

Fresh Hope Care Bushfire Fuel Management Plan Proposal

Maintenance of Maitland Council Bushland around Two Mile Creek

Prepared by: David Hanrahan Project Manager, Fresh Hope

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Review Sheet

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1. INTRODUCTION

This Bushfire Fuel Bushfire Fuel Management Plan relates to the maintenance of the land owned and currently managed by Maitland Council to the standard of an Asset Protection Zone. This land surrounds and includes Two Mile Creek and bisects an existing Residential Aged Care Facility (RACF) and Retirement Village (RV) both operated by Fresh Hope Care. Without ongoing management vegetation would pose a threat to this facility.

This Bushfire Fuel Management Plan identifies the management works which would be undertaken by Fresh Hope Care to maintain the APZ. This Bushfire Fuel Management Plan will commence prior to the first Occupation Certificate (Interim or Final) following the applied for Development Approval for the construction of a new Residential Aged Care Facility on Lot 57 of DP260833, known as 7 Martin Close, East Maitland.

The extent of the Asset Protection Zone has been delineated by recent flood mitigation works that have been undertaken by Council. The maintenance of this area must be in accordance with an Inner Protection Area (IPA) as detailed within:

- Planning for Bush Fire Protection 2019, published by the NSW Rural Fire Service, and
- Standards for Asset Protection Zones published by the NSW Rural Fire Services.
- Fresh Hope Care is also aware of the document "Bushfire Management Plan; For land held by Maitland City Council" prepared by Travers Bushfire and Ecology in 2017.

The primary purpose of an Asset Protection Zone is to ensure that a progressive reduction of bushfire fuel occurs between the bushfire hazard and any structures or assets.

As detailed within the Rural Fires Act - 1997 it is "the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from" any land vested in or under its control or management. The development of a Bushfire Fuel Bushfire Fuel Management Plan is essential for land holders or trustee in order to provide an established methodology for the management of vegetation loads for reduction of bushfires within those lands. In this case this Bushfire Fuel Management Plan would be undertaken by Fresh Hope Care as owners of adjacent land impacted by the APZ.

At the time of writing this plan the subject site was identified as being located in a designated 10/50 vegetation entitlement clearing area. Any relevant environmental approvals (where necessary) should be obtained prior to undertaking the works described herein.

2. PURPOSE OF PLAN

The purpose of this Bushfire Fuel Bushfire Fuel Management Plan is to provide a tool to be used as a guide for the ongoing maintenance of the subject site, including Asset Protection Zones, in order to maximise its effectiveness as a buffer during a bushfire emergency in this area.

This plan does not guarantee that a small fire or spot fire will not occur within the subject site, it will however provide a method to minimise the intensity of a fire and limit bushfire impact to the buildings within the adjacent Residential Aged Care Facility should a bushfire occur.



3. ADMINISTRATION OF BUSHFIRE FUEL MANAGEMENT PLAN

The activation of this Bushfire Fuel Management Plan will be a precondition to achieving the first Occupation Certificate (Interim or Final) associated with the proposed expansion of the RACF services for which a Development Application has been lodged. Fresh Hope Care will inform Maitland Council when the Bushfire Fuel Management Plan is first enacted. Until that time, Maitland Council will remain exclusively responsible for management of the subject land for all purposes.

Once the Bushfire Fuel Management Plan is activated all costs associated with works identified in this Bushfire Fuel Management Plan will be the responsibility of Fresh Hope Care.

This Bushfire Fuel Management Plan makes no change in ownership provision or responsibility for any other element of this parcel of land including Two Mile Creek with respect to maintenance for other purposes, service provision, security or any other matter.

This Bushfire Fuel Management Plan will be reviewed by Fresh Hope Care every five (5) years from activation to ensure that bush fire modelling techniques and surrounding vegetation have not altered in a material way. Every five (5) years from activation this Bushfire Fuel Management Plan will be submitted to Council for their information only. This Bushfire Fuel Management Plan will exist in perpetuity for as long as a Residential Aged Care Facility is in operation on the subject site.

The nominated representative, being Fresh Hope Procurement and Property Services Manager, will be the responsible party for the following components of this plan:

- Review of the Bushfire Fuel Management Plan relevant stake holders every five years
- Compliance with this Bushfire Fuel Management Plan
- Provision of necessary funds to ensure Bushfire Fuel Management Plan is followed
- Arrange an audit of the Asset Protection Zones by a suitably qualified bushfire practitioner prior to each fire season (August)



4. LAND COVERED BY BUSHFIRE FUEL MANAGEMENT PLAN

The extent of land covered by this Bushfire Fuel Management Plan is the Maitland Council owned land alongside and including Two Mile Creek between Stronach Avenue and The Boulevarde from which Maitland Council have removed overgrown vegetation in recent years.

This land includes the following property lots:

- Lot 3 of DP 258655
- Lot 58 of DP 260833
- Lot 61 of DP 262743
- Lot 2060 of DP 1045875 (only the area previously cleared)

This land is part of the "Figure 37" area as defined in Maitland City Council Bushfire Management Plan.



Image 01: Aerial image of the Bushfire Fuel Management Plan extent

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Image 02: Lot numbers identifications of the Plan area

Referenced Documents

Comments provided are based on the following documents:

- 'Planning for Bush Fire Protection –2019 (PBP)',
- 'Standards for Asset Protection Zones' and
- 'Bushfire Management Plan; For land held by Maitland City Council', November 2017

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5. APZ CONSTRUCTION

At the time of writing this document the treatment area was found to have been recently cleared and subject to periodic slashing undertaken by Maitland Council. It is understood these works occurred as a method of flood mitigation.

The treatment area currently complies with the requirements for an Inner Protection Area and therefore there are no new construction works.

6. FUEL MANAGEMENT / PROPERTY MAINTENANCE

The purpose of regular maintenance is to ensure that the presence of fuels (which could become involved in a fire) are maintained at the required levels within the APZ. Therefore, the impact of direct flame contact and radiant heat on the adjacent buildings is always at a reduced level.

The maintenance that will be undertaken by or commissioned by Fresh Hope Care will be consistent with the NSW RFS publication 'Standards for Asset Protection Zones' and include:

- 1. Raking or manual removal of fine fuels.
- 2. Ground fuels such as fallen leaves, twigs (less than 6 mm in diameter) and bark should be removed on a regular basis.
- 3. Mowing / slashing of grass. Grass needs to be kept short (as a guide be kept to no more than 100mm in height) and, where possible, green.
- 4. Removal or pruning of trees, shrubs and understorey vegetation, as necessary.
- 5. Do not allow shrubs or trees to re-generate unless they are in areas which comply with an APZ (i.e. not beneath existing trees, not linking existing canopies etc.).
- 6. Prune the lowest branches of the trees to provide a separation from the ground (up to two meters from the ground).
- 7. A maximum 15% canopy foliage cover should be maintained.
- 8. Where shrubs are allowed to regenerate, they should not be beneath trees, be in clumps or islands and not exceed more than 10% ground cover.



7. SCHEDULE OF MAINTENANCE

The grounds shall be managed on a routine basis. Particular attention to pruning, crown lifting, and removal of dead fuels will be made prior to the commencement of the bushfire danger period (1st October to 31st March – unless modified by the NSW Rural Fire Service) and at least once during the bushfire danger period.

Yearly Schedule

TIME	ELEVATED FUELS	SURFACE FUELS
AUGUST	×	K
NOVEMBER		K
FEBRUARY		×

Untreated Fuel Clumps



Treated Fuel Clumps



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8. METHOD FOR VEGETATION MANAGEMENT

All clearing will be undertaken by hand and / or mechanical means. The use of hand-held machine tools is acceptable including chainsaws.

Mulching will be undertaken well before the summer months however organic mulch will not be applied within 10 meters of any adjacent building.

Raking up of fine ground fuels is also acceptable as a general method of vegetation removal however any large quantities of collected vegetation will be manually moved away from any adjacent buildings and not allowed to "stockpile".

The processes outlined below are best practice guides for the methodologies of vegetation management and will be complied with to maintain the APZ as outlined within this Bushfire Fuel Management Plan. At the time of preparation of this Bushfire Fuel Management Plan there are no significant trees requiring removal.

Tree Removal

Existing Trees – Removing Trees or Limbs Overhanging Buildings

- 1. Clearing within the Asset Protection Zone (APZ) to be the minimum required and retain the maximum allowable vegetation where possible.
- 2. A physical clearing boundary will be demarcated and installed prior to clearing.
- 3. All tree lopping shall be conducted by a tree worker with minimum Certificate 3 trainings.
- 4. Prune or remove trees to:
 - a. Remove the entire identified tree and grind stump OR
 - b. Remove identified limbs overhanging buildings or where dead, diseased, broken, dangerous, or crossing branches
- 5. Construction machinery will be cleaned using a high-pressure washer (or other suitable device) prior to entering the work site

Tree Pruning

- 1. Prune as determined by a qualified arborist or the Landscape Supervisor. Prune in accordance with generally accepted standards for proper pruning.
- 2. The cutting blades on pruning shears, clippers, blades, saws, etc. shall be sterilized after pruning each tree to minimise the possibility of spreading disease. When pruning trees known or suspected to be diseased, cutting blades shall be sterilized after each cut. Sterilize blades by dipping them in a solution of 1-part bleach and 9-parts water or heavily spray them with a disinfectant spray such as Lysol. After dipping or spraying, wait 20 seconds before using again.
- 3. All work is to be conducted by or in direct supervision of a Cert 3 (Arboriculture) qualified tree worker.
- 4. Any tree removal or pruning that requires cherry picker or other machinery will be at the Contractors expense. The operator of the machinery should have an appropriate licence.

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Vegetation Under Scrubbing

- 1. Under scrubbing should not occur within 20 meters of the highest bank each side of the waterway. Retained areas of vegetation (the riparian zone) will be bordered with non-combustible markers or fencing to protect them from maintenance activities.
- 2. Notify all personnel and provide signage displaying information of vegetation protection requirements of the conditions.
- 3. Any non-weed species may be mulched on site if grass is not intended to be maintained.
- 4. Maintenance of the APZ must continue in perpetuity. Landscape maintenance is to comply with Maitland Council's Bushfire Management Plan (2017) and to generally follow the guidelines set out in Append 4 of Planning for Bush Fire Protection (RFS 2019).

Management within the Riparian Zone

- Remove weeds within the riparian zone (defined as within 20 m of the highest bank each side of the waterway). Weed removal should be conducted by hand where possible. If herbicide is required, the CRC guidelines for herbicide use in and around water¹ and the NSW DPI Weed Control Handbook² should be consulted. Weed Officers at Maitland Council should also be consulted regarding herbicide use. If entire weed removal is likely to cause erosion or significant loss of habitat, stage weed removal and progressively replant with native riparian species.
 - 2. No under scrubbing or physical removal by machinery shall occur within instream vegetation.
 - 3. Monitoring will be undertaken as follows:
 - a. Photo monitoring points of the riparian zone will be established prior to any works.
 - b. Annual monitoring will be conducted to ensure that shrub densities do not exceed 30% per 100m². Any priority weeds detected during monitoring will require immediate weed control as per measures and duties stated within the *Biosecurity Act 2015* and Weed Wise database for the Hunter region
 - 4. Maintenance: Although not currently apparent, if erosion does become evident, replanting with native riparian species may be required.

¹ CRC 2005. Herbicides – Guidelines for use in and around water

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⁽https://www.waternsw.com.au/ data/assets/pdf file/0011/56477/Herbicides-Guidelines-for-use-in-andaround-water-whole-saved-document.pdf).

² NSW DPI (2018). Weed Control Handbook – A guide to weed control in non-crop, aquatic and bushland situations (<u>https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0017/123317/weed-control-handbook.pdf</u>)



General Weed Treatment

Where intensive weed growth and disturbance has replaced native ground cover and mulch and caused little regrowth in indigenous plants, the application of a herbicide may be adopted as a method of weed removal. Herbicide application may only be used where there is no possibility of damage to existing plants due to overspray, wind drift or potential damage to native seedlings.

- 1. Weed references (but not limited to):
 - a. Biosecurity Act 2015
 - b. Hunter Local Land Services Region priority weeds list
 - c. Australian Association of Bush Regenerators
 - d. There may be plants not classified as weeds yet considered to have 'weedy' qualities on site. These should be assessed by an ecologist, qualified horticulturist or bush regenerator, documented and distributed to all staff and Contractors dealing with landscape maintenance on site.
- 2. Eradicate weeds by environmentally acceptable methods using herbicide suitable and approved for use near waterways. Alternatively, for larger weeds the tree roots should be removed by machinery or hand tools. The cost of all weed control work shall be included in the contract price for landscape maintenance. Regular maintenance of the mulch will help minimise weeds in shrub and groundcover areas.
- 3. **Herbicide Spray:** Herbicide should be sprayed at the manufacturer's recommended rates and in accordance with the CRC guidelines for herbicide use in and around water (CRC 2005) and the NSW DPI Weed Control Handbook (2018). Observance of the withholding period (minimum period of time between application of a chemical) stated on a registered herbicide label is a legal requirement. Remove dead weeds and stockpile in the depot. Do not spray prior to forecast significant rainfall events and not within one week following significant rainfall events.
- 4. Approved Herbicide: (unless otherwise approved): the use of herbicides in and around water (if required) should be species-specific in accordance with the NSW DPI Weed Control Handbook (2018). Weed Officers at Maitland Council would be consulted to approve use of specific herbicides. The use of surfactants should be avoided. All use of chemicals to be compliant with the Work Health and Safety Act 2011 and WorkCover NSW's Code of Practice for safely using and storing chemicals.
- 5. **Mulching:** Following the herbicide application the area sprayed should be mulched with chippings free of seed, weeds or green plant material, mulch to a depth of 70 mm with appropriate mulch.
- 6. Keep a logbook of all spraying, type of spray used, quantity/dosage and areas sprayed.



Asset Protection Zone – Instream vegetation

Site Description: Grassed Inner Protection Area. There are few shrubs within this area therefore reducing the potential for sustained fire.

Fire Behaviour:

If the area is regularly maintained a canopy fire may be restricted to the instream creek bed.

Minimal fire could occur. Any canopy fire from the instream vegetation concerning flying debris will be unsustained and is likely to selfextinguish.

Vegetation Maintenance:

Maintain grass at a maximum of 10 cm and rake and remove litter. No under scrubbing of vegetation.



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Asset Protection Zone – Riparian Corridor

Site Description: Grassed Inner Protection Area with a sloped grassed bank. There are minimal shrubs within this area therefore reducing the potential for sustained fire.

Fire Behaviour:

If the area is regularly maintained a canopy fire may be restricted to the creek bed are.

Minimal fire could occur. Any canopy fire from the creek bed concerning flying debris will be unsustained and is likely to selfextinguish

Vegetation Maintenance:

This Inner Protection Area is managed by mowing and litter removal.



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9. ACKNOWLEDGEMENT OF PARTIES

This document represents an agreement for the maintenance of lands owned by Maitland City Council including and alongside Two Mile Creek, and adjacent to lands owned by Fresh Hope Care including Lot 57 in DP 260833, known as 7 Martin Close, East Maitland, for the purposes of providing an Asset Protection Zone.

The activation of this agreed Bushfire Fuel Management Plan will take place only when Fresh Hope Care so advises Maitland Council. This will be a pre-requisite to the granting of any Occupation Certificate for future development of the Fresh Hope Care Residential Aged Care Facility.

This Bushfire Fuel Management Plan will exist for the lifetime of the Fresh Hope Care Residential Aged Care Facility.

Fresh Hope Care Representative

Name:

Title:

Signature:

Date:

Maitland City Council Representative

Name:

Title:

Signature:

Date: