

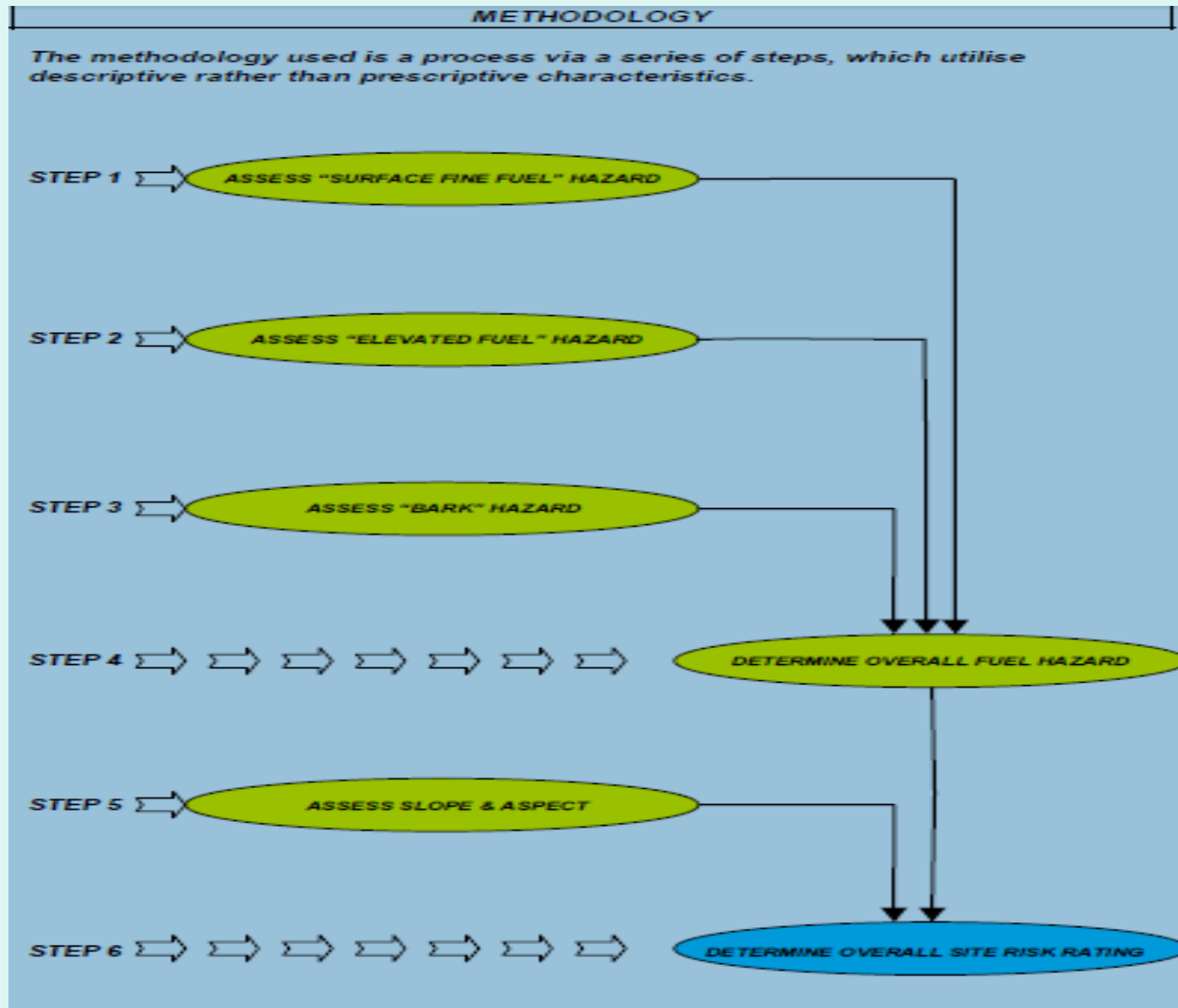
DECS Bushfire Preparation

Site Risk Assessment

History

- As a result of heightened community concern regarding bushfires, DECS undertook an initial site review in 2004.
- Approximately 400 sites were assessed.
- 314 were identified as at risk.
- A review of at risk sites occurred in 2009/10
- 22 R1, 106 R2, and 186 R3 sites were rated.

CFS Threat Assessment Guide



OVERALL FUEL HAZARD ASSESSMENT

Refer to the *SA Photo Examples Guide* (Included) and the *Overall Fuel Hazard Guide, 3rd Edition (1999)* publication by McCarthy, G.J., Tolhurst, K.G and Chatto, K. Natural Resources and Environment, Victoria.

STEP 1: ASSESS "SURFACE FINE FUEL" HAZARD

Circle the most accurate description (Low – Extreme).

Surface Fine Fuel Hazard
Rating System based on
Litter Bed Height
(measure with gauge)



Surface Fine Fuel Hazard	LOW	MODERATE	HIGH	VERY HIGH	EXTREME
Litter Bed Height (mm)	<15	15-25	25-35	35-50	50>
Equivalent Surface Load (t/ha)	<4	4-8	8-12	12-20	20+

Refer to NRE ; Overall Fuel Hazard Guide for the inclusion of assessing "Near-Surface fuels" (Pg 2) interacting with "Surface Fine Fuels". If in doubt assign the next higher "Surface Fine Fuels" rating.

STEP 2: ASSESS "ELEVATED FUEL" HAZARD

Tick the most appropriate rating listed below.

- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very High
- ☐ Extreme

Refer to NRE ; Overall Fuel Hazard Guide for descriptors & the inclusion of "assessing Near-Surface fuels" (Pgs 1-4) and "assessing Elevated fuels" (Pgs 5-13) . If in doubt assign the next higher rating.

STEP 3: ASSESS "BARK" HAZARD

Tick the most appropriate rating listed below.

- ☐ Low
- ☐ Moderate
- ☐ High
- ☐ Very High
- ☐ Extreme

Refer to NRE ; Overall Fuel Hazard Guide for descriptors of "assessing Bark hazards" (Pgs 14-23) . If in doubt assign the next higher rating.

OVERALL FUEL HAZARD ASSESSMENT

STEP 4: DETERMINE OVERALL FUEL HAZARD

The following tables are used to combine the assessed levels of Bark, Elevated and Surface Fine Fuel Hazard to give an Overall Fuel Hazard rating for a site. The starting point for these tables is Bark Hazard, so this should be used as the first input, eg. If you assessed the bark as a "high" hazard then start on Table 2. Next step is to locate on the table the Surface Fine Fuel Hazard rating that you assessed (across the top). Next step is to locate the Elevated Hazard rating (up and down) that you assessed. Now where the two ratings intersect on the table is the "Overall Fuel Hazard."

Table 1. Bark Hazard: Low / Moderate

		Surface Fine Fuel Hazard				
		L	M	H	VH	E
Elevated Fuel Hazard	L	L	M	M	H	H
	M	L	M	M	H	H
	H	L	M	H	VH	VH
	VH	VH	VH	VH	VH	VH
	E	E	E	E	E	E

Table 2. Bark Hazard: High

		Surface Fine Fuel Hazard				
		L	M	H	VH	E
Elevated Fuel Hazard	L	L	M	H	H	H
	M	L	M	H	H	H
	H	L	H	H	VH	VH
	VH	VH	VH	VH	VH	E
	E	E	E	E	E	E

Table 3. Bark Hazard: Very High / Extreme

		Surface Fine Fuel Hazard				
		L	M	H	VH	E
Elevated Fuel Hazard	L	M	VH	VH	VH	E
	M	M	VH	VH	E	E
	H	M	VH	E	E	E
	VH	E	E	E	E	E
	E	E	E	E	E	E

Hypothetical example:

- Bark Hazard => **HIGH**
- Elevated Fuel Hazard => **VERY HIGH**
- Surface Fine Fuel Hazard => **VERY HIGH**
- => Overall Fuel Hazard rating of **VERY HIGH**

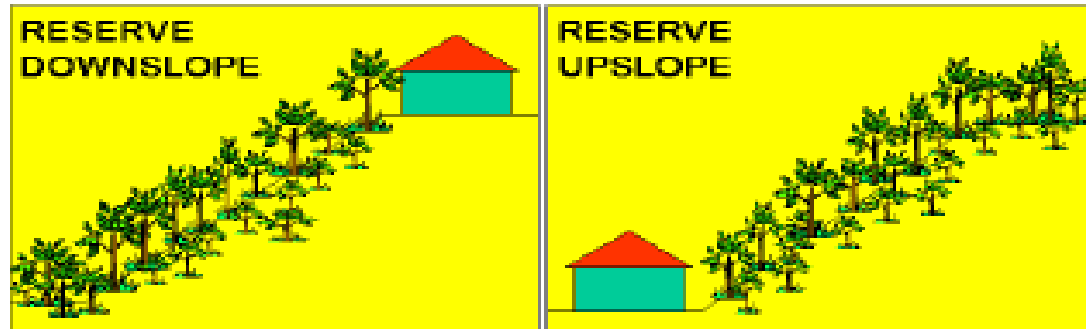
SLOPE & ASPECT ASSESSMENT

STEP 5: ASSESS SLOPE & ASPECT

(incl: DOWNSLOPE & UPSLOPE : treat FLAT LAND as upslope)

SLOPE may be measured using an inclinometer.

ASPECT is the direction a slope faces (eg: a NORTH slope faces North). The ASPECT of a slope may be determined using a compass or from a topographic map



		DOWNSLOPE		UPSLOPE	
		NE, E, SE	N, NW, W, SW, S	NE, E, SE	N, NW, W, SW, S
SLOPE °	0 - 5	A	C	A	B
	6 - 10	B	D	A	C
	11 - 15	C	E	B	D
	16 - 20	D	F	C	E
	> 20	E	G	D	F

STEP 6: DETERMINE OVERALL SITE RISK RATING

Combine the "OVERALL FUEL HAZARD RATING" (as determined in Step 4) and the "SLOPE & ASPECT" characteristic (as determined in Step 5) to decide the site risk level exposure >>

		SLOPE & ASPECT						
		A	B	C	D	E	F	G
FUEL HAZARD RATING	LOW	R ₃	R ₃	R ₃	R ₂	R ₂	R ₂	R ₁
	MEDIUM	R ₃	R ₃	R ₂	R ₂	R ₂	R ₂	R ₁
	HIGH	R ₃	R ₂	R ₂	R ₂	R ₂	R ₁	R ₁
	VERY HIGH	R ₂	R ₂	R ₂	R ₂	R ₁	R ₁	R ₁
	EXTREME	R ₂	R ₂	R ₂	R ₁	R ₁	R ₁	R ₁

Where R₁ = Extreme

R₂ = High

R₃ = Medium.

BUSHFIRE THREAT ASSESSMENT SUMMARY

[illegible]

SUMMARY of RATINGS

STEP	HAZARD ASSESSMENT	(circle as selected)							
1.	SURFACE FINE FUEL	L		M		H		VH	E
2.	ELEVATED FUEL	L		M		H		VH	E
3.	BARK	L		M		H		VH	E
4.	OVERALL FUEL	L		M		H		VH	E
5.	SLOPE & ASPECT	L		M		H		VH	E
6.	SITE OVERALL RISK RATING	R _s			R ₂			R ₁	
	SITE OVERALL RISK LEVEL	L	L-M	M	M-H	H	H-VH	VH	E

Post Victorian Bushfires

- As a result of new information about fire behaviour the following threat assessment criteria were added.
 - access and egress to site
 - fire history of the region
 - expansion of warning distance

School Closures

- On days of forecast Catastrophic fire weather rating within Fire Ban Districts, Schools and Preschools rated as R1 and R2 will be closed and school buses and taxi services will not operate.
- School Care will advise predetermined contacts within the CEO.
- School Care will advise CEO if a bushfire is burning in an area that is likely to threaten schools and preschools.

Resources

- www.crisis.sa.edu.au
 - Parent Bushfire Information Brochure ([High Risk Sites](#)) ([Low Risk Sites](#))
 - Parent information. A-Z listing of high risk school sites. <http://www.crisis.sa.edu.au/> >
 - [Bushfire Principles](#)
 - [Bus Procedures](#)
- CFS [Travel through Bushfire Prone Areas](#)
- CFS [Working in a Bushfire Prone Areas](#)