



GLYPHOSATE REDUCTION STRATEGY

*Operational Plan Initiative 2019-
2020*

[Abstract]

15 January 2020

DOUGLAS SHIRE
COUNCIL

*Engaging, Planning, Partnering
Muruku Kirraji - Eastern Kuku Yalanji
Nganyji pina ngunda-lum ... Ma:Inyjirri-yngku - Yirrganydji*

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Chemical Free Parks

Introduction

Douglas Shire Council region contains some of the most complex ecosystems. Our parks, reserves and natural areas provide critically important habitats for a diverse range of species. Management of these habitats is vital for maintaining our rich and diverse biodiversity.

Open Space is a highly valued asset by residents and visitors to Douglas Shire and contributes significantly to the regions character, lifestyle, health biodiversity and economy.

Council's Open Spaces Team is responsible for the grounds maintenance of all parks reserves, which includes public parks, natural reserves and foreshore areas, within Douglas Shire. The team ensures that our 2257 hectares of green space is kept in a manner people can take pride in. The use of glyphosate to control weeds and vegetation within these areas has been common practice for many years. Concerns have been raised about human exposure to the common herbicide glyphosate, therefore we seek to use alternatives wherever possible.



Background

Glyphosate is a broad-spectrum herbicide that works by inhibiting an enzyme found in plants; this enzyme is not found in humans. There are around 500 products containing glyphosate registered for use in Australia. Glyphosate has been registered for use in Australia for over 40 years.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the national regulator for agricultural chemicals. Products containing glyphosate are registered for use in Australia, and APVMA approved products containing glyphosate can continue to be used safely according to label directions. Australian law requires appropriate warnings on product labels, which include relevant poisons scheduling, first aid, and safety directions detailing personal protective equipment when handling and using products containing glyphosate.

The Douglas Shire Council is aware of recent international decisions concerning glyphosate. Concerns have been raised about human exposure to the common herbicide glyphosate, after a 2015 International Agency for Research on Cancer (IARC) assessment, which has classified glyphosate in a group of chemicals that is 'probably carcinogenic to humans' based on a strength-of-evidence assessment.

In 2016, following the IARC assessment, the APVMA considered glyphosate and found no grounds to place it under formal reconsideration. Glyphosate is registered for use in Australia, and APVMA approved products containing glyphosate can continue to be used safely according to label directions.

Aims of the Strategy

The aim of the Glyphosate Reduction Strategy is to meet the targets as outlined in the Operational Plan 2019-2020 being:

- Develop alternatives to glyphosate products
- Implement environmentally sensitive solutions for managing open spaces
- Seek the complete removal of glyphosate products



Scope of the Strategy

The Glyphosate Reduction Strategy was prepared with the initial focus on Parks and Open Spaces. The strategy will be used to provide clear direction to on ground staff responsible to the grounds maintenance of our green areas. The Glyphosate Reduction Strategy covers all council controlled parks, reserves and open space areas within the Douglas Shire. 133 parcels are included in the scope. See Appendices Table 1.

Out of Scope

Douglas Shire Council is committed to environment and safety and strives to protect our natural assets. Whilst we continue to seek alternatives wherever possible, there are still instances where we need to use glyphosate to fulfil our legal obligations in Biosecurity matters. One example of this is treating the highly invasive water weed *Salvinia Molesta*. Weedmaster Duo herbicide which contains glyphosate is the only registered chemical approved to be used in waterways to treat salvinia.

To ban the use of glyphosate completely without a viable alternative, poses a significant risk our native areas becoming infested with invasive weeds, the second biggest threat to biodiversity behind land clearing.

The GRS does not cover the following areas of council operations:

- Biosecurity Matters – Including any invasive species listed as Prohibited or Restricted Matter listed in the Biosecurity Act 2014 or any priority species listed in the Douglas Shire Biosecurity Management Plan
- Revegetation Projects – Riparian restoration, stream bank stabilisation, erosion control works.
- Road vegetation maintenance operations – Including Kerb and Channel treatments from the Street Sweeper Machine, road infrastructure and furniture maintenance eg guideposts, signs, culverts etc
- Drainage easements / flood mitigation measures that involve treatment of waterways.

Objectives of the Strategy

Objective 1 - To develop alternatives to glyphosate

Council will continue to investigate any new assessment reports or studies regarding glyphosate and any possible alternative options. Council will advocate and educate best practice alternative options to key land managers as follows:

- Agricultural Sector
- Queensland Parks & Wildlife Service (QPWS)
- Landscaping industry

- Department of transport and Main Roads (DTMR)

Objective 2 - Implement environmentally sensitive solutions for managing open spaces

Council will implement the alternative options into its parks and open spaces grounds maintenance procedures as follows:

- Steam weeding on playgrounds
- Steam weeding treatment of assets in high pedestrian zones / public areas such as pathways and drains in CBD areas, retail areas, near restaurants etc.
- Use of organic herbicides where suitable. Products such as Slasher and Bioweed Oil.
- Hand weeding of high profile garden beds
- Mechanical weeding (loop weeders)
- Brush cutting around assets
- Maintain Herbicide free register
- Flame weeding where appropriate

Objective 3 – Seek the removal of glyphosate products

- Glyphosate is banned for use in all playgrounds, areas near schools or child care facilities.
- Glyphosate is banned for use on footpaths in CBD zones and retail areas
- Glyphosate is not to be used in sensitive areas north of the Daintree River wherever possible (Does not include biosecurity tasks)
- Selective herbicides (non-glyphosate products) are to be used on a case by case site specific basis. For example Sempra is the registered herbicide for Navua Sedge and may be used to maintain nuts grass and sedge on sport fields

Operational Actions

Douglas Shire is located in the Wet Tropics Bioregion. Our tropical climate creates optimum growing conditions for many plants and weed species. Council takes great pride in its green open spaces.



Grass and Turf Maintenance

On average we service our lawn / grass areas an average of 18 times per year depending on the seasonal conditions. Glyphosate was historically used to treat many assets in conjunction with the mowing runs. Some examples of assets are sign posts, bollards, path edges etc. These assets will be treated site specific either by brush cutting or organic herbicide depending on the location.

Garden bed Maintenance

Council has 102 landscaped / garden beds of a variety of sizes. Keeping these areas free of weeds is a major challenge. Gardens are to be treated by mechanical methods such as hand removal, chipping, grubbing or organic herbicides in conjunction with mulching.



Playground Maintenance

Council ceased the use of glyphosate on playgrounds in 2016 following extensive trials with alternative methodology such as steam weeding. Council purchased a steam weeding machine in 2018 specifically for use in sensitive areas. The use of glyphosate in playgrounds is not permitted. All weed control tasks must be complete using chemical free methodology.

Footpath Maintenance

Council's foot path network consists of 65 kilometres of pathway. Path edges need to be maintained for asset protection and aesthetics. Edges in urban areas are required to be treated with organic non glyphosate products or by mechanical methods such as brush cutting.

Action Plan

Description	By When
Draft Glyphosate Reduction Strategy	15 th January 2020
Formal adoption of Glyphosate Reduction Strategy by council	21 st January 2020
Complete phase out of glyphosate in parks	21 st January 2020
Review of rural road maintenance options including herbicide treatment of guideposts	May 2020
Total phase out of glyphosate products including budget allocations to support new strategy (excluding Biosecurity)	July 2020

Risks

Pesticides, including herbicides, insecticides and fungicides, are hazardous chemicals and are a health risk if safety precautions are not taken. As with all hazardous chemicals, particularly those which may cause cancer, worker exposure must be minimised, including skin contact, breathing in vapour and mists, and accidental ingestion through poor hand hygiene. The following measures are embedded in council's operations when using herbicide to minimise the risk of exposure to workers:

- obtaining the Safety Data Sheet (SDS) for hazardous chemicals used
- understanding and following all the safety instructions on the SDS
- using engineering, isolation or substitution as the primary control measures, particularly for decanting and diluting tasks
- providing personal protective equipment (PPE) or respiratory protective equipment (RPE) to use in combination with higher order controls
- ensuring respirators have the appropriate particulate and/or vapour filter (if you need assistance with this talk to your PPE supplier)
- providing all workers, including mobile workers, with personal hygiene facilities

- training workers to use the product and minimise exposure.

Additional measures recommended for implementation include:

- fit testing tight-fitting respirators for each worker who is required to wear one
- Health monitoring of works where there is a significant risk. For example Biosecurity staff, spray tractor operator etc.
- Mobile signage notifying the community that “herbicide spraying in use”

APPENDIX A

Table 1 - List of Parks and Reserve Areas included in the Glyphosate Reduction Strategy

ELLIS BEACH SOUTH RESERVE
Wangetti Sports Field
Cook Hwy Reserve
Wangetti (West Of Cook Hwy)
WANGETTI RESERVE
Mowbray River Environment Area
Mowbray River Environment Area
Mowbray River Environment Area
DOWNING STREET RESERVE
MITRE STREET RESERVE
NAUTILUS STREET RESERVE
Warri Park
4 Mile Beach Esplanade
Bruno Reidwig Park
4 Mile Park
4 Mile Beach Esplanade
BALE DRIVE PARKS
ULYSSES AVENUE PARK
Willy Pye Memorial (Teamsters) Park
Hutchings Park
BIRDWING LANEWAY
BROLGA LANEWAY
PORT DOUGLAS ROAD PARK
Jalumbu Park
Community Hall
4 Mile Beach Esplanade
Sands Street
K. Caravan Park
YACHT CLUB PARK
No. 9 Ribbon Avenue
BULURU PARK
BULURU PARK
ST CRISPINS AVENUE RESERVE
CAPTAIN COOK HIGHWAY RESERVE
Coolalinga Reserve
Island Point Lookout
ISLAND POINT ROAD RESERVE
ISLAND POINT RESERVE

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MACROSSAN STREET RESERVE
Market Park
Island Point Nature Reserve
Rotary Park - Port Douglas
WHARF STREET
Diwan Sports Reserve
DAINTREE RIVER MOUTH RESERVE
THORNTON BEACH RESERVE
BLOOMFIELD ROAD RESERVE
CAPE TRIBULATION RESERVE
Daintree Ferry Area
Daintree Ferry Area
FOREST CREEK SES PARK
DE MEIO DRIVE RESERVE
DAINTREE MOUTH RESERVE EAST
Rocky Point Esplanade
Jimal Park
Phil Lunn Park
Wonga Community Park
New Wonga Esplanade
Wonga Beach Caravan Park
Bells Park
MOSSMAN RESERVE
Lou Prince Park
Newell Boat Area/Boating Club
SOMERSET DRIVE RESERVE
BOUGAINVILLIA STREET RESERVE
Kubirri
Shepherd Valley
Cassowary Soccer Grounds
George Davis Park
Caravan Park & Pool - Mossman
Unnamed Reserve
Manjal Dimbi (Middlemiss Park)
David Jack Park
North Mossman Park
Rotary Park (Mossman)
Coronation Park/Show Grounds
MOSSMAN GEORGE RESERVE
GWENDOLYN REX PARK
UPPER DAINTREE RESERVE
Daintree Town Boat Ramp Area
Daintree Sports Oval
Daintree Toilets

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Pioneer Park
STEWART CREEK RESERVE
DAINTREE RESERVE
Wangetti Esplanade
MOWBRAY RESERVE
4 Mile Beach Esplanade
4 Mile Beach Esplanade
Hutchings Park
BULURU/ULSSES AVENUE
Willy Pye Memorial (Teamsters) Park
Hutchings Park
4 Mile Beach Esplanade
Reynolds Park
PORT DOUGLAS MARINA RESERVE
Island Point Nature Reserve
Clink Theatre
Julan Park
Public Toilets
Rex Smeal Park
Court House Museum
BLOOMFIELD ROAD RESERVE
CAPE TRIBULATION RESERVE
Daintree Ferry Area
Daintree Ferry Area
Rocky Point Esplanade
New Wonga Esplanade
New Wonga Esplanade
Old Wonga Esplanade
Newell Beach Esplanade
Cooya Beach/Mossman River
Jim Holdsworth Park
Shepherd Valley
Coronation Park/Show Grounds
FOXTON AVENUE RESERVE
FOREST GLEN PARK
DAINTREE BOAT RAMP
Wangetti Esplanade
MOWBRAY RESERVE
Port Douglas Sailing Club
REEF STREET RESERVE
BULURU/ULSSES AVENUE
Hutchings Park
Surf Club
Tennis & Basketball Courts

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Port Douglas Sports Reserve
Port Douglas Ses
BLOOMFIELD ROAD RESERVE
Daintree Ferry Area
Aboretum
ANZAC PARK
DAINTREE MOUTH RESERVE WEST