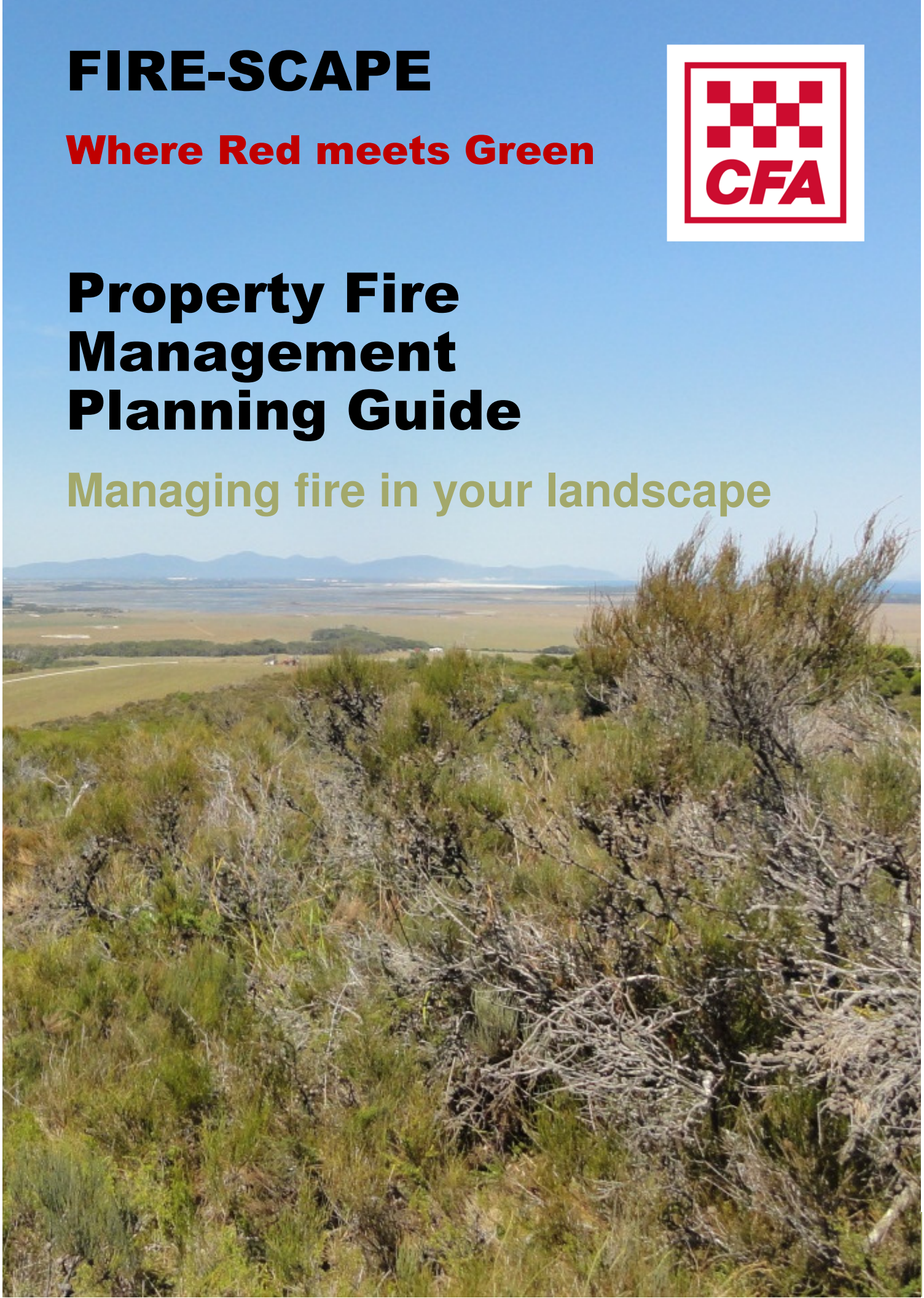
FIRE-SCAPE

Where Red meets Green

Property Fire Management Planning Guide

Managing fire in your landscape



Preparing a property fire management plan

This guide is one of several resources developed for the pilot Fire-Scape program. Fire-Scape aims to support local landholders and managers to develop balanced native vegetation management plans regarding fire in the wider landscape.

This guide is to be used by participants that attend both Workshops 1 and 2. Participants are encouraged to use this guide in the time between Workshops to develop your own property fire management plans. Please bring your property fire management plan with steps 1-4 completed to Workshop 2. This will provide more detail to the Community Burn Strategy being developed, and additional information delivered during Workshop 2 will enable you to better complete your property fire management plan.

You may need to set aside a few hours to complete the following plan. This preparation and your interest in fire management planning are greatly appreciated.

Should you require assistance in developing you property management plan, or to obtain a base map of your own property, please contact your Fire-Scape Facilitator.

Based on NSW Hotspots Fire Project resources, this guide was compiled by for use in the Fire-Scape pilot program 2013.

For more information on Fire-Scape, please contact:
CFA on 9262 8444 and ask for your local Vegetation Management Officer

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Preparing a Property Management Plan

The following steps can help you prepare your property fire management plan:

Identify your property and productivity assets and map them.

- Where are your important infrastructure and natural features?
- This is something you can do in more detail at home using this guide.

Identify and map the vegetation types across your property.

- Make a note of the types and structures of vegetation you have on your property.
- What are the Tolerable Fire Intervals (TFI's) recommended for each type?
- How often have the Ecological Vegetation Classes (EVC's) burned in the past? Note when and where fires have occurred.
- Is the past fire history consistent with the recommended TFI's? Which parts of your property do not meet these recommendations?
- What actions could you take to bring fire-frequency on your property into line with the recommendations?

Develop and maintain a mosaic of different stages of vegetation age.

- Do you have the resources to maintain parts of your property at different ages using fire to generate natural regrowth?
- Could you work with your neighbours to make this happen on a larger scale?

Monitor and Review.

- Keep a record of when fires occur and what areas they cover.
- Observe what happens to the vegetation, and to different species. Like all land management planning, fire planning is partly a matter of observation and responding to the needs of the land.
- Review your plan as you learn more.

WHAT YOU NEED TO GET STARTED

- **1 x A3 high resolution AERIAL PHOTO for your base property map**
- **2 x A3 transparency overlays**
- **Your mapping kit including:**
  - **Mapping pen set (black, blue, green, brown, yellow, red, purple)**
  - **Ruler**
  - **Masking tape (not supplied by this Pilot)**
  - **Methylated spirits and a cloth (not supplied by this Pilot)**

A Physical Property Layer

WHAT'S INVOLVED IN CREATING A PHYSICAL PROPERTY LAYER?

To create a physical property layer you will need to map your property infrastructure and built assets, water features and infrastructure, vegetation, and production areas.

Have you already undertaken Property Management Planning through Landcare, Department of Primary Industries (DPI), your local TAFE or as part of a regional or local natural resource management project?

☑ **YES** then you can use your existing plan, checking that your plan covers all of the simple steps outlined in this guide.

☒ **NO** then you need to compile some basic information about your property BEFORE the second Workshop. Please complete all the sections in this guide.

HOW IT WORKS

The mapping steps that form part of your fire management plan involve the creation of transparency overlays. At each step in this guide we have included examples of mapping overlays and 'notes' to help guide you. To work on an overlay, simply place the transparency over the top of your base property map, tape temporarily into place, and use mapping pens to mark on the features freehand. Aim to maintain scale and proportion (if you make a mistake, you can remove pen marks using methylated spirits and a cloth).

At the workshop, you will gain the additional information to work on more overlays, progressively building up the layers. When making planning decisions, these overlays can be viewed over your base property map singularly, all together, or as different combinations.

Standard symbols and colours for mapping are outlined in this guide based on those commonly used for mapping processes. Use the Property Mapping Symbols in your legend.

The Steps Involved

In this guide, there are **four steps** to the first transparent overlay and **two steps** for the second overlay. General information relating to each step will be discussed at Workshop 1 and 2, and participants are encouraged to add more specific property detail in between the workshops.

OVERLAY 1 (WORKSHOP 1)

STEP 1: Infrastructure and built assets (BLACK)

STEP 2: Water features and infrastructure (BLUE)

STEP 3: Native flora and fauna (GREEN)

STEP 4: Production areas (BROWN AND YELLOW)

OVERLAY 2 (WORKSHOP 2)

STEP 5: Fire history (RED)

STEP 6: Planned burn sites (PURPLE)

Overlay 1

STEP 1: INFRASTRUCTURE AND BUILT ASSETS

This step requires you to map infrastructure and built assets onto Overlay 1.

Before doing so, record the following directly onto your base property map in BLACK (refer to Property mapping Symbols):

1. Property name
2. Scale
3. Boundaries
4. Direction of prevailing winds
5. North arrow

Infrastructure and built assets include things like residential buildings and other major buildings such as farm sheds, machinery sheds and shop fronts (e.g. cellar door).

Using Overlay 1, identify and map the following built assets in BLACK:

1. House, sheds and other buildings
2. Public roads
3. Power lines
4. Internal fence lines
5. Gates
6. Farm tracks
7. Stock yards
8. Pumps
9. Other infrastructure or built assets
10. Other assets of importance

STEP 2: WATER FEATURES AND INFRASTRUCTURE

Identify and map the following features & infrastructure relating to water in BLUE onto Overlay 1:

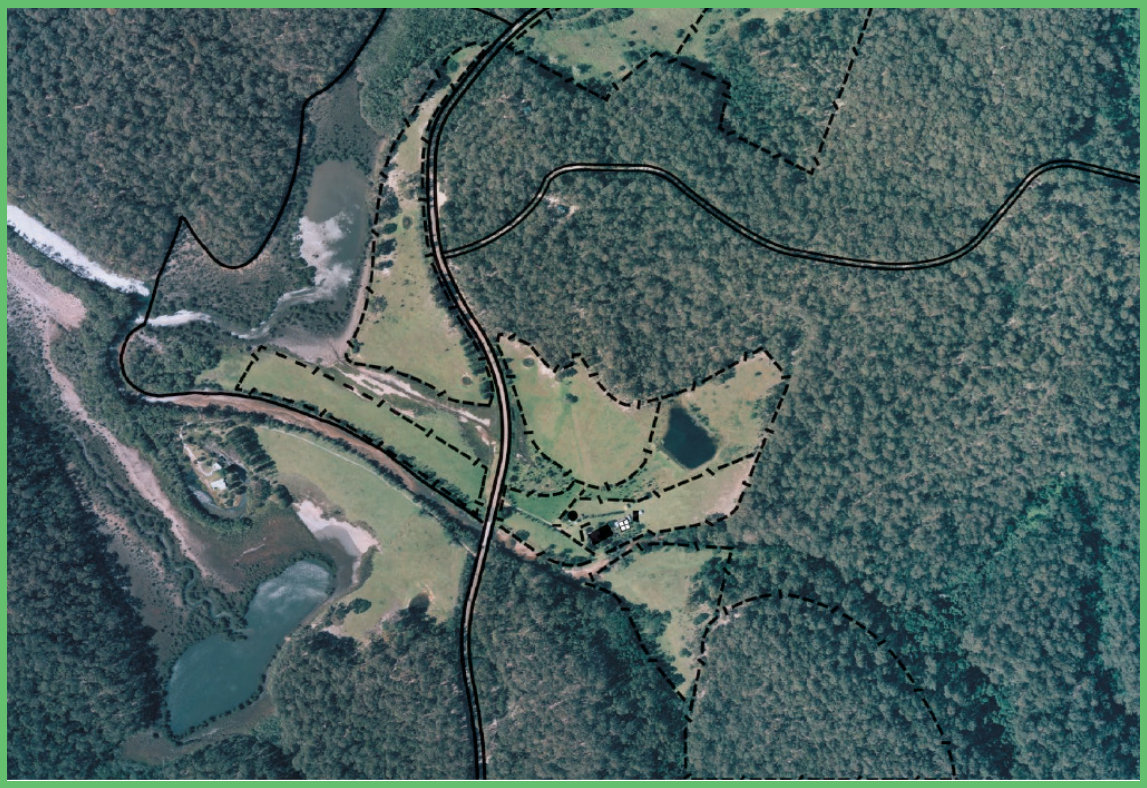
1. Permanent rivers & creeks
2. Intermittent (temporary) rivers & creeks
3. Major water pipes
4. Windmills
5. Water tanks
6. Water troughs
7. Farm dams
8. Permanent irrigation lines

Footloose Farm

W (Spring)

Scale 1:4000

N



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Infrastructure & Built Assets
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Footloose Farm

W (Spring)

Scale 1:4000

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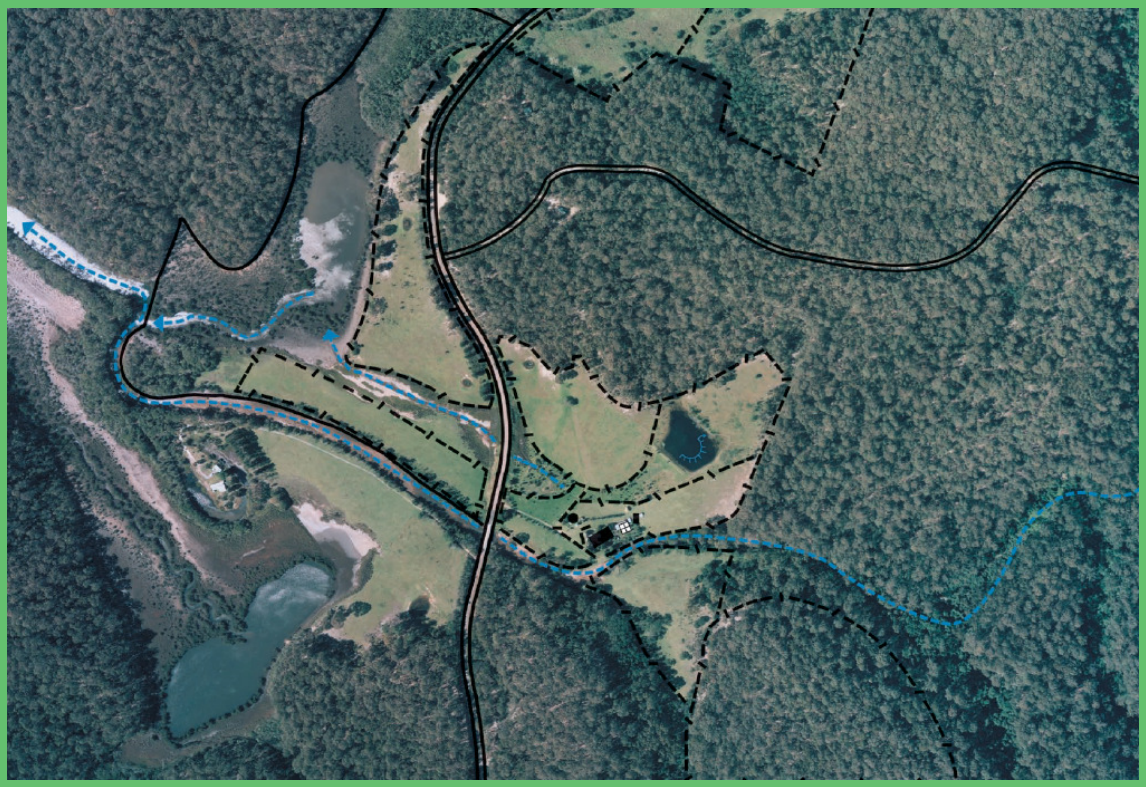

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Infrastructure & Built Assets
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Water
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STEP 3: NATIVE FLORA AND FAUNA

Still on Overlay 1, this step requires you to map your native vegetation, identify locations of known rare or threatened native plants and animals, and make some notes.

First, identify the boundaries in GREEN of each area of native vegetation on your property (i.e. each 'patch' of vegetation that is separate from other patches). Native vegetation can include remnant vegetation, wetlands, native forest, vegetated creek lines, plantings, regeneration and regrowth. Label each native vegetation area NV 1, NV 2, NV 3 etc.

Next, use the Site Notes (at the end of this guide) to make brief notes as to the age and condition of the vegetation areas as well as any other personal comments or observations.

The Workshops look at Ecological Vegetation Classes and specific important flora and fauna species in more detail. However, if you already know which EVCs or species you have on your property and where their boundaries lie, you may want to add these details…*If you do NOT have this knowledge, proceed to Step 4*.

If you do know which EVCs occur on your property and where their boundaries lie add this information to your map. Use a slashed GREEN line to mark the boundaries between each EVC. If you know of the location of a particular occurrence of a significant native plant or animal species, mark the species, location and date on your map in GREEN also.

Some examples of local vegetation types, EVCs and significant species you might have on your property include:

Vegetation Type	EVC	Native Flora	Native Fauna
Dry sclerophyll	Riparian Forest	Currant-wood	Long-nosed Potoroo
Shrub/grass	Riparian Scrub/Swampy Riparian Woodland Complex	Netted daisy-bush	Spot-tailed Quoll
Rainforest	Heathy Woodland	Starry daisy-bush	Grey Goshawk
Freshwater wetland	Wet Heathland	Wiry Bossiaea	Brush-tailed Phascogale
Creekside	Lowland Forest	Showy lobelia	Common Dunnart
Native grassland	Herb-rich Foothill Forest		

Make any notes on your NOTES ON NATIVE FLORA AND FAUNA worksheet. Your workshop facilitator will provide more information to assist with vegetation identification at the workshops.

STEP 4: PRODUCTION AREAS

Identify and map your production areas onto Overlay 1 as shown in the legend on PROPERTY MAPPING SYMBOLS.

Use a YELLOW PEN for shading and hatching and a BROWN PEN for labelling. Identify and map the following:

1. Cleared broadacre production areas (e.g. grazing & cropping)
2. Intensive production areas (e.g. viticulture, horticulture, aquaculture, feedlots etc.)
3. Production areas within native vegetation areas (e.g. farm forestry, agroforestry, grazing etc.

Footloose Farm

W (Spring)

Scale 1:4000

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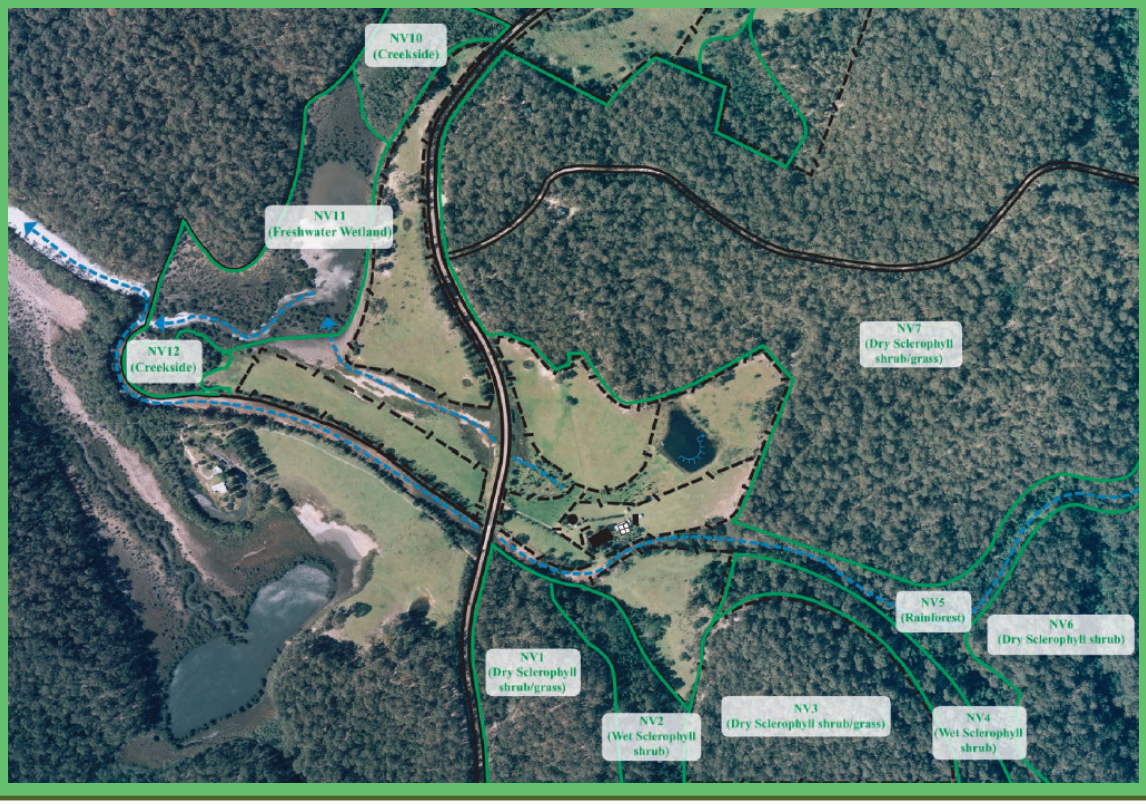

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Flora Fauna
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Footloose Farm

W (Spring)

Scale 1:4000

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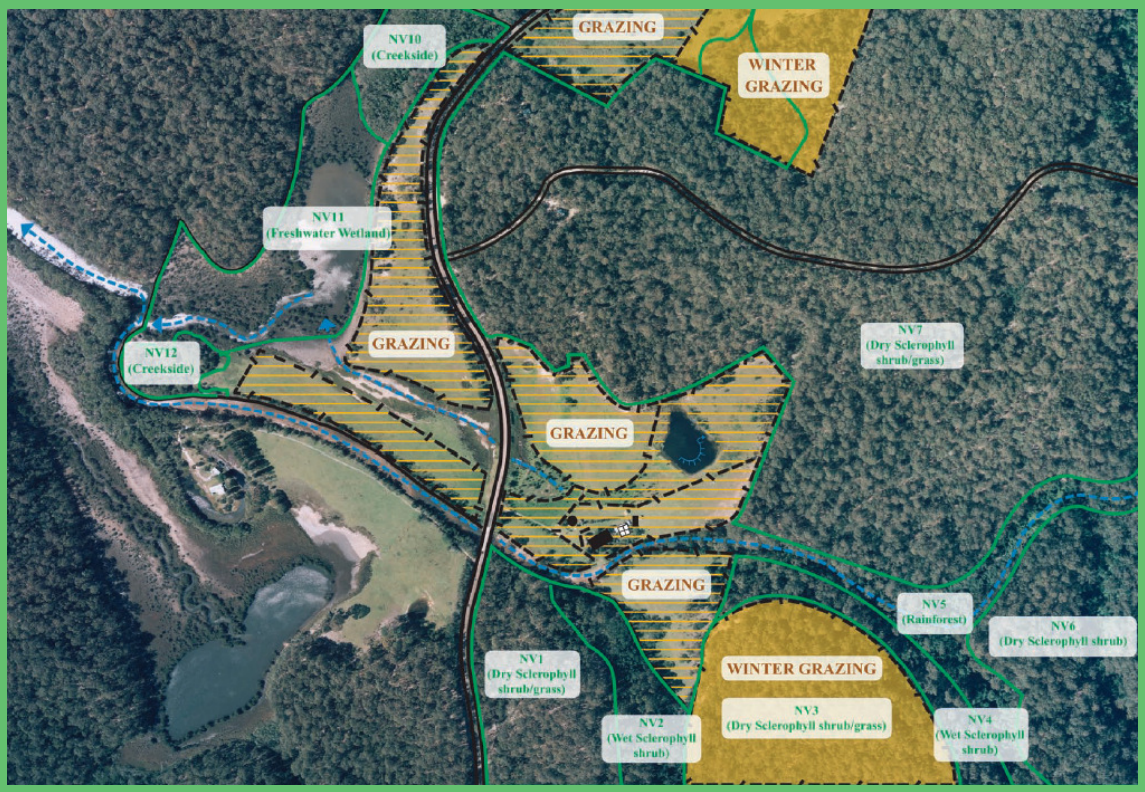

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Flora Fauna
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Property Mapping Symbols

Overlay 1 (Workshop 1)

Colour	Feature	Symbol	Notes
	INFRASTRUCTURE AND BUILT ASSETS		
	Property name	"Footloose Farm"	
	Scale	1:4000	Scale may differ from example
	Boundary		
	Direction of prevailing winds	W (summer)	Include season in brackets
	North Arrow	N	
	House, sheds and other buildings		Solid BLACK infill
	Public roads		
	Power lines	V V V V V	
	Internal fence lines	- - - / - - - / - - - / - - -	
	Gates		
	Farm tracks		
	Stock yards		
	Pumps	P	
	Other infrastructure or important assets	Solar panel	BLACK outline and name the asset
	WATER FEATURES AND INFRASTRUCTURE		
	Permanent rivers and creeks	*Fancy Free River*	Use a solid BLUE line, indicate name if known and use arrows to indicate direction of flow
	Intermittent (temporary) rivers and creeks	*Fancy Free River*	As above but using a dashed BLUE line
	Major water pipes	___ W ___ W ___ W ___	

Colour	Feature	Symbol	Notes
	Windmills		
	Water tanks		
	Water troughs		
	Farm dams		
	Permanent irrigation lines	IS	
NATIVE VEGETATION			
	Native vegetation areas		Mark in boundary of native vegetation using a GREEN line Label each area as NV1, NV2 etc
	Ecological Vegetation Classes		Mark in boundary of EVC using a dashed GREEN line Label each EVC
	Specific native flora	*Wiry Bossiaea 13/03/13*	Mark in location of significant plant in GREEN Label each with the species name and date when seen
	Specific native fauna	*Spot-tailed Quoll Feb 2002*	Mark in location of significant animal in GREEN Label each with the species name and date when seen
PRODUCTION AREAS			
	Cleared broadacre production areas. e.g. grazing and/or cropping	GRAZING	Hatch area in YELLOW with horizontal lines, write any details in BROWN
	Intensive production areas e.g. horticulture	ORCHARDS	Hatch area in YELLOW with vertical lines, write any details in BROWN
	Production areas within native vegetation	Timber, winter rough grazing	Shade native vegetation areas where you undertake production activities in YELLOW, write any details in BROWN

Overlay 2 (Workshop 2)

STEP 5: FIRE HISTORY

Now that you have created a basic physical layer for your property, you can begin to look at your property in relation to fire. This is important information for guiding decisions regarding planned burns as well as how you might respond to unplanned fire.

This process requires you to record the passage of fire in the local landscape using the PROPERTY MAPPING SYMBOLS in this section of the guide. Write down anything you know about this fire history onto the Site Notes section provided at the back of this guide. These notes are just for your own personal use.

Where possible, try to record such things as:

- Was the fire planned or unplanned?
- What was the extent of the fire (what area did it cover)?
- What year did the fire go through?

This knowledge could come from different sources, for instance:

- **Personal knowledge** – you know about fires that have happened over time and know exactly where they have been.
- **Personal observation** – you have observed the effects of fire:
  - Treed areas showing scorch marks
  - Burnt out fence posts
  - Plant species that regenerate after fire are thick and/or common in certain areas.
- **Interpretation** – records from the previous landholder, old photos etc.
- **Neighbours and fire brigade** - other people have seen fires happen over time and know pretty well where they have been.
- **Official information** – you have copies of fire history maps etc.

Your completed overlay tells a story of past fire events in the area which is useful for devising effective and appropriate fire management actions and strategies.

Footloose Farm

W (Spring)

Scale 1:4000

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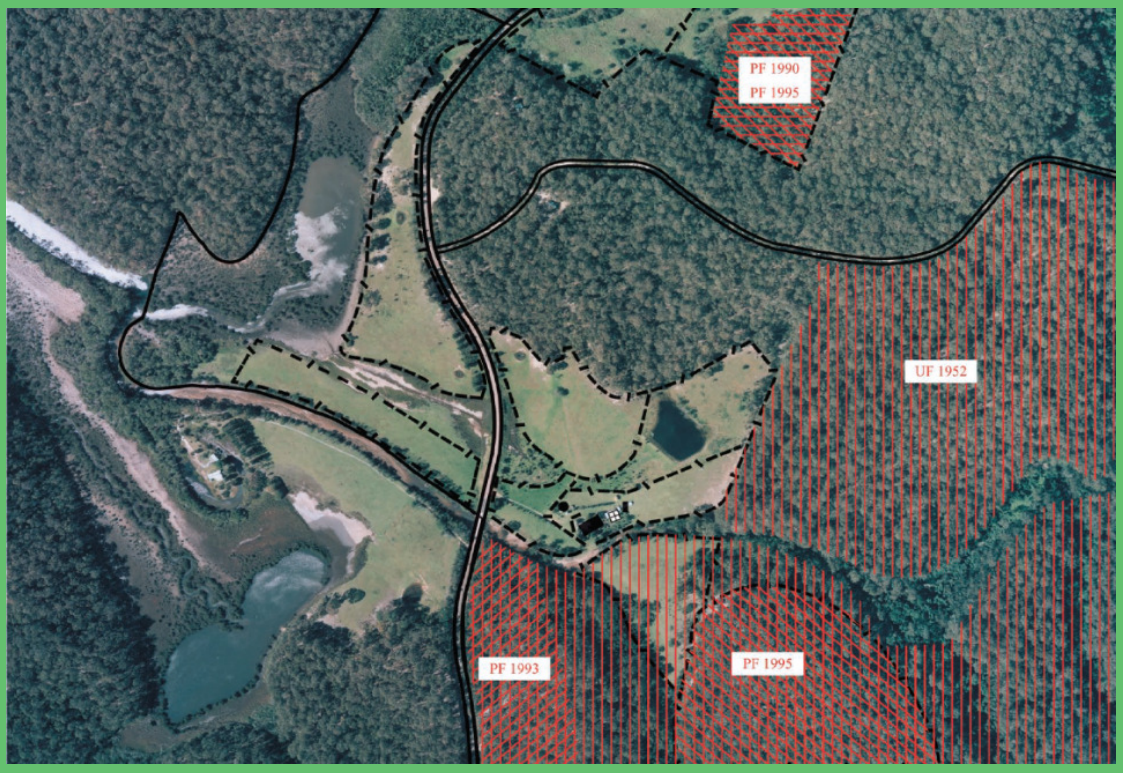

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Water
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Flora Fauna
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Production
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Fire History
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Footloose Farm

W (Spring)

Scale 1:4000

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LEGEND

Infrastructure & Built Assets
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Water
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Flora Fauna
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Production
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Fire History
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Planned Burns
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STEP 6: PLANNED BURN SITES

Now you are ready to identify and record your areas to include in your burn plan. In PURPLE mark out the boundaries of the areas you have identified to be managed for fire. Label each site PB 1, PB 2, PB 3 etc.

Next, use the CFA Fire and Biodiversity Monitoring Manual to make notes about:

1. The site description and size
2. Vegetation type, structure and Ecological Vegetation Classes
3. Fire History
4. Overall Fuel Hazard
5. Any other key features on this site

On the map of the property, include an approximate time frame or sequence of any burns on the property. You may mark the intended year and season of each burn.

This information will assist you to determine when, the method and how much to include to create an effective mosaic of vegetation and habitat on your property. Don't forget that managing these sites will also help reduce fuel hazards in bushfire.

Property Mapping Symbols

Overlay 2

Colour	Feature	Symbol	Notes
FIRE HISTORY			
	Planned fire		Record year alongside fire type, e.g. PF 2005 Indicate extent and recency by hatching in area of fire in RED as follows
	Unplanned fire		Record year alongside fire type, e.g. UF 2005 Indicate extent and recency as above
PLANNED BURN SITES			
	Planned burn sites		Mark in boundary of intended planned burn site using a PURPLE line Label each area in order of priority as PB 1, PB 2 etc You may wish to add the approximate year and season of each burn site.

SITE NOTES