

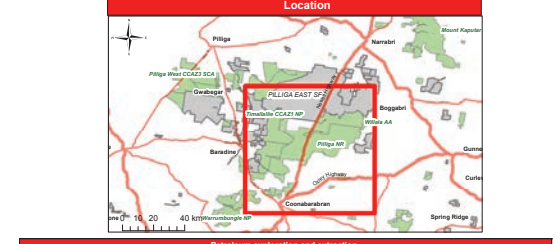
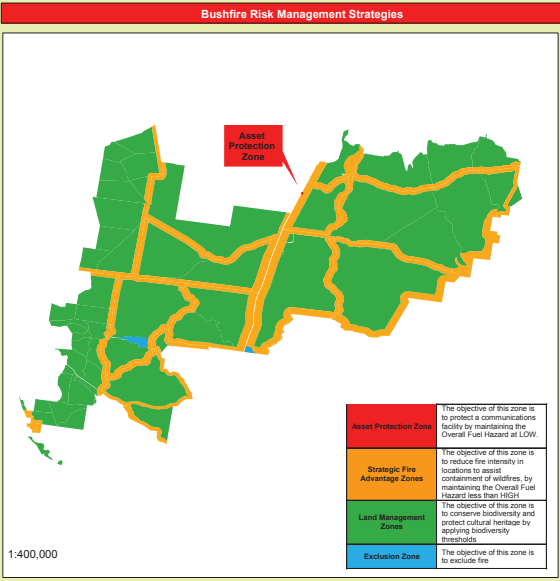
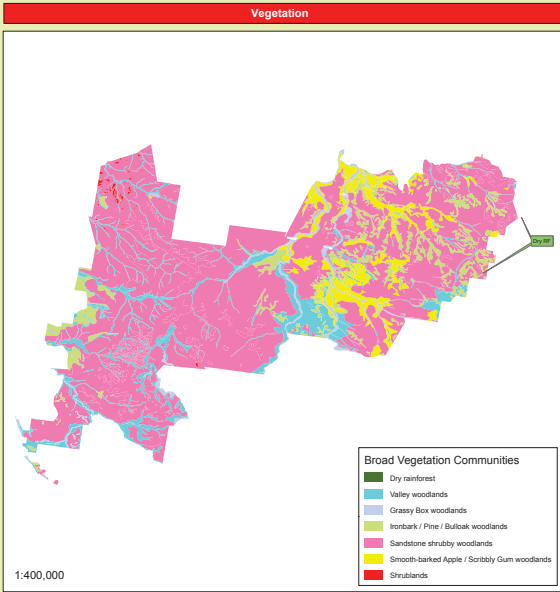
Pilliga East Fire Management Strategy 2016 - 2021
Page 1 of 3

Pilliga Nature Reserve
Willaella Aboriginal Area
Dandy Gorge Aboriginal Area
Timallialle National Park

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This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of Rural Fires Act 1987.
The NSW National Parks and Wildlife Service is part of the Office of Environment & Heritage.
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Contact: NPWS Northern Plains Region, PO Box 848 Narrabri NSW 2390. Ph: 6792 7350
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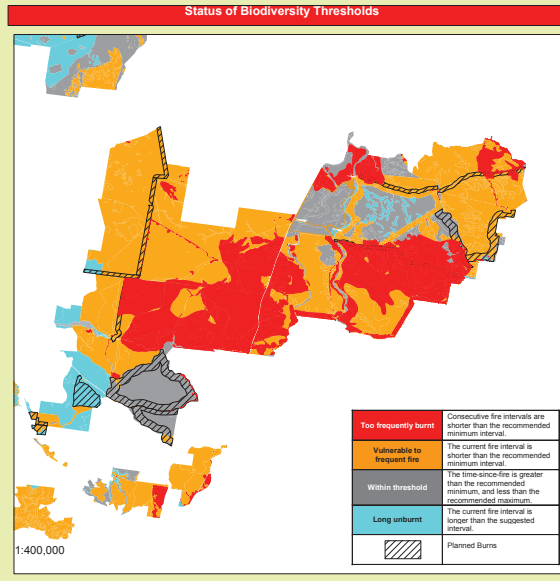
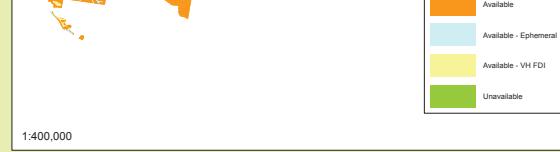
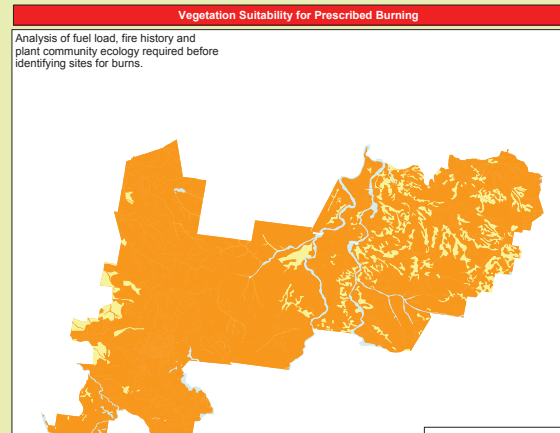
Plant Intent

The east Pilliga is a very fire prone landscape with many plant communities being burnt too frequently. This strategy aims to maximise burning effectiveness in strategic areas with help to contain the spread of wildfires while allowing thermally plant communities to return to fire frequencies that are within their desired minimum and maximum thresholds



Petroleum exploration and extraction

Areas of the Pilliga East State Conservation Area are subject to exploration licenses for coal seam gas (CSG). This fire management strategy will be reviewed as extraction activity increases and gas wells are located in close proximity to the NPWS estate. The review will ascertain if amendment to existing operational guidelines and fire management zones will be required.



Contact Information

Agency	Position / Location	Phone
National Parks & Wildlife Service	Duty Officer (24 hours) Barrington Area Office (Bus. hours)	0843 3330 0843 4000
NSW RFS Namoi Zone	Zone Manager Duty Officer	0427 051 124 0795 0770
NSW RFS Castlereagh Zone	Zone Manager Duty Officer	0429 305 713 0417 419 367
NSW RFS Liverpool Plains	Zone Manager Duty Officer	0427 308 845 1800 961 166
RFS Rural Fire Brigades	Borah Creek Brigade - David Toynton Barrington Brigade - Ian Watson Dandy Gorge - Alan Taylor Goondi Brigade - Tim O'Gorman Willaella Brigade - Peter Donaldson Wynella Brigade - Ron Bisset Yarrigan Brigade - Richard Stringer Yerrigan Brigade - Tony Waldron	0684 81915 0683 44830 0842 1400 0743 5253 0743 6614 0743 4487 0842 9162 0417 684 431
NSW Fire & Rescue	Narrabri Fire Station	0682 700
Emergency Services	Police, Fire, Ambulance	000
RFS	000	000
Police	000	000
Council	Connabarabran Narrabri Narrabri Warrumbungle	0682 7209 0792 7109 0799 6669 0847 6600

Communications Information

Service	Channel	Location and Comments
NPWS Repeaters	24 28	Gwabegar East Pilliga (Newell Highway) Southern Pilliga (Wanda)
NSW Forests	267 286 89 & 99	Nesbit Mountain Mount Dove Fraserford channels
RFS (Namoi / Gwydir Zone)	P002 P068	Gwabegar The Governor
RFS (Castlereagh Zone)	P138 P183 P154 P185	Siding Spring Southern Pilliga (Wanda) Barrington Nesbit Mountain
UHF - CBS	13	Small fire channel 10, large fires determined by IMF
Parks Radio	13	Small fire channel 10, large fires determined by IMF
Aviation - UHF	137	NPWS Fireground channel 2
Mobile phone - Tetra 3G		0682 7209 0792 7109 0799 6669 0847 6600

Check line of sight maps for a prediction of coverage for services.

Fire Season Information

Wildfires

- The critical wildfire season generally occurs during November and December.
- During periods of strong negative Southern Oscillation Index (El Niño events), this period may commence late September and extend into the first half of January.
- The end of the critical fire season is often marked by wet storm activity.

Prescribed Burning

- Open-ended burning may be undertaken in early spring (August - September), except during an El Niño event.
- Areas with HIGH - VERY HIGH Overall Fuel Hazard: Effective prescribed burning may not be conducted once the "critical fire season" and thunderstorm season is over.
- Areas with HIGH - VERY HIGH Overall Fuel Hazard: Prescribed burning should be undertaken before the late autumn rainfall to maximise effectiveness.
- During or leading up to an El Niño event, burning may be conducted during winter. Containment strategies should be in place for any dry south-westerly changes that may occur weeks after an open-ended burn.
- Spring burning must be fully contained.

Prescribed Burning

- Consider multi-phase operations, targeting higher OFH areas under LOW/MODERATE Fire Danger conditions, with follow-up burning in lower OFH areas under HIGH Fire Danger conditions.

Prevailing winds

- Easterly winds are likely to dominate during autumn.
- Westerly winds are likely to dominate during early spring. A warm dry period often occurs late August, associated with north-westerly conditions, which may provide for an opportunity to conduct effective burning.

Related documents

- NPWS (2011) Fire Management Manual
- NPWS (2011) Pilliga Nature Reserve Fire Management Plan, 2011 - 2006
- Rural Fire Service (2011) Pilliga Operations Sub-plan, 2007 / Annexure to Plans of Operations prepared by the following Bush Fire Management Committees: Castlereagh, Namoi, Liverpool Ranges & North-west
- Hunter, JT (2010) Vegetation and floristics of Timallialle NP, Yarrigan NP and Dandy Gorge AA. Report to DECOW
- Hunter, JT (2011) Vegetation and floristics of the Pilliga East SCA, Willaella AA, Pilliga NB and Likerley addition. Report to DECOW

Benchmarks for extreme fire behaviour

The Pilliga Scrub is characterised by large fire events which rapidly escalate to a landscape scale. Fire s have exceeded 100,000 hectares on a number of occasions. An aim of the reserve fire management strategy is to prevent large fires exceeding 20,000 hectares.

The potential fire behaviour in the eastern Pilliga is indicated by the following indicators:

- day-time runs of 20+ metres (30 kms - 1982 Pilliga east fire, 25 kms - 1997 Timallialle Creek fire & 2 separate ignitions from the 2006 Pilliga No. 4 fire)
- increases of the fire area greater than 50,000 hectares in one day (63,000 ha - 1982 Pilliga east fire, 75,000 ha - 2006 Pilliga No. 4 fire)
- significant fire runs in different directions over successive days (1865 Southern Pilliga fire & 1997 Timallialle Creek fire)
- significant night-time runs with easterly winds after very dry south-westerly conditions (20 kms - 2006 Pilliga No. 4 fire, 15 kms - 2002 Kerridge fire, 10 kms - 2002 Jennys fire)

Operational Guidelines

Aerial operations

- Aerial operations will be managed by trained and competent personnel. This includes directing aerial bombing and aerial ignition operations.
- The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances.
- All aerial ignition operations require the consent of the NPWS Regional Manager or the Section 44 Appointee.
- All personnel must be fully briefed before back burning operations begin.
- Backburning in areas of Low - Moderate OFH will require the use of wind, or low humidity to maximise effectiveness.
- Backburning should be limited to late afternoon and early evening.
- Backburning in Broadbush & Shrublands must be carefully planned and timed to avoid fire runs.
- Preparation for backburning may require "wind-rolling" on the edge of containment lines to assist up-light during low wind conditions.
- Where practicable to assist spot-up efforts, clear a 1m radius around dead and fibrous barked trees adjacent to containment lines prior to backburning, or cut down these trees during the spot-up.

Command & Control

- The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly.
- On the arrival of other combatant agencies, the initial Incident Controller will liaise with the RFS to ensure that the agency in command and control is determined and an Incident Controller is appointed.
- Recommended activation of the Pilliga Sub-plan of Operations when running a fire rapidly escalating, or when extreme conditions are forecast to impact a fireground.

Containment Lines

- New containment lines require the prior consent of a senior NPWS officer.
- Containment lines running along valley areas should be constructed at 20 - 50 metres from the outcrops to avoid severe erosion.
- All personnel involved in containment line construction should be briefed on, and must consider both natural and cultural heritage sites in the location.
- Earthmoving equipment may only be used with the prior consent of a senior NPWS officer.
- Earthmoving equipment must always be guided and supervised by an experienced officer, and accompanied by a support vehicle. When engaged in direct or parallel attack, this vehicle must be a fire fighting vehicle.
- Machinery exclusion areas apply, and are mapped on the Incident Map.
- Earthmoving equipment must be washed down, where practicable, prior to entering NPWS estate and again on exiting NPWS estate.

Fire Suppression Chemicals

- The use of foam, wetting agents and retardants will be permitted on the reserve.
- Fire suppression chemicals are not to be applied within 50m of water courses and dams.
- The use of retardants requires the approval of the Regional Manager or delegate.

Rehabilitation

- Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
- Consider deployment of bulk water carriers to support fire operations.

Watering points

- Potential smoke impacts on the Newell Highway will be assessed, and mitigation tactics considered during the planning of fire operations.

Smoke Management

- Immediately request closure of the Newell Highway when fire is running towards the Newell Highway. Request closure until the run is within 5 kilometres of the highway.
- The reserve may be closed to the public during periods of extreme fire danger, and will be closed during fire operations.
- Sub-salls in low gradient areas can turn to areas when saturated. Vehicles, graders and dozers are required to log to the axles, or worse.

Traffic Management

- Immediately request closure of the Newell Highway when fire is running towards the Newell Highway.
- Sub-salls in low gradient areas can turn to areas when saturated. Vehicles, graders and dozers are required to log to the axles, or worse.

Visitor & Apiarist Management

- Sub-salls in low gradient areas can turn to areas when saturated. Vehicles, graders and dozers are required to log to the axles, or worse.

Warnings

- Smooth-barked Apple and Scribbly Gum Areas may have OPH VERY HIGH. These areas are the most vulnerable.
- Sub-salls in low gradient areas can turn to areas when saturated. Vehicles, graders and dozers are required to log to the axles, or worse.
- Westerly fire runs may occur from unsecured western flanks with night-time easterly changes. This is a particular concern after fire running with dry south westerly conditions. Bureau of Meteorology must be consulted specifically on potential conditions existing winds.

Black text - general guidelines Blue text - reserve specific guidelines Red text - important warnings

Operational Guidelines - Heritage

Indigenous Cultural Heritage Site Management

Historic Site Management

Treated Fauna and Flora Management

Suppression Strategies

All vegetation types

Years with saturated soils and sub-soils

Fire danger rating CATASTROPHIC

Dry sclerophyll shrubby woodlands

Smooth-barked Apple / Scribbly Gum woodlands

Fire danger rating LOW - HIGH

Fire danger rating VERY HIGH - EXTREME

Valley and Creekside vegetation

Fire danger rating LOW - HIGH

Fire danger rating VERY HIGH - EXTREME

Broombush and shrublands

Fire danger rating LOW - HIGH

Ironbark / White Pine / Bullock woodlands

Grassy Box woodlands

Fire danger rating LOW - HIGH

Fire danger rating VERY HIGH - EXTREME

Vegetation Community

Valley woodlands

Grassy Box woodlands

Cowslip TEC

Ironbark / White Pine / Bullock woodlands

Sandstone shrubby woodlands

Smooth-barked Apple / Scribbly Gum woodlands

Shrublands

Strategic Zone management

OPH - Overall fuel hazard - A rating system that includes fuel filler, grasses, shrubs, bark type and bark condition
TEC - Treated ecological communities

Incident Map



Pilliga East Fire Management Strategy 2016-2021

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Map Details

Datum: Geocentric Datum of Australia 1994 (GDA84)	Data: Spot Satellite Imagery - 2005, 1:50k Topographic Map: Cubbo 8736N, Baradine 8736S and Bugaldie 8735N
Projection: Map Grid Australia (MGA) Zone 55	Scale: Note: scales are true when printed on A1 size paper

0 1 2 3 4 5 6 7 8 9 10 km

Scale 1:75,000

Pilliga Nature Reserve
Pilliga East State Conservation Area CCA3
Timallalie National Park CCA1

Pilliga East Aboriginal Area CCA2
Dandry Gorge Aboriginal Area CCA2

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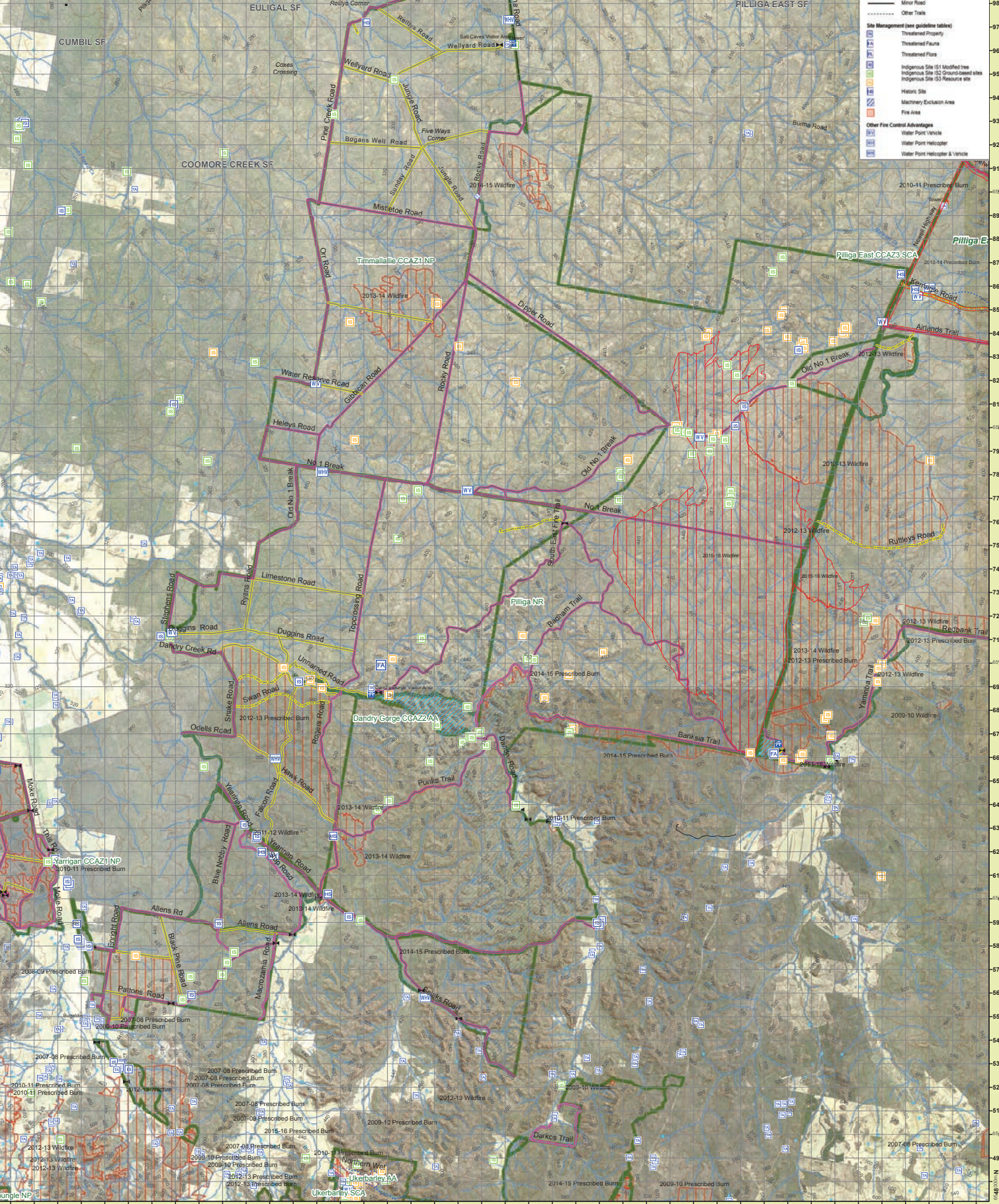
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Date Approved: 15/04/2016

Map Legend

- NPWS Estate, FONGW
- Assume all gres are tolled
- Gate
- Dam
- Building
- Drainage
- Contour 20m
- Fire Trails (NSW/NSW) to 2020
- Essential, Cat 1
- Essential, Cat 7
- Essential, Cat 9
- Important, Cat 1
- Important, Cat 7
- Important, Cat 9
- Damont
- Other Roads & Trails
- Major Road
- Minor Road
- Other Trails
- Site Management (see guideline tables)
- Threatened Property
- Threatened Fauna
- Threatened Flora
- Indigenous Site (S1 Modified tree)
- Indigenous Site (S2 Ground-based sites)
- Indigenous Site (S3 Reserve site)
- Historic Site
- Machinery Exclusion Area
- Fire Area
- Other Fire Control Advantages
- Water Point Vehicle
- Water Point Helicopter
- Water Point Helicopter & Vehicle



Incident Map



Pilliga East Fire Management Strategy 2016-2021

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Pilliga Nature Reserve
Pilliga East State Conservation Area CCA3
Timallalie National Park CCA1

Pilliga East Aboriginal Area CCA2
Dandy Gorge Aboriginal Area CCA2

Pilliga Nature Reserve 78463 Hectares
Pilliga East CCA Zone 3 State Conservation Area 24645 Hectares
Pilliga East CCA Zone 2 Aboriginal Area 1347 Hectares
Dandy Gorge CCA Zone 2 Aboriginal Area 352 Hectares

Map Details

Datum: Geocentric Datum of Australia 1994 (GDA94)
Projection: Map Grid Australia (MGA) Zone 55

Date: Spot Satellite Imagery 2005, 1:50k Topographic Map: Cubbo 8780N, Barotree 8786S and Bugside 8732N
Scale: Noted scales are true when printed on A1 size paper

0 1 2 4 6 8 10 km Scale 1:75,000

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Map Legend

- NPWS Estate FCA/NSW
- Assess all areas as needed
- Gate
- Dam
- Building
- Drainage
- Contour 20m

Fire Trails (priorities to 2020)

- Essential, Cat 1
- Essential, Cat 7
- Essential, Cat 9
- Important, Cat 1
- Important, Cat 7
- Important, Cat 9
- Dormant

Other Roads & Trails

- Major Road
- Minor Road
- Other Trails

Site Management (see guideline tables)

- Threatened Property
- Threatened Fauna
- Threatened Flora
- Indigenous Site (S1 Modified tree)
- Indigenous Site (S2 Ground-based site)
- Indigenous Site (S3 Resource site)
- Historic Site
- Machinery Exclusion Area
- Fire Area

Other Fire Control Advantages

- Water Point Vehicle
- Water Point Helicopter
- Water Point Helicopter & Vehicle

