

The practice of prescribed burning: whose risk are we measuring?

Ruth Ryan, HVP Plantations

National Fire Fuels Science Webinar 20 May 2020

The practice of hazard reduction: what are the potentials and limitations?

















Making Wood Products



A Busy Forest





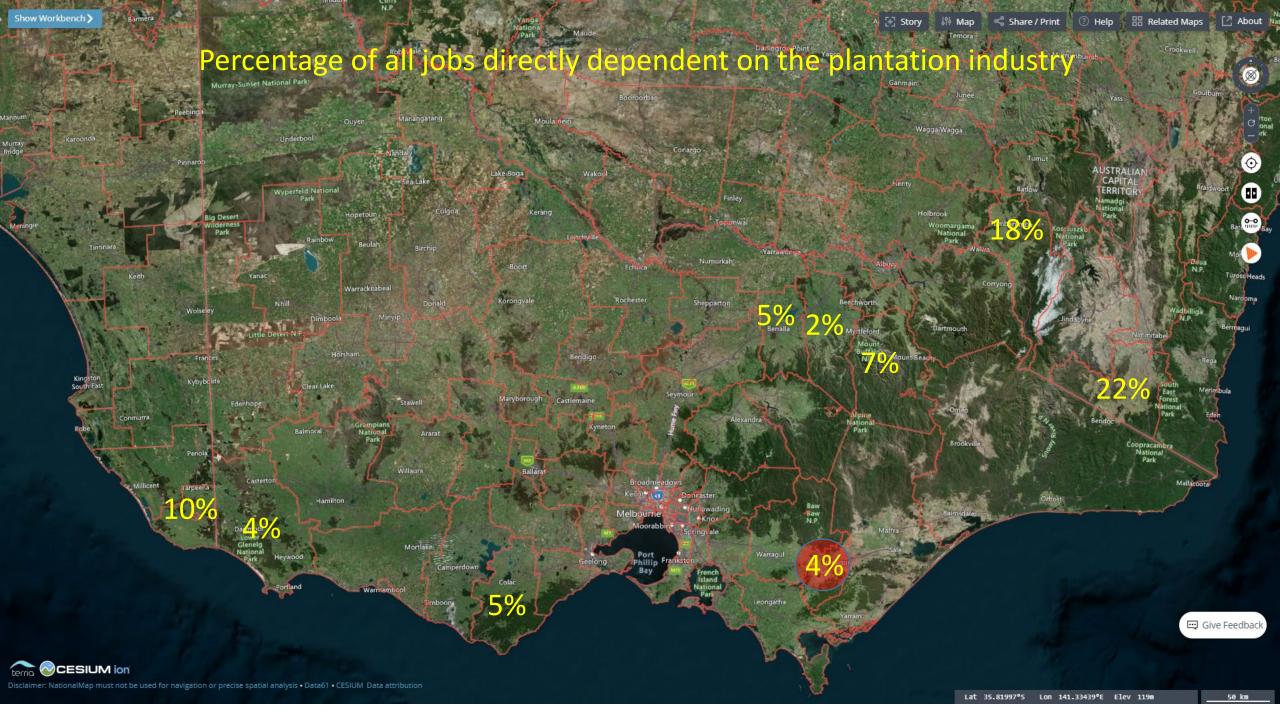












15 years investment

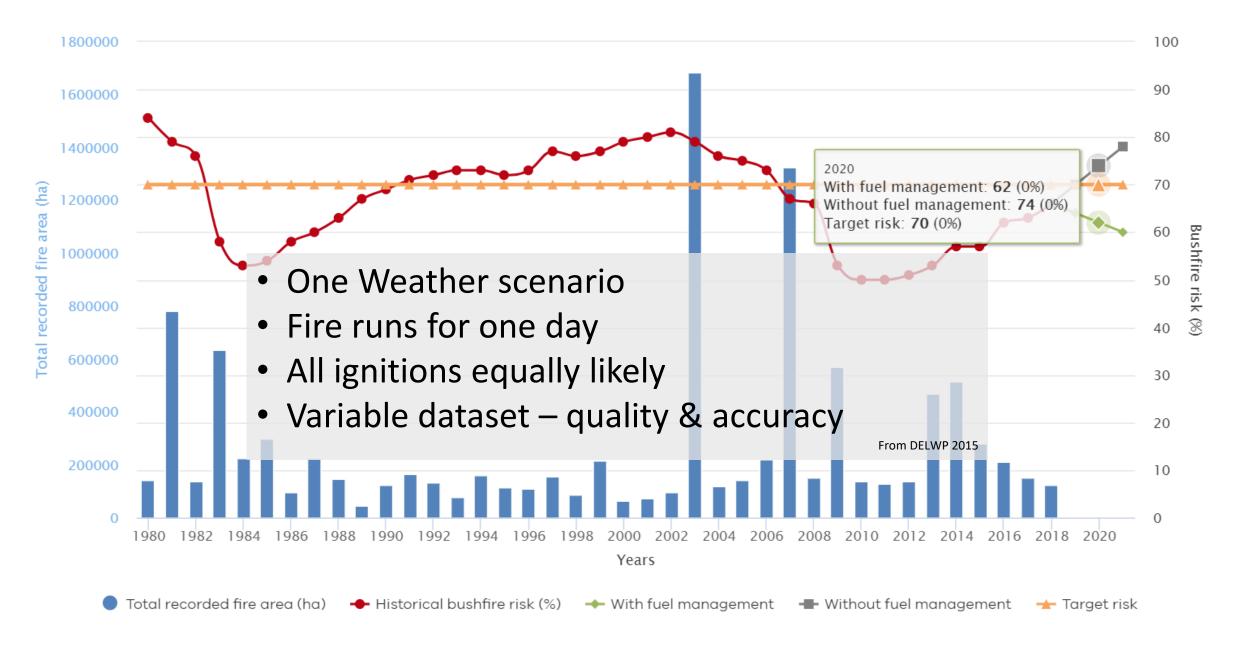
30 years investment



The clearing chain is pulled by two bulldozers and knocks over all the trees in its path

Forwarder replacement cost ~\$600K



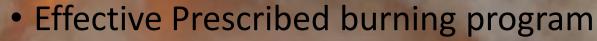






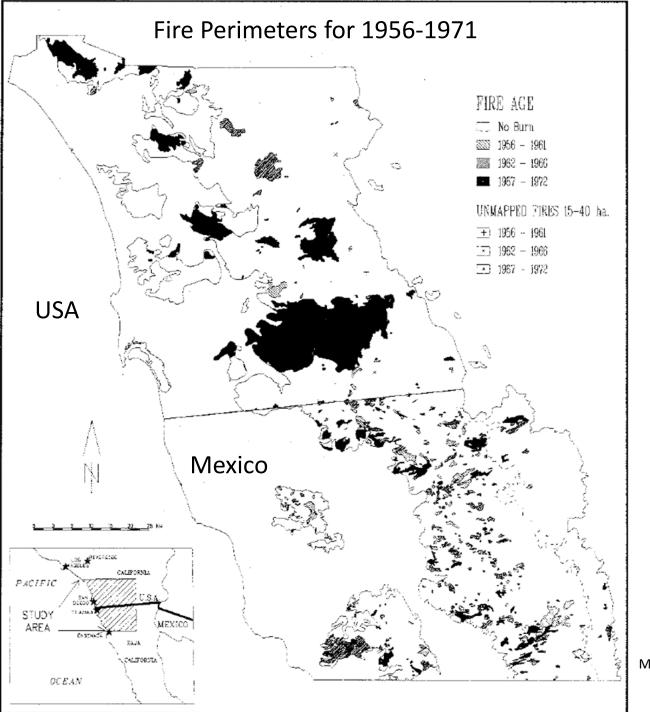
Otway Ranges, Victoria – Fuel Management Regimes

Objective	Performance measure (preferred direction)	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13
Economic impact on agriculture	Millions of \$ (♥)	163	141	187	173	170	164	161	171	176	166	182	192	165
Economic impact on plantations	Millions of \$ (♥)	47	37	58	46	44	46	47	47	51	45	56	60	47
Economic impact on tourism	Millions of \$ (♥)	134	115	165	148	147	137	131	131	138	130	146	153	137
Economic impact on viticulture	Millions of \$ (▼)	0.81	0.77	0.85	0.83	0.86	0.82	0.76	0.77	0.81	0.75	0.83	0.84	0.83
Economic impact on private buildings	Millions of \$ (♥)	136	120	206	184	182	117	125	119	130	128	138	149	124
Cost of disaster relief	Millions of \$ (♥)	55	49	83	74	73	48	51	49	53	52	56	61	50
Economic impact on water provision	Millions of \$ (♥)	0.38	0.35	0.43	0.38	0.36	0.37	0.37	0.38	0.39	0.39	0.42	0.43	0.38
Economic impact on public property	Millions of \$ (♥)	34	28	52	42	43	32	30	31	34	32	38	42	33
Cost of fire management treatments	Millions of \$ (♥)	2382	2533	2264	2308	2379	2348	2318	2358	2327	2344	2301	2276	2344
Community support	Constructed scale: $0 = \text{worst}, 100 = \text{best} (\triangle)$	77	57	39	66	64	82	82	77	79	79	79	69	83
Impact on cultural heritage	Number of sites adversely impacted (♥)	56	43	74	75	83	56	50	43	46	42	48	51	52
Impact on threatened fauna species	Number of species with a 20% or greater decline (▼)	4	5	1	3	4	1	3	5	5	5	5	5	2
Impact on non-threatened fauna species	Number of species with a 20% or greater decline (▼)	8	23	1	1	5	1	1	7	4	5	3	1	1
Impact on human life	Number of lives lost over 40 years (▼)	50	42	82	71	70	41	45	42	48	46	52	57	44
Number of towns having lower fire risk	Number of towns below an average of 60% residual risk (▲)	15	17	4	8	9	14	17	14	12	15	12	10	17



- Enhanced first attack success
- Risk modelling
 - Better reflects multiday fires
 - Equitable
 - looking after the people in the bush
 - Multiple values
 - Biodiversity
 - Cultural
 - Landscape
 - Economic
 - Social
 - Socio-economic data





Minnich & Chou (1997) Int. J Wildland Fire 7(3):221-248