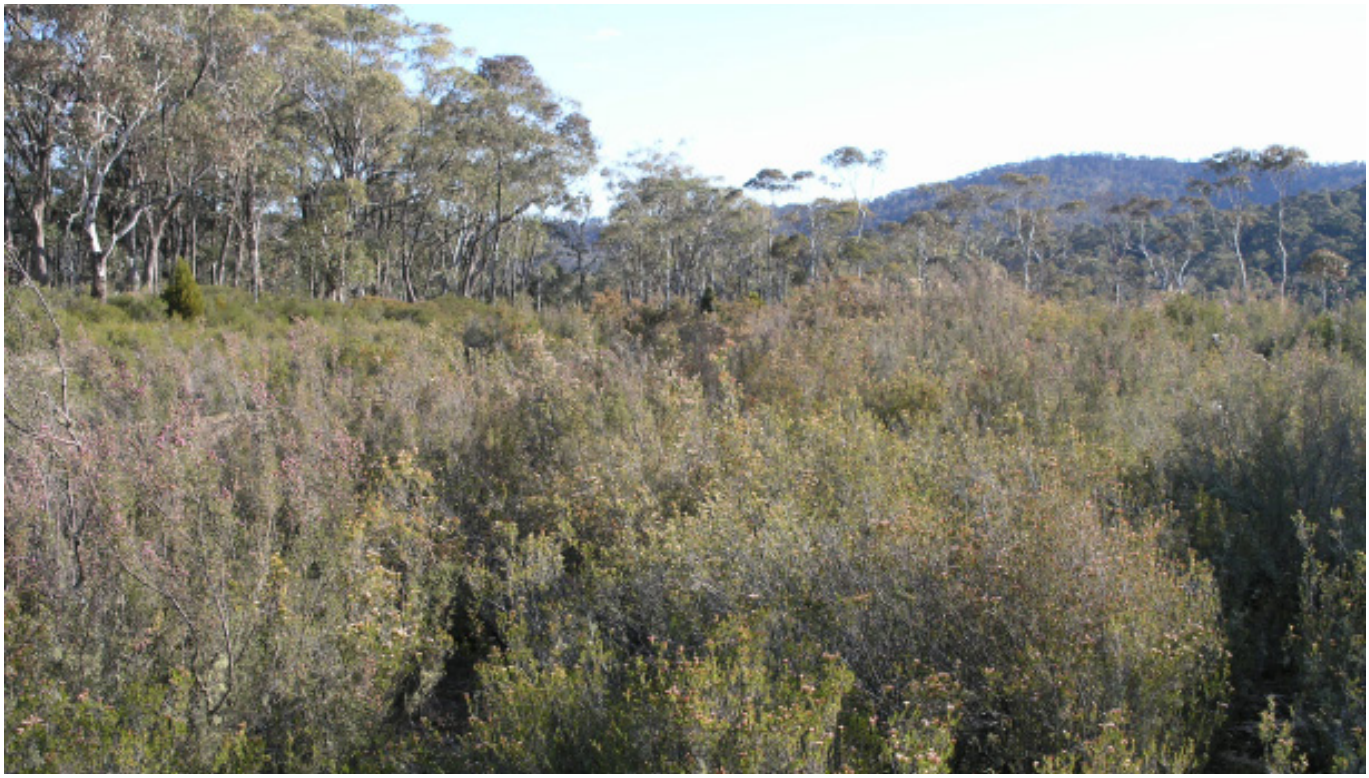
NSW GOVERNMENT

NSW RURAL FIRE SERVICE

COMPREHENSIVE VEGETATION FUEL LOADS

March 2019



The purpose of this fact sheet is to provide all stakeholders in the bush fire industry with the detailed fuel load information which underpins the APZ distances in the Pre-Release version of *Planning for Bush Fire Protection 2018* (PBP).

The vegetation classification system used within the following tables is based on the publication *'Ocean Shores to Desert Dunes'* David Keith (Keith, 2004) framework (except for heath). The fuel loads (1) used are from recent research provided by:

- The University of Wollongong's (UoW) Fuels Modelling Project;
- The University of Melbourne (UoM) which reference the fuel classifications found in Keith (2004); and
- CSIRO Ecosystems Sciences and Bushfire Dynamics and Applications.

It should be noted that in developing the simplified acceptable solutions in the Pre-Release version of PBP, the fuel loads which were considered outliers and not expected to be found in, and adjacent to developed areas were discounted.

Notwithstanding, as part of any site assessment process, the vegetation classifications adopted below must be those which are representative for the site.

VEGETATION	VEGETATION CLASSIFICATION	SURFACE AND ELEVATED	OVERALL FUEL LOAD (INCLUDING BARK AND CANOPY)
Rainforest	All	10	13.2
Wet Sclerophyll Forests (Shrubby)	North Coast WSF (Shrubby)	22	35.98
	South Coast WSF (Shrubby)	22	35.35
	Northern Escarpment WSF (Shrubby)	22	36.6
	Southern Escarpment WSF (Shrubby)	22	36.1
Wet Sclerophyll Forests (Grassy)	Northern Hinterlands WSF (Grassy)	20	33.1
	Southern Lowlands WSF (Grassy)	20	32.8
	Northern Tablelands WSF (Grassy)	20	31.53
	Southern Tablelands WSF (Grassy)	20	30.1
	Montane WSF (Grassy)	26	36.6
Dry Sclerophyll Forests (Shrub/Grass)	Clarence DSF	14	25.18
	Hunter Macleay DSF	14	24.6
	Cumberland DSF	14	24.97
	Southern Hinterland DSF	14	25.93
	Northern Gorge DSF	14	25.8
	Central Gorge DSF	14	25.8
	New England DSF	14	25.23
	North West Slopes DSF	14	24.47
	Upper Riverina DSF	14	25.09
	Pilliga Outwash DSF	7	11.05
Dry Sclerophyll Forests (Shrubby)	Coastal Dune DSF	20.5	31.1
	North Coast DSF	21.3	28.44
	Sydney Coastal DSF	21.3	27.3
	Sydney Hinterland DSF	21.3	27.42
	Sydney Sand Flats DSF	20.5	29.5
	South Coast Sands DSF	20.5	30.9
	South East DSF	17	28
	Southern Wattle DSF	17	28
	Northern Escarpment DSF	21.3	28.05
	Sydney Montane DSF	21.3	27.47
	Northern Tablelands DSF	22.5	31.5
	Southern Tablelands DSF	22.5	30.85
	Western Slopes DSF	15	18.86
	Yetman DSF	15	18.86
Pine Plantations (PBP – Radiata Pine)	N/A	21	31

[1] Fuel loads are expressed in tonnes per hectare

VEGETATION	VEGETATION CLASSIFICATION	SURFACE AND ELEVATED	OVERALL FUEL LOAD (INCLUDING BARK AND CANOPY)
Woodlands	Coastal Valley GW	10	18.07
	Tablelands Clay GW	10.5	18.61
	New England GW	10.5	20.2
	Southern Tableland GW	10.5	19.01
	Sub-alpine woodlands	18	27.3
	Western Slopes GW	10.5	18.3
	Floodplain transition woodlands	10.5	18.9
Semi-arid woodlands (grassy)	Inland floodplain woodlands; north-west floodplain woodlands; riverine plain woodlands; Brigalow Clay Plain woodlands	5.9	9.0
Semi-arid woodlands (PBP - Use for all classes except Dune Mallee and Sand plain Mallee)	North-west alluvial sand woodlands; riverine sandhill woodlands; inland rocky hill woodlands; subtropical semi-arid woodlands; western peneplain woodlands; semi-arid sand plain woodlands; desert woodlands	11.9	14.5
Semi-arid woodlands (PBP - Semi-arid woodlands (shrubby) – Mallee	Dune Mallee woodlands; Sand plain mallee woodlands	13.3	16.5
Forested Wetlands (Coastal swamp forest)	Coastal swamp forests	22.6	34.1
Forested Wetlands (Riverine forest)	Coastal floodplain wetlands; Eastern riverine forests; inland riverine forests	8.2	15.1
Heathlands (PBP - Tall Heath)	Keith: May include classes: Sydney coastal heaths; Coastal headland heaths; Wallum sand heath. PBP Note: Use for Heath > 2 metres. This example calculated @ 4metres height for PBP.	36.9	36.9
Heathlands, Freshwater Wetlands and Alpine Complex (PBP - Short Heath)	Keith: Includes classes: South Coast heaths; Northern montane heaths; Sydney montane heaths; Southern montane heaths; Coastal heath swamps (Freshwater wetlands formation); Alpine heaths (Alpine complex formation). May include classes: Sydney coastal heaths; Coastal headland heaths; Wallum sand heaths. PBP Note: Use for heath < 2m tall. This example calculated @ 2 metres height for PBP.	15.0	15.0
Arid shrublands (acacia)	Keith: North-west Plain Shrublands; Gibber Transition Shrublands; Stony Desert Mulga Shrublands; Sand Plain Mulga Shrublands. PBP Note: This example calculated @ 1.5 metres height for PBP.	6.2	6.2
Arid shrublands (chenopod)	Keith: Riverine Chenopod Shrublands; Aeolian Chenopod Shrublands; Gibber Chenopod Shrublands. PBP Note: This example calculated @ 1.5 metres height for PBP.	3.2	3.2
Freshwater Wetlands (PBP – Does not include class Heath swamp, which is included in short heath.)	Keith: Montane bogs and fens; Coastal freshwater lagoons; Montane lakes; Inland floodplain swamps; Inland floodplain shrublands. PBP Note: This example calculated @ 1 metre height for PBP.	4.4	4.4
Alpine Complex	Keith: Alpine herblands; Alpine fjaeldmarks; Alpine bogs and fens. PBP Note: Does not include class Alpine heaths, which is included in short heath. This example calculated @ 1 metre height for PBP.	5.8	5.8
Grassland	Keith: Maritime Grasslands, Temperate Montane Grasslands, Western Slopes Grassland, Riverine Plain Grasslands and Semi-arid Floodplain Grasslands. PBP Note: Dominated by perennial grasses and the presence of broad- leaved herbs on flat topography. Lack of woody plants. Plants include grasses, daisies, legumes, geraniums, saltbushes and copperburrs.	6.0	6.0

[1] Fuel loads are expressed in tonnes per hectare