
Vegetation Management Plan

Spring Farm Resource Recovery Park

Document PLANS004

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Version 1



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Objectives

Camden local government area is partly within the South West Growth Centre and experiencing rapid urban expansion. Population growth and development encroaching on long standing facilities, place enormous pressure on natural areas and biodiversity due to habitat clearing, degradation of waterways, and spread of pest animals and weeds. However, biodiversity needs to be protected on SUEZ sites so that essential life support systems are maintained.

This Vegetation Management Plan (VMP) has been prepared to guide the management of vegetation & weeds at the SFRRP.

SUEZ has developed a number of general and species-specific measures to monitor, control and prevent the spread of weed and to minimise the potential for the introduction of any additional weed species which have the potential to occur.

This biodiversity strategy aims to address SFRRP responsibilities to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development.

The requirement is to 'implement the plan', which means that all operations must use weed control operations and maintenance to keep vegetation management within the levels necessary to meet the objective.

Target threats

Climate change – GHD (2012) prepared a Climate Adaptation Report for Camden LGA and identified the following priorities:

- High risks to local environment and water quality – an increase in the mean maximum temperature by a few degrees would alter the ecosystem, the flora and fauna it can support, and alter a valued community asset (in particular the riparian areas).
- Moderate to high risks associated with changes to water quality and recreational use of the water ways may arise due to increase flow variability and temperatures. Weed infestations, increase in soil erosion and sediment and stormwater runoff can contribute to a degraded water quality.
- Invasive species – pest animals and weeds species threaten biodiversity by invading or destroying habitat, predation, disease or competition with native species on SUEZ site
- Loss, fragmentation and degradation of habitat - e.g. through clearing native vegetation or waterway pollution. Plant and animal species are less resilient to external pressures (e.g. climate change and weed invasion) when the ecological communities of which they are a part shrink, or when populations become isolated from each other.
- Unsustainable use of natural resources – such as soils and water
- Changes to the aquatic environment and water flows – Waterways and wetlands provide habitat for many species, reduce the impacts of floods, absorb pollutants and improve water quality. Impacts include pollution, gully and stream-bank erosion, removal of aquatic habitat and alterations to flows.
- Inappropriate fire regimes – although fire is important to many ecosystems, poorly managed fire regimes can impact biodiversity and ecosystem services through the destruction of ecological communities, increased soil erosion, expansion of weed and feral animal populations, reduced water quality and increased soil salinity.

Major weed threats

Significant weed growth is to be controlled through the combination of physical removal and the application of biodegradable herbicides.

Abbreviations used in the table are as follows:

- X = Major Weed impact
- Major Weeds include WONS, Noxious Weeds and Regional Environmental Weeds
- CPW = Cumberland Plain Woodland
- EBSF = Elderslie Banksia Scrub Forest
- R-FEF = River-flat Eucalypt Forest
- SOFF = Swamp Oak Floodplain Woodland
- MSW = Moist Shale Woodland
- Ce = *Cynanchum elegans*
- Eb = *Eucalyptus benthamii*
- Mv = *Marsdenia viridiflora*
- Pb = *Pomaderris brunnea*
- Ps = *Pimelia spicata*

Major weeds on Camden LGA & threats to biodiversity

| Weed | CPW | EBSF | R-FEF | MSW | SOFF | Threatened Flora Species | Aquatic | Rural Land | Declared Noxious / WONS |
|--------------------|-----|------|-------|-----|------|--------------------------|---------|------------|-------------------------|
| African Boxthorn | X | | | | | | | X | C4 / WONS |
| African Olive | X | X | X | X | | Ce, Mv, Ps, Pb | | X | |
| African Love Grass | X | X | X | X | | Ps, | | X | |
| Alligator Weed | | | | | X | | X | | C3 / WONS |
| American Hackberry | | | X | | X | Eb, Pb | | | |
| Balloon Vine | | | X | | | Eb, Pb | | | |
| Blackberry | X | | X | X | | Eb | | X | C4 / WONS |
| Box-elder Maple | | | X | | X | Pb | | | |

| | | | | | | | | | |
|----------------------|---|---|---|---|--|--------|--|---|-----------|
| Bridal Creeper | X | X | | X | | Ps | | X | C4 / WONS |
| Cats Claw Creeper | | | X | X | | Eb, Pb | | | WONS |
| Chilean Needle grass | X | | X | X | | Ps | | X | C4 / WONS |
| Green Cestrum | X | | X | X | | Eb, Mv | | X | C3 |

| Weed | CPW | EBSF | R-FEF | MSW | SOFF | Threatened Flora Species | Aquatic | Rural Land | Declared Noxious / WONS |
|----------------------------|-----|------|-------|-----|------|--------------------------|---------|------------|-------------------------|
| Honey Locust | | | X | | X | Eb, Pb | | X | |
| Japanese Honeysuckle | | | X | X | | Eb, Pb | | | |
| Mother of Millions | X | | | X | X | | | X | |
| Moth Vine | X | | X | X | X | Eb, | | | |
| Prickly Pear | X | | | | | | | X | C4 |
| Privet - large leaved | | | X | X | X | Eb, Mv, Pb | | X | C4 |
| Privet – small leaved | | | X | X | X | Eb, Mv, Pb | | X | C4 |
| Purple Top | X | | | X | X | | | | |
| Rhodes Grass | X | | X | X | | Ps | | | |
| Salvinia | | | | | | | X | | C3 / WONS |
| Serrated Tussock | | | | | | | | X | C4 / WONS |
| Spike Rush (Juncus acutus) | | | | | X | | | | |

| Weed | CPW | EBSF | R-FEF | MSW | SOFF | Threatened Flora Species | Aquatic | Rural Land | Declared Noxious / WONS |
|----------------|-----|------|-------|-----|------|--------------------------|---------|------------|-------------------------|
| Sweet Briar | | | X | | X | | | X | C4 |
| Turkey Rhubarb | | | X | | X | Eb, Pb | | | |
| Wandering Dew | | | X | X | X | Eb, Pb | | | |
| Water Hyacinth | | | | | | | X | | C2 / WONS |

Measuring Success

There are a number of parameters that will need to be monitored to determine if SFRRP is working effectively toward vegetation management. Indicators are:

| Theme | Measure |
|---|---|
| Protection of bushland* | Proportion of bushland under active management |
| | Area of native vegetation in reserves are protected |
| | Number of threatened flora and fauna species or populations |
| | The population of threatened flora at each site. |
| | Number of aquatic and terrestrial weed species, including number of weeds of national significance |
| | Number of pest animal species |
| | Number of Noxious weeds listed |
| Water is clean* | Internal water quality testing data shows wet weather discharge to our local streams and rivers are healthy |
| SFRRP involvement , tree planting, water quality monitoring, flora and fauna monitoring | Area of bushland being actively managed by SFRRP |

Flora

Clearing and hand over of portions of SFRRP for urban development has significantly reduced the extent and condition of native vegetation. Additional pressures include competition from weeds and rubbish dumping.

Some vegetation is protected on site reserves. The majority of reserves are located in the eastern part of SFRRP, and many are isolated from other patches of vegetation. Most of the large remnants of good quality vegetation are in the northern and eastern areas of the former landfill.

Spring Farm Corridor has been already Master planned as part of the Spring Farm Urban Release Area and much of the corridor has been conserved and rehabilitated through the urban development process.

Fauna

A total of 248 fauna species have been found in the Camden LGA of which 23 are exotic species. Twenty-five species are threatened under the TSC Act and eight species are protected under the EPBC Act. The main threats to fauna in the Camden LGA are habitat loss due to development, introduction of exotic species and indirect impacts of urbanisation such as road kill, electrocution, predation by domestic animals and poisoning.

Acts

Noxious Weeds Act 1993

The Noxious Weeds Act identifies noxious weeds, control measures, public and private responsibilities and provides a framework for the management of noxious weeds across NSW. Noxious weeds declared for Camden LGA are listed on the Department of Primary Industries website¹.

Royal Botanic Gardens and Domain Trust Act 1980

The Australian Botanic Garden Mount Annan was established in 1988 and is managed by the Royal Botanic Gardens and Domain Trust. It is the largest botanic garden in Australia and showcases Australian flora.

SFRRP shares a neighbouring fence line with the Mount Annan Botanical Gardens.

¹ <http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/noxweed/>

Responsibilities

Site Manager & Compliance

The site manager has responsibility for:

- Implementation of this plan
- Conforming with plan
- Training of staff in the plan
- Communication of the plan
- Reporting of noxious weed outbreaks
- Ensuring corrective actions are taken

Site Supervisor

The site supervisor has the responsibility for:

- Ensuring adherence to this plan
- Conforming with site plan

Site staff

All site staff have the responsibility for:

- Ensuring adherence to this plan
- Conforming with site rules

APPENDIX 1. - Landscape plan



APPENDIX 2. - SFRRP Aerial boundary



Related Documents

| DOCUMENT NAME | REFERENCE NUMBER |
|---|------------------------|
| SFARRF & SFMRF Risk Register | REG011 |
| Spill Response | SOP007 |
| Site Maintenance (section 18 – 24) | SOP041 |
| Environment Protection Licence | EPL 12588, 20021, 5105 |
| Environment Management Plan | PLAN004 |
| Pollution Incident Response Management Plan | PLAN003.2.13.1 |
| Noxious Weed Act 1993 | - |

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| Royal Botanical Gardens and Domain Trust Act 1980 | - |
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Review and Document Control

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