brisbane 2013 -2014

Target Species	LP Act Class	BCC Class	Lucinda Drain		Port Gate		Port West		T1-3 / Car Precinct / Lakes	
			2013	2014	2013	2014	2013	2014	2013	2014
AGAVACEAE										
Agave sp.		R					x		x	x
AMARANTHACEAE										
Alternanthera denticulata				x			x	x	x	
Alternanthera pungens										
Amaranthus quitensis										
Amaranthus viridis									x	x
Gomphrena celosioides									x	x
ANACARDIACEAE										
Schinus terebinthifolius	3	R	x	x	x	x	x	x	x	x
APIACEAE										
Cyclospermum leptophyllum									x	
Centella asiatica										
ASCLEPIADACEAE										
Gomphocarpus physocarpus		SIL			x	x	x	x		
ASPARAGACEAE										
Asparagus aethiopicus cv. Sprengeri	3									
Asparagus plumosus	3	C						x		
ASTERACEAE										
Ageratum houstonianum			x	x			x	x	x	x
Ambrosia artemisiifolia	2									
Ambrosia tenuifolia										
Aster subulatus					x				x	
Baccharis halimifolia	2	C			x	x	x	x	x	x
Bidens pilosa			x	x	x	x	x	x	x	x
Calyptocarpus vialis									x	
Cirsium vulgare										
Conyza bonariensis					x	x	x	x		x
Conyza pusilla										
Conyza sumatrensis			x		x				x	
Cotula australis			x							
Crassocephalum crepidioides				x				x	x	
Gamochaeta calviceps										
Emilia sonchifolia					x	x				
Hypochaeris radicata								x		
Nerium oleander										
Onopordum acanthium							x	x	x	x
Parthenium hysterophorus	2									
Pseudognaphalium luteoalbum										
Senecio madagascariensis	2	R					x		x	x
Sonchus oleraceus			x				x	x	x	
Sphagneticola trilobata	3									
Synedrella nodiflora			x							
Tagetes minuta			x				x		x	
Tridax procumbens			x	x		x			x	x
Wollastonia biflora			x							
ARECACEAE										
Syagrus romanzoffiana			x							

Weed Species Records for Port of Brisbane 2013 -2014

Target Species	LP Act Class	BCC Class	Lucinda Drain		Port Gate		Port West		T1-3 / Car Precinct / Lakes	
BALSAMINACEAE			2013	2014	2013	2014	2013	2014	2013	2014
Impatiens walleriana									x	x
BORAGINACEAE										
Heliotropium amplexicaule										
BRASSICACEAE										
Brassica tournefortii			x							
Cakile maritime										
Lepidium africanum			x						x	x
CACTACEAE										
Opuntia sp.	2	R	x							
CAESALPINIACEAE										
Senna pendula var. glabrifolia		R	x	x			x	x		
CAMPANULACEAE										
Lobelia erinus							x			
CARYOPHYLLACEAE										
Cerastium glomeratum										
Polycarpon tetraphyllum										
CHENOPODIACEAE										
Chenopodium ambrosioides										
Chenopodium sp.										
COMMELINACEAE										
Commelina benghalensis			x	x					x	
CONVOLVULACEAE										
Convolvulus arvensis										
Ipomoea sp. (alba)										
Ipomoea cairica		R	x	x	x		x	x	x	x
Ipomoea indica		R	x						x	
Ipomoea quamoclit			x							
CYPERACEAE										
Cyperus aggregatus										
Cyperus brevifolius			x						x	
Cyperus congestus									x	
Cyperus eragrostis									x	
Cyperus involucratus										x
Cyperus rotundus							x		x	
EUPHORBIACEAE										
Chamaesyce maculata			x						x	
Chamaesyce nutans									x	
Euphorbia hirta										
Euphorbia prostrata			x						x	
Euphorbia cyathophora							x			
Phyllanthus tenellus										
Ricinus communis		R	x			x	x	x	x	x
FABACEAE										
Centaurium erythraea										
Crotalaria incana										
Crotalaria lanceolata									x	x
Crotalaria pallida				x		x				
Desmodium uncinatum		R								
Indigofera hirsute			x							
Indigofera spicata									x	
Leucaena leucocephala		R	x		x	x	x		x	
Macroptilium atropurpureum		R	x	x	x	x		x	x	x

Weed Species Records for Port of Brisbane 2013 -2014

Target Species	LP Act Class	BCC Class	Lucinda Drain		Port Gate		Port West		T1-3 / Car Precinct / Lakes	
			2013	2014	2013	2014	2013	2014	2013	2014
Macroptilium lathyroides			x		x		x		x	
Medicago lupulina										
Medicago polymorpha									x	
Medicago sativa										
Melilotus albus										
Melilotus indicus										
Neonotonia wightii		R	x				x	x	x	
Sesbania cannabina								x		
Stylosanthes hamata			x						x	
Stylosanthes humilis			x		x				x	
Trifolium repens									x	
Trifolium fragiferum									x	
LAURACEAE										
Cinnamomum camphora	3	R			x	x				
MALVACEAE										
Malvastrum americanum										
Sida cornifolia			x	x	x					
Sida rhombifolia									x	x
MORACEAE										
Ficus elastica		R	x	x						
MYRINIACEAE										
Anagallis arvensis									x	
ONAGRACEAE										
Ludwigia longifolia									x	x
Ludwigia peruviana										
Oenothera drummondii subsp. Drummondii			x						x	
Oenothera laciniata			x						x	x
OXALIDACEAE										
Oxalis corniculata										
PASSIFLORACEAE										
Passiflora foetida		SIL			x	x	x			
Passiflora suberosa							x	x		
Passiflora subpeltata			x						x	
PETIVERIACEAE										
Rivina humilis		R						x		
PHYTOLACCACEAE										
Phytolacca octandra						x		x		x
PLANTAGINACEAE										
Plantago lanceolata			x	x		x				x
POACEAE										
Andropogon virginicus										
Brachiaria decumbens			x	x	x					
Brachiaria mutica			x	x						
Cenchrus ciliaris										
Cenchrus echinatus		R		x						x
Chloris gayana		R	x	x	x	x	x	x	x	x
Chloris virgata										
Cynodon dactylon			x	x	x		x	x	x	x
Dichanthium aristatum										
Digitaria ciliaris			x	x	x	x	x	x	x	x
Echinochloa colona										

Weed Species Records for Port of Brisbane 2013 -2014

Target Species	LP Act Class	BCC Class	Lucinda Drain		Port Gate		Port West		T1-3 / Car Precinct / Lakes	
			2013	2014	2013	2014	2013	2014	2013	2014
Echinochloa telmatophila										
Eleusine indica										
Eragrostis tenuifolia									x	
Lolium hybridum										
Melinis minutiflora		R							x	
Melinis repens		R	x	x	x	x	x	x	x	x
Poa annua										
Panicum larcomianum										
Panicum miliaceum										
Megathyrsus maximus var. maximus		R	x	x	x	x	x	x	x	x
Megathyrsus var. pubiglumis										
Paspalum dilatum			x		x					
Paspalum distichum			x			x			x	x
Polypogon monspeliensis			x						x	
Setaria sphacelata			x						x	x
Sorghum halepense		R				x		x		
Sporobolus africanus			x							
Sporobolus fertilis	2	R								
Urochloa mosambicensis			x						x	
POLYGONACEAE										
Rumex crispus										
Rumex brownii										
PORTULACACEAE										
Portulaca oleracea			x	x	x				x	
Portulaca pilosa										
SAPINDACEAE										
Cardiospermum grandiflora	3	R	x	x		x				
SCROPHULARIACEAE										
Misopates orontium										
SOLANACEAE										
Datura sp.		R		x						x
Datura stramonium										
Physalis minima										
Solanum chrysotrichum			x				x		x	
Solanum mauritianum								x		
Solanum seaforthianum		R		x						
Solanum dulcamara										
Solanum sp.										x
Solanum nigrum		R	x	x	x		x	x	x	x
TAMARICACEAE										
Tamarix ramosissima										
Tamarix aphylla	3	SIL								x
ULMACEAE										
Celtis sinensis	3	R								
VERBENACEAE										
Lantana camara	3	R	x	x	x		x	x		x
Lantana montevidensis	3	R								
Verbena aristigera			x						x	
Verbena bonariensis			x	x			x	x	x	x

Appendix C Lucinda Drain Weed Survey Results 2014

Site	GPS	GPS	East / West Bank	Recorded Weeds	Shrub / Tree Height
2	518017	6971677	east	1x Datura ferox	0.5m
3	517964	6971599	east	1x Schinus terebinthifolius	0.5m
4	517909	6971527	west	1x Schinus terebinthifolius	4.0m
5	517864	6971484	east	1x Schinus terebinthifolius	4.0m
5	517864	6971484	east	Solanum seaforthianum	
6	517843	6971461	west	3x Schinus terebinthifolius	2-6m
7	517747	6971365	west	2x Schinus terebinthifolius	4m
8	517705	6971325	west	1x Schinus terebinthifolius	4m
9	517709	6971313	east	Cenchrus echinatus	
10	517655	6971249	west	5x Lantana camara	2.0m
11	517550	6971075	west	2x Senna pendula var. glabrata	1.5m
11	517550	6971075	west	1x Schinus terebinthifolius	4.0m
12	517527	6971044	west	1x Schinus terebinthifolius	1.5m
13	517496	6970981	east	(50+)x Cenchrus echinatus	
13	517496	6970981	east	Cardiospermum grandiflorum	
14	516748	6970095	west	1x Schinus terebinthifolius	1.0m
15	516903	6970147	west	1x Schinus terebinthifolius	3.0m
16	516878	6970127	west	1x Lantana camara	1.0m
16	516878	6970127	west	1x Schinus terebinthifolius	4.0m
17	516955	6970131	east	7x Schinus terebinthifolius	0.5-1.5m
18	517061	6970221	west	1x Schinus terebinthifolius	4.0m
19	517094	6970251	west	4x Schinus terebinthifolius	1-2.0m
20	517851	6971455	east	2x Schinus terebinthifolius	0.5-1.0m
21	517864	6971459	east	1x Schinus terebinthifolius	2.0m

Appendix D Port West Drain Weed Survey Results 2014

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height
1	513775	6965756	10 x Schinus terebinthifolius	0.5 - 1.5m
2	513768	6965802	1 x Baccharis halimifolia	0.5m
3	513760	6965818	3 x Baccharis halimifolia	0.5m
4	513761	6965829	1 x Solanum nigra	0.5m
5	513748	6965839	8 x Baccharis halimifolia	0.5m
5	513748	6965839	2 x Solanum nigra	0.5m
6	513746	6965856	1 x Schinus terebinthifolius	0.5m
6	513746	6965856	3 x Baccharis halimifolia	0.5m
6	513746	6965856	1 x Solanum nigra	0.5m
8	513733	6965888	1 x Schinus terebinthifolius	1.0m
9	513727	6965903	2 x Schinus terebinthifolius	3.0m
10	513732	6965912	1 x Baccharis halimifolia	0.5m
11	513732	6965918	8 x Baccharis halimifolia	0.5-2.0m
12	513729	6965919	1 x Schinus terebinthifolius	0.5m
13	513723	6965928	1 x Schinus terebinthifolius	1.0m
13	513723	6965928	1 x Baccharis halimifolia	0.5m
14	513721	6965932	50 x Rivina humilis	0.5m
14	513721	6965932	50 x Senna pendula var. glabrata	0.5-2.0m
14	513721	6965932	1 x Schinus terebinthifolius	2.0m
15	513717	6965938	1 x Asparagus plumosus	
16	513711	6965954	1 x Asparagus plumosus	
17	513713	6965960	3 x Schinus terebinthifolius	0.5-1.0m
18	513714	6965958	16 x Baccharis halimifolia	0.5-1.5m
19	513715	6965967	5 x Baccharis halimifolia	0.5-1.5m
20	513707	6965969	50 x Baccharis halimifolia	0.5-1.7m
20	513707	6965969	5 x Senna pendula var. glabrata	0.5-2.0m
20	513707	6965969	1 x Schinus terebinthifolius	0.5m
20	513707	6965969	1 x Asparagus plumosus	
21	513710	6965993	10 x Lantana camara	2.0m
22	513701	6965994	24 x Baccharis halimifolia	0.5-1.0m
23	513678	6966071	5 x Senna pendula var. glabrata	1-3m
23	513678	6966071	15 x Baccharis halimifolia	0.5-1.0m
23	513678	6966071	2 x Schinus terebinthifolius	1.0m
24	513676	6966071	3 x Baccharis halimifolia	1.0m
25	513664	6966090	4 x Schinus terebinthifolius	0.5-1.0m
25	513664	6966090	4 x Senna pendula var. glabrata	0.5-1.0m
26	513657	6966108	3 x Schinus terebinthifolius	1.0m
26	513657	6966108	4 x Senna pendula var. glabrata	0.5-2.0m

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height
26	513657	6966108	3 x Lantana camara	1.5m
27	513635	6966161	1 x Lantana camara	1.0m
27	513635	6966161	25 x Schinus terebinthifolius	0.2m
27	513635	6966161	4 x Schinus terebinthifolius	1.0m
28	513629	6966183	10 x Schinus terebinthifolius	1.0-1.2m
28	513629	6966183	1 x Lantana camara	0.2m
29	513618	6966208	1 x Schinus terebinthifolius	1.5m
29	513618	6966208	4 x Schinus terebinthifolius	0.5m
29	513618	6966208	1 x Solanum nigra	0.2m
30	513618	6966221	2 x Ricinus communis	2.0m
30	513618	6966221	1 x Senna pendula var. glabrata	2.0m
30	513618	6966221	6 x Schinus terebinthifolius	1.0-1.5m
31	513601	6966253	1 x Ricinus communis	1.5m
32	513598	6966257	1 x Baccharis halimifolia	1.2m
33	513591	6966273	1 x Senna pendula var. glabrata	4.0m
33	513591	6966273	1 x Schinus terebinthifolius	2.0m
34	513587	6966288	26 x Gomphocarpus physocarpus	1.5m
34	513587	6966288	1 x Lantana camara	0.5m
36	513569	6966334	2 x Schinus terebinthifolius	1.0-1.5m
37	513548	6966396	1 x Lantana camara	2.5m
38	513546	6966406	2x Solanum mauritianum	4.0m

Appendix E Port Gate Drain Weed Survey Results 2014

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height	Site
3	515960	6968830	east	1x Baccharis halimifolia	0.5m
4	515962	6968802	east	2x Leucaena leucocephala	1-4.0m
5	515959	6968780	east	4x Schinus terebinthifolius	0.5m
5	515959	6968780	east	1x Baccharis halimifolia	0.5m
6	515959	6968746	west	1x Schinus terebinthifolius	0.5m
7	515961	6968700	east	1x Schinus terebinthifolius	0.5m
7	515961	6968700	east	2x Baccharis halimifolia	0.5-1.0m
8	515964	6968660	west	1x Schinus terebinthifolius	0.5m
9	515967	6968660	east	1x Ricinus communis	0.5m
10	515967	6968623	east	1x Baccharis halimifolia	1.5m
11	515971	6968572	east	1x Baccharis halimifolia	1.0m
12	515972	6968553	west	1x Baccharis halimifolia	1.0m
13	515975	6968498	west	1x Baccharis halimifolia	1.0m
14	515979	6968469	west	1x Baccharis halimifolia	0.5m
15	515979	6968429	east	2x Baccharis halimifolia	0.2m
16	515979	6968395	east	1x Gomphocarpus physocarpus	0.5m
17	515981	6968372	west	10x Schinus terebinthifolius	0.5-1.0m
18	515983	6968351	west	4x Schinus terebinthifolius	0.5m
19	515985	6968345	east	2x Baccharis halimifolia	0.5m
19	515985	6968345	east	1x Schinus terebinthifolius	0.2m
20	515987	6968320	east	1x Baccharis halimifolia	1.0m
21	515987	6968310	west	1x Schinus terebinthifolius	1.5m
21	515987	6968310	west	1x Baccharis halimifolia	1.0m
22	515987	6968299	east	10x Schinus terebinthifolius	0.2-1.5m
22	515987	6968299	east	1x Baccharis halimifolia	0.5m
22	515987	6968299	east	Passiflora foetida	
23	515992	6968287	west	1x Baccharis halimifolia	1.0m
24	515993	6968276	west	5x Baccharis halimifolia	0.5-1.0m
25	515995	6968267	east	25x Schinus terebinthifolius	0.2-2.0m
26	515993	6968253	west	2x Cinnamomum camphora	2-3.0m
26	515993	6968253	west	4x Schinus terebinthifolius	1.0m
26	515993	6968253	west	Cardiospermum grandiflorum	
27	515997	6968215	west	1x Baccharis halimifolia	1.5m
27	515997	6968215	west	5x Schinus terebinthifolius	0.5-1.5m

Port Gate Drain Weed Survey Results 2014

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height	Site
28	516004	6968182	west	4x Baccharis halimifolia	0.2-2.0m
28	516004	6968182	west	3x Schinus terebinthifolius	0.2m
28	516004	6968182	west	2x Ricinus communis	0.2m
29	516061	6968162	east	1x Baccharis halimifolia	0.2m
30	516128	6968092	west	2x Baccharis halimifolia	2.0m
30	516128	6968092	west	1x Schinus terebinthifolius	2.0m
31	516143	6968070	east	1x Schinus terebinthifolius	1.5m
31	516143	6968070	west	1x Baccharis halimifolia	1.0m

Appendix F T1-3, Car Precinct and Constructed Lake Weed Survey Results 2014

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height
1	516774	6970203	2x Schinus terebinthifolius	1.0m
1	516774	6970203	Passiflora foetida	
2	516710	6970178	1x Lantana camara	1.0m
2	516710	6970178	1x Solanum nigrum	0.5m
3	516570	6970133	1x Schinus terebinthifolius	1.0m
4	516528	6970125	1x Schinus terebinthifolius	1.5m
5	516394	6970107	5x Schinus terebinthifolius	1.5m
6	516358	6970098	2x Schinus terebinthifolius	1.5m
7	516340	6970096	20x Schinus terebinthifolius	0.5-1.5m
7	516340	6970096	1x Lantana camara	0.5
8	516321	6970106	5x Ricinus communis	1.5
9	516314	6970119	4x Schinus terebinthifolius	1.5m
10	516346	6970163	40x Baccharis halimifolia	1-1.5m
10	516346	6970163	12x Schinus terebinthifolius	1-1.5m
11	516367	6970189	14x Baccharis halimifolia	1-2.0m
11	516367	6970189	2x Ricinus communis	1-2.0m
11	516367	6970189	5x Schinus terebinthifolius	0.5-1.5m
12	516382	6970212	5x Ricinus communis	1.5-2.0m
13	516382	6970218	10x Solanum torvum	0.2-2.0m
13	516382	6970218	4x Schinus terebinthifolius	0.5m
13	516382	6970218	1x Ricinus communis	1.0m
14	516398	6970230	3x Ricinus communis	0.5-2.0m
15	516389	6970253	25x Schinus terebinthifolius	1-2.0m
16	516370	6970258	8x Schinus terebinthifolius	0.2m
17	516363	6970278	5x Schinus terebinthifolius	1-1.5m
18	516520	6970569	Cenchrus echinatus	
18	516520	6970569	Solanum nigra	0.5m
19	516520	6970573	8x Senecio madagascariensis	
20	516382	6970342	4x Senecio madagascariensis	
21	516527	6970204	9x Senecio madagascariensis	
21	516527	6970204	Cenchrus echinatus	
22	516567	6970231	1x Senecio madagascariensis	
23	516577	6970245	1x Datura ferox	
24	516678	6970229	1x Agave sp.	
25	516721	6970298	6x Schinus terebinthifolius	0.5-2.0m

T1-3, Car Precinct and Constructed Lake Weed Survey Results 2014

Site	GPS	GPS	Recorded Weeds	Shrub / Tree Height
25	516721	6970298	1x Cinnamomum camphora	0.5m
26	516732	6970307	17x Schinus terebinthifolius	0.2-2.5m
26	516732	6970307	1x Solanum torvum	0.5m
27	516764	6970316	5x Schinus terebinthifolius	2.0m
28	516787	6970304	3x Schinus terebinthifolius	0.5-1.0m
29	516798	6970300	10x Schinus terebinthifolius	1.0m
30	516808	6970248	1x Schinus terebinthifolius	1.0m
31	516448	6970763	1x Tamarix aphylla	2.5m

Appendix G Wildlife Online Data

Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Specified Point
Species: Plants (including other non-animals such as fungi and protists)
Type: Introduced
Status: All
Records: All
Date: All
Latitude: 27.3846
Longitude: 153.1697
Distance: 10
Email: Suanne.Richards@bmtwbm.com.au
Date submitted: Tuesday 22 Apr 2014 11:25:58
Date extracted: Tuesday 22 Apr 2014 11:30:07

The number of records retrieved = 233

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	ferns	Salviniaceae	*Salvinia molesta*	salvinia	Y			2/2
plants	higher dicots	Amaranthaceae	*Amaranthus viridis*	green amaranth	Y			1/1
plants	higher dicots	Amaranthaceae	*Amaranthus spinosus*	needle burr	Y			1/1
plants	higher dicots	Amaranthaceae	*Gomphrena celosioides*	gomphrena weed	Y			1/1
plants	higher dicots	Anacardiaceae	*Schinus terebinthifolius*		Y			1/1
plants	higher dicots	Apiaceae	*Cyclospermum leptophyllum*		Y			2/2
plants	higher dicots	Apocynaceae	*Araujia sericifera*	white moth vine	Y			1/1
plants	higher dicots	Apocynaceae	*Cascabela thevetia*	yellow oleander	Y			1/1
plants	higher dicots	Apocynaceae	*Asclepias curassavica*	red-head cottonbush	Y			1/1
plants	higher dicots	Apocynaceae	*Gomphocarpus physocarpus*	balloon cottonbush	Y			4/4
plants	higher dicots	Asteraceae	*Lactuca saligna*	wild lettuce	Y			1/1
plants	higher dicots	Asteraceae	*Soliva sessilis*		Y			1/1
plants	higher dicots	Asteraceae	*Cosmos bipinnatus*	cosmos	Y			1/1
plants	higher dicots	Asteraceae	*Helianthus annuus*		Y			1/1
plants	higher dicots	Asteraceae	*Sonchus oleraceus*	common sowthistle	Y			2/2
plants	higher dicots	Asteraceae	*Tridax procumbens*	tridax daisy	Y			1/1
plants	higher dicots	Asteraceae	*Xanthium spinosum*	Bathurst burr	Y			2/2
plants	higher dicots	Asteraceae	*Conyza bonariensis*		Y			2/2
plants	higher dicots	Asteraceae	*Conyza sumatrensis*	tall fleabane	Y			2/1
plants	higher dicots	Asteraceae	*Calyptocarpus vialis*	creeping cinderella weed	Y			1/1
plants	higher dicots	Asteraceae	*Centaurea melitensis*	Maltese cockspur	Y			1/1
plants	higher dicots	Asteraceae	*Cotula coronopifolia*	water buttons	Y			2/2
plants	higher dicots	Asteraceae	*Gaillardia pulchella*		Y			1/1
plants	higher dicots	Asteraceae	*Hypochaeris radicata*	catsear	Y			1/1
plants	higher dicots	Asteraceae	*Xanthium occidentale*		Y			1/1
plants	higher dicots	Asteraceae	*Ageratum houstonianum*	blue billygoat weed	Y			1
plants	higher dicots	Asteraceae	*Baccharis halimifolia*	groundsel bush	Y			3/2
plants	higher dicots	Asteraceae	*Montanoa hibiscifolia*		Y			2/2
plants	higher dicots	Asteraceae	*Tithonia diversifolia*	Japanese sunflower	Y			1/1
plants	higher dicots	Asteraceae	*Ambrosia artemisiifolia*	annual ragweed	Y			1/1
plants	higher dicots	Asteraceae	*Sphagneticola trilobata*		Y			1/1
plants	higher dicots	Asteraceae	*Crassocephalum crepidioides*	thickhead	Y			1/1
plants	higher dicots	Asteraceae	*Lactuca serriola forma serriola*		Y			1/1
plants	higher dicots	Asteraceae	*Emilia sonchifolia var. javanica*		Y			2/2
plants	higher dicots	Asteraceae	*Thymophylla tenuiloba var. tenuiloba*		Y			1/1
plants	higher dicots	Asteraceae	*Conyza parva*		Y			2/2
plants	higher dicots	Asteraceae	*Bidens pilosa*		Y			3/2
plants	higher dicots	Asteraceae	*Aster subulatus*	wild aster	Y			2/1
plants	higher dicots	Asteraceae	*Cirsium vulgare*	spear thistle	Y			1/1
plants	higher dicots	Bignoniaceae	*Tecoma stans var. stans*		Y			1/1
plants	higher dicots	Bignoniaceae	*Dolichandra unguis-cati*	cat's claw creeper	Y			1/1
plants	higher dicots	Boraginaceae	*Heliotropium amplexicaule*	blue heliotrope	Y			2/2
plants	higher dicots	Brassicaceae	*Rapistrum rugosum*		Y			1/1
plants	higher dicots	Brassicaceae	*Cakile maritima subsp. maritima*		Y			2/2
plants	higher dicots	Brassicaceae	*Lobularia maritima*	sweet Alyssum	Y			1/1
plants	higher dicots	Brassicaceae	*Lepidium bonariense*	Argentine peppercress	Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Brassicaceae	*Lepidium virginicum*	Virginian peppercress	Y			2/2
plants	higher dicots	Brassicaceae	*Raphanus raphanistrum*	wild radish	Y			1/1
plants	higher dicots	Brassicaceae	*Sisymbrium officinale*	hedge mustard	Y			1/1
plants	higher dicots	Brassicaceae	*Brassica rapa subsp. campestris*		Y			1/1
plants	higher dicots	Brassicaceae	*Lepidium didymum*		Y			3/3
plants	higher dicots	Brassicaceae	*Sisymbrium irio*	london rocket	Y			1/1
plants	higher dicots	Brassicaceae	*Cakile edentula*	sea rocket	Y			2/2
plants	higher dicots	Brassicaceae	*Rorippa palustris*	marsh cress	Y			1/1
plants	higher dicots	Cactaceae	*Opuntia stricta*		Y			1
plants	higher dicots	Caesalpiniaceae	*Senna septemtrionalis*		Y			1/1
plants	higher dicots	Caesalpiniaceae	*Caesalpinia decapetala*	wait-a-while	Y			1/1
plants	higher dicots	Caesalpiniaceae	*Senna alata*		Y			2/2
plants	higher dicots	Caesalpiniaceae	*Senna didymobotrya*		Y			1/1
plants	higher dicots	Caesalpiniaceae	*Senna occidentalis*	coffee senna	Y			1
plants	higher dicots	Caryophyllaceae	*Polycarpon tetraphyllum*		Y			1/1
plants	higher dicots	Caryophyllaceae	*Petrorhagia nanteuilii*	proliferous pink	Y			2/2
plants	higher dicots	Chenopodiaceae	*Chenopodium album*	fat-hen	Y			1/1
plants	higher dicots	Chenopodiaceae	*Dysphania ambrosioides*		Y			2/2
plants	higher dicots	Cleomaceae	*Tarenaya hassleriana*		Y			2/2
plants	higher dicots	Combretaceae	*Combretum paniculatum*		Y			1/1
plants	higher dicots	Convolvulaceae	*Ipomoea purpurea*	common morning glory	Y			2/2
plants	higher dicots	Convolvulaceae	*Ipomoea cairica*		Y			2/1
plants	higher dicots	Convolvulaceae	*Ipomoea quamoclit*	star of Bethlehem	Y			1/1
plants	higher dicots	Crassulaceae	*Bryophyllum daigremontianum*		Y			1/1
plants	higher dicots	Cucurbitaceae	*Cucumis dipsaceus*		Y			1/1
plants	higher dicots	Cucurbitaceae	*Momordica charantia*	balsam pear	Y			1/1
plants	higher dicots	Euphorbiaceae	*Ricinus communis*	castor oil bush	Y			2/1
plants	higher dicots	Euphorbiaceae	*Euphorbia hyssopifolia*		Y			1/1
plants	higher dicots	Euphorbiaceae	*Euphorbia cyathophora*	dwarf poinsettia	Y			1/1
plants	higher dicots	Euphorbiaceae	*Triadica sebifera*		Y			1/1
plants	higher dicots	Fabaceae	*Vigna luteola*	dalrymple vigna	Y			1/1
plants	higher dicots	Fabaceae	*Macrotyloma uniflorum var. stenocarpum*		Y			1/1
plants	higher dicots	Fabaceae	*Medicago lupulina*	black medic	Y			1/1
plants	higher dicots	Fabaceae	*Melilotus indicus*	hexham scent	Y			2/2
plants	higher dicots	Fabaceae	*Crotalaria pallida*		Y			1
plants	higher dicots	Fabaceae	*Indigofera spicata*	creeping indigo	Y			2/2
plants	higher dicots	Fabaceae	*Kummerowia striata*	japanese clover	Y			1/1
plants	higher dicots	Fabaceae	*Medicago polymorpha*	burr medic	Y			2/2
plants	higher dicots	Fabaceae	*Crotalaria trichotoma*		Y			1/1
plants	higher dicots	Fabaceae	*Crotalaria spectabilis*	showy rattlepod	Y			2/2
plants	higher dicots	Fabaceae	*Erythrina crista-galli*		Y			1/1
plants	higher dicots	Fabaceae	*Macroptilium lathyroides*		Y			1
plants	higher dicots	Fabaceae	*Vicia sativa subsp. nigra*		Y			2/2
plants	higher dicots	Fabaceae	*Macroptilium atropurpureum*	siratro	Y			1/1
plants	higher dicots	Fabaceae	*Pueraria montana var. lobata*		Y			1/1
plants	higher dicots	Fabaceae	*Medicago sativa subsp. sativa*		Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Fabaceae	*Crotalaria incana subsp. incana*		Y			1/1
plants	higher dicots	Fabaceae	*Crotalaria pallida var. obovata*		Y			4/4
plants	higher dicots	Fabaceae	*Neonotonia wightii var. wightii*		Y			2/2
plants	higher dicots	Fabaceae	*Desmodium incanum*		Y			2/2
plants	higher dicots	Gentianaceae	*Centaurium tenuiflorum*		Y			1/1
plants	higher dicots	Haloragaceae	*Myriophyllum aquaticum*	Brazilian water milfoil	Y			1/1
plants	higher dicots	Lamiaceae	*Salvia reflexa*		Y			1/1
plants	higher dicots	Lamiaceae	*Lamium amplexicaule*	deadnettle	Y			1/1
plants	higher dicots	Lamiaceae	*Salvia coccinea*	red salvia	Y			1/1
plants	higher dicots	Malvaceae	*Sida rhombifolia*		Y			2/2
plants	higher dicots	Malvaceae	*Abutilon grandifolium*		Y			2/2
plants	higher dicots	Malvaceae	*Pavonia hastata*	pink pavonia	Y			2/2
plants	higher dicots	Malvaceae	*Hibiscus mutabilis*		Y			1/1
plants	higher dicots	Malvaceae	*Malvastrum coromandelianum subsp. coromandelianum*		Y			2/2
plants	higher dicots	Malvaceae	*Sida cordifolia*		Y			2/2
plants	higher dicots	Martyniaceae	*Proboscidea lutea*		Y			1/1
plants	higher dicots	Mimosaceae	*Leucaena leucocephala subsp. leucocephala*		Y			1/1
plants	higher dicots	Molluginaceae	*Mollugo verticillata*		Y			1/1
plants	higher dicots	Moraceae	*Morus alba*	white mulberry	Y			1/1
plants	higher dicots	Moraceae	*Ficus benghalensis*	banyan	Y			1/1
plants	higher dicots	Myrsinaceae	*Lysimachia arvensis*		Y			2/1
plants	higher dicots	Myrsinaceae	*Ardisia elliptica*		Y			1/1
plants	higher dicots	Myrtaceae	*Eugenia uniflora*	Brazilian cherry tree	Y			1/1
plants	higher dicots	Oleaceae	*Olea europaea subsp. europaea*		Y			3/3
plants	higher dicots	Onagraceae	*Oenothera drummondii subsp. drummondii*		Y			3/3
plants	higher dicots	Oxalidaceae	*Oxalis corniculata*		Y			1/1
plants	higher dicots	Passifloraceae	*Passiflora foetida*		Y			1/1
plants	higher dicots	Passifloraceae	*Passiflora suberosa*	corky passion flower	Y			2/1
plants	higher dicots	Petiveriaceae	*Rivina humilis*		Y			3/1
plants	higher dicots	Phytolaccaceae	*Phytolacca octandra*	inkweed	Y			2/2
plants	higher dicots	Phytolaccaceae	*Phytolacca dioica*	bella sombra	Y			1/1
plants	higher dicots	Plantaginaceae	*Misopates orontium*	lesser snapdragon	Y			1/1
plants	higher dicots	Plantaginaceae	*Plantago coronopus subsp. coronopus*		Y			3/3
plants	higher dicots	Plantaginaceae	*Plantago myosuros subsp. myosuros*		Y			2/2
plants	higher dicots	Plantaginaceae	*Plantago lanceolata*		Y			2/2
plants	higher dicots	Polygalaceae	*Polygala paniculata*		Y			1/1
plants	higher dicots	Polygonaceae	*Rumex crispus*	curled dock	Y			1/1
plants	higher dicots	Polygonaceae	*Polygonum aviculare*	wireweed	Y			1/1
plants	higher dicots	Portulacaceae	*Portulaca oleracea*	pigweed	Y			1
plants	higher dicots	Rosaceae	*Rosa bracteata*	Macartney rose	Y			3/3
plants	higher dicots	Rosaceae	*Rosa cv. Excelsa*		Y			1/1
plants	higher dicots	Rosaceae	*Potentilla indica*		Y			1/1
plants	higher dicots	Rosaceae	*Prunus persica var. persica*		Y			1/1
plants	higher dicots	Rubiaceae	*Spermacoce remota*		Y			1/1
plants	higher dicots	Rubiaceae	*Richardia stellaris*		Y			3/3
plants	higher dicots	Rubiaceae	*Richardia brasiliensis*	white eye	Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Sambucaceae	*Sambucus nigra*		Y			1/1
plants	higher dicots	Sapindaceae	*Cardiospermum grandiflorum*	heart seed vine	Y			1
plants	higher dicots	Solanaceae	*Nicotiana glauca*	tree tobacco	Y			3/3
plants	higher dicots	Solanaceae	*Physalis angulata*		Y			1/1
plants	higher dicots	Solanaceae	*Physalis ixocarpa var. ixocarpa*		Y			1/1
plants	higher dicots	Solanaceae	*Solanum nodiflorum*		Y			5/5
plants	higher dicots	Solanaceae	*Nicandra physalodes*	apple of Peru	Y			2/2
plants	higher dicots	Solanaceae	*Solanum capsicoides*	devil's apple	Y			3/3
plants	higher dicots	Solanaceae	*Solanum mauritianum*	wild tobacco	Y			1/1
plants	higher dicots	Solanaceae	*Solanum chrysotrichum*		Y			2/2
plants	higher dicots	Solanaceae	*Solanum pseudocapsicum*	Madeira winter cherry	Y			1/1
plants	higher dicots	Solanaceae	*Cestrum parqui*	green cestrum	Y			1/1
plants	higher dicots	Solanaceae	*Datura ferox*	fierce thornapple	Y			1/1
plants	higher dicots	Solanaceae	*Solanum linnaeanum*	apple of Sodom	Y			1/1
plants	higher dicots	Sparrmanniaceae	*Triumfetta rhomboidea*	chinese burr	Y			1/1
plants	higher dicots	Tropaeolaceae	*Tropaeolum majus*	garden nasturtium	Y			1/1
plants	higher dicots	Ulmaceae	*Celtis sinensis*	Chinese elm	Y			1
plants	higher dicots	Verbenaceae	*Phyla canescens*		Y			1/1
plants	higher dicots	Verbenaceae	*Lantana montevidensis*	creeping lantana	Y			2/2
plants	higher dicots	Verbenaceae	*Verbena litoralis var. litoralis*		Y			3/3
plants	higher dicots	Verbenaceae	*Verbena litoralis var. brevibracteata*		Y			1/1
plants	higher dicots	Verbenaceae	*Verbena rigida*		Y			1/1
plants	higher dicots	Verbenaceae	*Lantana camara*	lantana	Y			4/2
plants	higher dicots	Verbenaceae	*Verbena incompta*		Y			3/3
plants	lower dicots	Lauraceae	*Cinnamomum camphora*	camphor laurel	Y			1/1
plants	lower dicots	Papaveraceae	*Argemone ochroleuca subsp. ochroleuca*	Mexican poppy	Y			1/1
plants	lower dicots	Papaveraceae	*Fumaria officinalis subsp. officinalis*		Y			1/1
plants	lower dicots	Ranunculaceae	*Ranunculus sceleratus subsp. sceleratus*		Y			1/1
plants	monocots	Alliaceae	*Nothoscordum borbonicum*		Y			1/1
plants	monocots	Amaryllidaceae	*Zephyranthes drummondii*		Y			2/2
plants	monocots	Asparagaceae	*Asparagus officinalis*	asparagus	Y			1/1
plants	monocots	Asparagaceae	*Asparagus virgatus*		Y			1/1
plants	monocots	Asparagaceae	*Asparagus plumosus*	feathered asparagus fern	Y			1/1
plants	monocots	Asphodelaceae	*Aloe arborescens*		Y			1/1
plants	monocots	Cannaceae	*Canna x orchiodes*		Y			1/1
plants	monocots	Cyperaceae	*Cyperus rotundus*	nutgrass	Y			4/4
plants	monocots	Cyperaceae	*Eleocharis minuta*		Y			5/5
plants	monocots	Cyperaceae	*Cyperus aggregatus*		Y			2/2
plants	monocots	Cyperaceae	*Cyperus eragrostis*		Y			1/1
plants	monocots	Cyperaceae	*Cyperus esculentus*	yellow nutgrass	Y			1/1
plants	monocots	Cyperaceae	*Cyperus involucratus*		Y			1/1
plants	monocots	Cyperaceae	*Cyperus sesquiflorus*		Y			2/2
plants	monocots	Cyperaceae	*Cyperus prolifer*	dwarf papyrus	Y			1/1
plants	monocots	Cyperaceae	*Cyperus brevifolius*	Mullumbimby couch	Y			1/1
plants	monocots	Hydrocharitaceae	*Egeria densa*	dense waterweed	Y			1/1
plants	monocots	Iridaceae	*Sisyrinchium sp. (Peregian P.R.Sharpe 4970)*	scourweed	Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	monocots	Juncaceae	*Juncus acutus subsp. acutus*		Y			1/1
plants	monocots	Juncaceae	*Juncus bufonius*	toad rush	Y			2/2
plants	monocots	Poaceae	*Briza minor*	shivery grass	Y			1/1
plants	monocots	Poaceae	*Chloris gayana*	rhodes grass	Y			3/2
plants	monocots	Poaceae	*Melinis repens*	red natal grass	Y			3/2
plants	monocots	Poaceae	*Chloris virgata*	feathertop rhodes grass	Y			2/1
plants	monocots	Poaceae	*Eleusine indica*	crowsfoot grass	Y			1
plants	monocots	Poaceae	*Hordeum vulgare*		Y			1/1
plants	monocots	Poaceae	*Sorghum bicolor*	forage sorghum	Y			1/1
plants	monocots	Poaceae	*Eragrostis minor*	smaller stinkgrass	Y			1/1
plants	monocots	Poaceae	*Avena ludoviciana*		Y			1/1
plants	monocots	Poaceae	*Bromus hordeaceus*		Y			2/2
plants	monocots	Poaceae	*Cenchrus setaceus*		Y			1/1
plants	monocots	Poaceae	*Paspalum urvillei*	vasey grass	Y			2/1
plants	monocots	Poaceae	*Sorghum halepense*	Johnson grass	Y			3/3
plants	monocots	Poaceae	*Triticum aestivum*	wheat	Y			4/4
plants	monocots	Poaceae	*Bromus catharticus*	prairie grass	Y			3/3
plants	monocots	Poaceae	*Cenchrus echinatus*	Mossman River grass	Y			1/1
plants	monocots	Poaceae	*Digitaria ciliaris*	summer grass	Y			1/1
plants	monocots	Poaceae	*Echinochloa colona*	awnless barnyard grass	Y			2/2
plants	monocots	Poaceae	*Lolium multiflorum*	italian ryegrass	Y			1/1
plants	monocots	Poaceae	*Paspalum dilatatum*	paspalum	Y			2/1
plants	monocots	Poaceae	*Setaria parviflora*	slender pigeon grass	Y			2/2
plants	monocots	Poaceae	*Setaria sphacelata*		Y			1/1
plants	monocots	Poaceae	*Axonopus compressus*		Y			1/1
plants	monocots	Poaceae	*Cortaderia selloana*	pampas grass	Y			1/1
plants	monocots	Poaceae	*Digitaria didactyla*	Queensland blue couch	Y			1/1
plants	monocots	Poaceae	*Melinis minutiflora*	molasses grass	Y			1/1
plants	monocots	Poaceae	*Digitaria abyssinica*		Y			1/1
plants	monocots	Poaceae	*Digitaria violascens*	bastard summergrass	Y			2/2
plants	monocots	Poaceae	*Phalaris canariensis*	canary grass	Y			1/1
plants	monocots	Poaceae	*Sorghum arundinaceum*	Rhodesian Sudan grass	Y			2/2
plants	monocots	Poaceae	*Sporobolus africanus*	Parramatta grass	Y			3/3
plants	monocots	Poaceae	*Cenchrus clandestinus*		Y			1/1
plants	monocots	Poaceae	*Dichanthium annulatum*	sheda grass	Y			1/1
plants	monocots	Poaceae	*Dichanthium aristatum*	angleton grass	Y			1/1
plants	monocots	Poaceae	*Eragrostis tenuifolia*	elastic grass	Y			2/2
plants	monocots	Poaceae	*Echinochloa crus-galli*	barnyard grass	Y			5/5
plants	monocots	Poaceae	*Echinochloa frumentacea*	Siberian millet	Y			1/1
plants	monocots	Poaceae	*Stenotaphrum secundatum*	buffalo grass	Y			2/2
plants	monocots	Poaceae	*Sporobolus coromandelianus*		Y			2/2
plants	monocots	Poaceae	*Ehrharta erecta var. erecta*		Y			1/1
plants	monocots	Poaceae	*Setaria pumila subsp. pumila*		Y			1/1
plants	monocots	Poaceae	*Cynodon dactylon var. dactylon*		Y			3/3
plants	monocots	Poaceae	*Megathyrsus maximus var. maximus*		Y			1/1
plants	monocots	Poaceae	*Setaria pumila subsp. subtesselata*		Y			1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	monocots	Poaceae	*Megathyrsus maximus var. pubiglumis*		Y			1/1
plants	monocots	Pontederiaceae	*Eichhornia crassipes*	water hyacinth	Y			2/2
plants	spike mosses	Selaginellaceae	*Selaginella kraussiana*		Y			1/1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992.* The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ( ).

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999.* The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).
This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.
This number is output as 999 if it equals or exceeds this value.

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