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North-West Conservation Park - Rehabilitation Monitoring

Lot 1 RP48903

North-West Conservation Park
Gainsborough Greens

Cnr Yawalpah Road and
Kerkin Road North,
Pimpama, Queensland

September 2018

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EXECUTIVE SUMMARY

Rehabilitation monitoring is required in accordance with the approved North-West Conservation Park Rehabilitation Management Plan (April 2014) for Lot 1 on RP48903, Gainsborough Greens, North-West Conservation Park. Two areas, A1 and A2, were direct seeded. Initially, heavy rain and a high groundwater table prevented seed germination within the modified receiving environment, however after 9 months the seedlings emerged. Monthly monitoring commenced in September 2015 following successful germination of native plants and will continue monthly for a period of 5 years.

Fourteen monitoring stations have been established throughout the seeded area of A1. Photographs were taken at each monitoring station on a monthly basis, and compared at 6 month intervals. Monthly field survey results including comments, native species, weed species, damage by fire/rubbish/pests, native dominance, and percentage vegetation cover are presented. Finally the progress towards the Desired Environmental Outcomes is assessed for the site as a whole.

Rehabilitation monitoring of the North-West Conservation Park will generally adhere to the following key dates:

- Works Completed December 2014;
- On-Establishment Inspection August 2015;
- CoGC Formal Inspection November 2015;
- CoGC Formal Inspection May 2016;
- CoGC Formal Inspection May 2017;
- CoGC Formal Inspection May 2018;
- CoGC Formal Inspection May 2019;
- CoGC Formal Inspection May 2020; and
- Off-Establishment Inspection August 2020.

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1.0 INTRODUCTION

Habitat Environment Management Trading Pty Ltd ('Habitat') was engaged by Mirvac Qld Pty Ltd ('the Client') to undertake Rehabilitation Monitoring in accordance with the approved North West Conservation Park Rehabilitation Management Plan (April 2014) for Lot 1 on RP48903, Gainsborough Greens, North West Conservation Park, Yawalpah Road, Pimpama, Queensland (the site). The intent of the monitoring is to ensure rehabilitation works meet the objectives of the Rehabilitation Management Plan.

1.1 Location and Site Description

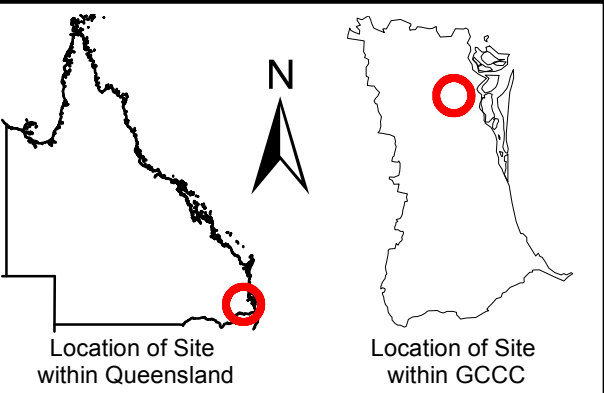
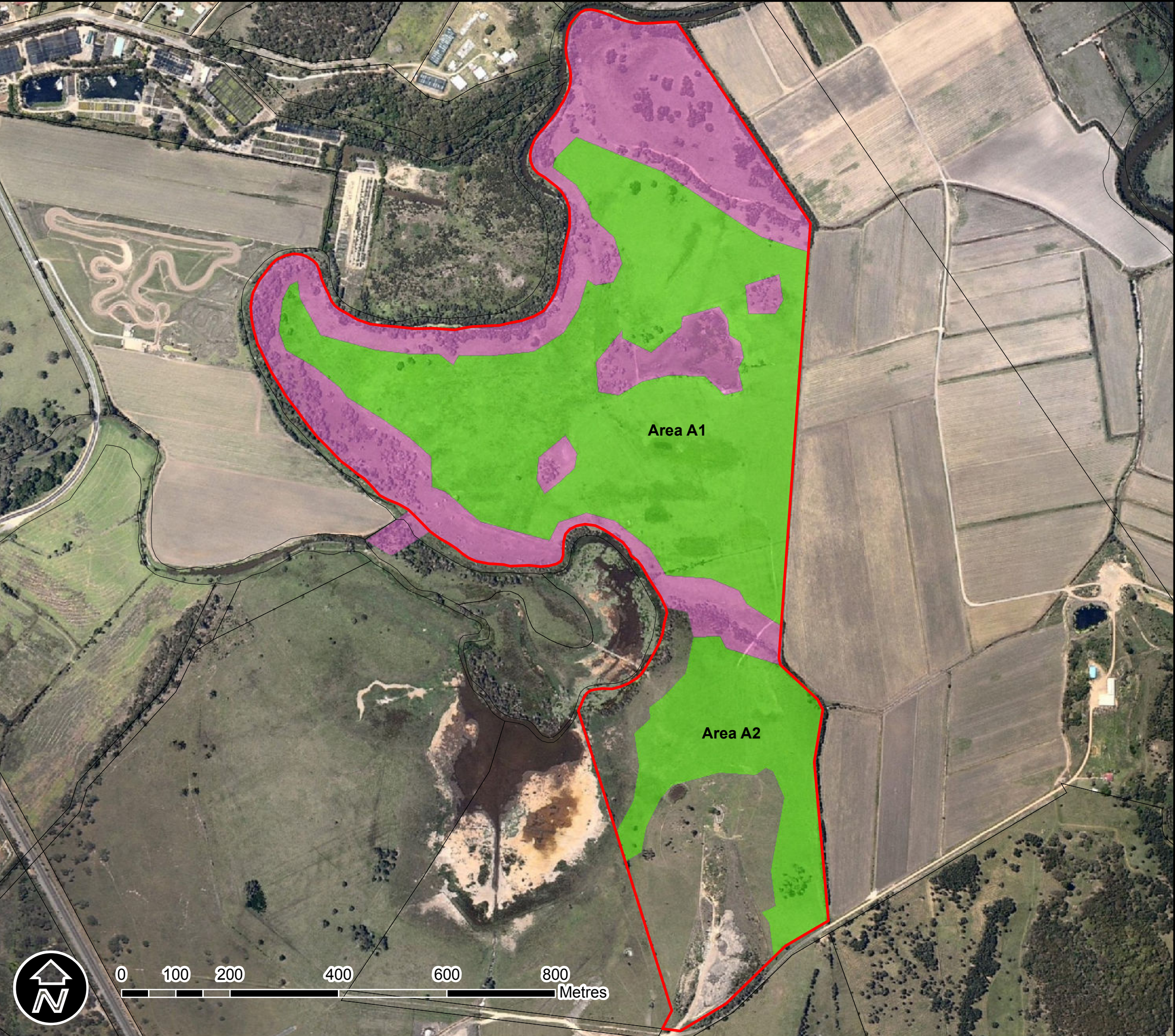
Gainsborough Greens is located approximately 2 km east of the Pacific Highway on Yawalpah Road, Pimpama, in the northern Gold Coast region. With reference to **Figure 1**, the North West Conservation Park is located within Lot 1 on RP48903, and is accessed by Swan Road to the south. It is bounded by the Pimpama River to the north and west and by rural properties of the Gainsborough Greens development to the east and south.

The topography of the site can be described as undulating hills with 5-10% slope and a large, flat area of grazing paddock. Remnant vegetation communities are generally absent within the lot with the exception of a riparian strip adjacent to the Pimpama River and a number of small patches of vegetation. Vegetation communities have structural integrity and a species diversity of predominantly low to moderate conservation values.

1.2 Rehabilitation & Monitoring

Rehabilitation Management Area 2 (RMA 2) of the North West Conservation Park Rehabilitation Management Plan involved direct seeding and monitoring in two areas being Area A1 (North) and Area A2 (South) (**Figure 1**). Area A1 of the Gainsborough Greens Rehabilitation project was direct seeded in December 2014 with a mix of 54 species. Immediately following the seeding works, the site received well above average rainfall, and consequently was inundated with water over much of the site for many months before plants began to emerge. Due to this rain event and time lag for approval, Area A2 of the Gainsborough Greens Rehabilitation project was direct seeded in October 2015.

In order to monitor the progress of rehabilitation, fourteen permanent 4m x 4m quadrats were established (**Figure 2**). Monthly monitoring commenced in September 2015 (once sign-off was received by CoGC for the commencement of the On Establishment Period) and will continue for a period of 5 years as per the approved North-West Conservation Park Rehabilitation Management Plan, prepared by Habitat (April 2014). This monitoring report provides information on the monitoring conducted over the A1 rehabilitation area on a monthly basis, and includes comparisons on a six monthly basis. An additional two monitoring points are included within the six month comparison. Monitoring included collecting data on species present, percentage of native species and percentage overall vegetation cover.



- Legend**
- Gold Coast City North Cadastre (2006)
 - Lot 1 on RP48903
 - Rehabilitation Monitoring Areas**
 - RMA 1
 - RMA 2

Figure 1:
Rehabilitation Monitoring Areas

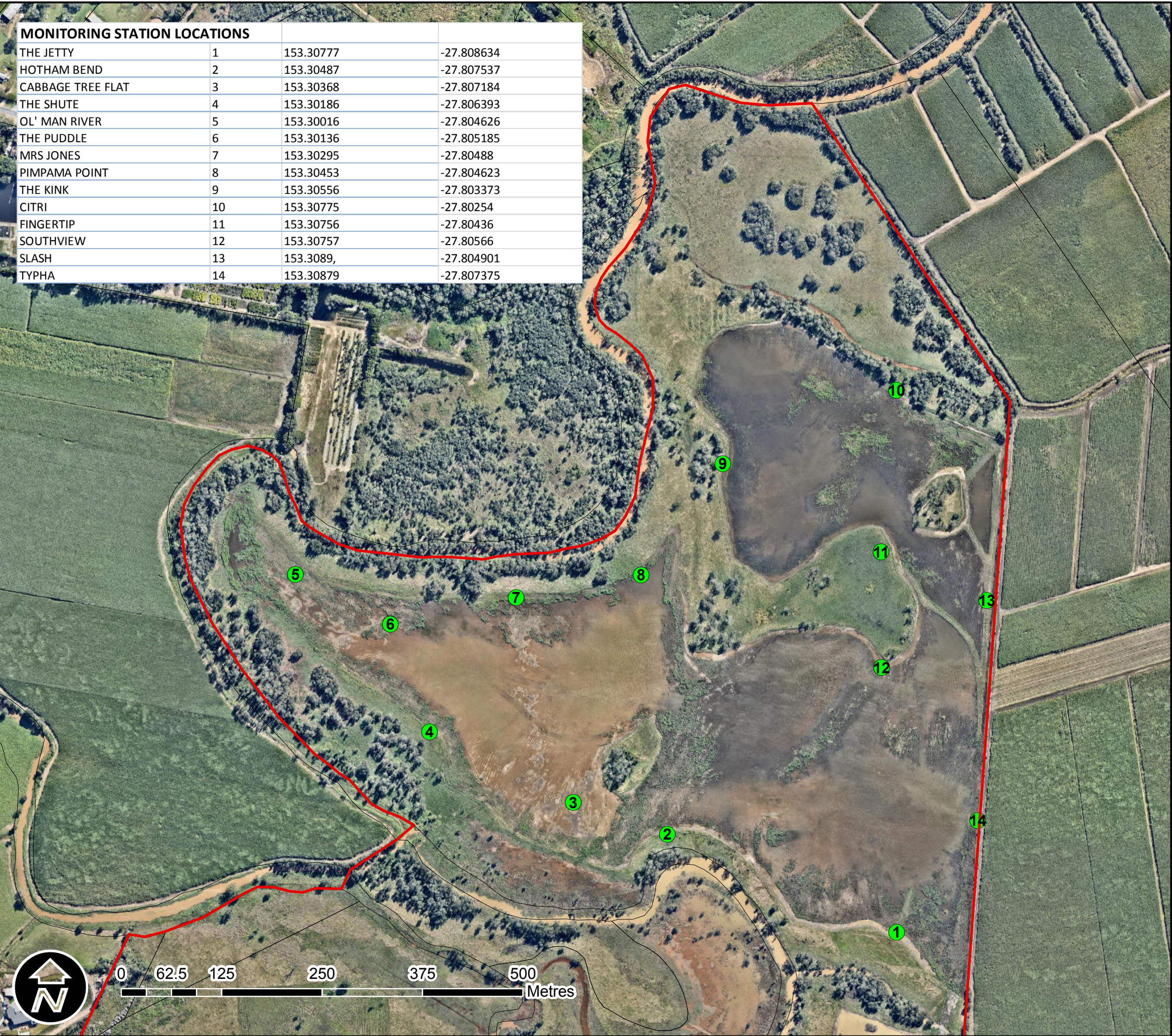
Client:
Mirvac Pacific Pty Ltd

Address:
Gainsborough Greens Golf Course
104 Swan Road,
PIMPAMA QLD

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Scale: As Shown	Paper: A3	Reference: DERM 2006; Near Map 2011
Drawn: BP	Date: February 2016	
Checked: MK	Job Number: 6300SB	PO Box 47 BURLEIGH HEADS QLD 4220 Ph:(07) 5535 00999 Fax:(07) 5535 0888 info@habitat.net.au





MONITORING STATION LOCATIONS			
THE JETTY	1	153.30777	-27.808634
HOTHAM BEND	2	153.30487	-27.807537
CABBAGE TREE FLAT	3	153.30368	-27.807184
THE SHUTE	4	153.30186	-27.806393
OL' MAN RIVER	5	153.30016	-27.804626
THE PUDDLE	6	153.30136	-27.805185
MRS JONES	7	153.30295	-27.80488
PIMPAMA POINT	8	153.30453	-27.804623
THE KINK	9	153.30556	-27.803373
CITRI	10	153.30775	-27.80254
FINGERTIP	11	153.30756	-27.80436
SOUTHVIEW	12	153.30757	-27.80566
SLASH	13	153.3089,	-27.804901
TYPHA	14	153.30879	-27.807375

Location of Site within Queensland

Location of Site within GCCC

Legend

- Gold Coast City North Cadastre (2006)
- Gainsborough Greens
- Monitoring Stations

Figure 2:
Location of Monitoring Stations

Client:
Mirvac Pty Ltd

Address:
Gainsborough Greens Golf Course
Yawalpah Road,
PIMPAMA QLD

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1.3 Desired Environmental Outcomes

Key Performance Indicators (KPIs) have been set to achieve the desired environmental outcomes for the ongoing rehabilitation of the A1 areas of the North-West Conservation Park. The following KPIs will be utilised to determine successful completion of rehabilitation after 5 years;

- KPI 1 - Complete eradication of the 6 weed species identified for eradication (*Baccharis halimifolia*, *Ipomea cairica*, *Lantana camara*, *Mimosa pudica*, *Solanum chrysotrichum* and *Solanum mauritianum*).
- KPI 2 - Ongoing management and control of other weeds listed (predominately pasture weeds).
- KPI 3 - Minimum 90% site coverage of seeded areas with native vegetation.
- KPI 4 - No individual bare areas greater than 50m² within seeded works.
- KPI 5 - Minimum 250 Koala Resource Trees per hectare.
- KPI 6 - General canopy height - 3 metres.
- KPI 7 - Satisfactory delivery of all Monitoring Reports throughout Establishment Period.

2.0 REVIEW OF DESIRED ENVIRONMENTAL OUTCOMES

2.1 The Big Picture - Rehabilitation Comparison from Start to Current Quadrat 1



Photo Plate 1: Quadrat 1 - Month 1 (September 2015)



Photo Plate 2: Quadrat 1 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with complete weed dominance, a minor native grass presence, and a prediction that tree species will be unlikely to appear. Now, the quadrat marker stakes are not visible to the density and prolific growth of *Casuarina glauca*.

The annual weed aster is beginning to re-emerge from its winter dormancy period. As *Casuarina glauca* growth continues to increase and add biomass, this weed will be outcompeted. The balance of the understorey in this area continues to increase in diversity.

Quadrat 2



Photo Plate 3: Quadrat 2 - Month 1 (September 2015)



Photo Plate 4: Quadrat 2 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with a low vegetative cover of mostly native sedge and grass species. Native dominance did initially decline due to the invasion of weedy grass species. This quadrat is subjected to periods of standing water post large rain events. This has allowed for the ongoing dominance of natives species, with the natural control of weeds through increased water levels and shading from native canopy trees.

Now, this quadrat is rapidly establishing a canopy of *Casuarina glauca*. This is currently resulting in a short term reduction of diversity in the understory as the dynamic of this quadrat shifts.

Quadrat 3



Photo Plate 5: Quadrat 3 - Month 1 (September 2015)

Comparison Summary

This quadrat began the five year monitoring period with little vegetative cover. The majority of vegetation consisted of weed species. Now, the quadrat marker stakes are not visible to the density and prolific growth of *Casuarina glauca*. This growth and formation of a continuous canopy is resulting in the reduction of ground cover species.



Photo Plate 6: Quadrat 3 - Month 36 (August 2018)

Quadrat 4



Photo Plate 7: Quadrat 4 - Month 1 (September 2015)



Photo Plate 8: Quadrat 4 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with little vegetative cover. The majority of vegetation consisted of weed species. Now, a strong canopy of *Casuarina glauca* continues to grow, with a structurally sound native understorey.

Vegetation growth in the surrounds also continues to gain biomass. Alternate routes between quadrats have to be utilised due to this growth.

Quadrat 5



Photo Plate 9: Quadrat 5 - Month 1 (September 2015)

Comparison Summary

This quadrat began the five year monitoring period with little vegetative cover. A canopy of *Casuarina glauca* and *Melaleuca quinquenervia* is now well formed and continuing to increase in biomass. Native groundcovers continue to surpass weed growth, with assistance from the canopy via shading.



Photo Plate 10: Quadrat 5 - Month 36 (August 2018)

Quadrat 6



Photo Plate 11: Quadrat 6 - Month 1 (September 2015)



Photo Plate 12: Quadrat 6 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with no vegetative cover. It was predicted that due to the location of this quadrat, that is unlikely that any canopy species will emerge. Whilst this quadrat has a broken canopy, there are still some scattered trees. Despite the lack of canopy, this quadrat has morphed into a perfect representation of a wetland community, dominated by sedges, rushes and cyperus species.

Quadrat 7



Photo Plate 13: Quadrat 7 - Month 1 (September 2015)

Comparison Summary

This quadrat began the five year monitoring period dominated by ground cover weed species, with no canopy vegetation. The initial 6 month review predicted that the quadrat would be unrecognisable in 2 years due to the growth of native canopy trees. This prediction has been proven accurate, with a strong canopy of casuarina forming in the surrounding area.



Photo Plate 14: Quadrat 7 - Month 36 (August 2018)

Casuarina glauca was recorded flowering and seeding within the surrounding areas for the first time since monitoring commenced.

Quadrat 8



Photo Plate 15: Quadrat 8 - Month 1 (September 2015)



Photo Plate 16: Quadrat 8 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with minimal vegetation cover. Due to the periodic water inundation of this quadrat, vegetation diverse, ranging from native sedges and rushes to rapidly establishing *Casuarina glauca*. With the canopy establishment coupled with winter dormancies, this diversity of this quadrat has notably decreased. A number of these species may re-emerge as growing conditions improve.

Quadrat 9



Photo Plate 17: Quadrat 9 - Month 1 (September 2015)



Photo Plate 18: Quadrat 9 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with significant vegetation cover, including native groundcovers. This quadrat experiences frequent and prolonged periods of inundation. It was predicted that vegetation will consist predominately of native sedges, rushes and cyperus species. Despite this prediction, scattered casuarina and melaleucas have continued to increase in biomass. This continuing vegetative development continues to displace weed species.

Quadrat 10



Photo Plate 19: Quadrat 10 - Month 1 (September 2015)



Photo Plate 20: Quadrat 10 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with canopy vegetation cover over the higher elevation portion, reaching approximately 1.5m in height. Now, canopy vegetation extends over most of the quadrat.

This quadrat, and surrounds, has the highest diversity of canopy vegetation, including a number of eucalypts. As this quadrat is at a higher elevation, it does suffer the most from dry weather. This quadrat is progressively transitioning towards a grassy woodland structure with dominance of native grasses in the understorey.

Quadrat 11



Photo Plate 21: Quadrat 11 - Month 1 (September 2015)



Photo Plate 22: Quadrat 11 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with a complete coverage with introduced grasses.

This quadrat is highly susceptible to invasion by annual herbaceous weed species.

Depending on the volume of rain and season this can alternate between aster and common sow thistle. These annual pasture weeds are not a significant environmental concern.

If significant rain is received, this quadrat becomes inundated, smothering the weeds and acting as a natural weed control. Over the past six months, there has been a shift in herbaceous weed species dominance.

Quadrat 12



Photo Plate 23: Quadrat 12 - Month 1 (September 2015)

Comparison Summary

This quadrat began the five year monitoring period with minimal vegetation coverage. A canopy of casuarina has now formed and continues to grow in height and biomass.

Due to the increase in shading and organic build up, weed species are beginning to decline. This quadrat is developing well into an open woodland community with a sparse understorey due to inundation.



Photo Plate 24: Quadrat 12 - Month 36 (September 2018)

Quadrat 13



Photo Plate 25: Quadrat 13 - Month 1 (September 2015)

Comparison Summary

This quadrat began the five year monitoring period with a cover of native sedges, rushes and cyperus species. Due to a period of extended drought-like conditions, this quadrat became extremely distressed, resulting in the dieback of predominantly wetland species.

This area has made a significant comeback with the change from sedges to casuarinas. A number of eucalypts are located on the fringes of this quadrat that are progressing well.



Photo Plate 26: Quadrat 13 - Month 36 (August 2018)

Quadrat 14



Photo Plate 27: Quadrat 14 - Month 1 (September 2015)



Photo Plate 28: Quadrat 14 - Month 36 (August 2018)

Comparison Summary

This quadrat began the five year monitoring period with a partial coverage of vegetation, dominated by Typha. This quadrat is now dominated by a monoculture of Typha. Whilst this is a native species, it can often outcompete other wetland species. Control of typha was undertaken within the first 6 months of monitoring, however was not followed up and therefore had little effect.

Now, a number of small casuarina seedlings are developing and have clearly emerged over the tops of the typha. This marks the commencement of the diversification of this quadrat.

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Photo Plate 29: A1 Eucalypt Plantings - Month 1 (September 2015)

Comparison Summary

Approximately 7,000 koala resource trees were planted adjacent to Hotham Creek and the Pimpama River. The site was previously degraded grazing pasture. Grasses were slashed prior to planting. Tree guards were removed at 5 months, once the stock had successfully established. Pasture grasses quickly regained their original height. Now, the average height of tubestock throughout is approximately 7m and is continuing to add height and biomass.



Photo Plate 30: A1 Eucalypt Plantings - Month 36 (August 2018)

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Photo Plate 31: A2 Eucalypt Plantings - Month 1 (September 2015)



Photo Plate 32: A2 Eucalypt Plantings - Month 36 (August 2018)

Comparison Summary

This area was seeded and consisted of approximately 9ha. Immediately subsequent to the seeding, 8,000 koala resource trees were planted. The site is inundated more frequently, which is creating significantly different hydrological conditions to that of A1. This has resulted in a different progression of rehabilitation when compared to that of A1. Native hibiscus are dominant in this area, with eucalypt and casuarina seedlings progressing well after a slow start.

2.2 Annual Review of Desired Environmental Outcomes

The following table identifies how the site is progressing with regard to achieving the Desired Environmental Outcomes over the 5 year monitoring period. Please note that the wording of KPIs have been amended to include the differentiation for terrestrial habitats. This is required as the KPIs are not practical for predominately aquatic and/or highly ephemeral areas of the North-West Conservation Park.

Table 1: Annual Review of Desired Environmental Outcomes

Year [#]	KPI Progress	KPI Comments
KPI 1 - Complete eradication of the 6 weed species identified for eradication (<i>Baccharis halimifolia</i>, <i>Ipomea cairica</i>, <i>Lantana camara</i>, <i>Mimosa pudica</i>, <i>Solanum chrysotrichum</i> and <i>Solanum mauritianum</i>).		
1 (2016)	Satisfactory	<i>Baccharis halimifolia</i> and <i>Mimosa pudica</i> are both only identified in one quadrat and are expected to be eradicated within those areas.
2 (2017)	Satisfactory	During this year, <i>Mimosa pudica</i> was controlled. <i>Baccharis halimifolia</i> was recorded at an unacceptable level. This weed was treated via hand removal prior to seed set to minimise seed dispersion. Broad scale removal occurred across the entire NWCP during April, with the complete removal of <i>Baccharis halimifolia</i> plants by May.
3 (2018)	Satisfactory	There have been no signs of re-emergence of <i>Mimosa pudica</i> within the quadrats. <i>Baccharis halimifolia</i> has been identified on and off within a select number of quadrats and the wider NWCP. Whenever identified, treatment of the species was immediately undertaken via manual removal. <i>Ipomea cairica</i> is present within the wider NWCP, however not present within any of the monitoring quadrats. This species will require treatment over the next 12 months. The other three species have not been identified within any quadrats or within the wider NWCP.
4 (2019)		
5 (2020)		
KPI 2 - Ongoing management and control of other weeds listed (predominately pasture weeds).		
1 (2016)	Satisfactory	It is expected that the majority of weeds will fail in the ephemeral environment.
2 (2017)	Satisfactory	Other pasture weed species are regularly treated when populations are considered to be impacting on the success of native species. Low risk annual weeds, such as Aster, Common Couch and Common Sow Thistle are assisting with soil stability in many areas, therefore are not being treated with herbicide. Natural weed suppression occurs during extended periods of inundation. It is anticipated that the next significant rain event will eradicate the majority of these populations.
3 (2018)	Satisfactory	Ongoing treatments are occurring for any populations of pasture weed species that have been identified as significantly impacting or having the ability to significantly impact the NWCP. Species such as Aster, Common Couch and Common Sow Thistle are still present; however these species are having little impact on the overall ecology of the area. These introduced species are still assisting with soil stability in many areas, therefore are not being treated with herbicide. In August there was a notable impact on these annual weeds due to

Year#	KPI Progress	KPI Comments
		the effects of winter combined with an increasing canopy cover.
4 (2019)		
5 (2020)		
KPI 3 - Minimum 90% site coverage of seeded [terrestrial] areas with native vegetation.		
1 (2016)	Satisfactory	The site coverage of 90% will not be achieved due to the ephemeral nature of part of the site. This KPI will be modified to 'Minimum 90% site coverage of the terrestrial part of the site'. In this regard the progress is Satisfactory with an average of 67% site coverage and 70% native species.
2 (2017)	Satisfactory	Average native vegetation cover of all the quadrats equates to approximately 75%, resulting in an upward trend of 9% over the past 12 months. This average also incorporates the quadrats that are dominated with wetland species. Over the past 6 months, vegetation cover slowed significantly (being winter), however the overall biomass increased beyond predicted expectations. This is a great outcome for only 2 years into the monitoring period.
3 (2018)	Satisfactory	Average native vegetation cover of all the quadrats equates to approximately 85%, resulting in an upward trend of 5% over the past 12 months. This average also incorporates the quadrats that are dominated with wetland species. At this stage of maturity for the site it is expected that the diversity will plateau. Also, at this stage of monitoring, measuring the percentage of vegetation cover can result quite differently now. As vegetation develops and the shade regime to the ground increases, plant life retracts. Biomass is moving upwards due to plant height growth, often leaving soil less covered. Along with this process is an increase in leaf litter, and consequently soil organic build up; micro-organism development; humus enrichment; and the long, slow process of soil recovery, structurally, physically and chemically.
4 (2019)		
5 (2020)		
KPI 4 - No individual bare areas greater than 50m² within [terrestrial] seeded works.		
1 (2016)	Satisfactory	This KPI will not be achieved due to the ephemeral nature of part of the site. This KPI will be modified to 'No individual bare areas greater than 50m ² within the terrestrial part of the site'. In this regard the progress is Satisfactory with an average vegetative cover of 67% and increasing.
2 (2017)	Satisfactory	Overall, the portion of the seeded area covered by quadrats averages vegetation coverage of 87%, with 75% consisting of native species. Review of the current Nearmap aerial photography (August 2017) demonstrates that there are no bare terrestrial area greater than 50m ² .
3 (2018)	Satisfactory	Overall, the portion of the seeded area covered by quadrats averages vegetation coverage of 91.4%, with 90.6% consisting of native species. Review of the current Nearmap aerial photography (August 2018) demonstrates that there are no bare terrestrial area greater than 50m ² .
4 (2019)		

Year#	KPI Progress	KPI Comments
5 (2020)		
KPI 5 - Minimum 250 Koala Resource Trees per [terrestrial] hectare.		
1 (2016)	Satisfactory	A number of koala resource trees have emerged including <i>Eucalyptus crebra</i> , <i>Corymbia intermedia</i> and <i>Melaleuca quinquenervia</i> . While the full extent of koala resource trees is unknown at this stage it is expected that canopy trees will be successful over the terrestrial parts of the site. For the remainder of the site it is understood that a higher quality environment has been created and this KPI will be modified to accommodate the ephemeral wetlands.
2 (2017)	Satisfactory	An accurate count of koala resource trees has not been conducted at this stage, however estimates averaged across the monitoring quadrats and buffer plantings currently exceed this requirement. Furthermore, in areas that are marginally terrestrial, melaleucas (which are identified as a koala resource tree) are flourishing.
3 (2018)	Satisfactory	An accurate count of koala resource trees has not been conducted at this stage, however estimates averaged across the monitoring quadrats and buffer plantings currently exceed this requirement. Furthermore, in areas that are marginally terrestrial, melaleucas (which are identified as a koala resource tree) are flourishing.
4 (2019)		
5 (2020)		
KPI 6 - General canopy height - 3 metres.		
1 (2016)	Satisfactory	Canopy trees have emerged with many exceeding 1m, which is considered satisfactory at this time.
2 (2017)	Satisfactory	Canopy trees have emerged across the entire NWCP, with many casuarinas averaging 2m in height. Along the periphery of the wetland, and at higher elevations, some eucalypts are reaching 7m in height. It is anticipated that all canopy vegetation will average a general height of 3m within the next 12 months.
3 (2018)	Satisfactory	Canopy trees are now averaging a height of 4m across the entire NWCP. Many species are now in flower and seed so a second cohort will become evident over this next period. Eucalypts at higher elevations are now exceeding 9m in height.
4 (2019)		
5 (2020)		
KPI 7 - Satisfactory delivery of all Monitoring Reports throughout Establishment Period.		
1 (2016)	Satisfactory	This report provides details of monthly monitoring for the first 12 months of the Establishment Period.
2 (2017)	Satisfactory	This report provides details of monthly monitoring for the first 24 months of the Establishment Period.
3 (2018)	Satisfactory	This report provides details of monthly monitoring for the first 36 months of the Establishment Period.
4		

Year#	KPI Progress	KPI Comments
(2019)		
5 (2020)		

Annual review conducted during September of each year

3.0 SIX MONTHLY COMPARISONS

3.1 Month 1 to Month 6

The following section reviews a comparison between the monitoring photos from September 2015 (month 1) and the month six monitoring survey conducted during February 2016. In summary, the overall findings at the conclusion of the six month monitoring survey for A1 included the following;

- The average dominance of native species is 70% indicating an 18% growth in non-native species from the first month.
- The average cover over all quadrats is 67%, indicating an increase of 15% from the first month.
- 69% of native species seeded have been identified on site indicating an increase of 12% from the first month.

Even though there is a downward trend in native species dominance by 12 percent, this is due to seasonal changes in perennial weed occurrence, as many weed species were observed in their summer growth cycle. These species were not observed in winter, and considering their perennial nature, it is of no concern that this seasonal trend may be a permanent downward shift. It is viewed as nothing more than a short-term cycle of perennial weed species having a positive attribution.

Over the first six-month period, while the site was very wet, wetland species performed really well. However, the performance of the canopy species was very poor. This has changed significantly at the six month monitoring point. In quadrat 12, 34 canopy trees were counted within the 16m² quadrat. This is representative of emerging canopy trees throughout the project area over all, even though not always obvious from the findings within the quadrats.

Other monitoring activities conducted for this 6 month comparison included a review of the koala feed trees planted within A1 along Hotham Creek. In addition, a review of A2 has been undertaken.

Quadrat 1



Photo Plate 33: Quadrat 1 - Month 1 (September 2015)

Comparison Summary
Weeds have remained dominant in this quadrat, however the native grasses have endured and Casuarinas have become common in surrounding areas. Overall there is a significant increase in biomass without a commensurate increase of native species. Native grass presence is noted however no tree species recorded and unlikely to appear.



Photo Plate 34: Quadrat 1 - Month 6 (February 2016)

Quadrat 2



Photo Plate 35: Quadrat 2 - Month 1 (September 2015)

Comparison Summary

Native species have continued to dominate this quadrat and canopy trees have become common in surrounding areas up to 1.5m. Steady expansion of natives and setting of new seed has strengthened the ecological resilience of this quadrat, a solid result these past six months.



Photo Plate 36: Quadrat 2 - Month 6 (February 2016)

Quadrat 3



Photo Plate 37: Quadrat 3 - Month 1 (September 2015)

Comparison Summary

Four new weed species have colonised this quadrat, however canopy trees have become common in the surrounding areas although still in seedling form. These weeds are providing competition for the native seedlings. The author is confident that over time the native trees will outperform and out shade weed species present at this time. Hundreds of tree seedlings are within a 20m radius of this quadrat.



Photo Plate 38: Quadrat 3 - Month 6 (February 2016)

Quadrat 4



Photo Plate 39: Quadrat 4 - Month 1 (September 2015)

Comparison Summary

A number of new weeds have emerged however canopy trees occur within the quadrat and surrounding areas, although still in seedling form. Aster is also predominant in this quadrat. As found elsewhere, the aster is serving a useful function for competition and protection. Beyond this quadrat couch grass is encroaching toward the quadrat. Careful monitoring will continue to be required to determine what effect this will have in the future.



Photo Plate 40: Quadrat 4 - Month 6 (February 2016)

Quadrat 5



Photo Plate 41: Quadrat 5 - Month 1 (September 2015)

Comparison Summary

A number of new weeds have emerged, however canopy trees occur within the quadrat and surrounding areas up to 1.7m. An impressive increase in biomass is also noted in this quadrat.



Photo Plate 42: Quadrat 5 - Month 6 (February 2016)

Quadrat 6



Photo Plate 43: Quadrat 6 - Month 1 (September 2015)

Comparison Summary
Vegetative cover has increased from 1% to 80%. A number of weed species have emerged, however a significant number of canopy trees occur in the surrounding areas. As per quadrat 5 it's expected that *Melaleuca spp.* will become more prevalent in the coming months. The physical change of this quadrat in six months is quite remarkable.



Photo Plate 44: Quadrat 6 - Month 6 (February 2016)

Quadrat 7



Photo Plate 45: Quadrat 7 - Month 1 (September 2015)

Comparison Summary

The number of canopy trees within this quadrat has increased from 1 to 6, and native species continue to dominate. It's likely that within 2 years this quadrat will be unrecognisable due to the presence and growth of these canopy trees. The 6 month picture doesn't reflect just how much native growth is occurring within this quadrat.



Photo Plate 46: Quadrat 7 - Month 6 (February 2016)

Quadrat 8



Photo Plate 47: Quadrat 8 - Month 1 (September 2015)



Photo Plate 48: Quadrat 8 - Month 6 (February 2016)

Comparison Summary

A number of new weed species have emerged, however a significant number of native canopy trees occur within the surrounding areas. This quadrat also represents an excellent example of how standing water can act as a weed suppressant in wetland conditions. Native dominance has been reduced by approximately one third over the past 6 months due to weed incursion. This said, it's expected that seasonal inundation will be effective in reducing the proliferation of exotic species in the future.

Quadrat 9



Comparison Summary

An additional canopy species has emerged and native species remain dominant. This quadrat is clearly suffering the effects of extended drought. Native plant vigour has been reduced, particularly in the last 3 months. This trend is expected to reverse once seasonal rainfall occurs.

Photo Plate 49: Quadrat 9 - Month 1 (September 2015)



Photo Plate 50: Quadrat 9 - Month 6 (February 2016)

Quadrat 10



Photo Plate 51: Quadrat 10 - Month 1 (September 2015)

Comparison Summary

This quadrat displays an increase in diversity and native dominance has increased from 76%-90%. Canopy trees occur within the quadrat up to 3.2m. The quadrat is the most diverse site in the entire monitoring precinct at this time. Diversity can be attributed to the differing soil profiles and inundation experienced across the quadrat.



Photo Plate 52: Quadrat 10 - Month 6 (February 2016)

Quadrat 11



Photo Plate 53: Quadrat 11 - Month 1 (September 2015)

Comparison Summary

Additional species have emerged including both native and exotic. Native species remain dominant. Seasonal growth of exotic annuals can be witnessed in the background (Aster, Common Sow Thistle). This has also been a consequence of an extended drought where inundation has not been present and assisting with weed control.



Photo Plate 54: Quadrat 11 - Month 6 (February 2016)

Quadrat 12



Photo Plate 55: Quadrat 12 - Month 1 (September 2015)

Comparison Summary

The number of canopy trees within this quadrat has increased from 0 to 34 and native species continue to dominate. This quadrat is another site that will be unrecognisable within 24 months.



Photo Plate 56: Quadrat 12 - Month 6 (February 2016)

Quadrat 13



Photo Plate 57: Quadrat 13 - Month 1 (September 2015)

Comparison Summary

A number of weed species have emerged as a consequence of the extended drought. The earthworks profile will allow for significant inundation when seasonal rain arrives upon which the dry land dependant exotics will suffer and the wetland natives will continue to prosper.



Photo Plate 58: Quadrat 13 - Month 6 (February 2016)

Quadrat 14



Photo Plate 59: Quadrat 14 - Month 1 (September 2015)

Comparison Summary

Vegetative cover has increased from 50% to 80%. A number of weed species have emerged, however native species remain dominant. The soil profile here is similar to quadrat 13. Therefore it's equally expected that dry land weed species will suffer when seasonal rainfall occurs. Native wetland species are clearly in a state of moderate distress at this time due to extended drought conditions.



Photo Plate 60: Quadrat 14 - Month 6 (February 2016)

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Photo Plate 61: A1 Eucalypt Plantings - Month 1 (September 2015)



Photo Plate 62: A1 Eucalypt Plantings - Month 6 (February 2016)

Comparison Summary

Approximately 7,000 koala resource trees were planted adjacent to Hotham Creek and the Pimpama River. The site was previously degraded grazing pasture. Grasses were slashed prior to planting. Tree guards were removed at 5 months after approval from Habitat that the stock had successfully established. Pasture grasses quickly regained their original height. At this time the tubestock is starting to grow above the pasture grasses. Average height of tubestock throughout is 600-800mm and all stock is now hardened and performing well. It's expected these plantings will have an average height of 2 metres within the next 18-24 months.

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Photo Plate 63: A2 Eucalypt Plantings - Month 1 (September 2015)



Photo Plate 64: A2 Eucalypt Plantings - Month 6 (February 2016)

Comparison Summary

This area was seeded in September/October 2015 and consisted of approximately 9ha. Immediately subsequent to the seeding, 8,000 eucalypt koala resource tubes were planted. After 5 months the results are very positive. All tubstock is performing well (average height 1 mtr) and 69% of native seed species have successfully germinated. The site is periodically inundated, reflected by standing water observed in the lower photo.

3.2 Month 6 to Month 12

The following section reviews a comparison between the monitoring photos from February 2016 (month 6) and the month 12 monitoring survey conducted during August 2016. Minimal change has occurred during this six month period as the majority of this period was throughout winter. In addition, as the site ages it becomes less dynamic. There was a lack of dominance from the summer annual weed *Aster subulatus*. With this decrease in dominance, direct sunlight energy is more readily available to the understory plants. The two major canopy species *Casuarina glauca* and *Melaleuca quinquinervia* have taken great advantage of this, both now very obvious through most of the project area, including the poorer eastern side. This observation was very significant.

In summary, the overall findings at the conclusion of this six month monitoring survey included the following;

- 37 species were observed either flowering or having set seed. This will strengthen the soil seed bank and have a positive influence on the ecological resilience of the site should there be any future disturbance.
- Due to the increase of canopy trees found within the quadrants, it is obvious this critical part of development is still occurring.
- The two main canopy trees were becoming prolific in abundance, with impressive growth rates of up to 2.2 metres at times, and many tens of hundreds in number.
- An overall improvement in vegetative cover by 7%
- Myrtle Rust on *Melaleuca quinquinervia* noticeable, but not excessive enough to negatively impact.
- Kangaroo grazing was evident.
- Large areas of pure stands of sedges were common over much of the area.
- Wattles, Casuarinas, native grasses, Eucalypts and Corymbia are common on the surrounding contours and developing well. Some even within the wetter zones, the tallest reaching at least 5m.
- The seasonally dominant weed *Aster* is currently dormant, affording positive growth from canopy trees.

Monitoring in A2 also occurred in month 12. Within this area there was a drop in species diversity by 9 species in comparison to assessment at month 1. The species noted to be absent, are clearly species that require good drainage, such as Acacias and Eucalypts. As the area was in draught during month 1, it afforded germination and survival from these 9 species. It is not surprising to see them become absent over winter where diseases causing plant death are common. This trend is a normal part of seedling development, where site specifics influence survival, diversity and abundance. The absence of these species was only in the higher contour zones. Again this highlights the influence of poor drainage from one season to another. The majority of the A2 project area is performing well, and relatively free of weeds.

Quadrat 1



Photo Plate 65: Quadrat 1 - Month 6 (February 2016)

Comparison Summary

This is the most degraded quadrant.

Having said that, the native grass

Capillipedium

spicigerum is common within the quadrant.

There is a native dominance of 37%, which is an upward trend of 33% since month 6.



Photo Plate 66: Quadrat 1 - Month 12 (August 2016)

Quadrat 2



Photo Plate 67: Quadrat 2 - Month 6 (February 2016)

Comparison Summary

The Aster has died off over winter and reveals a dormant *Bolboschoenus cardwellii*. *Casuarina glauca* is also viable in the foreground.

Both *Melaleuca quinquenervia*, some measuring 1.5m in height, and *Casuarina glauca* surround this quadrat in the hundreds. The entire surrounds are very weed free.



Photo Plate 68: Quadrat 2 - Month 12 (August 2016)

Quadrat 3



Photo Plate 69: Quadrat 3 - Month 6 (February 2016)

Comparison Summary

The evidence of dormancy and wintering is obvious. The *Livistona* palm within the quad is still alive but struggling, this can be common with *Livistona*'s.

Lomandra longifolia is becoming common in the surrounds; however, they are struggling with lack of oxygen to the root zone.



Photo Plate 70: Quadrat 3 - Month 12 (August 2016)

Quadrat 4



Photo Plate 71: Quadrat 4 - Month 6 (February 2016)

Comparison Summary
Canopy trees that were in seedling form in this quadrant are now over 1m high. There has been no change in native dominance, however vegetation cover has increased by 10%.



Photo Plate 72: Quadrat 4 - Month 12 (August 2016)

Quadrat 5



Photo Plate 73: Quadrat 5 - Month 6 (February 2016)

Comparison Summary
Melaleuca and Casuarina are forming impressive thickets in areas between quadrants 4, 5, 6 and 7. Despite the changes surrounding the quadrants, no significant change is noted within this quadrat.



Photo Plate 74: Quadrat 5 - Month 12 (August 2016)

Quadrat 6



Photo Plate 75: Quadrat 6 - Month 6 (February 2016)

Comparison Summary

This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant. *Parsonsia straminea* is seeding abundantly in the surrounding trees abutting the project area.



Photo Plate 76: Quadrat 6 - Month 12 (August 2016)

Quadrat 7



Photo Plate 77: Quadrat 7 - Month 6 (February 2016)

Comparison Summary

Native canopy vegetation continues to increase in diversity within this quadrat. During month 1, 6 individuals were identified, now there are significant numbers present. This is also representative of the surrounding area, and an overall upwards trend common over much of the site.



Photo Plate 78: Quadrat 7 - Month 12 (August 2016)

Quadrat 8



Photo Plate 79: Quadrat 8 - Month 6 (February 2016)

Comparison Summary

This quadrat still remains relatively weed free. The first canopy tree within the quadrat was recorded in month 12, indicating canopy trees are still emerging.



Photo Plate 80: Quadrat 8 - Month 12 (August 2016)

Quadrat 9



Photo Plate 81: Quadrat 9 - Month 6 (February 2016)

Comparison Summary

There has been an increase in canopy species in this quadrat from one, to two species. This area will benefit well from the next inundation event.



Photo Plate 82: Quadrat 9 - Month 12 (August 2016)

Quadrat 10



Photo Plate 83: Quadrat 10 - Month 6 (February 2016)

Comparison Summary

This is one of two dry and sloping quadrats where the contour highlights the impact of improved drainage on terrestrial plant success. This is evident both in diversity and structure, where 5 canopy species are present.

Capillipedium spicigerum is still a dominant grass in the background even though dormant over this period.



Photo Plate 84: Quadrat 10 - Month 12 (August 2016)

The growth within this quadrant is quite representative of the broader site, with some Eucalyptus reaching 5m or more.

Quadrat 11



Photo Plate 85: Quadrat 11 - Month 6 (February 2016)

Comparison Summary

This is a very stable quadrat. Comparing this winter photo (month 12) to the last summer photo (month 6), it is very interesting, and highlights the change in abundance and dominance of the different species. This time (month 12), *Persicaria attenuata* located in the surrounding area can be seen taking advantage of the lack of competition, spreading rapidly.



Photo Plate 86: Quadrat 11 - Month 12 (August 2016)

Quadrat 12



Photo Plate 87: Quadrat 12 - Month 6 (February 2016)

Comparison Summary

This quadrat is abundant with canopy tree species, which is also representative of the surrounding areas. The native grass *Capillipedium spicigerum* is dormant in the surrounding area. *Baumea articulata* was also observed in the surrounds, a sedge species not identified before within the area.



Photo Plate 88: Quadrat 12 - Month 12 (August 2016)

Quadrat 13



Photo Plate 89: Quadrat 13 - Month 6 (February 2016)

Comparison Summary
Summer temperatures will see *Eleocharis* recover its dominance in this area. There is a significant increase in canopy trees along this entire eastern edge adjacent to this quadrat. This has been the most concerning area due to exposure to winds, and lack of recruitment trees within windfall. This is the most vital aspect of change in these past 6 months.



Photo Plate 90: Quadrat 13 - Month 12 (August 2016)

Quadrat 14



Photo Plate 91: Quadrat 14 - Month 6 (February 2016)

Comparison Summary
Typha is becoming dominant in the area. The positive aspect to this would be its nesting habitat value for water birds over the wet season.



Photo Plate 92: Quadrat 14 - Month 12 (August 2016)

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Photo Plate 93: A1 Eucalypt Plantings - Month 6 (February 2016)



Photo Plate 94: A1 Eucalypt Plantings - Month 12 (August 2016)

Comparison Summary
Pasture grasses quickly regained their original height at the month 6 monitoring point. The average height of tubestock at that time was approximately 600-800mm, sun hardened and performing well. At the month 12 monitoring time, pasture grasses had continued to grow in height, however seedlings were clearly visible above the height of the grass. Stock averaged approximately 1200-1600mm in height.

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Comparison Summary

The site is still periodically inundated, limiting the growth of a number of the seeded species. Nonetheless, tubes are growing well with an average height of 1600mm. Seedlings of seeded species are also emerging and growing well.

Photo Plate 95: A2 Eucalypt Plantings - Month 6 (February 2016)



Photo Plate 96: A2 Eucalypt Plantings - Month 12 (August 2016)

3.3 Month 12 to Month 18

The following section reviews a comparison between the monitoring photos from August 2016 (month 12) and the month 18 monitoring survey conducted during February 2017. Direct seeding within A1 is now over two years old. An abundance of fauna tracks, scats and nests are regularly being observed within this area. In addition, a mob of kangaroos have also reinhabited this area. Over this six month period, canopy development and growth is impressive, with literally thousands of emerging trees becoming evident above the senescing weeds. Native seedlings are also being recorded in new areas of the rehabilitation area.

In summary, the overall findings for A1 included the following;

- Abundant animal tracks were common through the area, as well as nests, scats and burrows that were seen frequently;
- 37 species were observed either flowering or having set seed. This will strengthen the soil seed bank and have a positive influence on the ecological resilience of the site should there be any future disturbance;
- Two new native species were observed, *Leptospermum polygalifolium* subsp. *cismontanum* and *Juncus kraussii*;
- The two main canopy trees (Melaleuca and Casuarina) were becoming prolific in abundance, with impressive growth rates of up to 4 metres at times, and many tens of thousands in number;
- The dominant annual weed Aster sighted in August as the most common plant has lost its competitive and seasonal edge. There will be another flush of germination and growth from this weed over the coming winter, however that will be minimum in some areas where *Casuarina glauca* has become overly abundant;
- An overall improvement in vegetative cover by 3%;
- Myrtle Rust on *Melaleuca quinquinervia* around quadrats 4, 5 and 6 is noticeable but not excessive enough to negatively impact the rehabilitation area; and
- Wattles, Casuarinas, native grasses, Eucalypts and Corymbia are common on the surrounding contours and developing well. Some were even within the wetter zones, with the tallest reaching at least 5 metres around quadrat 10 where diversity is at its greatest.

Monitoring in A2 also occurred in month 18. In summary, the overall findings within this area were as follows;

- *Casuarina glauca* has advanced significantly from the lower contour zone where it is abundant, through the middle, and lesser so into the upper contour zone;
- Many species were identified to be setting seed, or having recently seeded;
- Two new recruitment species were found, being *Fimbristylis ferruginea* and *Parsonsia straminea*;
- Weed establishment and development varied considerably between none existent, or very limited, to areas of concern;
- *Casuarina glauca* was observed germinating in the worst and most denuded areas; and
- The planted Eucalypt corridor surrounding the site was performing very well.

Quadrat 1



Photo Plate 97: Quadrat 1 - Month 12 (August 2016)

Comparison Summary

This is the most

degraded quadrant.

Having said that, the

native grass

Capillipedium

spicigerum is common

within the quadrant.

Casuarina glauca is

abundant within the

quadrat and

surrounding areas.

Acacia falcata was also

identified within the

surrounding area at the

month 18 monitoring

event.



Photo Plate 98: Quadrat 1 - Month 18 (February 2017)

Quadrat 2



Photo Plate 99: Quadrat 2 - Month 12 (August 2016)



Photo Plate 100: Quadrat 2 - Month 18 (February 2017)

Comparison Summary

The dominating weed species Aster has further died down revealing the true abundance of *Casuarina glauca* in this area

Both *Melaleuca quinquenervia*, some measuring 2m in height, and *Casuarina glauca* surround this quadrat in the hundreds. The entire surrounds are very weed free.

Traversing between quadrats 2 and 3 is becoming difficult due to the abundance of canopy trees.

Juncus usitatus has recently set abundant seed within the surrounding area.

Quadrat 3



Comparison Summary

The growth of *Casuarina glauca* seedlings is phenomenal over this six month period.

Juncus kraussii has become common in the surrounds, along with other species diversity. This *Juncus* is a new species

Photo Plate 101: Quadrat 3 - Month 12 (August 2016)



Photo Plate 102: Quadrat 3 - Month 18 (February 2017)

Quadrat 4



Photo Plate 103: Quadrat 4 - Month 12 (August 2016)

Comparison Summary

Casuarina glauca

seedlings have also grown significantly within this quadrat over this six month period.

Melaleucas and Casuarinas are both thriving well within the surrounding area.



Photo Plate 104: Quadrat 4 - Month 18 (February 2017)

Quadrat 5



Photo Plate 105: Quadrat 5 - Month 12 (August 2016)



Photo Plate 106: Quadrat 5 - Month 18 (February 2017)

Comparison Summary

Growth within this quadrat over the past six months has been significant.

Utilisation of the rehabilitation area by macropods is evident. A portion of a regular travel path currently bisects this quadrat.

Melaleuca and Casuarina are forming impressive thickets in areas between quadrats 4, 5, 6 and 7. Myrtle rust is still obvious on the Melaleucas in the surrounding area, however it has not spread over this six month period.

Quadrat 6



Photo Plate 107: Quadrat 6 - Month 12 (August 2016)

Comparison Summary

This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant.



Photo Plate 108: Quadrat 6 - Month 18 (February 2017)

Quadrat 7



Photo Plate 109: Quadrat 7 - Month 12 (August 2016)

Comparison Summary

Native canopy vegetation continues to increase in diversity within this quadrat. During month 1, 6 individuals were identified, now there are significant numbers present. This is also representative of the surrounding area, and an overall upwards trend common over much of the site.



Photo Plate 110: Quadrat 7 - Month 18 (February 2017)

Quadrat 8



Photo Plate 111: Quadrat 8 - Month 12 (August 2016)

Comparison Summary

There are a significant number of canopy tree species within the surrounding areas of this quadrat, however are still not generating in great numbers within the quadrat boundaries. Sedges and grasses continue to grow and develop well.



Photo Plate 112: Quadrat 8 - Month 18 (February 2017)

Quadrat 9



Photo Plate 113: Quadrat 9 - Month 12 (August 2016)

Comparison Summary

There has been an increase in canopy species abundance within this quadrat. A new sedge species was identified within the surrounding area. This is a positive sign for an increase of species diversity.



Photo Plate 114: Quadrat 9 - Month 18 (February 2017)

Quadrat 10



Photo Plate 115: Quadrat 10 - Month 12 (August 2016)

Comparison Summary

This is one of two dry and sloping quadrats where the contour highlights the impact of improved drainage on terrestrial plant success. A different species composition is recorded within this quadrat due to the differences in contour. *Capillipedium spicigerum* is still a dominant grass in the background even though dormant over this period.



Photo Plate 116: Quadrat 10 - Month 18 (February 2017)

The growth within this quadrant is quite representative of the broader site, with some Eucalypts reaching 5m or more, with a DBH of approximately 25cm.

Quadrat 11



Photo Plate 117: Quadrat 11 - Month 12 (August 2016)

Comparison Summary

This is a very stable quadrat. Comparing month 12 and month 18 photos, there has been a significant change in Aster abundance behind this quadrat. This is an annual weed, therefore will die off.



Photo Plate 118: Quadrat 11 - Month 18 (February 2017)

Quadrat 12



Comparison Summary

This quadrat is abundant with canopy tree species, which is also representative of the surrounding areas. These individuals continue to grow well. The surrounds of this quadrat appear to be lagging compared to other areas, however have grown significantly over this six month period.

Photo Plate 119: Quadrat 12 - Month 12 (August 2016)



Photo Plate 120: Quadrat 12 - Month 18 (February 2017)

Quadrat 13



Photo Plate 121: Quadrat 13 - Month 12 (August 2016)

Comparison Summary

Canopy trees have grown significantly within this quadrat over the six month period. This growth is representative of the general areas, which has overall been a little slower to take off when compared to other areas of the site.



Photo Plate 122: Quadrat 13 - Month 18 (February 2017)

Quadrat 14



Photo Plate 123: Quadrat 14 - Month 12 (August 2016)

Comparison Summary

Typha is becoming dominant in the area. The positive aspect to this would be its nesting habitat value for water birds over the wet season. However, this species could, over a long period, degrade the diversity of the entire site. Interestingly enough, Typha was sprayed here in the very first visit.



Photo Plate 124: Quadrat 14 - Month 18 (February 2017)

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Photo Plate 125: A1 Eucalypt Plantings - Month 12 (August 2016)



Photo Plate 126: A1 Eucalypt Plantings - Month 18 (February 2017)

Comparison Summary

At the month 12 monitoring time, pasture grasses were still dominant, however seedlings were becoming clearly visible above the height of the grass. During the month 18 monitoring event, grass height was comparable, however planted stock continued to grow and prosper. Stock averaged approximately 3.5m in height at this monitoring event. Additional new species were identified within the NWCP during the month 18 monitoring period.

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Comparison Summary

The site is still periodically inundated, limiting the growth of a number of the seeded species. This area of tube stock planting is taking longer than the A1 plantings. It is anticipated that this stock will grow slower than other areas due to the geology and inundation.

Photo Plate 127: A2 Eucalypt Plantings - Month 12 (August 2016)



Photo Plate 128: A2 Eucalypt Plantings - Month 18 (February 2017)

3.4 Month 18 to Month 24

The following section reviews a comparison between the monitoring photos from February 2017 (month 18) and the month 24 monitoring survey conducted during August 2017. Many species of plants are flowering or seeding again. Small populations of new species identified last time have expanded significantly into small clusters, with *Juncus krausii*, *Carex appressa* and *Capillipedium spicigerum* being the most impressive.

In summary, the overall findings for A1 included the following;

- Abundant animal tracks were common, with nests, scats and burrows were seen frequently;
- One new species (*Gahnia aspera*) was observed and becoming common;
- The two main canopy trees are becoming prolific in abundance, with impressive growth rates of up to 5m at times, and many tens of thousands in number;
- The common weed species Aster is becoming less dominant, but continues to create a colonising aspect to areas not well vegetated yet. This is having a very positive effect in areas as it stabilising bare ground, whilst keeping the soil surface open due to its growth habit. This is allowing the soil surface to remain open to recruitment seed, and soil stored seed, without being vulnerable to either weed colonisation, or erosion;
- Myrtle Rust on *Melaleuca quinquinervia* around quadrats 4, 5 and 6 that was observed last visit, was much less obvious at this time of the year. There is minimum damage;
- Kangaroo grazing was evident;
- Large areas of pure stands of *Casuarina glauca* were common over much of the area;
- *Capillipedium spicigerum*, even though not easily noticed to an untrained eye, is abundant and dominant in the drier grassland areas.
- Wattles, Casuarinas, native grasses, Eucalypts and Corymbias are common on the surrounding contours and developing well. Some are even occurring within the wetter zones, the tallest reaching at least 7m around quadrat 10 where canopy diversity is at its greatest.

Monitoring in A2 also occurred in month 18. In summary, the overall findings within this area were as follows;

- No new species were identified, however the abundance and expansion of clusters of native plants is considerable. This is forming the beginning of functional areas of growth that will expand over time;
- *Casuarina glauca* seedlings are slowly spreading outwards through the site, and have made a significant advancement over the past 6 months;
- *Aster subulatus* is still common throughout the site and favouring low laying areas. As per A1, this weed species is creating favourable growing conditions for the recruitment of native species;
- *Hibiscus diversifolium*, being the most common plant, has flowered constantly for 6 months;
- *Parsonsia straminia* was becoming common as a seedling throughout most areas. This is a recruitment species, and an important butterfly host plant. It is also abundant in the adjoining bushland;
- The planted Eucalyptus and Melaleuca corridor surrounding the site is performing very well, and recent tube plantings within the site are strengthening canopy development.

Quadrat 1



Photo Plate 129: Quadrat 1 - Month 18 (February 2017)



Photo Plate 130: Quadrat 1 - Month 24 (August 2017)

Comparison Summary

This quadrat was noted during Month 18 as being the most degraded quadrat. Over the past 6 months, growth of *Casuarina glauca* has been exponential. This is clearly evident in the Month 24 monitoring photo. There has been no change in native plant dominance, however the biomass of native growth has significantly increased. This will greatly assist with shading out of weed species over the next 6 months.

Quadrat 2



Photo Plate 131: Quadrat 2 - Month 18 (February 2017)

Comparison Summary
Weed growth is noted to be struggling against the growing dominance of native vegetation, especially casuarinas.

Both *Melaleuca quinquenervia*, some measuring 2m in height, and *Casuarina glauca* surround this quadrat in the hundreds. The entire surrounds are very weed free.

Traversing between quadrats 2 and 3 is difficult due to the abundance of canopy trees.



Photo Plate 132: Quadrat 2 - Month 24 (August 2017)

Quadrat 3



Photo Plate 133: Quadrat 3 - Month 18 (February 2017)

Comparison Summary

The growth in biomass and height of *Casuarina glauca* has been significant over the past 6 months. Also increasing in strength is the coverage and density of groundcovers. This has increased the soil coverage and stability within the quadrat and surrounds.



Photo Plate 134: Quadrat 3 - Month 24 (August 2017)

Quadrat 4



Photo Plate 135: Quadrat 4 - Month 18 (February 2017)

Comparison Summary

Casuarina glauca were recorded to be no more than seedlings during the Month 18 monitoring event. These seedlings are now over 2.5m in height.

Within the surrounds of this quadrat are a number of eucalypt and *Corymbia* seedlings that are also growing well. A new species, *Gahnia aspera*, was also identified in good numbers surrounding this area.



Photo Plate 136: Quadrat 4 - Month 24 (August 2017)

Quadrat 5



Photo Plate 137: Quadrat 5 - Month 18 (February 2017)



Photo Plate 138: Quadrat 5 - Month 24 (August 2017)

Comparison Summary

Growth within this quadrat over the past six months has been exponential. Casuarinas and melaleucas have grown 1-2m over a 6 month period, which included the slower growing months of winter.

Melaleuca and Casuarina are forming impressive thickets in areas between quadrats 4, 5, 6 and 7. Myrtle rust is still present on some Melaleucas in the surrounding area, however is not spreading or degrading individuals.

Quadrat 6



Photo Plate 139: Quadrat 6 - Month 18 (February 2017)

Comparison Summary

This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant. This illustrates the habitat complexity and diversity within a small area of the site, with niche pockets such as this scattered throughout the NWCP.



Photo Plate 140: Quadrat 6 - Month 24 (August 2017)

Quadrat 7



Photo Plate 141: Quadrat 7 - Month 18 (February 2017)

Comparison Summary

Native canopy

vegetation continues to increase in height and biomass within this quadrat. Dominance of canopy species within the surrounding areas is variable, and includes a number of eucalypt and corymbia species. The increase in biomass of canopy vegetation has increased shading of the understorey. This has resulting in the eradication of one pasture weed species, *Conyza sumatrensis*.



Photo Plate 142: Quadrat 7 - Month 24 (August 2017)

Quadrat 8



Comparison Summary

This is a stable quadrat dominated by freshwater wetland species, such as sedge, rush and cyperus species. A small number of casuarinas are scattered in and around this quadrat, however it will never be a dominant species within this area due to the hydrology.

Photo Plate 143: Quadrat 8 - Month 18 (February 2017)



Photo Plate 144: Quadrat 8 - Month 24 (August 2017)

Quadrat 9



Photo Plate 145: Quadrat 9 - Month 18 (February 2017)

Comparison Summary

There are no major changes with this quadrat over the past 6 months. It has remained stable. Canopy vegetation growth within and surrounding this quadrat has increased. Native groundcover biomass has also increased slightly over this period.



Photo Plate 146: Quadrat 9 - Month 24 (August 2017)

Quadrat 10



Photo Plate 147: Quadrat 10 - Month 18 (February 2017)



Photo Plate 148: Quadrat 10 - Month 24 (August 2017)

Comparison Summary

The growth within this quadrat is quite representative of the broader site, with some Eucalypts reaching 6m or more, with a DBH of approximately 25cm. A notable increase in biomass is evident between Months 18 and 24.

The extent of vegetation cover within this quadrat has not increased. It is considered unlikely that this will increase due to the topography of this quadrat.

Quadrat 11



Photo Plate 149: Quadrat 11 - Month 18 (February 2017)

Comparison Summary

This quadrat provides an example of how dynamic this area can be. During Month 18, this area was noted as being very stable. Now at Month 24, the quadrat has decreased in native dominance due to an outbreak of Common Sow Thistle. It is noted that this pasture weed is not of concern and will be naturally controlled with the next large rain event, as standing water will smother this species.



Photo Plate 150: Quadrat 11 - Month 24 (August 2017)

Quadrat 12



Photo Plate 151: Quadrat 12 - Month 18 (February 2017)



Photo Plate 152: Quadrat 12 - Month 24 (August 2017)

Comparison Summary

Whilst this quadrat is abundant with canopy tree species, there is still a lack in good soil coverage. Native grasses are common across the higher contours surrounding this quadrat.

This quadrat and the immediate surrounds appear to be lagging compared to other areas, however vegetation has still grown significantly over this six month period.

Quadrat 13



Photo Plate 153: Quadrat 13 - Month 18 (February 2017)

Comparison Summary

Canopy trees have grown in height and biomass within this quadrat over the six month period. Growth within this area of the NWCP has been significant, with canopy vegetation reaching above weedy grass species within the broader area. These weedy grass species are beginning to struggle under the shading of native canopy vegetation.



Photo Plate 154: Quadrat 13 - Month 24 (August 2017)

Quadrat 14



Photo Plate 155: Quadrat 14 - Month 18 (February 2017)



Photo Plate 156: Quadrat 14 - Month 24 (August 2017)

Comparison Summary

Native dominance of vegetation has now reached 100% within this quadrat, with almost complete coverage. It is noted that the diversity of native species is rapidly declining due to the dominance of Typha.

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Comparison Summary
Height and biomass of seedlings have both increased exponentially over this 6 month period. As the canopy continues to develop, weed growth will gradually be reduced. Stock averaged approximately 4m in height at this monitoring event.

Photo Plate 157: A1 Eucalypt Plantings - Month 18 (February 2017)



Photo Plate 158: A1 Eucalypt Plantings - Month 24 (August 2017)

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Photo Plate 159: A2 Eucalypt Plantings - Month 18 (February 2017)



Photo Plate 160: A2 Eucalypt Plantings - Month 24 (August 2017)

Comparison Summary

The site is still periodically inundated, limiting the growth of a number of the seeded species. *Hibiscus diversifolius*, a species that requires high moisture levels, is dominant throughout this area. This area of tube stock planting is taking longer than the A1 plantings. It is anticipated that this stock will grow slower than other areas due to the geology and inundation.

3.5 Month 24 to Month 30

The following section reviews a comparison between the monitoring photos from August 2017 (month 24) and the month 30 monitoring survey conducted during February 2018. Over the past six months, vegetation growth has been so great that new routes between quadrats were required. This has resulted in an increase in opportunistic observations between quadrats, and has subsequently increased the recorded biodiversity of the NWCP on the whole.

In summary, the overall findings for A1 included the following;

- 30 plant species were either in flower or seed, and *Corymbia citriodora* having the first show of flowering from a canopy species. This will continue to strengthen the soil seed bank at seed fall;
- Several uncommon species were observed in higher numbers: *Juncus kraussii*, *Carex appressa*, *Allocasuarina littoralis* and *Livistona australis*;
- One new species was noted *Ficus obliqua*, with several individual specimens;
- Large areas of pure stands of *Casuarina glauca* were common over much of the area, with canopy closing rapidly;
- The reduction in weed species, both abundance and diversity was considerably noticeable;
- Myrtle Rust on *Melaleuca quinquinervia* around quadrant 4, 5 and 6 was still obvious and stunting growth of the host individual. It was not observed on every individual;
- *Capillipedium spicigerum* was incredibly dominant over large areas and was out competing weeds;
- Where the Camphor Laurel trees have been removed on the eastern boundary, *Imperata cylindrical* (Blady Grass) has dominated the area. This contributes towards edge sealing and biodiversity;
- Previously bare areas that are subject to frequent water inundation are now developing into a slower establishing wetland complex of sedges and aquatic plants. These areas are providing the habitat complexity for a variety of wading birds;

Monitoring in A2 also occurred in month 30. In summary, the overall findings within this area were as follows;

- *Casuarina glauca* seedlings are now rapidly spreading outwards through the site, and have made a significant expansion over the past 6 months. This is a key element in the creation and development of clusters, and clusters are the beginning of small functional areas of growth that inevitably move outward, and become more complex;
- A complex of grasses and sedges is rapidly developing as a stable complex ground flora;
- Some species were identified to be either flowering, or setting seed, in particular grasses such as *Capillipedium spicigerum*. This will continue to strengthen the resilience of the site;
- *Hibiscus diversifolium* being the most common plant found across all area at the previous six month monitoring period, is now being matched by the growth and abundance of *Casuarina glauca*;
- *Parsonsia straminea* was becoming common as a seedling throughout most areas. This is a recruitment species, and an important butterfly host plant. It's also abundant in the abutting bush land.
- The planted eucalypt and melaleuca Hotham Creek buffer is performing very well and gathering momentum.

Quadrat 1



Photo Plate 161: Quadrat 1 - Month 24 (August 2017)



Photo Plate 162: Quadrat 1 - Month 30 (February 2018)

Comparison Summary

Over the past 6 months, growth of *Casuarina glauca* has again been exponential. This is clearly evident in the Month 30 monitoring photo. Native plant biomass has again significantly increased over this 6 month period. The diversity and abundance of weed species has been greatly reduced. This growth has assisted in reducing the weed biomass within this quadrat.

Quadrat 2



Photo Plate 163: Quadrat 2 - Month 24 (August 2017)

Comparison Summary

Over the past six months, *Casuarina glauca* and *Melaleuca quinquenervia* growth has made this quadrat unrecognisable.

The entire surrounds are still very weed free. Traversing between quadrats 2 and 3 is difficult due to the abundance of canopy trees.



Photo Plate 164: Quadrat 2 - Month 30 (February 2018)

Quadrat 3



Photo Plate 165: Quadrat 3 - Month 24 (August 2017)

Comparison Summary

The growth in biomass and height of *Casuarina glauca* has been significant over the past six months. Of note is a positive colour change in the foliage, indicating the increase in soil health. Also increasing in strength is the coverage and density of native groundcovers. The diversity of ground cover species has increased over this period of time.



Photo Plate 166: Quadrat 3 - Month 30 (February 2018)

Quadrat 4



Photo Plate 167: Quadrat 4 - Month 24 (August 2017)



Photo Plate 168: Quadrat 4 - Month 30 (February 2018)

Comparison Summary

Casuarina glauca growth and biomass has continued to increase. This canopy formation has continued to suppress weed growth.

Vegetation growth in the surrounds also continues to gain biomass. Alternate routes between quadrats have to be utilised due to this growth. Also identified within the surrounds of this quadrat was *Melaleuca salignus*, which is a new species for this area.

Quadrat 5



Photo Plate 169: Quadrat 5 - Month 24 (August 2017)

Comparison Summary

Growth within this quadrat over the past six months has been exponential. There has been no increase in soil coverage, however due to the growth and development of canopy species the overall shading of the soil has increased.

Myrtle rust is still being recorded within this area, however impacts on plant health is not significant.



Photo Plate 170: Quadrat 5 - Month 30 (February 2018)

Quadrat 6



Photo Plate 171: Quadrat 6 - Month 24 (August 2017)

Comparison Summary

This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges and rushes in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant. This illustrates the habitat complexity and diversity within a small area of the site, with niche pockets such as this scattered throughout the NWCP.



Photo Plate 172: Quadrat 6 - Month 30 (February 2018)

Quadrat 7



Photo Plate 173: Quadrat 7 - Month 24 (August 2017)

Comparison Summary

Native canopy

vegetation continues to increase in height and biomass within this quadrat. The increase in biomass of canopy vegetation has increased shading of the understorey.

Dominance of canopy species within the surrounding areas is variable. Becoming more notable within this surrounds of this quadrat is *Melaleuca salignus*.



Photo Plate 174: Quadrat 7 - Month 30 (February 2018)

Quadrat 8



Photo Plate 175: Quadrat 8 - Month 24 (August 2017)

Comparison Summary

This is a stable quadrat dominated by freshwater wetland species, such as sedge, rush and cyperus species. A small number of casuarinas are scattered in and around this quadrat, however it will never be a dominant species within this area due to the hydrology. These casuarinas have grown exponentially over this six month period. This is demonstration of how optimal growth conditions contribute to successful growth.



Photo Plate 176: Quadrat 8 - Month 30 (February 2018)

Quadrat 9



Photo Plate 177: Quadrat 9 - Month 24 (August 2017)

Comparison Summary

After remaining relatively dormant for the last six months, the casuarina and melaleuca seedlings have grown rapidly into small canopy trees. With the increase in canopy cover, two weed species have been outcompeted from this quadrat.

Within the surrounding area, casuarinas are noted to be in seed. Once these trees set viable seed, a second cohort will commence development.



Photo Plate 178: Quadrat 9 - Month 30 (February 2018)

Quadrat 10



Photo Plate 179: Quadrat 10 - Month 24 (August 2017)



Photo Plate 180: Quadrat 10 - Month 30 (February 2018)

Comparison Summary

The growth within this quadrat is quite representative of the broader site. The extent of vegetation cover within this quadrat has not increased. It is considered unlikely that this will increase due to the topography of this quadrat. However, soil shading has increased due to the overall increase of biomass of the canopy. This continual increase in shading will continue to alter species composition and abundance.

The native grass *Capillipedium spicigerum* has continued to seasonally outcompete weed species, with a significant decline in *Mimosa pudica* noted during this six month period.

Quadrat 11



Photo Plate 181: Quadrat 11 - Month 24 (August 2017)



Photo Plate 182: Quadrat 11 - Month 30 (February 2018)

Comparison Summary

This quadrat provides an example of how dynamic this area can be. During Month 18, this area was noted as being very stable. In Month 24, the quadrat decreased in native dominance due to an outbreak of Common Sow Thistle. Now the quadrat is dominated by an introduced carpet grass.

These dynamic changes are assumed to be associated with the fluctuating water table levels and levels of water inundation.

Quadrat 12



Photo Plate 183: Quadrat 12 - Month 24 (August 2017)



Photo Plate 184: Quadrat 12 - Month 30 (February 2018)

Comparison Summary

This quadrat and the immediate surrounds appeared to be lagging compared to other areas, however vegetation grown significantly over this six month period has been exponential. With the increased shading as a direct result of the increase in biomass, the extent of growth within this quadrat will rapidly increase. A significant decline in weed abundance has been recorded over this six month period.

Quadrat 13



Comparison Summary

Canopy trees have grown significantly in height and biomass within this quadrat over the six month period. Growth within this area of the NWCP has been significant, with canopy vegetation having a positive impact on reducing the extent of weedy grass species due to shading.

Photo Plate 185: Quadrat 13 - Month 24 (August 2017)



Photo Plate 186: Quadrat 13 - Month 30 (February 2018)

Quadrat 14



Photo Plate 187: Quadrat 14 - Month 24 (August 2017)

Comparison Summary

A number of small casuarina seedlings are developing and beginning to emerge over the tops of the typha. This marks the commencement of the diversification of this quadrat.



Photo Plate 188: Quadrat 14 - Month 30 (February 2018)

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Comparison Summary
Height and biomass of seedlings have both increased exponentially over this 6 month period. As the canopy continues to develop, weed growth will gradually be reduced. Stock averaged approximately 5m in height at this monitoring event.

Photo Plate 189: A1 Eucalypt Plantings - Month 24 (August 2017)



Photo Plate 190: A1 Eucalypt Plantings - Month 30 (February 2018)

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Photo Plate 191: A2 Eucalypt Plantings - Month 24 (August 2017)



Photo Plate 192: A2 Eucalypt Plantings - Month 30 (February 2018)

Comparison Summary

The site is still periodically inundated, limiting the growth of a number of the seeded species. *Hibiscus diversifolius*, a species that requires high moisture levels, is dominant throughout this area. This area of tube stock planting is taking longer than the A1 plantings. It is anticipated that this stock will grow slower than other areas due to the geology and inundation.

3.6 Month 30 to Month 36

The following section reviews a comparison between the monitoring photos from February 2018 (month 30) and the month 36 monitoring survey conducted during August 2018. Of note, a significant portion of species within the entire NWCP area are seeding or flowering. This includes multiple acacia species, casuarina species, native pea trees, native grasses and eucalypts. This marks a significant milestone for maturation of this vegetation. Over the next 6 to 12 months a second cohort of seedlings will emerge as a result of self-propagation.

In summary, the overall findings for A1 included the following;

- 45 plant species were either in flower or seed, with *Eucalyptus robusta* and *Casuarina glauca* having the first show of flowering. This will continue to strengthen the soil seed bank;
- Several species uncommon within the NWCP were observed in higher numbers: *Juncus kraussii*, *Ficus oblique* and *Carex appressa* forming small clones in appropriate niches;
- *Leptospermum polygalifolius* ssp *cismontanum* was noted and in flower for the first time;
- Large areas of *Casuarina glauca* copses were common over much of the area, with canopy cover closing rapidly;
- The reduction in weed species, both in abundance and diversity was considerably noticeable;
- Myrtle Rust was still obvious on some *Melaleuca quinquenervia* individuals around quadrats 4, 5 and 6. Growth of these individuals was visibly stunted;
- Fauna activity was significant during the month 36 monitoring inspection with bandicoot diggings around quadrats 5 and 6; multiple waterbird observations and many sightings of hunting birds of prey;
- The native grass species *Capillipedium spicigerum* was incredibly dominant over large areas and was out competing weed species considerably; and
- Many weed species are declining significantly.

Monitoring in A2 also occurred in month 36. In summary, the overall findings within this area were as follows;

- *Casuarina glauca* seedlings are now rapidly spreading outwards through the site, and have made a significant expansion over the past 6 months. This is a key element in the creation and development of clusters, and clusters are the beginning of small functional areas of growth that inevitably move outward, and become more complex;
- A complex of grasses and sedges is rapidly developing. What's impressive about this is the impact on weed elimination through the closing of any ecological niche available;
- Salt tolerant sedges like *Juncus kraussii* are becoming more common in the western section where sodium soils are evident;
- *Hibiscus diversifolius* appearing as dead sticks is beginning its summer life cycle;
- *Parsonsia straminia* is becoming common as a seedling throughout most area; and.
- The planted eucalypts are very slow growers in these areas of high water table. The water table will start to stabilise as growth of other species continues, and this will have a positive effect on survival.

Quadrat 1



Photo Plate 193: Quadrat 1 - Month 30 (February 2018)



Photo Plate 194: Quadrat 1 - Month 36 (August 2018)

Comparison Summary

Over the past 6 months, growth of *Casuarina glauca* has again been exponential. Native plant biomass has again significantly increased over this 6 month period. The diversity and abundance of weed species has been greatly reduced, however aster is beginning to re-emerge from winter dormancy.

As *Casuarina glauca* growth continues to increase and add biomass, this weed will be outcompeted. The balance of the understorey in this area continues to increase in diversity.

Quadrat 2



Photo Plate 195: Quadrat 2 - Month 30 (February 2018)

Comparison Summary

Over the past six months, *Casuarina glauca* and *Melaleuca quinquenervia* growth has made this quadrat unrecognisable.

This quadrat is rapidly establishing a canopy of *Casuarina glauca*. This is currently resulting in a short term reduction of diversity in the understory as the dynamic of this quadrat shifts.



Photo Plate 196: Quadrat 2 - Month 36 (August 2018)

Quadrat 3



Photo Plate 197: Quadrat 3 - Month 30 (February 2018)



Photo Plate 198: Quadrat 3 - Month 36 (August 2018)

Comparison Summary

The growth in biomass and height of *Casuarina glauca* has been significant over the past six months. This growth and formation of a continuous canopy is resulting in the reduction of ground cover species. During month 36 *Casuarina glauca* was recorded as flowering and seeding for the first time. This will commence the processes for the growth of the second cohort of seedlings and canopy growth.

Quadrat 4



Photo Plate 199: Quadrat 4 - Month 30 (February 2018)

Comparison Summary
Casuarina glauca growth and biomass has continued to increase. This canopy formation has continued to suppress weed growth.

Vegetation growth in the surrounds also continues to gain biomass. Alternate routes between quadrats have to be utilised due to this growth.



Photo Plate 200: Quadrat 4 - Month 36 (August 2018)

Quadrat 5



Photo Plate 201: Quadrat 5 - Month 30 (February 2018)



Photo Plate 202: Quadrat 5 - Month 36 (August 2018)

Comparison Summary

Growth within this quadrat over the past six months has again been exponential. A canopy of *Casuarina glauca* and *Melaleuca quinquenervia* is now well formed and continuing to increase in biomass. Native groundcovers continue to surpass weed growth, with assistance from the canopy via shading.

Myrtle rust is still being recorded within this area, with the growth of some individuals stunted; however this is not affecting all plants.

Quadrat 6



Photo Plate 203: Quadrat 6 - Month 30 (February 2018)



Photo Plate 204: Quadrat 6 - Month 36 (August 2018)

Comparison Summary

This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges and rushes in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant, with a few scattered individuals within the quadrat. Despite the lack of canopy, this quadrat has morphed into a perfect representation of a wetland community, dominated by sedges, rushes and cyperus species. This illustrates the habitat complexity and diversity within a small area of the site, with niche pockets such as this scattered throughout the NWCP.

Quadrat 7



Photo Plate 205: Quadrat 7 - Month 30 (February 2018)

Comparison Summary
Native canopy vegetation continues to increase in height and biomass within the surrounds to this quadrat. Note that the month 30 monitoring photo appears different as it shows the surrounding vegetation. The actual quadrat was inaccessible at that time due to inundation.

Casuarina glauca was recorded flowering and seeding within the surrounding areas for the first time since monitoring commenced.



Photo Plate 206: Quadrat 7 - Month 36 (August 2018)

Quadrat 8



Photo Plate 207: Quadrat 8 - Month 30 (February 2018)



Photo Plate 208: Quadrat 8 - Month 36 (August 2018)

Comparison Summary

This is a stable quadrat dominated by freshwater wetland species, such as sedge, rush and cyperus species. A small number of casuarinas are scattered in and around this quadrat, however it will never be a dominant species within this area due to the hydrology.

With the canopy establishment coupled with winter dormancies, this diversity of this quadrat has notably decreased between month 30 and month 36. A number of these species may re-emerge as growing conditions improve.

Quadrat 9



Photo Plate 209: Quadrat 9 - Month 30 (February 2018)

Comparison Summary
Scattered casuarina and melaleucas have continued to increase in biomass. This vegetative development continues to displace weed species.

Within the surrounding area, casuarinas are noted to be in seed. Once these trees set viable seed, a second cohort will commence development.



Photo Plate 210: Quadrat 9 - Month 36 (August 2018)

Quadrat 10



Photo Plate 211: Quadrat 10 - Month 30 (February 2018)



Photo Plate 212: Quadrat 10 - Month 36 (August 2018)

Comparison Summary

The growth within this quadrat is quite representative of the broader site. The extent of vegetation cover within this quadrat has not increased. It is considered unlikely that this will increase due to the topography of this quadrat. However, soil shading has increased due to the overall increase of biomass of the canopy. This continual increase in shading will continue to alter species composition and abundance.

This quadrat is progressively transitioning towards a grassy woodland structure with dominance of native grasses in the understorey.

Quadrat 11



Photo Plate 213: Quadrat 11 - Month 30 (February 2018)



Photo Plate 214: Quadrat 11 - Month 36 (August 2018)

Comparison Summary

This quadrat provides an example of how dynamic this area can be. During Month 18, this area was noted as being very stable. In Month 24, the quadrat decreased in native dominance due to an outbreak of Common Sow Thistle. Over the past six months, there has been a shift in herbaceous weed species dominance.

These dynamic changes are assumed to be associated with the fluctuating water table levels and levels of water inundation.

Quadrat 12



Photo Plate 215: Quadrat 12 - Month 30 (February 2018)



Photo Plate 216: Quadrat 12 - Month 36 (August 2018)

Comparison Summary

This quadrat and the immediate surrounds appeared to be lagging compared to other areas, however vegetation has grown significantly over the past 12 months.

Due to the increase in shading and organic build up, weed species are continuing to decline. This quadrat is developing well into an open woodland community with a sparse understorey due to inundation.

Quadrat 13



Photo Plate 217: Quadrat 13 - Month 30 (February 2018)

Comparison Summary

Canopy trees have grown significantly in height and biomass within this quadrat over the six month period.

This area has made a significant comeback with the change from sedges to casuarinas. A number of eucalypts are located on the fringes of this quadrat that are progressing well.



Photo Plate 218: Quadrat 13 - Month 36 (August 2018)

Quadrat 14



Photo Plate 219: Quadrat 14 - Month 30 (February 2018)

Comparison Summary

Typha is still quite dominant in this quadrat. A number of small casuarina seedlings are developing and have clearly emerged over the tops of the typha. This marks the commencement of the diversification of this quadrat.



Photo Plate 220: Quadrat 14 - Month 36 (August 2018)

(A1) Hotham Creek - Pimpama River Riparian Eucalypt Plantings



Comparison Summary
Height and biomass of seedlings have both increased exponentially over this 6 month period. As the canopy continues to develop, weed growth will gradually be reduced. Stock averaged approximately 7m in height at this monitoring event.

Photo Plate 221: A1 Eucalypt Plantings - Month 30 (February 2018)



Photo Plate 222: A1 Eucalypt Plantings - Month 36 (August 2018)

(A2) Hotham Creek - Swan Road Open Space Precinct Eucalypt Plantings and Native Seeding



Photo Plate 223: A2 Eucalypt Plantings - Month 30 (February 2018)



Photo Plate 224: A2 Eucalypt Plantings - Month 36 (August 2018)

Comparison Summary

The site is still periodically inundated, limiting the growth of a number of the seeded species. *Hibiscus diversifolius*, a species that requires high moisture levels, is dominant throughout this area. This area of tube stock planting is taking longer than the A1 plantings. It is anticipated that this stock will grow slower than other areas due to the geology and inundation.


3.7 Remaining Six Monthly Comparisons

As these comparison dates come by, this section will be updated with photographs illustrating the changes from the previous six months. The following comparisons are to be completed;

- Month 36 (August 2018) to Month 42 (February 2019);
- Month 42 (February 2019) to Month 48 (August 2019);
- Month 48 (August 2019) to Month 54 (February 2020); and
- Month 54 (February 2020) to Month 60 (August 2020).

4.0 MONTHLY QUADRAT MONITORING SURVEYS

4.1 Quadrat 1

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This is the most degraded quadrat. It is not expected that this quadrat will perform well. The quadrat sits on an elevated area and was not subject to flooding. The quadrat was selected as it will serve as a good opportunity to observe whether a native seedbank can eventually overcome a significant existing exotic weed presence. This quadrat contains many more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Senecio sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	This is the most degraded quadrat. This quadrat continues to perform poorly. Very little identifiable change has occurred with exotic species continuing to dominate. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cirseum vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	This is the most degraded quadrat. This quadrat continues to lack native vegetation. Biomass of weeds appears to be fairly stable. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Cynodon dactylon</i>		


Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cirsium vulgare</i> , <i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	While this remains the most degraded quadrat, the native grass <i>Capillipedium spicigerum</i> is now common in the quadrat. A positive first sign. <i>Casuarina glauca</i> is noted in the surrounding areas and may (over time) assist with shading out exotics. No sign of tree species within the quad as yet. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	<i>Capillipedium spicigerum</i> is common though weeds continue to dominate. The surrounding area includes <i>Casuarina glauca</i> performing well. Isolated <i>Melaleuca quinquinervia</i> also recorded adjacent to this quad on lower cut areas. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:	Nil		

Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	Weed biomass has increased significantly since last month. Average height of weeds is 500mm approx. New <i>Casuarina glauca</i> have been found adjacent to the quad and one of these measured 1.3 metres in height. Native grasses continue to be outcompeted by exotics. No tree species recorded yet and hopes are fading of potential in this regard. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	<i>Casuarina glauca</i> are becoming very common around this area, some measured at 1.5 metres. This quadrat contains more unidentified grasses and flat weeds than listed due to dormancy or immaturity.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	5%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	The native grass <i>Capillipedium spicigerum</i> is common within the quadrat and currently setting seed. <i>Casuarina glauca</i> are very common around this area, some measured at 1.5 metres.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus fruticosus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	10%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	There has been no significant change in this quadrat.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	15%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster die-back in the lead up to winter is becoming notable within this month's monitoring of this quadrat.		
Native species:	<i>Capillipedium spicigerum</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	20%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Due to the die-back of Aster, <i>Casuarina glauca</i> seedlings are becoming visible and are becoming emergent over the Aster. The native grass <i>Capillipedium spicigerum</i> is still common within the quadrant.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	35%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	The native grass <i>Capillipedium spicigerum</i> is common within the quadrant.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	37%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	The native grass <i>Capillipedium spicigerum</i> is common within the quadrant. <i>Casuarina</i> seedlings are progressing steadily.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	<i>Casuarina glauca</i> seedlings continue to prosper, with some individuals reaching over 1m in height.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Native dominance continues to increase with the increased growth of <i>Casuarinas</i> and <i>Capillipedium spicigerum</i> .		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Casuarinas continue to grow, averaging approx. 1.8m in height.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Casuarinas continue to dominant and grow, still averaging approx. 1.8m in height. Melaleuca was recorded on the periphery of the quadrat.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Casuarinas continue to grow well within and surrounding this quadrat. <i>Capillipedium spicigerum</i> is still common. <i>Acacia falcata</i> was recorded on the periphery of the quadrat.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. Casuarinas continue to grow well within and surrounding this quadrat, averaging 3m in height.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	55%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Casuarinas continue to grow well within and surrounding this quadrat, averaging 3m in height.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	55%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Casuarinas continue to grow well within and surrounding this quadrat, averaging 4m in height. Melaleucas are becoming more notable at 1.5m		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Vegetation health is steady. <i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	A small amount of rain was received in the local area this month, assisting in growth of all species as the temperature rises.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Temperatures continue to climb, resulting in significant growth of <i>Casuarina glauca</i> . A moderate level of rain was received during the latter part of this month.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cirsium vulgare</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> ,		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Native dominance increased this month with the loss of a weed species and weed biomass. An additional native species, <i>Parsonsia straminea</i> , was also recorded.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i> , <i>Parsonsia straminea</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Aster is beginning to re-emerge from winter dormancy. This may be its last season as competition from native trees eliminates its ability to reproduce.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i> , <i>Parsonsia straminea</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes within the quadrat this month. Understorey and canopy of the surrounding area continues to develop with many new species emerging.		
Native species:	<i>Capillipedium spicigerum</i> , <i>Casuarina glauca</i> , <i>Ludwigia octovalvis</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			

4.2 Quadrat 2

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	All species are setting seed. This significantly increases the rate of native establishment, but more importantly, lays down a seed bank strengthening the ecological resilience of the area. This quadrat is performing very well.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	All species are setting seed and the ecological resilience of the area is improving, however percentage cover has not greatly improved.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:	Nil		

Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	All native species are now setting seed. This is an excellent indicator of long term native dominance and regeneration. No new species identified. No improvement on cover.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i>		
Weed species:	Nil		
Damage:	Nil		


Native dominance:	100%	Percentage vegetation cover:	80%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	All species are continuing to set seed. One new species was identified, <i>Fimbistylis furrugina</i> , but still no improvement on cover.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furrugina</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	No new species identified and no improvement on cover. Site seems to be maintaining low diversity and stable growth patterns. However, the surrounding area is performing well with <i>Casuarina glauca</i> and <i>Melaleuca</i> species.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furrugina</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	All species have set seed. This significantly increases the rate of native establishment, but more importantly, lays down a seed bank strengthening the ecological resilience of the area. Starwort is common in the surrounding area, but so too are canopy trees, both <i>Melaleuca</i> spp., some measuring 1.5m, and <i>Casuarina glauca</i> by the hundreds.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furrugina</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%





Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	The vigour in which the <i>Bolboschoenus cardwellii</i> is recovering and expanding in this area is impressive. Starwort is coming to the end of its life cycle. Many <i>Melaleuca</i> , some measuring over 1.5, and <i>Casuarina glauca</i> surround this quadrat.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	The vigour in which the <i>Bolboschoenus cardwellii</i> is recovering and expanding in this area is impressive. Starwort is coming to the end of its life cycle. Native dominance continues to remain solid. Many <i>Melaleuca</i> and <i>Casuarina</i> surround this quadrat.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Aster was recorded within this quadrat for the first time this month, decreasing the overall dominance by native species.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	No significant changes were recorded for this quadrant. This can be attributed to many species moving into a dormant growth period. Aster is still present, however has not spread any further.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	The Aster is showing signs of die off as the temperatures decrease. Both <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> surround this quadrat in the hundreds.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	The Aster has died off over winter and reveals a dormant <i>Bolboschoenus cardwellii</i> . <i>Casuarina glauca</i> is also viable in the foreground. Both <i>Melaleuca quinquenervia</i> , some measuring 1.5m in height, and <i>Casuarina glauca</i> surround this quadrat in the hundreds. The entire surrounds are very weed free.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	Aster die-off is still evident this month. <i>Casuarina glauca</i> is also viable in the foreground. Both <i>Melaleuca quinquenervia</i> , and <i>Casuarina glauca</i> surround this quadrat in the hundreds.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Surrounding areas still remain relatively weed free. <i>Bolboschoenus cardwellii</i> still progressive in growth.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Aster growth is starting to increase with the rise in temperatures.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Groundsel has been identified within this quadrat this month.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Groundsel treatment within this quadrat has been successful. No living foliage was identified this month. Casuarina continues to dominate, approximately 1m in height.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	The dominating weed species Aster has died down revealing the true abundance of <i>Casuarina glauca</i> in this area.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. Whilst not visible within the photo, the entire quadrat is covered by approximately 2cm of water. Casuarinas continue to grow well, averaging 1.8m.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Casuarinas continue to grow well, averaging 1.8m. Sedges continue to prosper and dominate the quadrat.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Waterlogging is still evident during this monitoring month. No change in casuarina height. Wetland sedge species continue to prosper.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Weed growth is struggling against the ongoing growth and dominance of native species, such as casuarina.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Vegetation health is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			

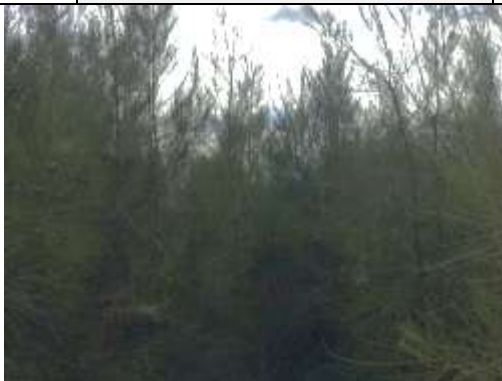
Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	<i>Casuarina glauca</i> continues to emerge, slowly increasing in dominance.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	A moderate level of rain was received at the end of last month and the end of this month. Coupled with the increasing temperatures, <i>Casuarina glauca</i> biomass has significantly increased.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbistylis furruginea</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Species diversity is declining due to the allelopathic properties of <i>Casuarina glauca</i> .		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	A drop in diversity was notable this month as the canopy continues to develop. Native dominance remains unchanged as biomass has continued to increase.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Leersia hexandra</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes this month. Myrtle rust still evident in the surrounding area.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Eleocharis dulcis</i> , <i>Leersia hexandra</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

4.3 Quadrat 3

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	There are literally hundreds of tree seedlings (predominately <i>Casuarina glauca</i>) surrounding this quadrat. The one exotic species is rye grass, not of concern. A <i>Livistona</i> seedling exists in the centre of the quadrat.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i>		
Weed species:	<i>Lolium multiflorum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	3%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	Many tree seedlings surround this quadrat. A number of exotic species are noted in the surrounding areas however these are not of concern. Casuarina seedlings have increased significantly in the past month.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Lolium multiflorum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	5%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	There are literally hundreds of tree seedlings surrounding this quadrat. A number of new weed species are present including <i>Aster subulatus</i> , which visually dominates, however natives continue to appear and prosper. I suspect they will outcompete the Aster within 3 years.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Lolium multiflorum</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	15%

Photo:	Nil
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* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	A number of new weed species are present including Groundsel however natives continue to dominate. Groundsel in this area is being hand pulled for control.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Lolium multiflora</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	63%	Percentage vegetation cover:	15%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	Tree seedlings continue to appear in abundance surrounding this quadrat. Casuarina's now at an average height of 200mm. A number of new weed species are present however natives continue to dominate. Several new native species are present in the surrounding areas.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Lolium multiflora</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	55%	Percentage vegetation cover:	15%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	There are literally hundreds of tree seedlings surrounding this quadrat. In surrounding areas several new species were observed germinating, small clusters of Eucalyptus, also <i>Canavalia rosea</i> , <i>Acacia concurrens</i> , <i>Hibiscus diversifolium</i> , <i>Corymbia intermedia</i> . These may be vulnerable if the area is inundated for long periods. This increase in eucalypts and the like can be attributed to over-seeding works undertaken in October. Conditions since then have been dry and this has allowed for the eucalypt seed to prosper.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	18%

Photo:	
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* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	There are literally hundreds of tree seedlings surrounding this quadrat. 11 <i>Casuarina glauca</i> seedlings exist within the quadrat, where there were none 6 weeks ago. <i>Lomandra longifolia</i> is becoming common in the surrounds, and small Groundsel (<i>Baccharis halimifolia</i>) plants were seen that had not been noticed before. The small <i>Livistona australis</i> seedlings in this area, a native canopy tree, seem to be struggling and lacking vigour.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> . <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	18%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	There are literally hundreds of tree seedlings surrounding this quadrat. 11 <i>Casuarina glauca</i> seedlings exist within the quadrat. <i>Lomandra longifolia</i> is becoming common in the surrounds, and small Groundsel plants, <i>Baccharis halimifolia</i> . The small <i>Livistona australis</i> seedlings in this area, a native canopy tree, continue to progress slowly.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	18%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	There has been no significant change within this quadrat. Many <i>Casuarina glauca</i> seedlings are still emerging within the quadrat and surrounds		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Cynodon dactylon</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster within this quadrat is showing signs of die-off due to the change in temperature.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	20%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Signs of winter are becoming more prevalent within this quadrat this month. Groundsel is still present within this quadrat, however is not spreading.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	20%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	The evidence of dormancy and wintering is obvious. The <i>Livistona</i> palm within the quad is still alive but struggling, this can be common with <i>Livistona</i> 's. <i>Lomandra longifolia</i> is becoming common in the surrounds; however, they are struggling with lack of oxygen to the root zone.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	There is no significant change within this quadrat. It is anticipated that plant growth will increase within the coming months, especially if temperatures continue to rise.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Green growth on Casuarinas is increasing this month with the rise in temperatures. Overall cover is not increasing, with the area suffering from a lack of water.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	44%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Casuarina seedlings continue to prosper and grow this month, and remain the dominant native species.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Casuarina seedlings continue to prosper and grow this month, and remain the dominant native species.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	25%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Casuarina seedlings continue to prosper and grow this month with individuals up to approximately 2.5m in height. Casuarinas remain the dominant native species.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	30%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Casuarina seedlings continue to prosper and grow this month. <i>Juncus kraussii</i> (a new species for A1) has become common in the surrounds.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	35%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged (approximately 2cm of water across quadrat) and functioning as the wetland it is designed to be. Casuarina seedlings continue to prosper and grow this month, approximately 2-3m in height.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	50%	Percentage vegetation cover:	35%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Casuarina seedlings continue to prosper and grow this month, approximately 3m in height. Recommend additional weed control events for Groundsel. Individual plants are beginning to flower. Treatment is required before seed disperses.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Baccharis halimifolia</i> *, <i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	35%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Casuarina seedlings continue to prosper and grow this month, approximately 3m in height. Groundsel control has removed all seedlings from this quadrat and immediate surrounds.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	55%	Percentage vegetation cover:	35%
Photo:			

Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months. Groundsel remains under control.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	55%	Percentage vegetation cover:	35%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	35%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Casuarina and grass biomass continues to increase.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	35%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health and growth is steady.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	35%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Vegetation health and growth is steady. Groundsel noted again in low density within general proximity to this quadrat.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	35%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Some rain was received in the local area at the end of this month assisting in the continued growth of <i>Casuarina glauca</i> . Groundsel still present in surrounding areas, but not spreading.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	40%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Consistent light rainfall across the latter part of this month, coupled with increasing temperatures, has provided good growing conditions for vegetation. Treatment of groundsel required in surrounding areas, but access difficult due to rain.		
Native species:	<i>Microleana stipoides</i> , <i>Ludwigia octovalvis</i> , <i>Livistona australis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds. Rainfall, temperatures and increased shading has resulted in a shift in species composition		
Native species:	<i>Ludwigia octovalvis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	65%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	65%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth. Groundsel treatment commenced in surrounding areas.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Canopy growth continues to progressively shade out weed species, reducing diversity and abundance of weeds		
Native species:	<i>Ludwigia octovalvis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	<i>Casuarina glauca</i> growth continues to increase in height and biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Leersia hexandra</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Species diversity is declining due to the allelopathic properties of <i>Casuarina glauca</i> .		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	July 2018		
Comments:	A decline in diversity was notable this month due to the developing dominance of <i>Casuarina glauca</i> .		
Native species:	<i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes this month due. <i>Eucalyptus robusta</i> is setting seed in surrounding area.		
Native species:	<i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	70%
Photo:			

4.4 Quadrat 4


Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	Canopy trees were in seedling form in the quadrat. This quadrat is also performing very well.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	88%	Percentage vegetation cover:	50%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	Canopy trees remain in seedling form in the quadrat. Weed species are not present. However, couch is beginning to migrate toward the quadrat. It will be interesting to observe this migration and its effect in the time ahead.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	88%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	Canopy trees remain in seedling form in the quadrat. Minimal change in growth rate here. However, this is expected to change with the onset of Summer approaching.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	78%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Canopy trees remain in seedling form in the quadrat. Groundsel seedlings again appearing here in isolated locations. Hand pulling occurring.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	As with Quadrat 3, a lot of tree seedlings continue to appear beyond Quad 4. Aster growth seems to creating a positive competition environment. Will monitor whether this is correct in the time ahead.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	Canopy trees remain in seedling form in this quadrat. In surrounding areas several new species were observed germinating, small clusters of Eucalyptus, also <i>Canavalia rosea</i> , <i>Acacia concurrens</i> , <i>Hibiscus diversifolium</i> , and <i>Corymbia intermedia</i> . They may be vulnerable if the area is inundated for long periods. Aster weed is proving to be an unlikely ally.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	Canopy trees remain in seedling form in the quadrat. The new terrestrial species observed last time between these quadrats have mostly yellowed, suffering from lack of oxygen due to recent rains. Of course sedges are becoming abundant, and the appropriate canopy trees being Melaleuca and Casuarina are thriving.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	Canopy trees remain in seedling form in the quadrat. The new terrestrial species observed last time between these quadrats have mostly yellowed, suffering from lack of oxygen due to recent rains. Sedges are becoming abundant, and the appropriate canopy trees being Melaleuca and Casuarina are thriving. Percentage cover and native dominance remain strong.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Canopy trees remain in seedling form in the quadrat. Native diversity and species dominance within this quadrat are both moderate to high for the area.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Native grass and sedge species continue to progress well. Casuarina seedlings are prospering, however growth will slow over the winter period.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Growth within this quadrat has slowed during the winter period. Aster die-off is evident.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance :	70%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	Canopy trees that were in seedling form in this quadrant are now over 1m high. There has been no change in native dominance, however vegetation cover has increased by 10%.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	Casuarina seedlings within this quadrat continue to prosper.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Casuarina seedlings continue to show new growth. Native dominance continues to increase.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Native species continue to dominate within this quadrat this month. Sedges and rushes also continue to grow well.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Groundsel has been identified within this quadrat this month.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Groundsel treatment has been successful within this quadrat. Casuarinas continue to grow well, with most individuals reaching approximately 1.5m in height.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Casuarinas continue to grow well and dominate within this quadrat. Aster has died off from this quadrat this month.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged (approximately 2cm of water covering quadrat) and functioning as the wetland it is designed to be. Casuarinas continue to grow well and dominate within this quadrat, approximately 1.8m high.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Casuarinas continue to grow well, approximately 2m high.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Casuarinas continue to grow well and dominate within this quadrat, approximately 2m high.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	A new species, <i>Gahnia aspera</i> , was also identified in good numbers within the surrounds of this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health and casuarina growth is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Vegetation health and casuarina growth is steady. Groundsel recorded within the area again.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Some rainfall was received in the latter part of this month assisting in the growth of vegetation. Groundsel still recorded but not increasing in density.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Vegetation health and casuarina growth is steady. Treatment of groundsel will be required, however access is an issue due to rain and waterlogging.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Vegetation health and casuarina growth is steady. Treatment of groundsel commenced this month.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Native vegetation biomass continues to increase. Groundsel removal throughout entire NWCP continues this month		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has assisted with natural weed treatment. Canopy growth and shading has also assisted in a reduction of weed growth. Groundsel treatment has been successful and the weed removed from this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Vegetation health and casuarina growth is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Native vegetation biomass continues to increase.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Persicaria decipiens</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Species diversity is declining due to the allelopathic properties of <i>Casuarina glauca</i> .		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	A decline in diversity was notable this month due to the developing dominance of <i>Casuarina glauca</i> .		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes this month however the surrounding area continues to develop well with <i>Juncus krausii</i> copses strengthening in areas of high sodium soils.		
Native species:	<i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			

4.5 Quadrat 5

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	Some plants exceeded 1 metre in height. <i>Melaleuca quinquenervia</i> was common here. Excellent plant diversity recorded here.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	88%	Percentage vegetation cover:	60%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	Some plants exceeded 1 metre in height. <i>Melaleuca quinquenervia</i> is common here. Very little structural or species change has occurred here.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	88%	Percentage vegetation cover:	60%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	<i>Melaleuca quinquenervia</i> continues to be common here generally at 1m in height. Emergent weeds <i>Aster subulatus</i> identified. <i>Melaleuca</i> growth rates and dominance indicate favourable soil and moisture conditions for this species in this location.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	77%	Percentage vegetation cover:	60%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Some plants exceeded 1.2 metre in height - an improvement of 200mm since last month. <i>Melaleuca quinquenervia</i> remains common here. The weed <i>Aster subulatus</i> continues to grow. <i>Cuphea carthagenesis</i> identified.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	75%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	No significant change in height this month for the <i>Melaleuca quinquenervia</i> . Generally at approximately 1.2 m. Asides, <i>Ludwigia</i> showing signs of stress due to dry ground conditions.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	Some plants now exceeding 1.3 metres in height. <i>Melaleuca quinquenervia</i> remains most common here. In surrounding areas several new species were observed germinating, small clusters of Eucalyptus, also <i>Canavalia rosea</i> , <i>Acacia concurrens</i> , <i>Acacia hubbardiana</i> , <i>Acacia falcata</i> , <i>Hibiscus diversifolium</i> , <i>Corymbia intermedia</i> , and <i>Eucalyptus teriticornis</i> . They may be vulnerable if the area is inundated for long periods. These are dormant seed as this area was not over-seeded in October. A promising sign for elsewhere onsite.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%


Photo:	
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Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	Some plants of <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> exceeded 1.5 metres in height, these were common here. The new terrestrial species observed last time between these quadrats have mostly yellowed, suffering from lack of oxygen due to recent rains. Seven canopy trees were counted within 1 square metre being <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> . Myrtle Rust is also obvious on <i>Melaleuca</i> in the surrounds.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	Some plants of <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> exceeded 1.5 metres in height. As per Quadrat 4, the new terrestrial species observed last time between these quadrats have mostly yellowed, suffering from lack of oxygen due to recent rains. Canopy trees, <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> are progressing. Myrtle Rust is also obvious on <i>Melaleuca</i> in the surrounds.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	<i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> seedlings exceed 1.5 metres in height. New species emerging in the surrounding areas are still not evident within this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Native canopy seedlings still progressing well. Some Aster die-back is starting to show due to the decrease in temperature.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Growth of vegetation has slowed over this month as species enter winter dormancy. With the standard reduction in Aster due to the winter period, native dominance has increase, despite overall growth of vegetation not increasing.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	Melaleuca and Casuarina are forming impressive thickets in areas between quadrants 4, 5, 6 and 7. Despite the changes surrounding the quadrants, no significant change is noted within this quadrat. Canopy trees, <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> are still progressing. Myrtle Rust is also obvious on Melaleuca in the surrounds.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	No significant change is noted within this quadrat. Canopy trees, <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> are still progressing. Myrtle Rust is also obvious on Melaleuca in the surrounds.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			

Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Melaleuca and Casuarina seedlings continue to grow well. Myrtle Rust is still obvious on Melaleuca in the surrounds, however is yet to spread into this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Melaleuca and Casuarina seedlings continue to grow well. No other notable changes have occurred this month.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Groundsel has been identified within this quadrat this month. Melaleucas continue to gain height.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i>*		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	85%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Native vegetation continues to prosper this month with Casuarinas reaching up to approximately 1.5m and Melaleucas averaging 1.3m in height.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i>*		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Native vegetation continues to prosper this month with Casuarinas reaching up to approximately 1.5m and Melaleucas averaging 1.3m in height.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged (approximately 4cm of water covering quadrat) and functioning as the wetland it is designed to be. Correct angle for photo was not achievable due to water. Casuarinas reaching up to approximately 2.5m and Melaleucas averaging 1.5m in height.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Casuarinas and Melaleucas continue to grow well.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Canopy species continue to reach above groundcovers. Casuarinas reaching up to approximately 3m and Melaleucas averaging 2m in height.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Melaleuca growth is notable this month, becoming co-dominant with the casuarinas.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Melaleuca and casuarina continue to grow well.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Melaleuca and casuarina continue to grow well.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Increasing temperatures and scattered rain events have provided good growing conditions for all vegetation. Groundsel was recorded again within the vicinity of this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Rainfall and increasing temperatures promoted vegetative growth across this quadrat and overall NWCP. Groundsel will require treatment in the coming months, however no possible this month due to waterlogging.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Growth of casuarina seedlings very evident this month, adding a significant amount of biomass to this quadrat. A small amount of Myrtle Rust is still evident in the surrounding area, but not causing significant degradation.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Melaleuca and casuarina continue to grow well. Treatment of groundsel continued this month.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Melaleuca and casuarina continue to add height and biomass.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Melaleuca and casuarina continue to grow well.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Fimbristylis ferruginea</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Persicaria attenuata</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Species diversity is declining due to the allelopathic properties of <i>Casuarina glauca</i> .		
Native species:	<i>Juncus usitatus</i> , <i>Cyperus polystachyos</i> , <i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	A decline in diversity was notable this month due to the developing dominance of <i>Casuarina glauca</i> .		
Native species:	<i>Juncus usitatus</i> , <i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes this month. Myrtle rust still observed within the surrounding area.		
Native species:	<i>Juncus usitatus</i> , <i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	90%
Photo:			

4.6 Quadrat 6

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	The water having recently receded from this area results in a poor cover at the moment. However, It is assumed that <i>Bolboschoenus carwellii</i> in the background will advance to inhabit the area quickly.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i>		
Weed species:	<i>Nymphaea</i> sp.		
Damage:	Nil		
Native dominance:	Unable to determine	Percentage vegetation cover:	1%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	There has been no great improvement for this quadrat with regard to vegetation cover. In time, the soil conditions will improve for spread of the surrounding vegetation.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i>		
Weed species:	<i>Nymphaea</i> sp.		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	10%
Photo:	Nil		

Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	This quadrat still remains relatively dormant. It is expected that vegetation cover will improve in the summer months. The apparent slow performance of this quadrat can be attributed to its inundation for 9 months. Its only now been approximately 6 weeks since it's been free of standing water so it's reasonable to suggest growth has been 'stunted' as a consequence of the extended inundation.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i>		
Weed species:	<i>Nymphaea</i> sp.		
Damage:	Nil		


Native dominance:	66%	Percentage vegetation cover:	15%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Some additional species noted including canopy species.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	40%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	Steady colonisation continues to occur in this quad. Diversity remains stable with no new species recorded this month.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	58%	Percentage vegetation cover:	60%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	This quadrat has changed from 1% cover to 80% cover in just six months. A remarkable result! There are significant numbers of canopy trees in the surrounding area to this quadrat. Although it looks like the weed species Aster is a dominant plant in the area, it is of no concern. It will die of its own accord within the next 4 months.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> .		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	58%	Percentage vegetation cover:	80%


<p>Photo:</p>	
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Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	This quadrat has changed from 1% cover to 95% cover in 8 months. The quadrat has a thin layer of water covering it. This will have the effect of being a good weed control agent. There are significant numbers of canopy trees in the surrounding area to this quadrat. Although it looks like the weed species Aster is a dominant plant in the area, it is beginning to decline.		
Native species:	Juncus usitatus, Typha orientalis, Casuarina glauca, Cyperus polystachyos, Ludwigia octovalvis, Bolboschoenus cardwellii, Persicaria attenuata		
Weed species:	Centella asiatica, Cuphea carthagenesis, Aster subulatus, Paspalum dilatatum, Nymphaea sp., Cynodon dactylon		
Damage:	Nil		
Native dominance:	61%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	The quadrat has a thin layer of water covering it. This will have the effect of being a good weed control agent. There are significant numbers of canopy trees in the surrounding area to this quadrat. Although it looks like the weed species Aster is a dominant plant in the area, it is beginning to decline.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	61%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	There is still a thin layer of water covering it acting as a weed control agent. Aster growth is still declining, and is anticipated to continue this decline into winter.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster die-off is notable this month. Waterlogging, whilst assisting weed control, is also impacting upon growth of native canopy species. However, many native sedges are prospering.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	No significant changes have occurred during this month.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	This quadrat has retained native dominance during the entire monitoring phase to date, and continues to do so with many species of sedges in the area. There are significant numbers of canopy trees in the surrounding area to this quadrant.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	Native sedges and rushes are continuing to prosper this month adding to the native dominance within this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	No significant changes have been recorded this month.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Native sedges and rushes continue to grow well within this area, with Juncus still remaining the dominant species.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. <i>Juncus</i> continues to flourish.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	<i>Juncus</i> continues to flourish, however <i>Cynodon dactylon</i> still dominates.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	95%
Photo:			

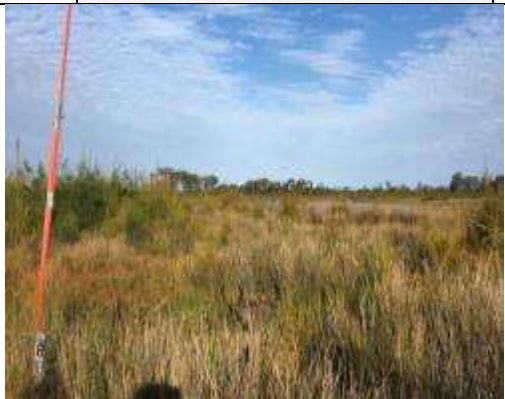
Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Native sedge species continue to dominate this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. The correct angle of the photo was not achievable due to this waterlogging. Native sedge species continue to dominate this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Native sedge species continue to dominate this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Native sedge species continue to dominate this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Weed growth remains minimal within this quadrat.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation growth is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea</i> sp., <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Vegetation growth is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Frequent small rainfall events occurred during this month, increasing the waterlogging of this quadrat. These conditions are favourable for the species within this area.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Similar conditions to the previous month whereby frequent small rainfall events occurred, increasing the waterlogging of this quadrat. These conditions are favourable for the species within this area.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2017		
Comments:	Vegetation growth is steady. Casuarina seedlings are becoming noticeable over the top of tall reeds and sedges.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	This quadrat continues to grow in complexity, with both sedge/cyperus wetland vegetation and casuarina canopy growing strongly.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Vegetation growth is steady.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	both sedge/cyperus wetland vegetation and casuarina canopy growing strongly.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	95%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Cyperus polystachyos</i> , <i>Ludwigia octovalvis</i> , <i>Bolboschoenus cardwellii</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Centella asiatica</i> , <i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Nymphaea sp.</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Native diversity has slightly reduced however this is expected given the slower growing season. Weed diversity has also decreased.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Weed diversity has significantly reduced again this month.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	Weed presence remains relatively low again this month.		
Native species:	<i>Juncus usitatus</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i> , <i>Bolboschoenus cardwellii</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	95%
Photo:			

4.7 Quadrat 7


Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	Very heavily dominated by Ludwigia, with one individual canopy species, <i>Melaleuca quinquenervia</i> . Reasonable diversity, exotic presence recorded at the outer perimeter of the quadrat.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	83%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	Still heavily dominated by Ludwigia with one canopy species, <i>Melaleuca quinquenervia</i> .		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	83%	Percentage vegetation cover:	90%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	Ludwigia continues to dominate however a number of canopy trees have emerged within this quadrat. An additional weed <i>Aster subulatus</i> was identified. Aster is appearing across much of the western portion of the site and will require careful observation in regard to potential dominance.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	90%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	This quadrat continues to be dominated by <i>Ludwigia</i> , with a number of individual canopy trees, <i>Melaleuca quinquenervia</i> . <i>Aster subulatus</i> continues to grow.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	90%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	This quadrat continues to be dominated by <i>Ludwigia</i> , however a number of canopy trees have emerged including <i>Melaleuca quinquenervia</i> and <i>Casuarina glauca</i> . No significant structural change report this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	90%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	The overall number of canopy trees has improved in this quadrat. This is representative of the surrounding area also. As per quadrat 6, it appears weeds are dominating in the picture but on-ground natives make up approximately 75% of coverage.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	Upon the first visit, one canopy tree was identified, upon the second visit 6 canopy trees were identified. Now there are significant numbers present. This is representative of the surrounding area also, and an upwards trend common over much of the site. There are significant numbers of canopy trees in the surrounding area. A vigorous response from the sedges to recent rain is evident around this area.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	A significant number of canopy species are present. This is representative of the surrounding area also, and an upwards trend common over much of the site. There are significant numbers of canopy trees in the surrounding area. A vigorous response from the sedges to recent rain is evident around this area.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Growth conditions have favoured native sedges this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	As per similar quadrats, Aster is starting to show signs of die-back for the winter months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	No significant differences were recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	Native canopy vegetation continues to increase in diversity within this quadrat. During month 1, 6 individuals were identified, now there are significant numbers present. This is also representative of the surrounding area, and an overall upwards trend common over much of the site.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	Melaleuca and Casuarina seedlings continue to grow and prosper this month. Native dominance has also increased with this spike in growth.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Cypress and sedge growth continues to increase this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Melaleuca and Casuarina seedlings continue to grow and prosper this month, with many emerging over the height of Juncus plants.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Melaleuca and Casuarina seedlings continue to grow and prosper this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Melaleuca and Casuarina seedlings continue to grow and prosper this month, with Casuarinas up to approximately 2m in height and Melaleucas averaging approximately 1.2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Melaleuca and Casuarina seedlings continue to grow and prosper this month, with Casuarinas up to approximately 2m in height and Melaleucas averaging approximately 1.2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. Melaleuca and Casuarina seedlings continue to grow and prosper, with Casuarinas up to approximately 3m and Melaleucas approximately 1.5m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Melaleucas and Casuarinas continue to grow well.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Melaleuca and Casuarina seedlings continue to grow and prosper, with Casuarinas up to approximately 3.5m and Melaleucas approximately 2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Biomass of casuarinas has increased significantly, which has in turn increased shading. This has resulted in the eradication of <i>Conyza sumatrensis</i>		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health and growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Vegetation health and growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Rainfall and increasing temperatures have driven an increase in biomass of casuarina and melaleuca.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Rainfall events of the previous month and this month have resulted in waterlogging. This has assisted the growth of melaleucas.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Casuarinas have added significant biomass and continue to close in the canopy.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Vegetation health and growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Conyza sumatrensis</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth. One weed species not present this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Vegetation health and growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Casuarinas have added significant biomass and continue to close in the canopy.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	An alternate route was identified to gain access into this quadrat beyond the thicket of <i>Casuarina glauca</i> . Quadrat is dominated by wetland groundcovers. Species composition, native dominance and vegetation cover statistics remain unchanged.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Carex apressa</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	<i>Casuarina glauca</i> was recorded flowering and seeding within the surrounding areas for the first time since monitoring commenced.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Carex apressa</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	<i>Melaleuca quinquenervia</i> in the surrounding area is struggling with Myrtle Rust.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Casuarina glauca</i> , <i>Juncus usitatus</i> , <i>Carex apleura</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	100%
Photo:			

4.8 Quadrat 8


Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This is a typical example of an ephemeral clay pan wetland. Water has receded now for approximately 1 month. Clay crust has formed with moist soil material below the crust. Weeds are not present.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	30%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	This quadrat is slowly improving with vegetation cover and remaining weed free at this stage.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	40%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	This quadrat continues to improve in vegetative cover. It is expected that a number of weeds will emerge during summer with <i>Cuphea carthagenesis</i> noted.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	As expected a number of new weeds have emerged however the percentage vegetative cover is also improving. It is expected that these annual weeds will retreat after the summer months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Cynodon dactylon</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	70%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	Vegetative cover continues to improve in this quadrat. A number of canopy trees have been observed in the surrounding areas.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	80%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	This area has developed from 30 percent cover to 100 percent cover in six months. There are significant numbers of canopy trees in the surrounding area. Diversity is impressive here also.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	This area has developed well in the last 8 month period. There are significant numbers of canopy trees in the surrounding area. <i>Capillipedium spiciergum</i> is seeding prolifically in this area.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	There are significant numbers of canopy trees in the surrounding area. <i>Capillipedium spiciergum</i> is seeding prolifically in this area.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Sedges and rushes continue to perform well within this quadrat. There has been no change in native dominance.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster is commencing winter dormancy, however not significant enough to alter the native dominance. Minimal growth is anticipated over this period.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	No significant change has been recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	This quadrat still remains relatively weed free. The first canopy tree within the quadrat was recorded this month, indicating canopy trees are still emerging.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	With the increase of temperatures, Juncus and rushes have grown significantly. This has increased the native dominance within this quadrat.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	No significant change recorded for this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Wetland species, such as Juncus, have continued to remain healthy. No significant changes have been recorded.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Wetland species, such as Juncus, have continued to remain healthy.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Wetland species, such as <i>Juncus</i> , have continued to remain healthy. <i>Casuarinas</i> average approximately 1.2m in height. <i>Cynodon dactylon</i> continues to dominate.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	There are no significant changes to this quadrat this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Yes - evidence of tyre tracks through quadrat. It is anticipated that this quadrat will recover quickly from this disturbance.		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged (approximately 8cm of water covering quadrat) and functioning as the wetland it is designed to be. Casuarinas up to approximately 1.5m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage. Recovering well from tyre track disturbance.		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Quadrat still dominated by sedges and groundcovers. Casuarinas up to approximately 1.5m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Quadrat remains stable.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Rainfall and increasing temperatures has boosted vegetative growth.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Moderate rainfall has been received during this month, increasing waterlogging.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Casuarina seedlings are now clearly evident over the tops of rushes/sedges this month and are now growing rapidly		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Casuarina canopy is continuing to form and shade out weed species. Aster not present within this quadrat this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Native plant growth and biomass continues to increase.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria</i> sp., <i>Casuarina glauca</i> , <i>Carex appressa</i> , <i>Leersia hexandra</i> , <i>Cyperus exaltatus</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Casuarina canopy is continuing to form and shade out weed species.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria</i> sp., <i>Casuarina glauca</i> , <i>Carex appressa</i> , <i>Leersia hexandra</i> , <i>Cyperus exaltatus</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus prismatacarpa</i> , <i>Fimbristylis ferruginea</i> , <i>Cyperus polystachyos</i> , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Carex appressa</i> , <i>Leersia hexandra</i> , <i>Cyperus exaltatus</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Some native species have dropped out of this quadrat due to a combination of competition and winter; however native abundance is increasing despite the decline in diversity.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Fimbristylis ferruginea</i> , , <i>Juncus usitatus</i> , <i>Persicaria sp.</i> , <i>Casuarina glauca</i> , <i>Carex appressa</i> , <i>Cyperus exaltatus</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Some additional native species have dropped out of this quadrat due to a combination of competition and winter; however native abundance is increase despite the decline in diversity.		
Native species:	<i>Fimbristylis ferruginea</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Carex appressa</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	Vegetation growth steady.		
Native species:	<i>Fimbristylis ferruginea</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Carex appressa</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	100%
Photo:			

4.9 Quadrat 9

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This is an interesting quadrat due the drop in contour from the fore ground to the background. Although not easily seen in the photo, it highlights how water has limited weed growth at the lower contours, creating a specialist environment favouring the native sedges in comparison to the fore ground, where weed species are dominant.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	89%	Percentage vegetation cover:	50%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	Native sedges continue to dominate the lower contours with weed species occurring at the top edge of this quadrat. One canopy species has emerged <i>Melaleuca quinquenervia</i> . This is a positive development.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	As the water line slowly recedes a number of new species have emerged.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		


Native dominance:	83%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Very little change recorded here this month. Wetland species continue to dominate the lower contour.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	83%	Percentage vegetation cover:	70%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	Groundsel observed here in small numbers for the first time. Hand pulling being undertaken. Asides, this quad has excellent diversity and structural integrity. No significant change is recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *, <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	83%	Percentage vegetation cover:	80%
Photo:	Nil		


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	There has been an increase in canopy species in this quadrat from one, to two species. This area will benefit well from the next inundation event and is clearly now suffering the effects of extended drying and lack of rain.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	Rain events over the past month have improved the health of this quadrat. Native dominance still remains strong.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	Rain events over the past month have improved the health of this quadrat. Native dominance still remains strong.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Typha growth is slowly increasing. It is anticipated that this species will soon dominate this quadrat.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster has started to die-off for the winter period.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Ludwigia has grown significantly this month, becoming more dominant. This however has not changed the overall native dominance.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	This area will benefit well from the next inundation event.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	71%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	No significant changes have been recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Typha growth has increased this month and is clearly the dominant native species within this quadrat.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	No significant changes have been recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Typha continues to grow well, competing for dominance.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Typha continues to grow well, competing for dominance. Melaleuca and casuarina individuals continue to grow well, averaging 1m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i> , <i>Verbena bonariensis</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	There has been no significant change within this quadrat this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged (approximately 15cm of water covering quadrat) and functioning as the wetland it is designed to be. Casuarinas and Melaleucas approximately 1.5m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Quadrat dominated by sedges and groundcovers.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Sedges and groundcovers continue to dominate. Casuarinas and Melaleucas approximately 1.5m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Vegetation growth is stable.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Casuarinas continue to increase in biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	A number of scattered rainfall events occurred this month. This assisted in the growth of sedge and wetland species that dominate this quadrat.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Further rain events occurred this month resulting in the increasing biomass of casuarinas and sedges/rushes.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Vegetation growth is stable.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Native vegetation continues to add biomass, outcompeting weed species.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth, including the displacement of 2 weed species.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Vegetation growth is stable.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Native vegetation continues to add biomass, outcompeting weed species.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Persicaria decipiens</i> , <i>Persicaria attenuata</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Vegetative development continues to displace weed species.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Species diversity is declining, however native dominance remains high.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	Within the surrounding area, casuarinas are noted to be in seed. Once these trees set viable seed, a second cohort will commence development.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Juncus usitatus</i> , <i>Eleocharis dulcis</i> , <i>Cyperus exaltatus</i> , <i>Casuarina glauca</i> , <i>Melaleuca quinquenervia</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	100%
Photo:			

4.10 Quadrat 10

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This is one of two dry and sloping quadrats where the contour highlights the impact of improved drainage on terrestrial plant success. This is evident both in diversity and structure, where 5 canopy species are present. The area is also surrounded with <i>Mimosa pudica</i> *, a weed of concern in these drier environments.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	76%	Percentage vegetation cover:	50%
Photo:			

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	No significant change has been observed in this quadrat.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	76%	Percentage vegetation cover:	50%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	Some additional native and weed species noted. Vegetative cover has not improved.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		

Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus fruticosus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:	Nil		


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	It is not expected that vegetative cover will improve from seed due to the cut. Any increase in vegetative cover will be based on spread of existing vegetation. It is expected that weeds may exploit the bare areas in the summer months. However, tree diversity remains impressive here.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	No significant changes to report. Of all quads, this is the most impressive for structure and diversity.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:	Nil		

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	This is one of two dry and sloping quadrats where the contour highlights the impact of improved drainage on terrestrial plant success. This is evident both in diversity and structure, where 5 canopy species are present. There has been an increase in diversity in this quadrat by three species. The area is also surrounded with <i>Mimosa pudica</i> , a weed of concern in these drier environments. The growth within this quadrat is quite representative of this contour zone around the entire site. Although the diversity is highest in this area. Other areas of the same contour are expected to change as the benefits of shading increases. The tallest tree measured at 3.2 metres in this quadrat. An increase in cover in this area is not expected due to the severity of scalping, with no surface organics left by machinery.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:			

* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	The growth within this quadrat is quite representative of this contour zone around the entire site. Although the diversity is highest in this area, change has been noted in other areas of the same contour as the benefits of shading increases. The tallest tree previously measured at 3.2 metres in this quadrat. This time the growth has been impressive, now growing up to 4 metres.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%




* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	The growth within this quadrat is quite representative of this contour zone around the entire site. Although the diversity is highest in this area, change has been noted in other areas of the same contour as the benefits of shading increases.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	No significant change has been recorded this month.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	It is anticipated that growth of vegetation within this quadrat will slow over the winter period.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Winter effects are evident, however vegetation health is good for this time of year.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	This is one of two dry, sloping quadrats where the contour highlights the impact of improved drainage on terrestrial plant success. This is evident in diversity & structure.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	The growth within this quadrant is quite representative of the broader site, with some Eucalyptus reaching 5m or more. <i>Capillipedium spicigerum</i> is still a dominant grass in the background even though dormant over this period.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Cynodon dactylon</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	No significant changes have been recorded this month.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Growth of canopy vegetation is evident this month, with juvenile eucalypts growing well. <i>Capillipedium spicigerum</i> is still a dominant grass within this quadrat.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. No other significant changes were noted.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Canopy eucalypts continue to grow, averaging approximately 2.5m-4m in height.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Canopy eucalypts continue to grow, averaging approximately 2.5m-4m in height.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Despite being on the upper margins of this area, this quadrat was still high in moisture. Canopy eucalypts continue to grow, approximately 4.5m.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Soil moisture within the higher elevation areas was reduced back to average levels. Canopy eucalypts continue to grow, averaging approximately 4.5m.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Canopy eucalypts continue to grow, averaging approximately 4.5m.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Mimosa pudica</i> *, <i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Weed treatment has controlled Mimosa.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Height and biomass of vegetation continues to increase.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation growth remains steady.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes this month		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	A number of small rainfall events and warming temperatures are assisting with increasing the biomass of vegetation within this quadrat.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Vegetation growth remains steady.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2017		
Comments:	Vegetation growth remains steady.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Due to the location of this quadrat, it is quite dry and will benefit greatly from the next large rain event.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	Canopy is continuing to close. The native grass <i>Capillipedium spicigerum</i> continues to out compete the weed grass species.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Height and biomass of vegetation continues to increase.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Vegetation growth remains steady.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	55%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Gomphocarpus physocarpus</i> , <i>Axonopus sp.</i> , <i>Brachiaria decumbens</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	60%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Winter has notably impacted weed abundance and diversity.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	<i>Corymbia citriodora</i> recorded with mature seed. Many species in flower and seed within this quadrat and surrounding area.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	This quadrat is progressively transitioning towards a grassy woodland structure with dominance of native grasses in the understorey.		
Native species:	<i>Corymbia citriodora</i> , <i>Capillipedium spicigerum</i> , <i>Acacia fimbriata</i> , <i>Acacia hubbardiana</i> , <i>Acacia concurrens</i> , <i>Acacia lieocalyx</i> , <i>Allocasurina littoralis</i> , <i>Cyperus polystachyos</i> , <i>Dodonaea viscosa</i> , <i>Pultenaea villosa</i> , <i>Parsonsia straminia</i> , <i>Melaleuca viminalis</i> , <i>Melaleuca salignus</i> , <i>Eucalyptus crebra</i> , <i>Hovea acutifolia</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	90%	Percentage vegetation cover:	70%
Photo:			

4.11 Quadrat 11

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This is the only quadrat that has been left undisturbed. The quadrat and areas seen in the background were previously dominated by weeds prior to being slashed. Slashing works avoided small isolated stands of <i>Cynodon</i> and <i>Eleocharis</i> . This effort, coupled with flood rains has created a remarkable result with native plant communities now dominating the entire site.		
Native species:	<i>Eleocharis dulcis</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	This quadrat is performing relatively well with no major weed incursion, but also contains no canopy species.		
Native species:	<i>Eleocharis dulcis</i>		
Weed species:	<i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	A number of new species are present including <i>Cyperus polystachyos</i> and the weed <i>Aster subulatus</i> . It is expected that the receding waterline will allow an increase in weeds during the summer months.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Weeds continue to grow as expected but native species still dominate. Cyperus performing well here.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	Milk thistle has been identified here. This is expected as the site was previously covered in thistle prior to slashing and assisted natural regeneration being applied to the site. Natives continue to dominate. Milk Thistle and Aster should be expected to appear annually.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:	Nil		


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	No new weed species identified and natives continue to dominate. In the background you can see clumping weed species, particularly Aster and Milk Thistle. It's evident with the absence of water logging, weed species can behave differently than when the area is inundated. Inundation on this site is actually an asset towards weed control.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	No new weed species identified and natives continue to dominate. Inundation on this site has been an asset towards weed control.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	No new weed species identified and natives continue to dominate. Inundation on this site has been an asset towards weed control.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	No significant changes recorded this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Native dominance is slightly lower this month due to the onset of cooler temperatures.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Wintering is extremely notable this month with the significant die-off of Aster. <i>Gomphocarpus physocarpus</i> has been identified within the quadrat for the first time this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	There is an ongoing change in abundance and dominance of different species within this quadrat. <i>Persicaria attenuata</i> located in the surrounding area can be seen taking advantage of the lack of competition, spreading rapidly.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	<i>Cynodon dactylon</i> continues to grow and is moving closer to taking over dominance within this quadrat.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	<i>Cynodon dactylon</i> continues to edge closer to dominance.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	<i>Gomphocarpus physocarpus</i> is becoming dominant in the surrounding areas and encroaching further into the quadrat.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	50%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. No other significant changes were recorded this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	<i>Cynodon dactylon</i> continues to dominate within this quadrat.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	No significant change recorded within this quadrat. Aster continues to spread behind this quadrat.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. No significant change recorded within this quadrat. Waterlogging is evident within this quadrant. Aster continues to spread in the background, however this annual will commence senescence soon.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Minor waterlogging is still evident within this quadrant. Aster has moved into the senescence stage of its lifecycle.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Growth conditions remain unchanged, with this quadrat continuing to underwhelm.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	45%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	An outbreak of Common Sow Thistle, a common pasture weed, has occurred across the quadrat this month. This weed is not of concern and will be controlled with the next large rain/flooding event.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	No significant changes this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	Common Sow Thistle is still present in high numbers within this quadrat, however this is not of concern at this time.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	A number of small rainfall events were received during the latter part of this month increasing vegetative growth across this quadrat.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	No significant changes this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaeocharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	No significant changes this month.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Elaecharis equisetina</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cynodon dactylon</i> , <i>Sonchus oleraceus</i> , <i>Gomphocarpus physocarpus</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	A change in species composition and distribution of species within the quadrat is notable this month when compared to the previous monitoring.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Persicaria sp.</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Persicaria sp.</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Species density and distribution in the quadrat continues to change.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Persicaria sp.</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Common Sow Thistle is still present in high numbers within this quadrat, however this is not of concern at this time.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Persicaria sp.</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Persicaria sp.</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	A transition is occurring with the re-emergence of Spear Thistle within this quadrat. This species is not of concern.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i> , <i>Cirsium vulgare</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Common Sow Thistle and Spear Thistle are codominant weed species within this quadrat due to the current season.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i> , <i>Cirsium vulgare</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	No significant changes this month. <i>Capillipedium spicigerum</i> is still dominant and abundant within the immediate surrounds.		
Native species:	<i>Eleocharis dulcis</i> , <i>Cyperus polystachyos</i> , <i>Axonopus sp</i>		
Weed species:	<i>Sonchus oleraceus</i> , <i>Cynodon dactylon</i> , <i>Cirsium vulgare</i>		
Damage:	Nil		
Native dominance:	40%	Percentage vegetation cover:	100%
Photo:			

4.12 Quadrat 12


Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	Water has recently receded from this area. Typha may move quickly in the coming wet season to smother the development of this area. This quadrat was selected to monitor how Typha (native) and other endemic wetland species will compete in the time ahead.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	15%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	There has not been a significant change in this quadrat. Typha is not spreading.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	15%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	A number of <i>Casuarina glauca</i> have been identified. It is hoped that this species will continue to spread.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	20%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	<i>Casuarina glauca</i> continues to grow. <i>Ludwigia</i> really starting to show signs of distress, probably drought related. The weed <i>Aster subulatus</i> has also been identified.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	25%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	This quadrat is proving to be quite a good performer. While native cover remains relatively low, it holds quite a good percentage strength over exotics. This being more so as a result of drier ground conditions where weeds are expected to thrive.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	30%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	<i>Typha</i> has not increased in abundance in this area as expected since the first monitoring. 34 canopy trees were counted within the quadrat. No canopy trees were identified six months ago when monitoring started. This is representative of the surrounding area.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	30%
Photo:			

Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	The canopy trees are abundant within this 16 square metre quadrat. This is representative of the surrounding area also. <i>Schoenoplectus vallidus</i> , a new native sedge is common in the surrounds. <i>Pennesetum alopecerioides</i> is looking fantastic in the surrounding area. Typha has not increased in abundance in this area as was expected at the first visit. Grasses and sedges have moved into the bare areas significantly over the past 6 weeks.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	50%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	The canopy trees are abundant within this 16 square metre quadrat. This is representative of the surrounding area also. <i>Schoenoplectus vallidus</i> , a new native sedge is common in the surrounds. <i>Pennesetum alopecerioides</i> is looking fantastic in the surrounding area. Typha has not increased in abundance in this area as was expected at the very first visit. Grasses and sedges have moved into the bare areas.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	86%	Percentage vegetation cover:	50%
Photo:			

Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	No significant change recorded this month.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Aster is showing signs of wintering and die-back.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	50%
Photo:			

Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	Wintering has affected this quadrat significantly this month. In addition, <i>Baccharis halimifolia</i> * was also identified for the first time.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	This quadrat is abundant with canopy tree species, which is also representative of the surrounding areas. The native grass <i>Capillipedium spicigerum</i> is dormant in the surrounding area. <i>Baumea articulata</i> was also observed in the surrounds, a sedge species not identified before within the area.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	50%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.

Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	This quadrat is slowly emerging from its winter phase.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	60%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	No significant changes recorded this month.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	60%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Typha is growing well amongst other native grass species.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	60%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Groundsel was not identified this month. This may be a result of the growing height and density of Typha.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Casuarinas continue to grow well, averaging 1.5m in height.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Casuarinas continue to grow well, averaging 1.5m in height.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. Previously bare areas within this quadrat are flooded this month. Waterlogging may change species diversity over the next few months.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be. Increased moisture has benefited this quadrat.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	A number of individual Casuarinas have shot up due to the rain events over the past few months. Some individuals now reaching 3m, almost doubling in height.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	60%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	65%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Growth in biomass of casuarina has been steady. Quadrat is still lacking good soil coverage.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation growth is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes this month.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Casuarinas continue to grow in biomass.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Increasing temperatures and the rainfall events over the past two months have allowed for continued growth of casuarinas and native grasses.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Vegetation growth is steady.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	30	Months since direct seeding:	34
Date:	February 2018		
Comments:	Casuarina canopy continues to close and shade out understorey. Weed grass significantly reduced in growth.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	<i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	31	Months since direct seeding:	35
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	32	Months since direct seeding:	36
Date:	April 2018		
Comments:	Casuarina canopy continues to close and shade out understorey.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	33	Months since direct seeding:	37
Date:	May 2018		
Comments:	Casuarinas continue to grow in biomass.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	70%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Ludwigia octovalvis</i> , <i>Microleana stipoides</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	70%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Due to the increase in shading and organic build up, weed species are continuing to decline.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	75%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	This quadrat is developing well into an open woodland community with a sparse understorey due to inundation.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Elaeocharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	Native diversity has declined over the past few monitoring months; however native dominance has not decreased.		
Native species:	<i>Bolboschoenus cardwellii</i> , <i>Elaecharis dulcis</i> , <i>Casuarina glauca</i> , <i>Typha orientalis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	80%
Photo:			

4.13 Quadrat 13


Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	The very specific nature of the hydrology here has quite obviously favoured <i>Eleocharis dulcis</i> . The quadrat was selected to monitor how other natives perform in competition with present <i>Eleocharis</i> dominance.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	50%
Photo:			


Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	<i>Eleocharis dulcis</i> continues to dominate. No new weed species have emerged.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	A new weed species has emerged however native vegetative cover has increased.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> .		
Weed species:	<i>Cuphea carthagenesi</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	60%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	A number of new annual weeds have emerged. It is expected that this will be the case over summer months as conditions favour them. Coverage at approximately 57% is expected to slowly increase, despite weed presence.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> .		
Weed species:	<i>Cuphea carthagenesis</i> , <i>Paspalum dilatatum</i> , <i>Aster subulatus</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	<i>Aster subulatus</i> is prevalent however is not expected to thrive for an extended period of time. <i>Eleocharis dulcis</i> continues to dominate.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	The very specific nature of the hydrology here has quite obviously favoured <i>Eleocharis dulcis</i> . The surrounding area is lacking obvious signs of canopy trees.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	More inundation will help the Eleocharis to recover its dominance. This surrounding area is lacking obvious signs of canopy trees.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	More inundation will help the Eleocharis to recover its dominance. This surrounding area is lacking obvious signs of canopy trees.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	The first Casuarina seedling was observed this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	Signs of wintering are evident this month with the di-off of Aster.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	No significant change recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			

Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	Summer temperatures will see <i>Eleocharis</i> recover its dominance in this area.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	Quadrat and surrounds are quite dry and seem to be in need of a rain event.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			

Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	No significant changes recorded this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	Casuarina seedlings growing well. Some individuals up to 40cm in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	November 2016		
Comments:	Groundsel has been identified within this quadrat this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Casuarinas continue to grow well within this quadrat, averaging approximately 1.2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i> , <i>Baccharis halimifolia</i> *		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


* Weed species requires complete eradication to meet the Desired Environmental Outcomes.


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Casuarinas continue to grow well within this quadrat, averaging approximately 1.2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be. Casuarinas continue to grow well within this quadrat, averaging approximately 1.2m in height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Sedges and groundcovers still dominate this quadrat. Casuarina growth is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Sedges and groundcovers still dominate this quadrat. Casuarina growth is steady, averaging approximately 2m height.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Casuarinas continue to grow in abundance and height. Weedy grasses starting to struggle against native canopy.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes have occurred this month.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Small rain events have promoted strong vegetative growth.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Casuarinas have increased in biomass this month assisted by increasing temperatures and a number of small rainfall events.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	70%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Casuarina growth continues to close in canopy, increasing shade and decreasing weed biodiversity and biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i>		
Weed species:	<i>Aster subulatus</i> , <i>Cuphea carthagenesis</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species. Canopy growth and shading has also assisted in a reduction of weed growth.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Vegetation health is steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	85%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Casuarina growth continues to close in canopy, increasing shade and decreasing weed biodiversity and biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	85%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Vegetation growth steady.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	85%
Photo:			

Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	No significant changes within the quadrat this month. Surrounding areas are progressing extremely well with the removal of Camphor Laurels.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	<i>Casuarina glauca</i> continues to add biomass.		
Native species:	<i>Ludwigia octovalvis</i> , <i>Eleocharis dulcis</i> , <i>Bolboschoenus cardwellii</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i> , <i>Persicaria attenuata</i> , <i>Lomandra longifolia</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			

4.14 Quadrat 14

Monitoring month:	1	Months since direct seeding:	6
Date:	September 2015		
Comments:	This quadrat is dominated by native Typha. It was selected to determine how other natives are able to compete successfully (or otherwise) with the Typha.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Ludwigia octovalvis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	50%
Photo:			

Monitoring month:	2	Months since direct seeding:	7
Date:	October 2015		
Comments:	This area continues to show leaning toward Typha however no weeds have been identified and the quadrat remains 100% native.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Ludwigia octovalvis</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	3	Months since direct seeding:	8
Date:	November 2015		
Comments:	No weeds have been identified and the quadrat remains 100% native. Typha levels remain stable. A <i>Cyperus</i> species has also been identified.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Typha orientalis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	4	Months since direct seeding:	9
Date:	December 2015		
Comments:	Typha beginning to show signs of distress here due to likely effect of dry ground with water having receded some time ago.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	66%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	5	Months since direct seeding:	10
Date:	January 2016		
Comments:	As per last month, the Typha is really beginning to struggle as a result of the dry conditions. I expect it'll go into a period of dormancy (this may have already commenced) and will only regain vigour once rain arrives.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	50%
Photo:	Nil		


Monitoring month:	6	Months since direct seeding:	11
Date:	February 2016		
Comments:	The eastern side is the most isolated area of the project with regard to native tree recruitment potential, and an obvious lack of tree seedlings recruiting over the entire eastern side was observed. This quad reflects the lack of tree species being recorded in the eastern area. Typha continues to dominate native cover, however this dominance is finely balanced with weeds making up almost 50% of coverage. This quad is another good example of how standing water controls weeds in wetlands and the effect drying out may have on weed growth.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	80%


<p>Photo:</p>			
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Monitoring month:	7	Months since direct seeding:	12
Date:	March 2016		
Comments:	This eastern side is the most isolated area of the project with regard to native tree recruitment potential, and an obvious lack of tree seedlings recruiting over the entire eastern side was observed.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	57%	Percentage vegetation cover:	80%
<p>Photo:</p>			


Monitoring month:	8	Months since direct seeding:	13
Date:	April 2016		
Comments:	This eastern side is the most isolated area of the project with regard to native tree recruitment potential, and an obvious lack of tree seedlings recruiting over the entire eastern side was observed.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	9	Months since direct seeding:	14
Date:	May 2016		
Comments:	Typha continues to grow well within this quadrat.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	10	Months since direct seeding:	15
Date:	June 2016		
Comments:	No significant changes recorded this month.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance :	60%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	11	Months since direct seeding:	16
Date:	July 2016		
Comments:	This quadrat fared well over the winter period and continues to grow well.		
Native species:	<i>Elaeocharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	60%	Percentage vegetation cover:	80%
Photo:			


Monitoring month:	12	Months since direct seeding:	17
Date:	August 2016		
Comments:	<i>Typha</i> is becoming dominant in the area. The positive aspect to this would be its nesting habitat value for water birds over the wet season.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	13	Months since direct seeding:	18
Date:	September 2016		
Comments:	<i>Typha</i> continues to grow well within this quadrat.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	65%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	14	Months since direct seeding:	19
Date:	October 2016		
Comments:	Typha is growing strongly and is dominant over all other species.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	75%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	15	Months since direct seeding:	20
Date:	November 2016		
Comments:	No significant changes recorded this month.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	16	Months since direct seeding:	21
Date:	December 2016		
Comments:	A high visibility flag and extended pole was added to the quadrat stake this month for ease of identification. Typha continues to grow well.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	80%	Percentage vegetation cover:	75%
Photo:			


Monitoring month:	17	Months since direct seeding:	22
Date:	January 2017		
Comments:	Typha continues to grow well and dominates this quadrat.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	18	Months since direct seeding:	23
Date:	February 2017		
Comments:	Typha continues to dominate this quadrat.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	19	Months since direct seeding:	24
Date:	March 2017 (NB: monitoring event occurred early April due to inaccessibility)		
Comments:	During the last half of this month, the NWCP received significant rainfall. Access to the area was limited. Much of the area is waterlogged and functioning as the wetland it is designed to be (background of photo). Typha still continues to dominate this quadrat.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil - large weather event associated with Ex-Tropical Cyclone Debbie did not result in any damage		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	20	Months since direct seeding:	25
Date:	April 2017		
Comments:	Much of the area is still waterlogged and functioning as the wetland it is designed to be.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	21	Months since direct seeding:	26
Date:	May 2017		
Comments:	Typha still continues to dominate this quadrat.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	22	Months since direct seeding:	27
Date:	June 2017		
Comments:	No significant changes this month. It is anticipated growth will slow moving into the colder months.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	85%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	23	Months since direct seeding:	28
Date:	July 2017		
Comments:	An additional length of conduit was added to the flagging pole this month due to the increasing height of vegetation. Vegetation health is steady.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	95%	Percentage vegetation cover:	85%
Photo:			


Monitoring month:	24	Months since direct seeding:	29
Date:	August 2017		
Comments:	Native dominance has reached 100%, however noted that this is primarily Typha. Diversity is decreasing due to Typha abundance.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	25	Months since direct seeding:	30
Date:	September 2017		
Comments:	Vegetation health is steady.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	26	Months since direct seeding:	31
Date:	October 2017		
Comments:	No significant changes occurred this month.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	27	Months since direct seeding:	32
Date:	November 2017		
Comments:	Quadrat still dominated by dense Typha, which will soon outcompete other native and weed species.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	28	Months since direct seeding:	33
Date:	December 2017		
Comments:	Rain events over the past two months have increased the waterlogging of this area, promoting strong vegetation growth.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	29	Months since direct seeding:	34
Date:	January 2018		
Comments:	Vegetation health is steady.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	30	Months since direct seeding:	35
Date:	February 2018		
Comments:	Casuarina seedlings are becoming evident over the top of the Typha. This marks the commencement for a change in biodiversity for this quadrat. Species diversity will increase over time as the casuarina canopy forms.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	31	Months since direct seeding:	36
Date:	March 2018		
Comments:	A significant amount of rain fell at the end of last month resulting in standing water for approximately 3 weeks. This has acted as a natural weed control for a number of the weed species.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			


Monitoring month:	32	Months since direct seeding:	37
Date:	April 2018		
Comments:	Quadrat still dominated by dense Typha, however other natives are still increasing in density and biomass, including the addition of <i>Casuarina glauca</i> .		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			

Monitoring month:	33	Months since direct seeding:	38
Date:	May 2018		
Comments:	Vegetation health is steady.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	95%
Photo:			

Monitoring month:	34	Months since direct seeding:	39
Date:	June 2018		
Comments:	No significant changes this month due to the slowing down of the growing season.		
Native species:	<i>Elaecharis dulcis</i> , <i>Ludwigia octovalvis</i> , <i>Cyperus polystachyos</i> , <i>Typha orientalis</i> , <i>Carex appressa</i> , <i>Juncus usitatus</i> , <i>Casuarina glauca</i>		
Weed species:	<i>Cirsium vulgare</i> , <i>Aster subulatus</i> , <i>Paspalum dilatatum</i>		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	35	Months since direct seeding:	40
Date:	July 2018		
Comments:	Winter has had a notable effect on species diversity within this quadrat.		
Native species:	<i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			


Monitoring month:	36	Months since direct seeding:	41
Date:	August 2018		
Comments:	Casuarina seedlings continue to grow well and add biomass.		
Native species:	<i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	100%
Photo:			

Monitoring month:	37	Months since direct seeding:	42
Date:	September 2018		
Comments:	Surrounding areas are continuing to grow well since the removal of Camphor Laurels.		
Native species:	<i>Typha orientalis</i> , <i>Casuarina glauca</i>		
Weed species:	Nil		
Damage:	Nil		
Native dominance:	100%	Percentage vegetation cover:	90%
Photo:			

Appendix A: Supporting Data


NORTH WEST CONSERVATION PARK


SUMMARY OF SPECIES IDENTIFIED ON SITE

0 =  Not identified as present
1 = Identified on site

shaded species names = included in seed mix																																																			
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC										
		2015												2016												2017												2018													
CANOPY																																																			
Corymbia citriodora	Spotted Gum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
Corymbia intermedia	Pink Bloodwood	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Eucalyptus crebra	Narrow-leaved Ironbark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Eucalyptus exserta	Old Peppermint Gum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Eucalyptus microcorys	Tallowwood	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Eucalyptus pillularis	Blackbutt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Eucalyptus robusta	Swamp Mahogany	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Eucalyptus tereticornis	Queensland Blue Gum	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Ficus obliqua	Small-leaved Fig	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Ficus rubiginosa	Port Jackson fig	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Livistona australis	Cabbage-tree Palm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Lophostemon confertus	Queensland Brush Box	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Melaleuca quinquenervia	Broad-leaved Paperbark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Melaleuca salicina	White Bottlebrush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Melaleuca salignus	Willow Bottlebrush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Melaleuca viminalis	Weeping Bottlebrush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MIDSTORY																																																			
Acacia aulococarpa		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia cincinnata	Late-flowering Hickory Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia concurrens	Black Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia disparrima	Brush Ironbark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia falcata	Sickle Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia fimbriata	Brisbane Golden Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia hubbardiana	Prickly Moses	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia implexa	Hickory Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia leiacalyx	Black Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia melanoxylon	Austrian Blackwood	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia oshanesii	Irish Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Acacia penninervis	Hickory Wattle	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Allocasuarina littoralis	Black Sheoak	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Alphitonia excelsa	Red Ash	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Banksia rabur	Swamp Banksia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Banksia spinulosa	Hairpin Banksia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Casuarina glauca	Swamp Sheoak	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commersonia bartramia	Brown kurrajong	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dodonaea triquetra	Hop Bush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dodonaea viscosa	Sticky Hop Bush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hibiscus diversifolius	Swamp Hibiscus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hovea acutifolia	Hovea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																					

NORTH WEST CONSERVATION PARK
SUMMARY OF WEED SPECIES IDENTIFIED ON SITE

0 =  Not identified as present

1 =  Identified on site

		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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