

## Appendix One



### *Shire of York*

### Bushfire Risk Management Planning

### Communication Strategy

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Version: 3

Date: May 2018

## Document Control

Document Name	Bushfire Risk Management Plan Communications Strategy	Current Version	3
Document Owner	Shire of York CEO	Issue Date	DD/MM/YYYY
Document Location	<i>Add as required.</i>	Next Review Date	DD/MM/YYYY

## Related Documents

Title	Version	Date
Shire of York Bushfire Risk Management Plan	V5	April 2018
Bushfire Risk Management Planning Local Government Grant Agreement	2017/2018	Sept 2017
		<i>Add as required.</i>

## Amendment List

Version	Date	Author	Section
V1	Nov 2017	John Hansen	Entire Document
V2	April 2018	John Hansen	Post OBRM Review
V3	May 2018	John Hansen	Communications Roles and Responsibilities

## 1 INTRODUCTION

A Bushfire Risk Management Plan (BRM Plan) is a strategic document that outlines the approach to the identification, assessment and treatment of assets exposed to bushfire risk within the Shire of York. This Communication Strategy accompanies the BRM Plan for the Shire of York. It documents the communication objectives for the BRM Plan, roles and responsibilities for communication, key stakeholders, target audiences and key messages at each project stage, communication risks and strategies for their management, and communication monitoring and evaluation procedures.

## 2 COMMUNICATIONS OVERVIEW

### Communication Objectives

The communication objectives for the development, implementation and review of the BRM Plan for the Shire of York are as follows:

1. Key stakeholders understand the purpose of the BRM Plan and their role in the bushfire risk management planning process.
2. Stakeholders who are essential to the bushfire risk management planning process, or can supply required information, are identified and engaged in a timely and effective manner.
3. Relevant stakeholders are involved in decisions regarding risk acceptability and treatment.
4. Key stakeholders engage in the review of the BRM Plan as per the schedule in place for the local government area.
5. The community and other stakeholders engage with the bushfire risk management planning process and as a result are better informed about bushfire risk and understand their responsibilities to address bushfire risk on their own land.

### Communication Roles and Responsibilities

The Shire of York is responsible for the development, implementation and review of the Communication Strategy. Key stakeholders support local government by participating in the development and implementation of the Communications Strategy as appropriate. An overview of communication roles and responsibilities follows:

- *CEO, Shire of York, responsible for endorsement of the BRM Plan Communications Strategy.*
- *CEO Delegate, Shire of York, responsible for overseeing the implementation of the BRM Plan.*
- *Bushfire Risk Management Planning Coordinator, Shire of York, responsible for operational-level communication between the Shire and the Department of Fire and Emergency Services.*
- *Area Officer, Department of Fire and Emergency Services, responsible for strategic-level communication between the Shire and the Department of Fire and Emergency Services.*
- *Bushfire Risk Planning Coordinator, Shire of York, responsible for the development of the BRM Plan.*

## Key Stakeholders for Communication

The following table identifies key stakeholders in bushfire risk management planning. These are stakeholders that are identified as having a significant role or interest in the planning process or are likely to be significantly impacted by the outcomes.

Stakeholder	Role or interest	Level of impact of outcomes	Level of engagement
<b>Shire of York</b>	Significant role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager.	High	Inform, consult, involve, collaborate and empower
<b>Department of Fire and Emergency Services</b>	Significant role in plan and treatment development, implementation and review. Support role in treatment Implementation.	High	Inform, consult, involve and collaborate
<b>Office of Bushfire Risk Management</b>	Significant role in plan governance.	High	Inform, consult and collaborate
<b>Department of Biodiversity Conservation and Attractions, Parks and Wildlife Service</b>	Significant role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager.	High	Inform, consult, involve, collaborate and empower
<b>Forest Products Commission</b>	Significant role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager.	High	Inform, consult, involve, collaborate and empower
<b>Public Transit Authority and ARC Infrastructure</b>	Significant role in plan and treatment development. Responsible for treatments as a land owner/manager Critical infrastructure interest.	High	Inform, consult, involve, collaborate and empower
<b>Main Roads WA</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Telecommunication Service Providers</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Department of Lands, Landcorp &amp; Landgate</b>	Role in plan and treatment development, implementation and review	Medium	Inform, consult, involve, collaborate and empower
<b>Water Corporation &amp; Department of Water</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager.	Medium	Inform, consult, involve, collaborate and empower

	Critical infrastructure interest.		
<b>Department of Education</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager. Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Department of Health</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager. Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Private Land Owners</b>	Role in plan and treatment development, implementation and review. May have responsibilities for treatments as land owners/managers	High	Inform, consult, involve, collaborate and empower
<b>Business Owners</b>	Role in plan and treatment development, implementation and review. May have responsibilities for treatments as land owners/managers. Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Western Power</b>	Role in plan and treatment development, implementation and review. Responsible for treatments as a land owner/manager Critical infrastructure interest.	Medium	Inform, consult, involve, collaborate and empower
<b>Chief Bushfire Control Officer</b>	Significant role in plan and treatment development, implementation and review.	High	Inform, consult, involve, collaborate and empower
<b>Bushfire Brigades and other Emergency Services Volunteers</b>	Significant role in plan and treatment development, implementation and review	High	Inform, consult, involve, collaborate and empower
<b>Bushfire Advisory Committee, District Operations Advisory Committee &amp; Local Emergency Management Committee</b>	Role in plan and treatment development, implementation and review	High	Inform, consult, involve, collaborate and empower
<b>Landcare, York Wildflower Society, Caring for the Avon River Environment</b>	Role in plan and treatment development, implementation and review	Medium	Inform, consult and involve
<b>Traditional Owners, Gnaala Karla Boodja Regional Corporation, South West Aboriginal Land and Sea Council and Department of Aboriginal Affairs</b>	Role in plan and treatment development, implementation and review	Medium	Inform, consult and involve

## Communications Plan

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
<b>Development of the BRM Plan</b>								
Life of the Plan	Shire of York CEO, Senior Leadership Team and Council	1 – 3 & 5	• Email • Face to face meetings	• Inform and consult • Confirm accountability and responsibilities • Input into plan and treatments	CEO or Delegate	• Resource constraints could limit their ability to participate	• Clarify misunderstandings and intentions of plan • Feedback on the presentation	• Stakeholder's willingness to participate
Life of the Plan	Shire of York Building and Works	2,3 & 5	• Email • Face to face meetings • Phone	• Input into plan and treatments	CEO or Delegate	• Limited time • Conflicting priorities	• Plan meetings • Express value of meeting	• Stakeholder's willingness to participate • Contributions to treatment plan
Annually	Bushfire Advisory Committee (BFAC) and District Operations Advisory Committee (DOAC)	1 – 3 & 5	• Face to face meeting • Presentation	• Inform and consult • Confirm project objectives • Seek input into treatment plans • Project updates	CEO or Delegate	• Stakeholder's willingness to participate	• Preparation • Ensure current information on the BRM Plan Project is available	• Seek feedback on the presentation and (anecdotal) community feedback
Bi-Monthly	Local Emergency Management Committee (LEMC)	1 – 3 & 5	• Email • Face to face meetings • Presentation	• Confirm project objectives • Seek input into treatment plans • Project updates	CEO or Delegate	• Stakeholder's willingness to participate	• Preparation • Ensure current information on the BRM Plan Project is available	• Feedback on the presentation
Quarterly or as required	Chief Bushfire Control Officer (CBFCO), Bushfire Brigades,	1 – 3 & 5	• Email • Face to face meetings	• Confirm project objectives • Seek input into treatment plans and providing project	CEO or Delegate	• Time constraints • No plan, unorganised • Availability of plan	• Clarify misunderstandings and intentions of plan • Support for BRMP process • Level of engagement	• Feedback

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
	Brigade Captains			• Identify Risk and share information		volunteers	• Confirm benefits • Preparation • Ensure current information on the BRM Plan Project is available	
Biannually	DBAC, Parks and Wildlife Service and Forest Products Commission (FPC)	1 – 3 & 5	• Face to face meetings • Email • Telephone	• Confirmation of environmental assets • Identification of DPAW and FPC burn plans • Confirming project objectives, seeking input into treatment plans and providing project updates • Development of treatment options	CEO or Delegate	• Resource constraints could limit their ability to participate • Willingness to release 'confidential' data re environmental assets	• Clarify misunderstandings and intentions of plan • Provide undertakings re the release of confidential data • Restrict release of information and document in plan	• Level of engagement • Environmental assets in BRMs
Annually or as required	Stakeholders – Landowners / Land Managers	1 – 3 & 5	• Email • Face to face meeting • Telephone • Presentations • Community Engagement activities	• Asset identification/ confirmation • Outline BRMP process and objectives • Identify assets at risk • Identify existing controls/programs • Development of treatment options	CEO or Delegate	• Time constraints and travel • Level of interest and engagements in process • Lack of resourcing	• Select appropriate channel of communication • Prepare materials and good planning • Communicate funding opportunities when available	• Engagement and participation levels
Annually or as required	Stakeholders – Others	1 – 3 & 5	• Email • Face to face meeting • Telephone	• Asset identification/ confirmation • Inform of BRMP process	CEO or Delegate	• Time constraints and travel • Level of	• Select appropriate channel of communication	• Engagement and participation levels

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
				<ul style="list-style-type: none"> <li>• Presentations</li> <li>• Community Engagement activities</li> </ul>	<ul style="list-style-type: none"> <li>• Identify assets at risk</li> <li>• Identify existing controls/programs</li> <li>• Development of treatment options</li> </ul>	<ul style="list-style-type: none"> <li>interest and engagements in process</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare materials</li> <li>• Plan communication</li> </ul>	• Feedback
Annually or as required	Landcare	1 – 3 & 5	<ul style="list-style-type: none"> <li>• Face to Face meetings</li> <li>• Email</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Confirmation of environmental assets</li> <li>• Confirming project objectives</li> <li>• Seeking input into treatment plans</li> <li>• Providing project updates</li> </ul>	CEO or Delegate	<ul style="list-style-type: none"> <li>• Time constraints</li> <li>• Level of interest and engagement in process</li> </ul>	<ul style="list-style-type: none"> <li>• Select appropriate communication method</li> <li>• Prepare materials</li> <li>• Plan communications</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement and participation levels</li> <li>• Feedback</li> </ul>
Monthly	All BRMOS, BRMPC, BRMB	1 – 3 & 5	<ul style="list-style-type: none"> <li>• Email</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Roles and responsibilities of the DFES Bushfire Risk Management Officers and LG Bushfire Risk Planning Coordinators</li> <li>• New ideas or programs available</li> <li>• Information sharing</li> <li>• Funding sources and availability</li> </ul>	BRMB	<ul style="list-style-type: none"> <li>• Timing</li> <li>• Availability</li> </ul>	<ul style="list-style-type: none"> <li>• Plan communications</li> <li>• Leverage off of other forums and opportunities to network</li> </ul>	<ul style="list-style-type: none"> <li>• Engagement and participation levels</li> <li>• Ideas shared</li> <li>• Improvements made</li> </ul>
Annually or as required	Office of Bushfire Risk Management	1 & 2	<ul style="list-style-type: none"> <li>• Email</li> <li>• Face to face meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance and governance</li> <li>• Plan endorsement</li> </ul>	BRMB	<ul style="list-style-type: none"> <li>• Government funding</li> <li>• Government priorities</li> <li>• Identified non compliances</li> </ul>	<ul style="list-style-type: none"> <li>• Stay up to date with process improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Plan endorsed</li> </ul>
Biannually or as required	Dept of Fire and Emergency Services (DFES) – District/Regional Office	1 – 3 & 5	<ul style="list-style-type: none"> <li>• Email</li> <li>• Face to face meetings</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• UCL/UMR planned works</li> <li>• Identification of treatment strategies</li> <li>• Identification of other</li> </ul>	BRMO BRMB	<ul style="list-style-type: none"> <li>• Time constraints</li> <li>• Conflicting priorities</li> <li>• Response</li> </ul>	<ul style="list-style-type: none"> <li>• Plan communications</li> <li>• Share information</li> <li>• Response</li> </ul>	<ul style="list-style-type: none"> <li>• Other planned works</li> <li>• Identified Funding opportunities</li> </ul>

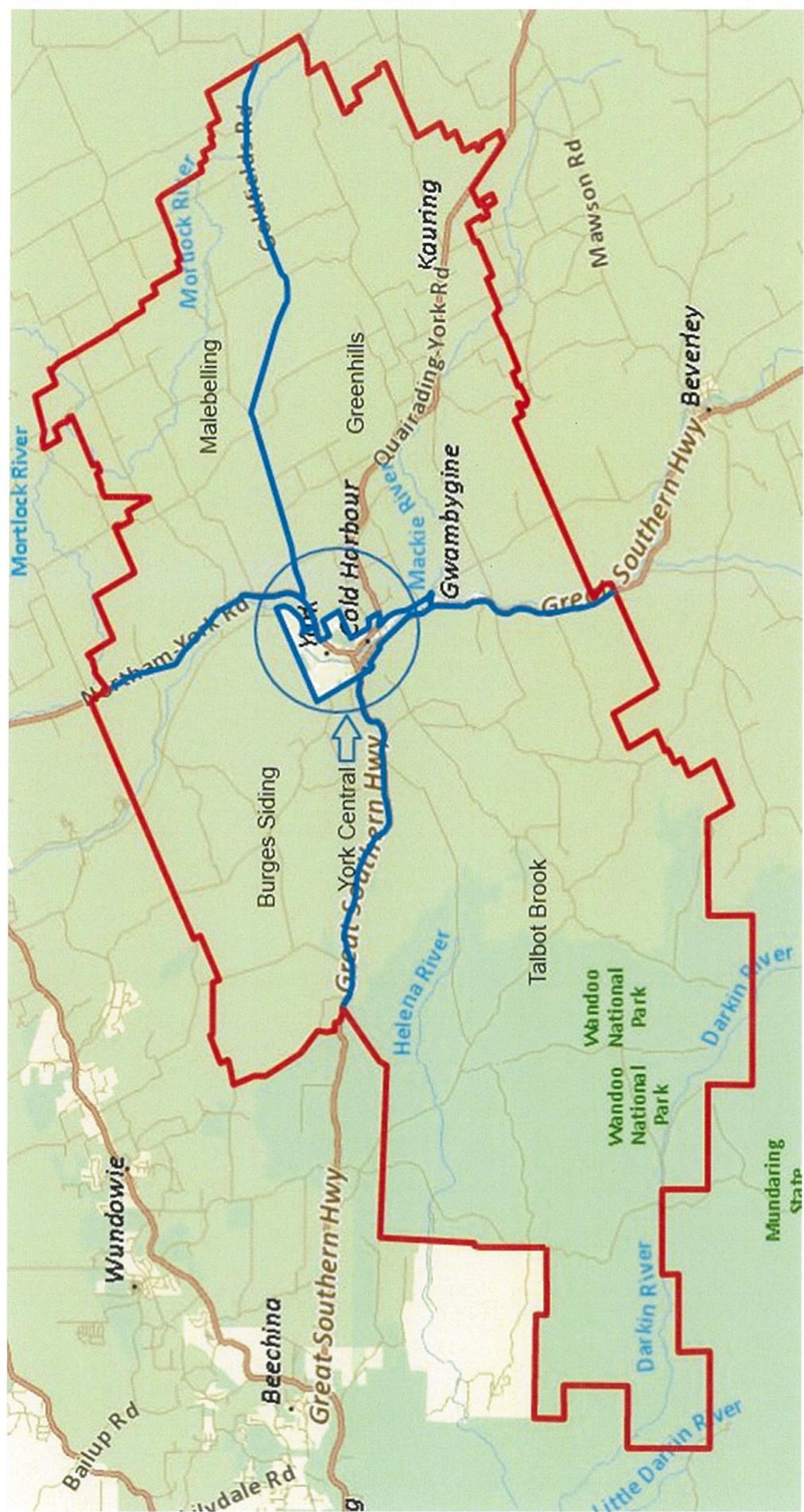
Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
				planned works • Sharing information • Identifying funding opportunities		obligations		• UCL/UMR treatments included on BRMS
<b>Implementation of the BRM Plan</b>	Shire of York CEO, Senior Leadership Team and Council	1 – 3 & 5	• Email • Face to face meetings	• Inform and consult • Confirm accountabilities and responsibilities. • Progress update • Issues identification and action planning	CEO or Delegate	• Time constraints • Availability • Lack of understanding • Budget (for LG mitigation)	• Planning and time management • Clear purpose • Targeted communication updates • Regular updates	• Feedback, • Questions raised • Level of support received
<b>Life of the Plan</b>	Shire of York Building and Works	1 -3 & 5	• Email • Face to face meetings	• Reduction of fuel loads on LG managed lands • Upgrades to strategic firebreaks	CEO or Delegate	• Poor organisation, • Limited time, • Not preparing • Poor communication from stakeholders and LG on completion of works	• Treatments applied • Positive feedback received on treatment supplied • Risk ratings reduced	• Misunderstandings and intentions of plan • Plan communications • Regular updates
<b>Life of the Plan</b>	LEM/C, BFAC & DOAC, CBFCO, BFB, CAPTS	1 – 3 & 5	• Email • Face to face meetings	• Report on progress to plan • Report issues/constraints	CEO or Delegate	• Availability • Time • 'Buy in'	• Collate data and report on success to plan • Compliance to plan • Keep informed	• Feedback received • Level of engagement • Issues identified and addressed
<b>Life of the Plan</b>	Stakeholders – Landowners / Land Managers	1 – 3 & 5	• Email • Face to face meetings	• Inform and consult • Confirm accountability and	CEO or Delegate	• Availability • Time • Loss of	• Planned sharing of information • Negotiations	• Feedback • Commitment to implement

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
			• Presentations • Community Engagement	responsibility • Status and progress of plan • Treatment status, gaps and issues to be addressed		commitment • Access to treatment resources • Funding	• Communicate funding opportunities when available	agreed controls • Highly engaged • Treatments being completed • Risk ratings reduced
Life of the Plan	Stakeholders – Others	1 – 3 & 5	• Face to face • Presentations • Community Engagement • Telephone • Email	• Inform and consult • Confirm accountability and responsibility • Status and progress of plan • Treatment status • Gaps and issues to be addressed	CEO or Delegate	• Availability • Time • Loss of commitment	• Planned sharing of information • Negotiations conducted • Communicate funding opportunities when available	• Feedback • Commitment to implement agreed controls • Highly engaged • Treatments being completed
Life of the Plan	BRM/B, BRM/PCs, BRM/Os, OBRM, DFES District / Regional Office	1 – 3 & 5	• Face to face meetings • Email • Telephone	• UCL/UMR Management • Status and progress of plan • Treatment status, gaps and issues to be addressed • Continuous improvement • Information sharing • Identification of other planned works • Identification of funding opportunities	CEO or Delegate BRM/BRMB	• Time • Conflicting priorities	• Schedule communication opportunities	• Planned works identified • Improvements identified and implemented • Issues addressed
<b>Review of the BRM Plan</b>							• Poor reporting and recording of information	• BRPMC & BRMO to record data and information • Feedback received • Planned works
Annually	Shire of York, CEO and Councillors	4, 5	• Email • Face to face meetings	• Governance and compliance • Review, monitoring	CEO or Delegate			

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility to Communication	Identified Risks to Manage Risks	Strategy to Monitor & Evaluation Method
5 Yearly (Shire, DFES and OBRM)	OBRM, BRMO, BRMB, BRMPC & LG Council	4, 5	Email • Face to face meetings • Telephone	and reporting to Council • Status update • Continuous improvement	CEO or Delegate	• Review not completed by BRMB and OBRM • Approved by BRMB and OBRM for LG	completed • Reporting & Statistics • Risk ratings reduced
Quarterly	Shire of York – Business Areas	4, 5	Face to face meetings • Email • Telephone	• Governance and compliance • Review, monitoring and reporting • Future planning	CEO or Delegate	• Poor reporting and recording of information • Review not completed by BRMB and OBRM	• BRPMC & BRMO to record data and information appropriately • Approved by BRMB and OBRM for LG
Quarterly or as required	Shire of York – Building and Works	4, 5	Face to face meetings	• Report on actions and status of BRMP • Continuous improvement	CEO or Delegate	• Objectives not clear • Key actions not identified	• Good reporting and feedback on work completed • Improvements identified and implemented
Biannually or as required	DFES Regional / District Office	4, 5	Face to face meetings • Email • Telephone	• Report on actions and status of BRMP • Continuous improvement	CEO or Delegate	• Time Availability • Conflicting priorities	• Feedback on work completed • Risk ratings reduced • Improvements identified and implemented
						• Plan Communications • Discuss with Shire Leadership Team	• Feedback on work completed • Risk ratings reduced • Improvements identified and implemented

Timing of Communication	Stakeholder(s)	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring & Evaluation Method
Annually	BFAC, DOAC, LEMC, CBFCCO, BFBs, Captains	4, 5	• Face to face meetings • Email • Telephone • Presentations	• Report on actions and status of BRMP • Continuous improvement	CEO or Delegate	• Availability • Time • Conflicting priorities • Buy in	• Keep informed • Share the wins	• Feedback on work completed • Risk ratings reduced • Improvements identified and implemented
Annually or as required	Stakeholders – Land Owners / Land Managers	4, 5	• Face to face meetings / Telephone • Presentation • Community Engagement	• Status of treatments • Success of treatments • Continuous improvement	CEO or Delegate	• Availability • Time • Conflicting priorities • Buy in • Access to resources	• Plan communication • Target communication • Planned and prepared	• Feedback on work completed • Risk ratings reduced • Improvements identified and implemented
Every 2 years	Stakeholders – Other	4, 5	• Face to face meetings • Telephone • Presentations • Community Engagement	• Status of treatments • Success of treatments • Continuous improvement	CEO or Delegate	• Availability • Time • Conflicting priorities • Buy in • Access to resources	• Plan communication • Target communication • Planned and prepared	• Feedback on work completed • Risk ratings reduced • Improvements identified and implemented
Annually or as required	BRMB, BRMOS, BRMPCs	4, 5	• Face to Face meetings • Workshops • Telephone	• Continuous Improvement • Sharing information	BRMB	• Availability • Time • Conflicting priorities	• Plan communication	• Improvements identified and implemented

## Appendix Two:- Planning Areas

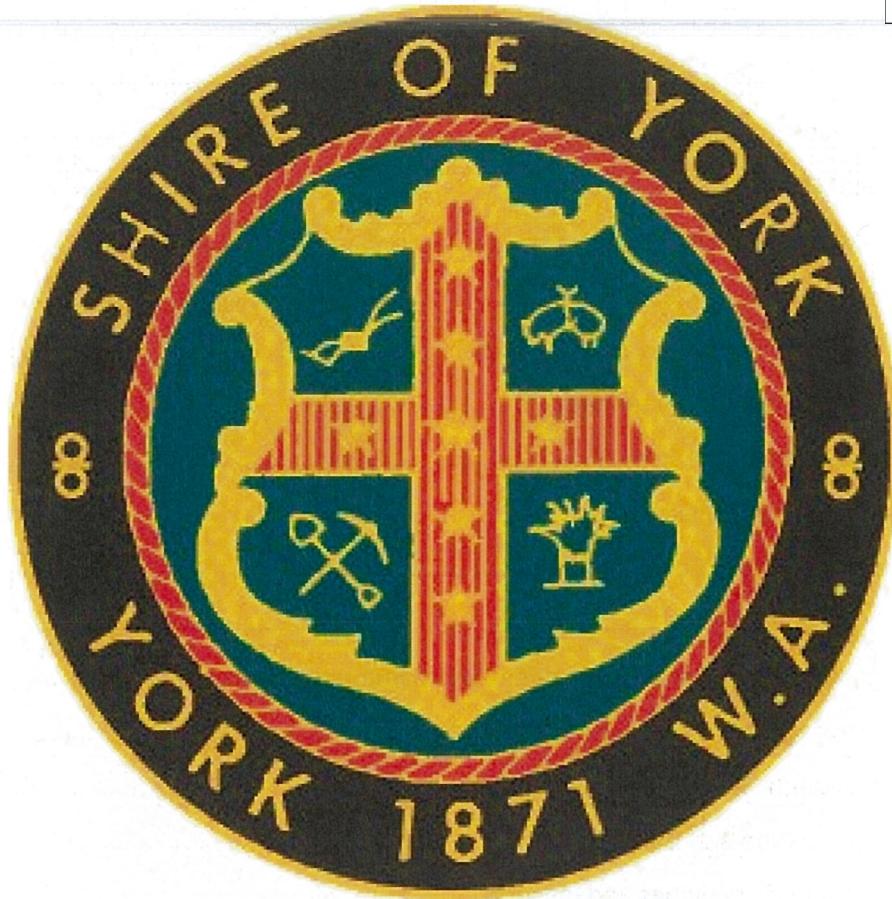




## Appendix Three: Multi-Agency Treatment Work Plan – Local Government Wide Controls

Control	Action/Activity Description	Lead Agency	Other Stakeholder(s)	Implementation Notes
BRMP Risk Analysis	Maintain and refine BRMP	Local Government	Landowners DFES	Treatment identification and planning for all very high and extreme risk assets within the Shire
Shire of York, Local firebreak and hazard reduction laws (Bushfires act 1954)	Annual Firebreak and Fuel Reduction Notice	Local Government	FCO's, brigades and land owners	Local law established to ensure land owners understand and comply to firebreak specifications as well as appropriately reducing fuel load and risk on their properties. Notice reviewed annually. Rangers inspect compliance to the notice and fines apply if non-compliant.
Shire of York Prohibited, Restricted and Open burn times (Bush Fires act 1954)	Annual Firebreak and Fuel Reduction Notice. Requirement to obtain "Burn Permit" during restricted times.	Local Government	Chief FCO, CESM, Rangers and the public.	Prohibited and restricted burn times are designed to force the community to apply for "Burn Permits" thereby reducing the risk during very high to catastrophic fire danger rating days. Notice reviewed annually and dates can be subject to change as required by the Chief and Deputy FCO's.
Shire of York mitigation works	The Shire's Works team has annual works programs to reduce fuel load and remove hazards.	Local Government	Public (reporting hazards and concern of risk) The Shire's Works team and Ranger	Work includes, slashing, spraying, mulching, pruning and other mechanical treatments.
DFES UCL/UMR land management	Preparedness, mitigation work conducted on lands owned by DoL and managed by DFES under a MOU	DFES Goldfields-Midlands	P&W, LG, Local brigades	Annual budgeting has been completed to include mitigating risk on UCL/UMR.
Department of Biodiversity Conservation & Attractions (Parks and Wildlife) Master Burn Plans	P&W have a 6 season burn program that is published on their website. Yearly plans are available.	Parks & Wildlife	Local brigades, DFES, LG	The plans can be accessed via their website, by sharing shape files (GIS) and are communicated at Local BFAC and other various meetings.
Water Corporation Bushfire Risk Management Program	Bushfire Risk Management Plan. A Bushfire Risk Management Project is underway for the Water Corp.	Water Corporation		A plan is currently being developed. High risk areas are identified and treatments planned then completed. Treatments and risk assessments are available through Water Corp BRMP department.
State-wide arson prevention programs	Education and awareness campaigns exist across the state for arson.	WA Police	DFES, LG	Participation as required. The Shire participates in campaigns for arson prevention.
Local Emergency Management Arrangements	Emergency Management Plan	Shire of York	SJA WA POL DFES DC Education CBFCO OEM	Annual review of emergency plans and arrangements.

Control	Action/Activity Description	Lead Agency	Other Stakeholder(s)	Implementation Notes
Five Minute Fire Chat	Community Engagement	State Government	LG, Chief FCO, CESM, Rangers, Bushfire Ready Groups and the public	The key message of this campaign is - preparing for and responding to bushfires as a team effort and everyone needs to play their part <a href="https://www.dfes.wa.gov.au/firechat/Pages/default.htm">https://www.dfes.wa.gov.au/firechat/Pages/default.htm</a>
Western Power annual asset inspection and vegetation management program	Western Power Bushfire Plan	Western Power	DFES, LG, DPAW	Annual vegetation management and asset inspections are completed to ensure risk is managed. Full asset inspections are completed every 4 years.
Department of Education Memorandum of Understanding	Coordination of bushfire risk management activities	DFES	DoE	Including the identification and planning of treatment options for bushfire risks on DoE school sites as listed on the DoE bushfire zone register and agreed to annually by DFES and DoE



## ***Shire of York***

# **Bushfire Risk Management Plan**

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**2018 – 2023**

*Add review and endorsement dates to title page as known and appropriate, for example:*

*Office of Bushfire Risk Management (OBRM) Bushfire Risk Management (BRM) Plan reviewed XX  
Month 20XX*

*Local Government Council BRM Plan endorsement XX Month 20XX*

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## Document Endorsements

The Shire of York council endorses that the Bushfire Risk Management Plan (BRM Plan) has been reviewed and assessed by the Office of Bushfire Risk Management as compliant with the standard for bushfire risk management planning in Western Australia, the *Guidelines for Preparing a Bushfire Risk Management Plan*. The Shire of York is the owner of this document and has responsibility, as far as is reasonable, to manage the implementation of the BRM Plan and facilitate the implementation of bushfire risk management treatments by risk owners. The endorsement of the BRM Plan by the Shire of York council satisfies their endorsement obligations under section 2.2.7 of the *State Hazard Plan for Fire (Interim, Nov 2017)(Westplan Fire)*.

Local Government	Representative	Signature	Date
Shire of York	Mr Paul Martin CEO		

## Amendment List

Version	Date	Author	Section
V1	17/07/2017	John Hansen	Entire Document
V2	18/01/2018	John Hansen	DFES Burn Data
V3	08/03/2018	John Hansen and Tyron McMahon	Post DFES QA
V4	28/03/2018	John Hansen	Asset information
V5	20/04/2018	John Hansen and Tyron McMahon	Post OBRM Comments
V6	07/05/2018	John Hansen	Monitoring and Review Amendments

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## 1. Introduction

### 1.1 Background

Under the *State Hazard Plan for Fire (Westplan Fire)* an integrated Bushfire Risk Management Plan (BRM Plan) is to be developed for local government areas with significant bushfire risk. This BRM Plan has been prepared for the Shire of York in accordance with the requirements of *Westplan Fire* and the *Guidelines for Preparing a Bushfire Risk Management Plan* (Guidelines). The risk management processes used to develop this BRM Plan are aligned to the key principles of *AS/NZS ISO 31000:2009 Risk management – Principles and guidelines* (AS/NZS ISO 31000:2009), as described in the Second Edition of the *National Emergency Risk Assessment Guidelines* (NERAG 2015). This approach is consistent with the policies of the State Emergency Management Committee, specifically the *State Emergency Management Policy 3.2 and State Emergency Management Prevention and Mitigation Procedure 1*.

This BRM Plan is a strategic document that identifies assets at risk from bushfire and their priority for treatment. The Treatment Schedule sets out a broad program of coordinated multi-agency treatments to address risks identified in the BRM Plan. Government agencies and other land managers responsible for implementing treatments participate in developing the BRM Plan to ensure treatment strategies are collaborative and efficient, regardless of land tenure.

### 1.2 Aim and Objectives

The aim of the BRM Plan is to document a coordinated and efficient approach toward the identification, assessment and treatment of assets exposed to bushfire risk within the Shire of York.

The objective of the BRM Plan is to effectively manage bushfire risk within the Shire of York in order to protect people, assets and other things of local value. Specifically, the objectives of this BRM Plan are to:

- Guide and coordinate a tenure blind, multi-agency bushfire risk management program over a five year period;
- Document the process used to identify, analyse and evaluate risk, determine priorities and develop a plan to systematically treat risk;
- Facilitate the effective use of the financial and physical resources available for bushfire risk management activities;
- Integrate bushfire risk management into the business processes of local government, land owners and other agencies;
- Ensure there is integration between land owners and bushfire risk management programs and activities;
- Monitor and review the implementation of treatments to ensure treatment plans are adaptable and risk is managed at an acceptable level.

### 1.3 Legislation, Policy and Standards

The following legislation, policy and standards were considered to be applicable in the development and implementation of the BRM Plan.

### 1.3.1 Legislation

- *Bush Fires Act 1954*
- *Emergency Management Act 2005*
- *Fire Brigades Act 1942*
- *Fire and Emergency Service Act 1998*
- *Conservation and Land Management Act 1984*
- *Environmental Protection Act 1986*
- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Wildlife Conservation Act 1950*
- *Aboriginal Heritage Act 1972*
- *Metropolitan Water Supply, Sewerage and Drainage Act 1909*
- *Country Areas Water Supply Act 1947*
- *Building Act 2011*
- *Bush Fires Regulations 1954*
- *Emergency Management Regulations 2006*
- *Planning and Development (Local Planning Scheme) Regulations 2015*

### 1.3.2 Policies, Guidelines and Standards

- National Emergency Risk Assessment Guidelines (NERAG) (Second Edition 2015)
- State Emergency Management Policy
- State Hazard Plan for Fire (Interim) (Westplan Fire)
- State Planning Policy 3.7: Planning in Bushfire Prone Areas
- State Planning Policy 3.4: Natural Hazards and Disasters
- Guidelines for Planning in Bushfire Prone Areas (2015)
- Western Australian Emergency Risk Management Guidelines (Emergency Management WA 2005)
- A Guide for the Safe Use of Pesticides in Non-Agricultural Workplaces (Dept. of Health 2007)
- Guidelines for Plantation Fire Protection (DFES 2011)
- Firebreak Location, Construction and Maintenance Guidelines (DFES)
- Bushfire Risk Management Planning – Guidelines for preparing a Bushfire Risk Management Plan (2015)
- AS/NZS ISO 31000:2009 - Risk management – Principles and guidelines
- AS 3959-2009 Construction of buildings in bushfire-prone areas
- Building Protection Zone Standards (DFES)

### 1.3.3 Other Related Documents

- National Strategy for Disaster Resilience
- National Statement of Capability for Fire and Emergency Services (AFAC 2015)
- Public Service Circular No. 88 Use of Herbicides in Water Catchment Areas (Dept. of Health 2007)
- Code of Practice for Timber Plantations in Western Australia (Forest Products Commission 2006)
- Bushfire Risk Management Planning Handbook (DFES)
- Bushfire Risk Management System (BRMS) User Guide (DFES)
- Shire of York Strategic Community Plan 2016-2026
- Shire of York Corporate Business Plan 2016 – 2020

- Shire of York Bushfire Policies and Procedures Manual (2017)
- Shire of York Local Emergency Management Arrangements (2017) (Draft)
- Shire of York Town Planning Scheme No. 2
- Bushfire Prone Mapping for Shire of York (2017)
- Roadside Vegetation and Conservation Values in the Shire of York (2010)
- Roadside Conservation Values in the Shire of York (2003)
- Shire of York Native Vegetation Handbook (1994)
- Shire of York 2017/2018 Fire Break Notice
- Shire of York Herbicide Exemption Register (2017)
- Shire of York Clearing Native Vegetation Guidelines
- Shire of York Information Booklet 2016/2017
- Shire of York Bushfire Policies and Procedures Manual (2017)
- MoU with DFES for the financial support of a CESM (Community Emergency Services Manager)
- Shire of York Permit to set Fire to the Bush

## 2. The Risk Management Process

The risk management processes used to identify and address risk in this BRM Plan are aligned with the international standard for risk management, AS/NZS ISO 31000:2009, as described in NERAG (2015). This process is outlined in Figure 1 below.

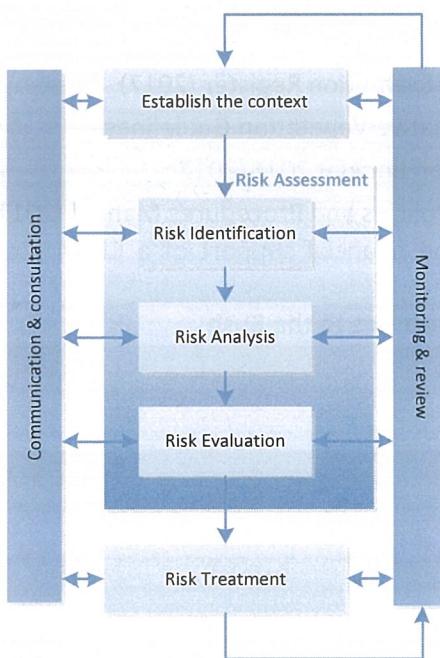


Figure 1 - An overview of the risk management process <sup>1</sup>

### 2.1 Roles and Responsibilities

Table 1 – Roles and Responsibilities

Stakeholder Name*	Roles and Responsibilities
<b>Local Government</b>	<ul style="list-style-type: none"><li>As custodian of the BRM Plan, coordination of the development and ongoing review of the integrated BRM Plan.</li><li>Negotiation of commitment from land owners to treat risks identified in the BRM Plan.</li><li>As treatment manager, implementation of treatment strategies.</li><li>As part of the approval process, submission of the draft BRM Plan to the Office of Bushfire Risk Management (OBRM) to review it for consistency with the Guidelines.</li><li>As part of the approval process, submission of the final BRM Plan to council for their endorsement and adoption.</li></ul>
<b>Department of Fire and Emergency Services (DFES)</b>	<ul style="list-style-type: none"><li>Participation in and contribution to the development and implementation of BRM Plans, as per their agency responsibilities as the Westplan Fire Hazard Management Agency.</li><li>Support to local government through expert knowledge and advice in relation to the identification, prevention and treatment of bushfire risk.</li><li>Facilitation of local government engagement with state and federal government agencies in the local planning process.</li><li>Undertake treatment strategies, including prescribed burning on behalf of Department of Lands for Unmanaged Reserves and Unallocated Crown Land within gazetted town site boundaries.</li></ul>

<sup>1</sup> Source: AS/NZS ISO 31000:2009, Figure 3, reproduced under SAI Global copyright Licence 1411-c083.

Stakeholder Name*	Roles and Responsibilities
	<ul style="list-style-type: none"> <li>▪ In accordance with Memorandums of Understanding and other agreements, implementation of treatment strategies for other landholders.</li> </ul>
<b>Office of Bushfire Risk Management (OBRM)</b>	<ul style="list-style-type: none"> <li>▪ Under the OBRM Charter, to ensure bushfire risk is managed in accordance with AS/NZS ISO 31000 and reporting on the state of bushfire risk across Western Australia.</li> <li>▪ Review BRM Plans for consistency with the Guidelines prior to final endorsement by council.</li> </ul>
<b>Department of Biodiversity, Conservation and Attractions - Parks and Wildlife Service (P&amp;WS)</b>	<ul style="list-style-type: none"> <li>▪ Participation in and contribution to the development and implementation of BRM Plans.</li> <li>▪ Providing advice for the identification of environmental assets that are vulnerable to fire and planning appropriate treatment strategies for their protection.</li> <li>▪ As treatment manager, implementation of treatment strategies on department managed land and for Unmanaged Reserves and Unallocated Crown Land outside gazetted town site boundaries.</li> <li>▪ In accordance with Memorandums of Understanding and other agreements, implementation of treatment strategies for other landholders.</li> </ul>
<b>Other State and Federal Government Agencies</b>	<ul style="list-style-type: none"> <li>▪ Assist the local government by providing information about their assets and current risk treatment programs.</li> <li>▪ Participation in and contribution to the development and implementation of BRM Plans.</li> <li>▪ As treatment manager, implementation of treatment strategies.</li> </ul>
<b>Public Utilities</b>	<ul style="list-style-type: none"> <li>▪ Assist the local government by providing information about their assets and current risk treatment programs.</li> <li>▪ Participation in and contribution to the development and implementation of BRM Plans.</li> <li>▪ As treatment manager, implementation of treatment strategies.</li> </ul>
<b>Corporations and Private Land Owners</b>	<ul style="list-style-type: none"> <li>▪ As treatment manager, implementation of treatment strategies.</li> </ul>

## 2.2 Communication & Consultation

As indicated in Figure 1 (page 8), communication and consultation throughout the risk management process is fundamental to the preparation of an effective BRM Plan. To ensure appropriate and effective communication occurred with relevant stakeholders in the development of the BRM Plan, a *Communication Strategy* was prepared. The strategy is provided at **Appendix One**.

### 3. Establishing the Context

#### 3.1 Description of the Local Government and Community Context

##### 3.1.1 Strategic and Corporate Framework

Within the Shire of York, the Strategic Community Plan sets out the community's vision and aspirations for the future. The document identifies a 10 year strategic plan to guide Council decision making and priority setting, including providing clarity for funding allocation and pursuit of grant opportunities. The strategy is reviewed every 2 years to ensure currency, and it is intended that the BRM Plan will be formally included in the strategy at its next review. To ensure Council's decisions consider the community's aspirations, and deliver the best results possible with the available resources, the Shire has adopted the following integrated planning and reporting framework (Figure 2).

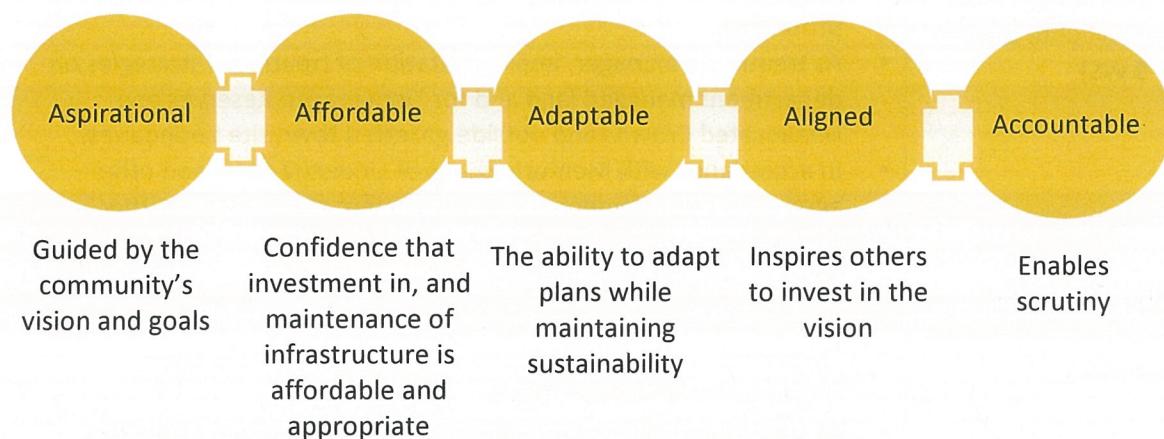


Figure 2 - Integrated Planning and Reporting Framework

Bushfire risk management supports the achievement of several community aspiration themes, including the protection of cultural heritage, environmental and economic values, and building resilience in infrastructure and communities. The Strategic Community Plan identifies heritage and tourism as one of York's greatest development opportunities, and a key strategy for the future. There is also a major focus on systems that promote fiscally responsibility, accountability, and transparent governance - with the community indicating a desire for increased consultation, particularly in relation to heritage and environmental protection. The BRM Plan provides an opportunity to identify and assess these types of values, engage stakeholders in relevant discussion and set out a plan to address priority risks over time. Development of the BRM Plan will also provide the Shire with an avenue to seek new grant funding opportunities, that otherwise wouldn't be available.

The Strategic Community Plan highlights a number of key challenges for the Shire of York, including improving the resilience of community infrastructure, such as telecommunications and energy, revitalisation of the river and development of precinct and land-use planning policy. Also highlighted is the intent to increase tourism and visitor numbers through the promotion of local heritage assets and trails. These activities present an ideal opportunity for bushfire risk management to be appropriately addressed in council policy and used to improve decision making processes and outcomes.

Under a Memorandum of Understanding (MOU) with the Department of Fire and Emergency Services and Shire of Beverley, the Shire of York currently employs a Community Emergency Services Manager (CESM) to manage and coordinate local emergency services, prevention programs and community engagement activities for fire and natural hazards within the Shire. This position is a shared facility

with the neighbouring Shire of Beverley and is currently, April 2018, due for renewal. However recent changes within DFES to create a new division, the Rural Fire Division, have indicated that this position itself may be subject to change. If this eventuates, the CEO, subject to available funds, may allocate these functions to another position.

The BRM Plan will inform planning and delivery of many of these programs by identifying and prioritising assets at risk of being impacted by a bushfire. The BRM Plan may also identify suitable treatment strategies, these will be undertaken in priority of their associated risk profile to assist in reducing the risk rating. Prioritising risk will allow all asset owners and land managers to forward plan programs and budget for treatments within the BRM Plan area. Due to the uncertainty of the CESM role and position, the CEO may, subject to available funds, allocate the responsibility for the ongoing maintenance and implementation of the BRM Plan to his delegate.

The Local Emergency Management Committee (LEMC) along with the Bushfire Advisory Committee (BFAC) and the District Emergency Management Advisor from the Office of Emergency Management (OEM) as stakeholders to this project have and will continue to be kept apprised of this document and their input and advice incorporated there in to.

### **3.1.2 Location, Boundaries and Tenure**

The Shire of York is situated in the Wheatbelt Region of Western Australia 97kms East of Perth in the Avon Valley. The Shire covers an area of 2,133 square kilometres and is bounded by the Shires of Northam and Cunderdin to the north and north east respectively, Quairading to the east, Beverley to the South and Mundaring and Kalamunda to the West. As detailed in appendix three, "Communications Strategy" a specific list of key landowners has been identified and documents how they will be engaged throughout the BRM Planning process specifically the treatment strategy. For example, as detailed in appendix three, Private Landowners will be consulted by way of face to face meetings, email and telephone where appropriate and invited to Presentations and Community Engagements.

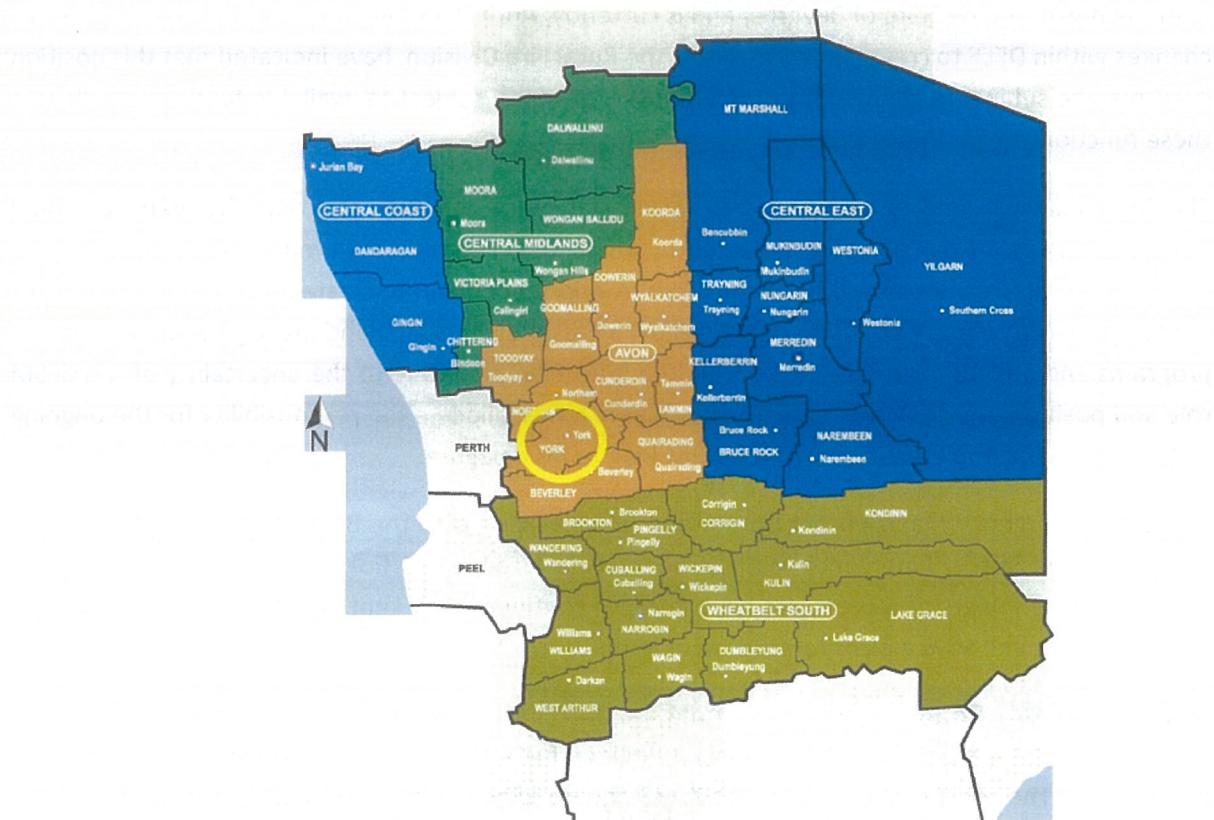


Figure 3 - Shire of York<sup>2</sup>

Table 2 – Overview of Land Tenure and Management within the BRM Plan Area

Land Manager/Agency	% of Plan Area
<b>Local Government</b>	0.23% (500ha)
<b>Private</b>	73.18% (156,100ha)
<b>Department of Bio-Diversity, Conservation and Attractions</b>	22.48% (47,960ha)
<b>Department of Planning, Lands and Heritage</b>	1.52% (3,250ha)
<b>Main Roads</b>	2.57% (5,490ha)
<b>Other</b>	
<b>Total</b>	100% (213,300ha)

Source: FES Maps

### 3.1.3 Population and Demographics

The Shire, with the key town sites of York (the Shire's seat of local government), Gwambygine, Mount Hardey, Greenhills and Kauring had a total resident population of 3,606 in 2016 (*ABS 2016 Census*), at which time the male to female ratio was approximately 50:50. Aboriginal and Torres Strait Islander people made up a total of 3.1% of the population (*ABS 2016 Census*).

The 2016 census showed that 70% of the 3,606 population were living in the Town site *ABS 2016 Census*. With the Avon River flowing through the town site of York, residents within this zone are exposed to increase risk from bushfire as the riparian zone and land immediately adjacent contains

<sup>2</sup> Map sourced from the Shire of York Strategic Community Plan 2016 - 2026

high fuel loads with high grass and weed burden as a result of the river flooding, the built environment within the vicinity of this area has just as much exposure to Bushfire risk as those in the more rural areas of the Shire and will be addressed as a priority within the BRM Plan.

The Median age is 51 years with the 0 – 19 year range accounting for 21.4% of the population, this age group as usually still at school and can be educated about Bushfire risk by school based information sessions. The 20 – 59 age group account for 42.8% and the 60 and over group for 35.8%. This older range shows the future impact on the community in providing specific care and therefore the need to accommodate Special needs polices for their protection in the event of a Bushfire.

At the current confirmed rate of growth and assuming the lowest, most conservative growth scenario the Shire's population is forecast to be 4,600 in 2026, which is expected to occur mainly in the town of York. (*Western Australia Tomorrow (DPHL): Population report No. 7 2006-2026-forecast profile, York (S) Local Government Area.*)

Ongoing community engagement by way of general meetings and newspaper advertisements enable the community to maintain an awareness of the bushfire risk and what action they need to take in the event one occurs in their locality. However due to the lack of significant events in recent times there is a certain level of complacency that will be addressed as treatment strategies through the BRM Plan processes.

An average of 172,505 tourists visit the Shire per year with the day trip market (79% of visitors) dominating local tourism activity this demographic of vulnerable population type requires specific consideration when promoting bushfire safety throughout the Shire, as the tourist population may be unaware of the risks associated in conjunction with possible language barriers. Information on awareness and action that can be taken by these visitors to protect themselves during the fire season will be made available through the Tourist Information centre.

Currently there are no areas within the Shire that are experiencing significant or rapid growth. The minor development areas within the RUI are minimal and are currently covered within this BRM Plan.

### **3.1.4 Economic Activities and Industry**

Agriculture (cropping and grazing) have historically been the cornerstone of the Shire's economy and remains the dominant industry with 136,100ha of agriculture land holdings generating approximately \$46.2M in production value per annum. (*Avon sub-region Economic strategy 2013*)

Cereal crops (particularly wheat) are the most prevalent and valuable to the economy, followed by wool production. While there is potential to diversify the agriculture industry within the Shire, the availability of water is a key challenge. Other local industries include wine and olive production. Tourism also plays an important economic role.

A number of significant Aboriginal and built heritage features throughout the Shire contribute to its unique identity and history. An average of 172,505 tourists visit the Shire per year with the day trip market (79% of visitors) dominating local tourism activity and reflecting York's proximity to Perth. In addition to heritage, other key assets to York's tourism market potential comprise entrepreneurship, natural amenity and festivals. (*York- A strategy for Tourism Development 2013*)

York has a predominance of broad acre farms which results in a peak of fire risk at and around harvest times, typically November through to February.

## 3.2 Description of the Environment and Bushfire Context

### 3.2.1 Topography and Landscape Features

The western third of the Shire falls within the Swan coast catchment and is dominated by the higher elevation and relief of the Darling Range. Moving east, the Shire falls away into the Avon Valley and is characterised by low relief, sluggish drainage lines and weathering to great depths with lateritic soils. East of the Avon Valley, the land rises, through the steep rocky slopes, to the undulating surface of the plateau. The Shire is drained by the Avon River, the river Mackie and part of the Mortlock River drains the northern-eastern corner. These areas are renowned as areas of specific interest to local community groups which provide challenges when recommending treatment strategies; this will be addressed by consulting and involving these parties before and during the planning process

Among the most significant features are The Avon, Mackie and Mortlock Rivers, Mount Bakewell, Mount Matilda, Mount Brown, Mount Mackie, Mount Observation, Mount Ronan, Gwambygine Hill and the Needling Hills. Due to the nature of these features access and the ability to control a bushfire is restricted leading to potential increased fire activity and providing the fire with a path to travel. The BRM Plan will address these issues in the treatment phase and increase the ability to access these locations

### 3.2.2 Climate and Bushfire Season

The Shire of York's climate is regarded as Mediterranean, with dry, hot summers and mild, wet winters. Annual rainfall ranges from 1100mm in the West of the Shire to less than 451mm in the East of the Shire. The average maximum temperatures range from 34.3C in January to 15.6C in July, while corresponding average minimum temperatures range from 16.8C in January to 5.3C in July. Frosts throughout winter are common in York.

Most of the rain falls during the cool winter months of May to August, and is associated with the passage of winter cold fronts. Thunderstorms may locally provide rain during the summer, however can also be a source of fire ignition when not accompanied by rain.

The fire season in York is typically from Mid-October through until Mid-April. This is supported by the gazetted Restricted Burning Times starting on the 23<sup>rd</sup> of October and finishing on the 14<sup>th</sup> of April. While the Prohibited Burning Times start on the 1<sup>st</sup> of December and cease on the 14<sup>th</sup> of February.

Windy conditions are experienced in the Shire from late winter through spring and summer. The prevailing winds in summer veer from the South West through to the South and East. Bushfire threat is typically associated with very hot (above average temperatures), dry (less than 20% humidity) windy (above 12 – 15 Kilometres per hour) conditions and high fuel loads. It is these climatic conditions coupled with fuel loads that are the primary influences on fire activity.

The Shire of York falls within the Avon weather forecast district. The Fire Danger Rating for the Shire is based upon the Grass Fire Danger Index (GFDI). Information from the Bureau of Meteorology (BoM) shows from the 1<sup>st</sup> July 2014 through until the 1<sup>st</sup> July 2017 the Shire has observed 30 days with a FDI rating of Severe, 5 days with a rating of Extreme and 3 days of Catastrophic.

The following graphs represent rainfall, humidity, wind speed and temperature data collected from the weather station at York East from November 2013 to November 2017.

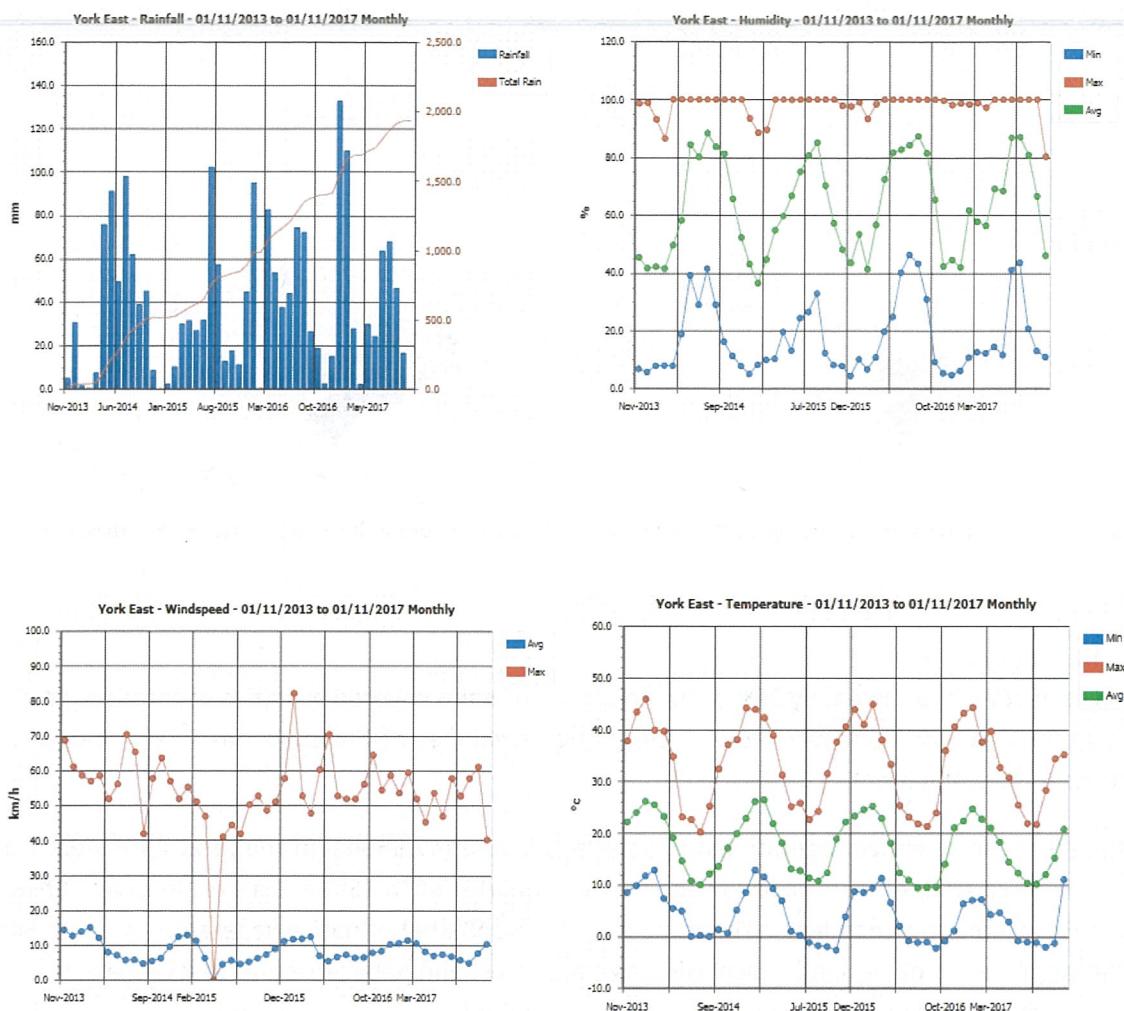
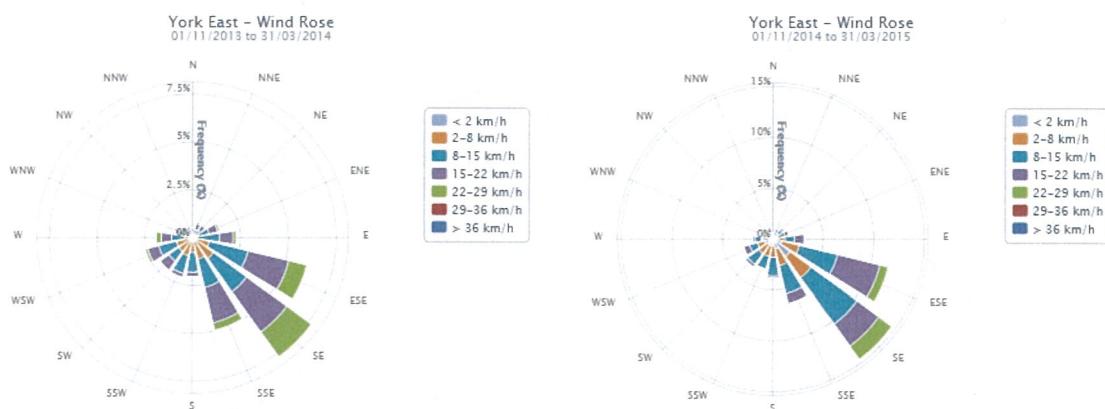


Figure 4 - Weather Data for the Shire of York 2013-2017<sup>3</sup>



<sup>3</sup> <https://www.agric.wa.gov.au/weather-stations>

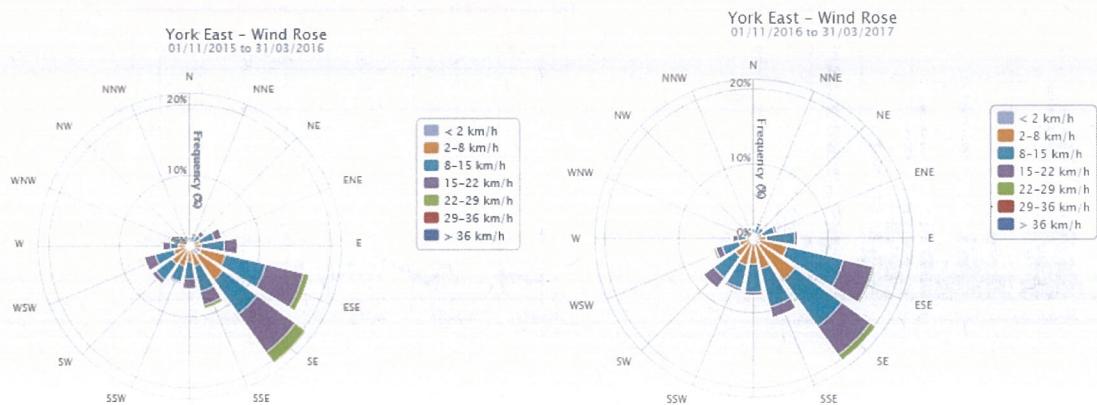


Figure 5 - York East, weather station. Wind Roses for 2013/14 – 2016/7 during Fire Season – November to March

### 3.2.3 Vegetation

In the Shire of York, approximately 26% of the total area remains covered by native vegetation. (*Native Vegetation Handbook for the Shire of York 12-1994*) The remainder of the shire has been cleared for agriculture and development.

The area of perennial, native vegetation on public land is 22% (47,960ha) of the total shire area. This includes the large tract of state forest in the western quarter of the Shire, Nature Reserves, Crown Land and Government owned land. The remaining 4% (8348.8ha) of native vegetation is on private land. The large area of public land which exists as state forest and public reserves masks the extent of clearing on private land in the Shire.

The majority of remnant vegetation in the state forest to the west of the shire consists of a medium forest with jarrah-marri trees. There are some parts with medium woodlands consisting of marri - wandoo trees, most of which have a low density shrub understory with a scattering of grass trees.

The map below shows the remnant vegetation types within the Shire.

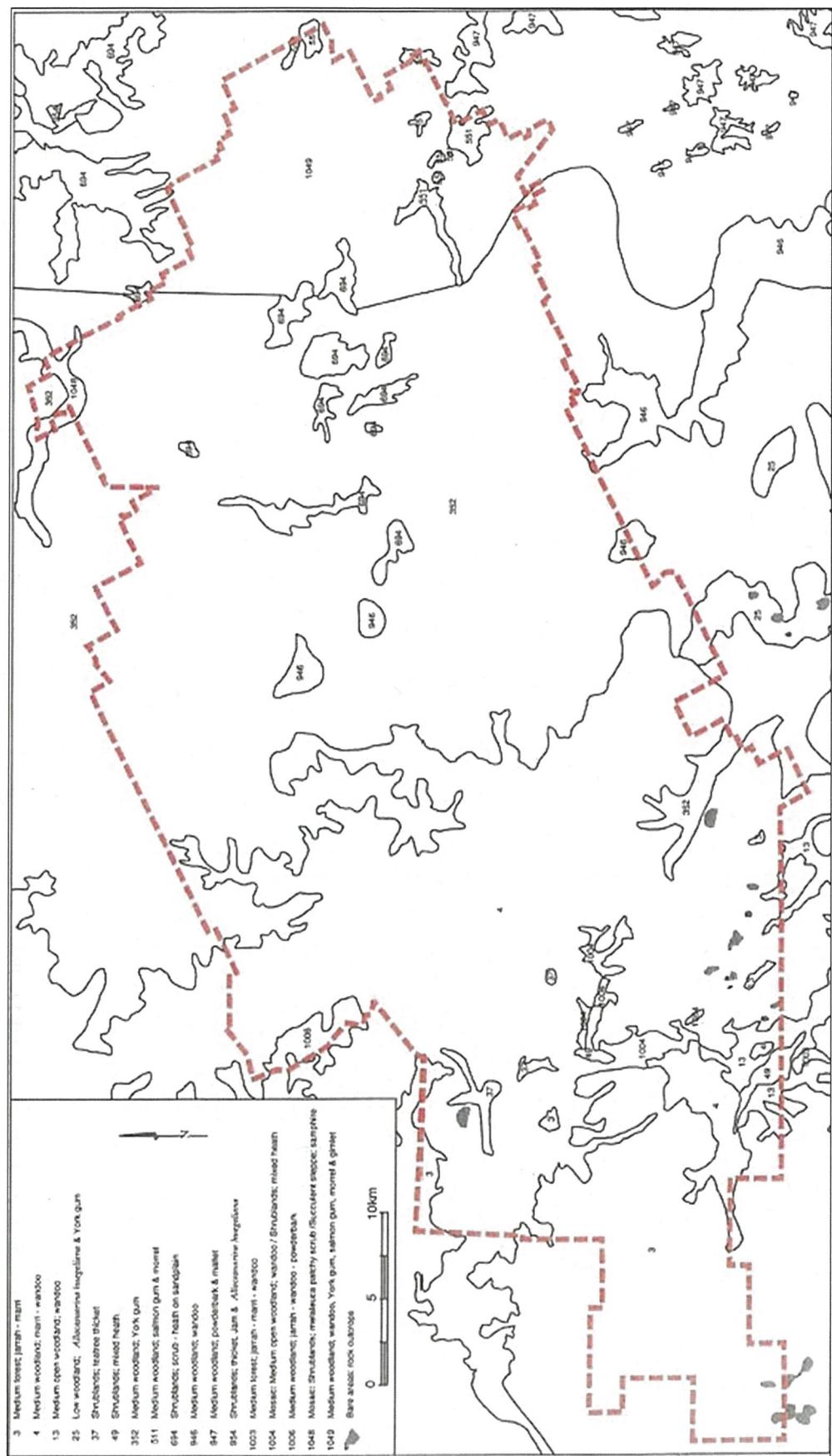


Figure 6 – Remnant Vegetation within the Shire of York<sup>4</sup>



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<sup>4</sup> Map sourced from Native Vegetation Handbook for the Shire of York 12 - 1994

### ***Environmental Considerations - Flora and Fauna***

Flora and Fauna represent particular significance for the Shire as they are not only recognised environmental assets in their own right, but also impact the treatment options available for identified risks in relation to other assets. For example, the breeding cycle of some mammals, such as the Phascogale, will restrict the period in which prescribed burns can be undertaken due to the need to ensure nests are not disturbed during the breeding season. Within the Shire there is also some correlation between high and extreme fire risk areas and areas containing environmental assets, heightening the need to ensure due diligence is applied before determining or applying treatments. Treatment planning processes need to ensure that an appropriate review of sensitivities is undertaken, and consultation with relevant agencies occurs prior to any mitigation work commencing.

The rivers and reserves within the Shire of York, as well as the bush land reserves, are highly valued by the local community due to their aesthetic and cultural value, in addition to any environmental significance they may hold.

#### **3.2.4 Bushfire Frequency and Causes of Ignition**

Over the past five years, the Shire of York has averaged 25.8 bushfires per year (DFES IRS Data). The shire experiences fires started from various ignition sources, with the heightened risk throughout the harvest period due to accidental ignitions from farming practices. Cases of arson have occurred in the western area of the Shire, through the state forest and nature reserves. Another main cause of ignition is the event of lightning storms throughout the summer period, in some cases these are not associated with rain, meaning the fires are more difficult to extinguish and contain.

Supplementary information gathered from the community indicates that not all fires are reported to DFES, so the data provided may under report actual fire occurrences.

There are areas of significant fire hazard located within the shire, including:

- State forest and nature reserves that have high fuel loads and difficult terrain for access and suppression.
- The Avon River, which runs through the town of York, with high fuel loads and minimal access for suppression.
- Agriculture cropping areas that border the town, prior to harvest these areas carry high fuel loads.

York has four Volunteer Bush fire brigades, one Volunteer Fire & Rescue (VFRS) brigade and a Volunteer Fire and Emergency Services brigade (VFES) strategically positioned throughout the Shire. However, the Shire of York relies heavily on local farmer response units for early response to, and suppression of fires within the Shire. Private appliances range from 400L slip on water units up to 5,000L water carters.



All Landscape Fires  
LGA of YORK (S)  
from 01/07/2012 to 30/06/2017

Bushfires Summary of Ignition

	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	Total
<b>Total Number of Bushfires:</b>	<b>32</b>	<b>21</b>	<b>34</b>	<b>24</b>	<b>18</b>	<b>129</b>
Burn off fires	7	4	6	3	2	22
Campfires/bonfires/outdoor cooking	1	0	0	0	0	1
Cigarette	1	1	0	1	0	3
Equipment - Operational deficiency	0	1	0	0	0	1
Heat from other hot objects or friction	1	0	0	0	0	1
Hot works (grinding, cutting, drilling etc..)	0	0	0	1	0	1
Human Error (Left on, knock over, unattended etc.)	1	0	0	0	1	2
Improper Fuelling/Cleaning/Storage/Use of material ignited	0	0	0	0	1	1
Indoor Appliances - cause unknown	0	1	0	0	0	1
Other open flames or fire	2	0	4	3	0	9
Power lines	0	0	1	0	0	1
Reignition of previous fire	1	1	2	2	2	8
Sleeping/Alcohol/Drugs/Physical-Mental impairment	0	0	0	0	1	1
Suspicious/Deliberate	3	1	4	2	2	12
Undetermined	9	7	5	1	3	25
Unreported	1	1	2	2	5	11
Vehicles (incl. Farming Equipment/Activities)	2	1	2	4	0	9
Weather Conditions - Lightning	3	3	6	5	0	17
Weather Conditions (High winds, natural combustion etc. Excludes Lightning)	0	0	2	0	1	3

**EXTERNAL USE APPROVED**

The information contained within this report has been provided by the the  
Operational Information Systems Branch of the Department of Fire and Emergency Services.  
Contact: reports@dfes.wa.gov.au

## ☰ York 5 Year Fire History... ☰ ::

Data Supplied by DFES Jan 2018  
9 views

SHARE EDIT

### York 5 Year Fire History

- ▼  Undetermined
- ▼  Burn off fires
- ▼  Weather Conditions - Lightning
- ▼  Suspicious/Deliberate
- ▼  Unreported
- ▼  Other open flames or fire
- ▼  Vehicles (incl. Farming Equipment/Activi...
- ▼  Reignition of previous fire
- ▼  Cigarette
- ▼  Weather Conditions (High winds, natural...)
- ▼  Human Error (Left on, knock over, unattac...
- ▼  Campfires/bonfires/outdoor cooking
- ▼  Equipment - Operational deficiency
- ▼  Heat from other hot objects or friction
- ▼  Hot works (grinding, cutting, drilling etc.)
- ▼  Improper Fuelling/Cleaning/Storage/Use...
- ▼  Indoor Appliances - cause unknown
- ▼  Power lines
- ▼  Sleeping/Alcohol/Drugs/Physical-Mental...

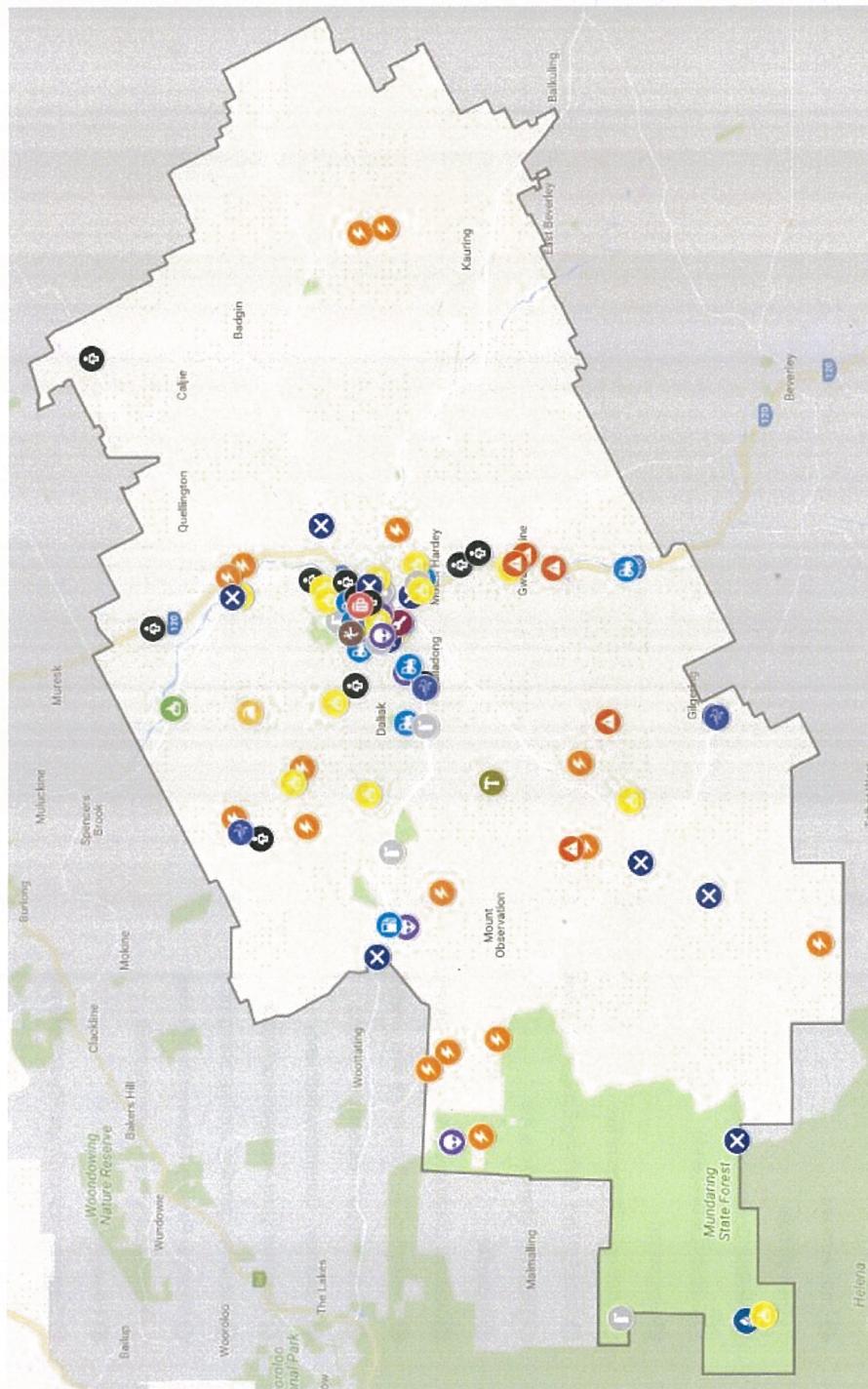


Figure 7 - Landscape Bushfire Report June 2012 – June 2017  
 (Source: DFES)

## 4. Asset Identification and Risk Assessment

### 4.1 Planning Areas

The Shire of York has been divided into five planning areas:

1. Burges Siding
2. Malebelling
3. Greenhills
4. Talbot Brook
5. York Central

Attached at **Appendix Two** is a map showing the boundaries of the planning areas identified within the Shire of York.

#### 4.1.1 Priorities for Asset Identification and Assessment

Assets were identified and assessed across the local government, based on the following order of priority.

Table 3 – Priorities for Asset Identification and Assessment

Priority	Asset Category	Asset Subcategory	Planning Area
<b>First Priority</b>	Human Settlement	Special Risk and Critical Facilities	All
<b>Second Priority</b>	Human Settlement	All other subcategories	All
<b>Third Priority</b>	Economic	Critical Infrastructure	All
<b>Fourth Priority</b>	Economic	All other subcategories	All
<b>Fifth Priority</b>	Environmental	All subcategories	All
<b>Sixth Priority</b>	Cultural	All subcategories	All

### 4.2 Asset Identification

Asset identification and risk assessment has been conducted at the local level using the methodology described in the Guidelines. Identified assets have been mapped, recorded and assessed in the Bushfire Risk Management System (BRMS). Identified assets are categorised into the following subcategories:

Table 4 – Asset Categories and Subcategories

Asset Category	Asset Subcategories
<b>Human Settlement</b>	<ul style="list-style-type: none"><li>• <b>Residential areas</b> Rural urban interface areas and rural properties.</li><li>• <b>Places of temporary occupation</b> Commercial, mining and industrial areas located away from towns and population centres (that is, not adjoining residential areas).</li><li>• <b>Special risk and critical facilities</b> Hospitals, nursing homes, schools and childcare facilities, tourist accommodation and facilities, prison and detention centres, government administration centres and depots, incident control centres, designated evacuation centres, police, fire and emergency services.</li></ul>
<b>Economic</b>	<ul style="list-style-type: none"><li>• <b>Agricultural</b> Pasture, grazing, livestock, crops, viticulture, horticulture and other farming infrastructure.</li><li>• <b>Commercial and industrial</b></li></ul>

Asset Category	Asset Subcategories
	<p>Major industry, waste treatment plants, mines, mills and processing and manufacturing facilities and cottage industry.</p> <ul style="list-style-type: none"> <li><b>Critical infrastructure</b> Power lines and substations, water and gas pipelines, telecommunications infrastructure, railways, bridges, port facilities and waste water treatments plants.</li> <li><b>Tourist and recreational</b> Tourist attractions and recreational sites that generate significant tourism and/or employment within the local area.</li> <li><b>Commercial forests and plantations</b></li> <li><b>Drinking water catchments</b></li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li><b>Protected</b> Rare and threatened flora and fauna, ecological communities and wetlands.</li> <li><b>Priority</b> Fire sensitive species and ecological communities.</li> <li><b>Locally important</b> Nature conservation and research sites, habitats, species and communities, areas of visual amenity.</li> </ul>
<b>Cultural</b>	<ul style="list-style-type: none"> <li><b>Aboriginal heritage</b> Places of indigenous significance.</li> <li><b>Recognised heritage</b> Assets afforded legislative protection through identification by the National Trust, State Heritage List or Local Planning Scheme Heritage List.</li> <li><b>Local heritage</b> Assets identified in a Municipal Heritage Inventory or by the community.</li> <li><b>Other</b> Other assets of cultural value, for example community centres and recreation facilities.</li> </ul>

### 4.3 Assessment of Bushfire Risk

Risk assessments have been undertaken for each asset, or group of assets, identified using the methodology described in the Guidelines. Most risk assessments were undertaken using a 'desk top' assessment however assets with a preliminary rating of 'very high' and 'extreme' have had their assessments confirmed via a field assessment. This included consultation (as per the "Communications Strategy") with DBCA to identify environmental assets within the Shire.

At the time of completing this Bushfire Risk Management Plan, a total of 271 assets have undergone a bushfire risk assessment.

The percentage of assets within the local government in each asset category at the time of BRM Plan endorsement is shown in the following table:

Table 5 – Asset Category Proportions

Asset category	Proportion of identified assets
<b>Human Settlement</b>	<b>76.75%</b>
<b>Economic</b>	<b>18.82%</b>
<b>Environmental</b>	<b>4.43%</b>



#### 4.3.1 Likelihood Assessment

Likelihood is described as the chance of a bushfire igniting, spreading and reaching an asset. The approach used to determine the likelihood rating is **the same for each asset category**: Human Settlement, Economic, Environmental and Cultural.

There are four possible likelihood ratings: almost certain, likely, possible, and unlikely.

Table 6 – Likelihood Ratings

Likelihood Rating	Description
<b>Almost Certain</b> (Sure to Happen)	<ul style="list-style-type: none"> <li>Is expected to occur in most circumstances;</li> <li>High level of recorded incidents and/or strong anecdotal evidence; and/or</li> <li>Strong likelihood the event will recur; and/or</li> <li>Great opportunity, reason or means to occur;</li> <li>May occur more than once in 5 years.</li> </ul>
<b>Likely</b> (Probable)	<ul style="list-style-type: none"> <li>Regular recorded incidents and strong anecdotal evidence; and /or</li> <li>Considerable opportunity, reason or means to occur;</li> <li>May occur at least once in 5 years.</li> </ul>
<b>Possible</b> (feasible but < probable)	<ul style="list-style-type: none"> <li>Should occur at some stage; and/or</li> <li>Few, infrequent, random recorded incidents or little anecdotal evidence; and/or</li> <li>Some opportunity, reason or means to occur.</li> </ul>
<b>Unlikely</b> (Improbable, not likely)	<ul style="list-style-type: none"> <li>Would only occur under exceptional circumstances.</li> </ul>

‘Likelihood’ has been assessed in the context of

- Separation Distance** – the distance between the asset and the hazard vegetation
- Fuel Age** – the period of time elapsed since the fuel was last burnt

#### 4.3.2 Consequence Assessment

Consequence is described as the outcome or impact of a bushfire event. The approach used to determine the consequence rating is **different for each asset category**: Human Settlement, Economic, Environmental and Cultural.

There are four possible consequence ratings: minor, moderate, major and catastrophic.

Table 7 – Consequence Ratings

Consequence Rating	Descriptions
<b>Minor</b>	<ul style="list-style-type: none"> <li>No fatalities.</li> <li>Near misses or minor injuries with first aid treatment possibly required.</li> <li>No persons are displaced.</li> <li>Little or no personal support (physical, mental, emotional) required.</li> <li>Inconsequential or no damage to an asset, with little or no specific recovery efforts required beyond the immediate clean-up.</li> <li>Inconsequential or no disruption to community.</li> </ul>

Consequence Rating	Descriptions
	<ul style="list-style-type: none"> <li>• Inconsequential short-term failure of infrastructure or service delivery. (Repairs occur within 1 week, service outages last less than 24 hours.)</li> <li>• Inconsequential or no financial loss. Government sector losses managed within standard financial provisions. Inconsequential business disruptions.</li> </ul>
<b>Moderate</b>	<ul style="list-style-type: none"> <li>• Isolated cases of serious injuries, but no fatalities. Some hospitalisation required, managed within normal operating capacity of health services.</li> <li>• Isolated cases of displaced persons who return within 24 hours.</li> <li>• Personal support satisfied through local arrangements.</li> <li>• Localised damage to assets that is rectified by routine arrangements.</li> <li>• Community functioning as normal with some inconvenience.</li> <li>• Isolated cases of short to mid-term failure of infrastructure and disruption to service delivery. (Repairs occur within 1 week to 2 months, service outages last less than 1 week.)</li> <li>• Local economy impacted with additional financial support required to recover. Government sector losses require activation of reserves to cover loss. Disruptions to businesses lead to isolated cases of loss of employment or business failure.</li> <li>• Isolated cases of damage to environmental or cultural assets, one-off recovery efforts required, but with no long term effects to asset.</li> </ul>
<b>Major</b>	<ul style="list-style-type: none"> <li>• Isolated cases of fatalities.</li> <li>• Multiple cases of serious injuries. Significant hospitalisation required, leading to health services being overstretched.</li> <li>• Large number of persons displaced (more than 24 hours duration).</li> <li>• Significant resources required for personal support.</li> <li>• Significant damage to assets, with ongoing recovery efforts and external resources required.</li> <li>• Community only partially functioning. Widespread inconvenience, with some services unavailable.</li> <li>• Mid to long-term failure of significant infrastructure and service delivery affecting large parts of the community. Initial external support required. (Repairs occur within 2 to 6 months, service outages last less than a month.)</li> <li>• Local or regional economy impacted for a significant period of time with significant financial assistance required. Significant disruptions across industry sectors leading to multiple business failures or loss of employment.</li> <li>• Significant damage to environmental or cultural assets that require major rehabilitation or recovery efforts.</li> <li>• Localised extinction of native species. This may range from loss of a single population to loss of all of the species within the BRM Plan area (for a species which occupies a greater range than just the BRM Plan area).</li> </ul>
<b>Catastrophic</b>	<ul style="list-style-type: none"> <li>• Multiple cases of fatalities.</li> <li>• Extensive number of severe injuries.</li> </ul>

Consequence Rating	Descriptions
	<ul style="list-style-type: none"> <li>Extended and large number requiring hospitalisation, leading to health services being unable to cope.</li> <li>Extensive displacement of persons for extended duration.</li> <li>Extensive resources required for personal support.</li> <li>Extensive damage to assets that will require significant ongoing recovery efforts and extensive external resources.</li> <li>Community unable to function without significant support.</li> <li>Long-term failure of significant infrastructure and service delivery affecting all parts of the community. Ongoing external support required. (Repairs will take longer than 6 months, service outages last more than 1 month.)</li> <li>Regional or State economy impacted for an extended period of time with significant financial assistance required. Significant disruptions across industry sectors leading to widespread business failures or loss of employment.</li> <li>Permanent damage to environmental or cultural assets.</li> <li>Extinction of a native species in nature. This category is most relevant to species that are restricted to the BRM Plan area, or also occur in adjoining areas and are likely to be impacted upon by the same fire event. 'In nature' means wild specimens and does not include flora or fauna bred or kept in captivity.</li> </ul>

The methodology used to determine the consequence rating for each asset category is based on the following taken from the Bushfire Risk Management Planning Handbook (2018):

Table 8 – Inputs for the consequence assessments for Human Settlement Assets

Consequence Assessment for Human Settlement Assets	
Hazard	Vulnerability
Hazard <ul style="list-style-type: none"> <li>vegetation category (fuel age and canopy %)</li> <li>slope</li> <li>separation distance (between the asset and vegetation and under the vegetation)</li> </ul>	Vulnerability of the asset <ul style="list-style-type: none"> <li>community education</li> <li>property preparedness</li> <li>access</li> <li>capability of occupants</li> <li>water supply</li> <li>construction standard</li> </ul>

Table 9 – Inputs for the consequence assessments for Economic Assets

Consequence Assessment for Economic Assets	
Hazard	Vulnerability
Hazard <ul style="list-style-type: none"> <li>vegetation category (fuel age and canopy %)</li> <li>slope</li> <li>separation distance (between the asset and vegetation and under the vegetation)</li> </ul>	Vulnerability of the asset <ul style="list-style-type: none"> <li><i>The susceptibility of the asset to the adverse effects of a bushfire</i></li> <li><i>The level of impact or importance of the asset.</i></li> </ul>

Table 10 – Inputs for the consequence assessments for Environmental Assets

Consequence Assessment for Environmental Assets	
Potential Impact of Fire	Vulnerability
Potential Impact of Fire <ul style="list-style-type: none"> <li>The potential impact of a bushfire event or fire regime on the asset.</li> </ul>	Vulnerability of the asset <ul style="list-style-type: none"> <li>Conservation Status</li> <li>Geographic Extent</li> </ul>

Table 11 – Inputs for the consequence assessments for Cultural Assets

Consequence Assessment for Cultural Assets	
Hazard	Vulnerability
Hazard <ul style="list-style-type: none"> <li>vegetation category (fuel age and canopy %)</li> <li>slope</li> <li>separation distance (between the asset and vegetation and under the vegetation)</li> </ul>	Vulnerability of the asset <ul style="list-style-type: none"> <li>The susceptibility of the asset to the adverse effects of a bushfire.</li> </ul>

## Determining Bushfire Threat

The level of bushfire threat for human settlement and cultural assets is determined using a quantified bushfire threat assessment model.<sup>5</sup> The model is based on the methodology set out in *AS3959-2009 Construction of buildings in bushfire prone areas* that is used to undertake a Bushfire Attack Level (BAL) assessment. The threat assessment is used to measure the severity of an asset's potential exposure to ember attack, radiant heat and direct flame contact.

Criteria applied when undertaking the bushfire threat assessment is as follows:<sup>6</sup>

- **Assessment in the context of Fire Danger Index (FDI) 80.** - The fire danger index reflects the chance of a fire starting, its rate of spread, its intensity and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long and short term drought effects. The asset assessment is to be in the context of possible fire runs in weather conditions of FDI 80 reflecting an 'Extreme' fire danger rating. The higher the rating, the less chance of controlling a fire until weather conditions improve. From the FDI predictions can be made regarding a fire's rate of spread, intensity and the potential for various suppression tactics to succeed. The FDI is the basis for determining the Fire Danger Rating, shown below, which is a scale developed to assist communities to better understand information about fire danger.<sup>7</sup>

<sup>5</sup> *Guidelines for Preparing a Bushfire Risk Management Plan (2015)*

<sup>6</sup> *AS3959-2009 Construction of buildings in bushfire prone areas*

<sup>7</sup> Source: Department of Fire and Emergency Services

FIRE DANGER RATING	WHAT DOES IT MEAN?
CATASTROPHIC 100+	<ul style="list-style-type: none"> <li>These are the worst conditions for a bush or grass fire</li> <li>If a fire starts and takes hold, it will be extremely difficult to control and will take significant firefighting resources and cooler conditions to bring it under control</li> </ul>
EXTREME 75-99	<ul style="list-style-type: none"> <li>These are very hot, dry and windy conditions for a bush or grass fire</li> <li>If a fire starts and takes hold, it will be unpredictable, move very fast and difficult for firefighters to bring under control</li> <li>Spot fires will start and move quickly. Embers may come from many directions</li> </ul>
SEVERE 50-74	
VERY HIGH 32-49	<ul style="list-style-type: none"> <li>These are hot, dry and possibly windy conditions for a bush or grass fire</li> <li>If a fire starts and takes hold, it may be hard for firefighters to control</li> </ul>
HIGH 12-31	<ul style="list-style-type: none"> <li>If a fire starts, it is likely to be controlled in these conditions and homes can provide safety</li> <li>Be aware of how fires can start and reduce the risk</li> </ul>
LOW-MODERATE 0-11	<ul style="list-style-type: none"> <li>Controlled burning may occur in these conditions if it is safe – check to see if permits apply.</li> </ul>

Figure 8 – Fire Danger Ratings <sup>8</sup>

- Classification of vegetation** - This is viewed out to 100 metres from the asset/s, further (150m) if classified fuels are continuous, **view vegetation as if it is in its worst state or condition** (stubble will be classified as Grassland, prescribed burnt forest is still classified as forest).
- Fuel loads and vegetation ratings** - These are taken into account using AS3959-2009 methodology.
- Separation Distance** - from asset/s to classified vegetation, which includes the Asset Protection Zone (20 metres) and the Hazard Separation Zone (80 metres).

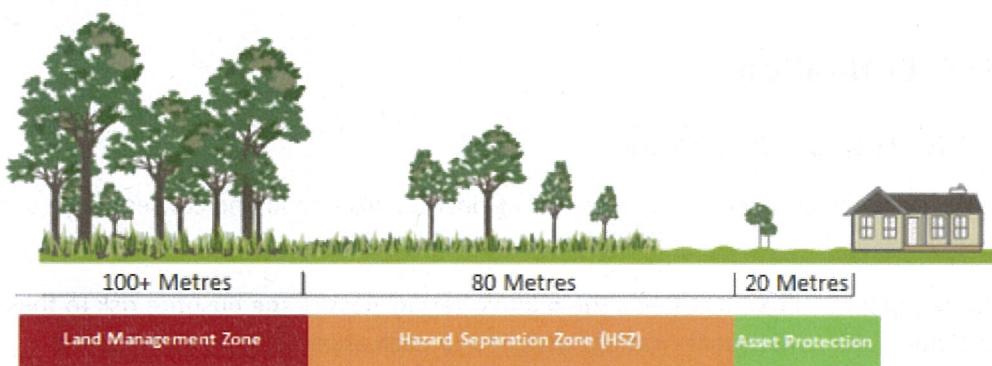


Figure 9 – Bushfire Management Zones <sup>9</sup>

- Effective slope** - under the classified vegetation.

<sup>8</sup> Source: Department of Fire and Emergency Services

<sup>9</sup> Bushfire Risk Management Planning Handbook, Department of Fire and Emergency Services

- **Fire spread mechanisms**
  - Ember attack – noting that over 90% of houses destroyed or damaged by bushfire are ignited by ember attack.
  - Radiant heat.
  - Direct flame contact.

#### 4.3.3 Assessment of Environmental Assets

Using available biological information and fire history data, environmental assets with a known minimum fire threshold were assessed to determine if they were at risk from bushfire, within the five year life of the BRM Plan. Environmental assets that would not be adversely impacted by bushfire within the five year period have not been included and assessed in the BRM Plan. The negative impact of a fire on these assets (within the period of this BRM Plan) was determined to be minimal, and may even be of benefit to the asset and surrounding habitat.

#### 4.3.4 Local Government Asset Risk Summary

A risk profile for the local government is provided in the summary table below. This table shows the proportion of assets at risk from bushfire in each risk category at the time the BRM Plan was endorsed.

Table 12 – Local Government Asset Risk Summary

Risk Rating Asset Category	Low	Medium	High	Very High	Extreme
Human Settlement	4.05 %	6.65 %	17.7 %	24 %	24.4 %
Economic			1.1 %	17.7 %	
Environmental	0.4 %	0.75 %	1.8 %	1.5 %	
Cultural					

The ‘Guidelines for Preparing a Bushfire Risk Management Plan’ requires that only assets considered of value and vulnerable to fire are to be included in this plan consequently not all assets within the Shire have been included in this assessment.

### 5. Risk Evaluation

#### 5.1 Evaluating Bushfire risk

The risk rating for each asset has been assessed against the likelihood and consequence descriptions to ensure:

- The rating for each asset reflects the relative seriousness of the bushfire risk to the asset;
- Likelihood and consequence ratings assigned to each asset are appropriate; and
- Local issues have been considered.

## 5.2 Treatment Priorities

The treatment priority for each asset has been automatically assigned by BRMS, based on the asset's risk rating. Table 10 shows how likelihood and consequence combine to give the risk rating and subsequent treatment priority for an asset.

Table 13 – Treatment Priorities

Consequence Likelihood	Minor	Moderate	Major	Catastrophic
Almost certain	3D (High)	2C (Very High)	1C (Extreme)	1A (Extreme)
Likely	4C (Medium)	3A (High)	2A (Very High)	1B (Extreme)
Possible	5A (Low)	4A (Medium)	3B (High)	2B (Very High)
Unlikely	5C (Low)	5B (Low)	4B (Medium)	3C (High)

## 5.3 Risk Acceptability

'Low' and 'Medium' Risks were not considered to require specific treatment during the life of this BRM Plan. They will be managed by routine local government wide controls and monitored for any significant change in risk.

In most circumstances risk acceptability and treatment will be determined by the land owner, in collaboration with local government and fire agencies. However, as a general rule, the following courses of action have been adopted for each risk rating.

Table 14 – Criteria for Acceptance of Risk and Course of Action

Risk Rating	Criteria for Acceptance of Risk	Course of Action
Extreme (Priorities 1A, 1B, 1C)	Only acceptable with excellent controls. Urgent treatment action is required. Treatment plans to be explored and implemented. Local Government Wide Controls are not enough to adequately manage the risk. Immediate attention required as a priority.	Routine controls are not enough to adequately manage the risk. Immediate attention required as a priority. Specific action is required in the first year of the BRM Plan with an annual review via BRMS reporting prior to each fire season, conducted by the nominated Shire representative. Refer Section 7.2

<b>Very High</b> (Priorities 2A, 2B, 2C)	Only acceptable with excellent controls. Treatment action is required. Local Government Wide Controls are not enough to adequately manage the risk.	Routine controls are not enough to adequately manage the risk. Specific action is required within the first two years of the BRM Plan. Bi annual review via BRMS reporting prior to each fire season, conducted by the nominated Shire representative. Refer Section 7.2
<b>High</b> (Priorities 3A, 3B, 3C, 3D)	Only acceptable with adequate controls. Treatment action may be required.	Specific action may be required. Risk may be managed with routine controls and/or specific procedures and is subject to a review every 2 years via BRMS reporting prior to each fire season, conducted by the nominated Shire representative. Refer Section 7.2
<b>Medium</b> (Priorities 4A, 4B, 4C)	Acceptable with adequate controls. Treatment action is not required but risk must be monitored regularly.	Specific action may not be required. Risk may be managed with routine controls and/or procedures and monitored as required throughout the life of the BRM Plan. Refer Section 7.2
<b>Low</b> (Priorities 5A, 5B, 5C)	Acceptable with adequate controls. Treatment action is not required but risk must be monitored.	Need for specific action is unlikely. Risk will be managed with routine controls and monitored as required. Refer Section 7.2

## 6. Risk Treatment

The purpose of risk treatment is to reduce the likelihood of a bushfire occurring and/or the potential impact of a bushfire on the community, economy and environment. This is achieved by implementing treatments that modify the characteristics of the hazard, the community or the environment.

There are many strategies available to treat bushfire risk. The treatment strategy (or combination of treatment strategies) selected will depend on the level of risk and the type of asset being treated. Not all treatment strategies will be suitable in every circumstance.

### 6.1 Local Government-Wide Controls

Local government-wide controls are activities that reduce the overall bushfire risk within the Shire of York. These types of treatments are not linked to specific assets, and are applied across all or part of the local government as part of normal business or due to legislative requirements. The following controls are currently in place across the Shire of York:

- *Bush Fires Act 1954* Section 33 notices, including applicable fuel management requirements, firebreak standards and annual enforcement programs;
- Declaration and management of Prohibited Burn Times, Restricted Burn Times and Total Fire Bans for the local government;
- Public education campaigns and the use of DBCA and DFES state-wide programs, tailored to suit local needs;
- State-wide arson prevention programs developed in conjunction with WA Police and DFES;
- State planning framework and local planning schemes, implementation of appropriate land subdivision and building standards in line with DFES, Department of Planning and Building Commission policies and standards; and
- Monitoring performance against the BRM Plan and reporting annually to the local government council and OBRM.
- Shire of York Annual Weed Eradication Programme.
- Other practices and programs undertaken by local government or state agencies that contribute to bushfire risk management within the local government, including controls in place under state government policies, agreements or memorandums of understanding. These include:
  - Department of Parks and Wildlife Master Burn Program
  - Water Corporation Bushfire Risk Management Plan
  - Western Power annual asset inspection and vegetation management program
  - Code of Practice for Timber Plantations in Western Australia
  - Department of Education Memorandum of Understanding
  - Main Roads WA Bridge Assessment and Maintenance Works Plan

A Local Government-Wide Controls and multi-agency work plan has been developed and is attached at **Appendix Three**. The plan details work to be undertaken as a part of normal business, to improve current controls or to implement new controls to better manage bushfire risk across the local government.

## 6.2 Asset-Specific Treatment Strategies

Asset-specific treatments are implemented to protect an individual asset or group of assets, identified and assessed in the BRM Plan as being at risk from bushfire. There are six asset specific treatment strategies:

- **Fuel management** - Treatment reduces or modifies the bushfire fuel through manual, chemical and prescribed burning methods;
- **Ignition management** - Treatment aims to reduce potential human and infrastructure sources of ignition in the landscape;
- **Preparedness** - Treatments aim to improve access and water supply arrangements to assist firefighting operations;
- **Planning** - Treatments focus on developing plans to improve the ability of firefighters and the community to respond to bushfire; and
- **Community Engagement** - Treatments seek to build relationships, raise awareness and change the behaviour of people exposed to bushfire risk.
- **Other** - Local government-wide controls, such as community education campaigns and planning policies, will be used to manage the risk. Asset-specific treatment is not required or not possible in these circumstances.

## 6.3 Determining the Treatment Schedule

Efforts will be made to finalise the Treatment Schedule within six months of this BRM Plan being endorsed by council. The Treatment Schedule will be developed in broad consultation with land owners and other stakeholders.

Land owners are ultimately responsible for treatments implemented on their own land. This includes any costs associated with the treatment and obtaining the relevant approvals, permits or licences to undertake an activity. Where agreed, another agency may manage a treatment on behalf of a land owner. However, the onus is still on the land owner to ensure treatments detailed in this BRM Plan are completed.

## 6.4 Privacy Issues and Release of Information

Information captured through the Bushfire Risk Management System (BRMS) includes some sensitive data and information such as the location of culturally and environmentally significant sites, land ownership details and risk information.

Additionally the Asset Risk Register is, by its nature, a living evolving document. Appending a copy of the Asset Risk Register report to the BRM Plan only provides a snapshot of the asset and risk information for a particular point in time and does not show changes in the risk profile over time.

The Shire of York, as a matter of course, will provide reports to stakeholders that detail the assets and treatments that the stakeholders (landowners) have responsibility for in order to actively encourage and support the implementation, monitoring and review of agreed actions.

## 7. Monitoring and Review

Monitoring and review processes are in place to ensure that the BRM Plan remains current and valid. These processes are detailed below to ensure outcomes are achieved in accordance with the *Communication Strategy and Treatment Schedule*.

### 7.1 Review

A comprehensive review of this BRM Plan will be undertaken at least once every five years, from the date of council endorsement. Significant circumstances that may warrant an earlier review of the BRM Plan include:

- Changes to the BRM Plan area, organisational responsibilities or legislation;
- Changes to the bushfire risk profile of the area; or
- Following a major fire event.

### 7.2 Monitoring

BRMS will be used to monitor the risk ratings for each asset identified in the BRM Plan and record the treatments implemented. Risk ratings are reviewed on a regular basis. New assets will be added to the *Asset Risk Register* when they are identified. Currently the CESM (reporting to the Emergency Management, Infrastructure and Development Services Manager) and the Asset Manager have both undertaken BRMS training and it is anticipated they, or the CEO's delegated person, will undertake the ongoing maintenance and review of the BRM Plan. The availability of funding will play a key role in determining how this issue is managed in the future.

As per table 14, the Shire of York has determined that assets rated:

- 'Extreme' will be re-evaluated annually, prior to the bushfire season
- 'Very High' will be re-evaluated every second year (as a minimum)
- 'High' will be re-evaluated every third year
- 'Medium' will be reviewed every fourth year
- 'Low' will be reviewed every fifth year

A re-evaluation process would involve completing an evaluation of treatments already completed in relation to the specific asset using the Bushfire Risk Management System and identifying further treatments with a view to further reducing the risk profile of the asset. This should also include a broader review to determine if any conditions within the local environment have changed (i.e. unplanned fire events, new developments, flood events) that may impact upon the risk assessment. Ideally the re-evaluation process for 'extreme' and 'very high' risk assets would include a site visit.

A review process would involve determining if any conditions with the local context have changed (ie developments) that may impact upon the assets risk profile. The review process can be limited to a 'desk top' spatial mapping review.

### 7.3 Reporting

Council will receive an annual report prior to the start of each fire season detailing the progress of the plan and the treatments as well as an overview of the current risk ratings within the Shire. Following receipt of this report council will produce a publically distributed statement updating the community on the details contained therein.

The Shire of York will submit an annual report to OBRM each year summarising progress made towards implementation of the BRM Plan.

## 8. Glossary

<b>Asset</b>	A term used to describe anything of value that may be adversely impacted by bushfire. This may include residential houses, infrastructure, commercial, agriculture, industry, environmental, cultural and heritage sites.
<b>Asset Category</b>	There are four categories that classify the type of asset – Human Settlement, Economic, Environmental and Cultural.
<b>Asset Owner</b>	The owner, occupier or custodian of the asset itself. Note: this may differ from the owner of the land the asset is located on, for example a communication tower located on leased land or private property.
<b>Asset Register</b>	A component within the Bushfire Risk Management System used to record the details of assets identified in the Bushfire Risk Management Plan.
<b>Asset Risk Register</b>	A report produced within the Bushfire Risk Management System that details the consequence, likelihood, risk rating and treatment priority for each asset identified in the Bushfire Risk Management Plan.
<b>Bushfire</b>	Unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires both with and without a suppression objective. <sup>10</sup>
<b>Bushfire Management Plan</b>	A document that sets out short, medium and long term bushfire risk management strategies for the life of a development. <sup>11</sup>
<b>Bushfire Hazard</b>	The Hazard posed by the classified vegetation, based on the vegetation category, slope and separation distance.
<b>Bushfire risk management</b>	A systematic process to coordinate, direct and control activities relating to bushfire risk with the aim of limiting the adverse effects of bushfire on the community.
<b>Consequence</b>	The outcome or impact of a bushfire event.
<b>Draft Bushfire Risk Management Plan</b>	The finalised draft Bushfire Risk Management Plan (BRM Plan) is submitted to the OBRM for review. Once the OBRM review is complete, the BRM Plan is called the 'Final BRM Plan' and can be progressed to local government council for endorsement.
<b>Emergency Risk Management Plan</b>	A document (developed under <i>State Emergency Management Policy 2.9</i> ) that describes how an organisation(s) intends to undertake the activities of emergency risk management based on minimising risk. These plans help

<sup>10</sup> Australasian Fire and Emergency Service Authorities Council 2012, *AFAC Bushfire Glossary*, AFAC Limited, East Melbourne.

<sup>11</sup> Western Australian Planning Commission 2015, *State Planning Policy 3.7: Planning in Bushfire Prone Areas*, WAPC, Perth.

	inform the ongoing development of Local Emergency Management Arrangements (LEMA) and Westplans.
<b>Geographic Information System (GIS)</b>	A data base technology, linking any aspect of land-related information to its precise geographic location. <sup>12</sup>
<b>Geographic Information System (GIS) Map</b>	The mapping component of the Bushfire Risk Management System. Assets, treatments and other associated information is spatially identified, displayed and recorded within the GIS Map.
<b>Land Owner</b>	The owner of the land, as listed on the Certificate of Title; or lessor under a registered lease agreement; or other entity that has a vested responsibility to manage the land.
<b>Likelihood</b>	The chance of something occurring. In this instance, the chance of a bushfire igniting, spreading and reaching the asset.
<b>Locality</b>	The officially recognised boundaries of suburbs (in cities and larger towns) and localities (outside cities and larger towns).
<b>Planning Area</b>	A geographic area determined by the local government which is used to provide a suitable scale for risk assessment and stakeholder engagement.
<b>Priority</b>	See Treatment Priority.
<b>Recovery Cost</b>	The capacity of an asset to recover from the impacts of a bushfire.
<b>Responsible Person</b>	The person responsible for planning, coordinating, implementing, evaluating and reporting on a risk treatment.
<b>Risk acceptance</b>	The informed decision to accept a risk, based on the knowledge gained during the risk assessment process.
<b>Risk analysis</b>	The application of consequence and likelihood to an event in order to determine the level of risk.
<b>Risk assessment</b>	The systematic process of identifying, analysing and evaluating risk.
<b>Risk evaluation</b>	The process of comparing the outcomes of risk analysis to the risk criteria in order to determine whether a risk is acceptable or tolerable.
<b>Risk identification</b>	The process of recognising, identifying and describing risks.

<sup>12</sup> Landgate 2015, *Glossary of terms*, Landgate, Perth

<b>Risk Manager</b>	The organisation or individual responsible for managing a risk identified in the Bushfire Risk Management Plan; including review, monitoring and reporting.
<b>Risk Register</b>	A component within the Bushfire Risk Management System used to record, review and monitor risk assessments and treatments associated with assets recorded in the Bushfire Risk Management Plan.
<b>Risk treatment</b>	A process to select and implement appropriate measures undertaken to modify risk.
<b>Rural</b>	Any area where in residences and other developments are scattered and intermingled with forest, range, or farm land and native vegetation or cultivated crops. <sup>13</sup>
<b>Rural Urban Interface (RUI)</b>	The line or area where structures and other human development adjoin or overlap with undeveloped bushland. <sup>14</sup>
<b>Slope</b>	The angle of the ground's surface measured from the horizontal.
<b>Tenure Blind</b>	An approach where multiple land parcels are consider as a whole, regardless of individual ownership or management arrangements.
<b>Treatment</b>	An activity undertaken to modify risk, for example a prescribed burn.
<b>Treatment Objective</b>	The specific aim to be achieved or action to be undertaken, in order to complete the treatment. Treatment objectives should be specific and measurable.
<b>Treatment Manager</b>	The organisation, or individual, responsible for all aspects of a treatment listed in the Treatment Schedule of the Bushfire Risk Management Plan, including coordinating or undertaking work, monitoring, reviewing and reporting.
<b>Treatment Priority</b>	The order, importance or urgency for allocation of funding, resources and opportunity to treatments associated with a particular asset. The treatment priority is based on an asset's risk rating.
<b>Treatment Schedule</b>	A report produced within the Bushfire Risk Management System that details the treatment priority of each asset identified in the Bushfire Risk Management Plan and the treatments scheduled.

<sup>13</sup> Australasian Fire and Emergency Service Authorities Council 2012, *AFAC Bushfire Glossary*, AFAC Limited, East Melbourne

<sup>14</sup> Australasian Fire and Emergency Service Authorities Council 2012, *AFAC Bushfire Glossary*, AFAC Limited, East Melbourne

<b>Treatment Strategy</b>	The broad approach that will be used to modify risk, for example fuel management.
<b>Treatment Type</b>	The specific treatment activity that will be implemented to modify risk, for example a prescribed burn.
<b>Vulnerability</b>	The susceptibility of an asset to the impacts of bushfire.

## 9. Common Abbreviations

APZ	Asset Protection Zone
BRMP	Bushfire Risk Management Planning
BRMS	Bushfire Risk Management System
CALD	Culturally and Linguistically Diverse
DBCA	Department of Biodiversity, Conservation and Attractions - Parks and Wildlife Service
DEMC	District Emergency Management Committee
DFES	Department of Fire and Emergency Services
ERMP	Emergency Risk Management Plan
FFDI	Forest Fire Danger Index
FMP	Fire Management Plan
GFDI	Grassland Fire Danger Index
GIS	Geographic Information System
HSZ	Hazard Separation Zone
JAFFA	Juvenile and Family Fire Awareness
LEMA	Local Emergency Management Arrangements
LEMC	Local Emergency Management Committee
LG	Local Government
LMZ	Land Management Zone
OBRM	Office of Bushfire Risk Management
P&WS	Department of Biodiversity, Conservation and Attractions - Parks and Wildlife Service
SEMC	State Emergency Management Committee
SLIP	Shared Land Information Platform
WAPC	Western Australian Planning Commission

## **Appendices**

- 1      Communication Strategy**
- 2      Planning Area Map**
- 3      Local Government-Wide Controls, Multi-Agency Treatment Work Plan**