



natural goodness
getting close to nature naturally

anglesea environment report

JULY 2006

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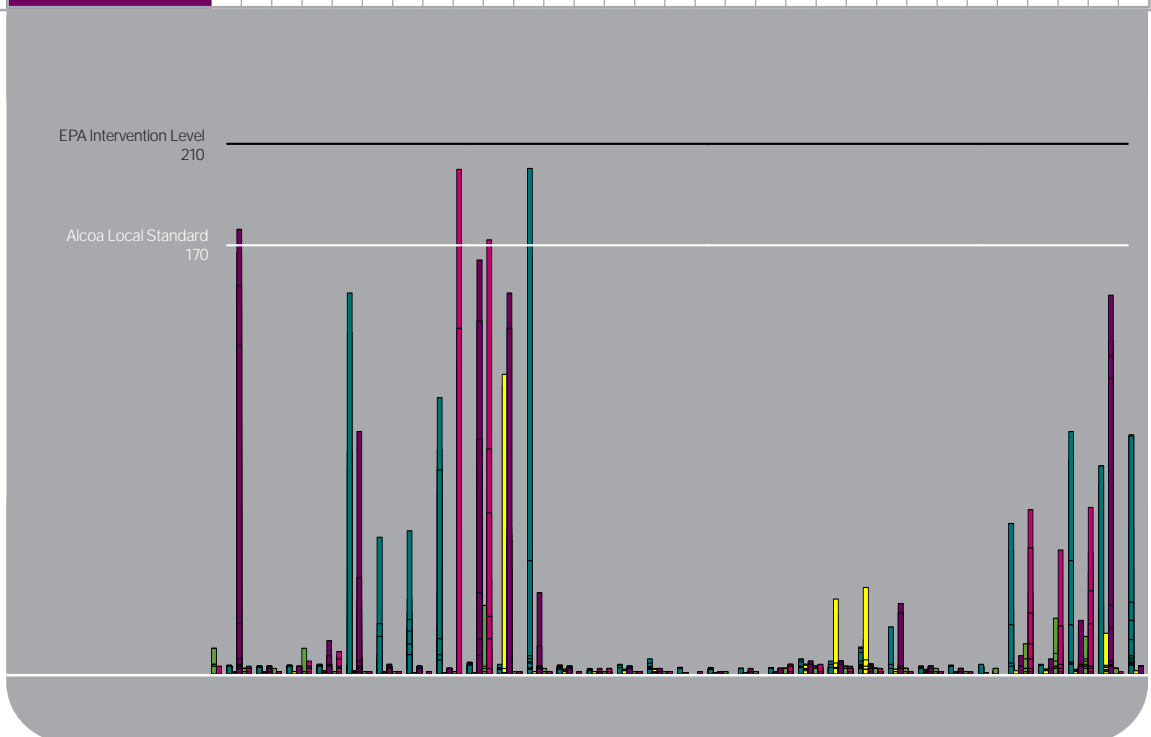
australia's aluminium

air

Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.056	0.197
Stack SO ₂ kg/min 1-hour average Licence limit 111.34kg/min	76.82	89.81

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	3	27
Primary School	4	200
Mt Ingoldsby	-	-
Scout Camp	8	200
Camp Wilkin	1	119
Camp Road	7	176

Ambient Monitors																															
SO ₂ Maximum 1 hour averages (ppb)																															
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Community Centre	10	2	2	10	1	1	1	0	1	27	1	2	0	1	1	1	0	1	1	2	3	3	2	2	2	1	2	12	22	15	2
Primary School	3	3	1	5	9	1	1	1	200	172	1	1	1	2	1	1	1	0	0	4	4	3	2	1	1	1	0	65	49	66	1
Mt Ingoldsby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Scout Camp	3	3	4	4	151	54	57	109	5	4	200	4	2	4	6	2	2	2	2	6	5	11	19	3	3	4	60	4	96	83	95
Camp Wilkin	1	1	1	1	1	1	1	1	1	119	1	2	1	2	2	1	1	1	1	4	29	34	2	2	1	0	1	2	2	16	1
Camp Road	176	3	3	13	96	4	3	2	164	151	32	3	2	3	2	0	1	1	2	5	5	4	28	3	2	0	7	6	21	150	3



water



Water Storage

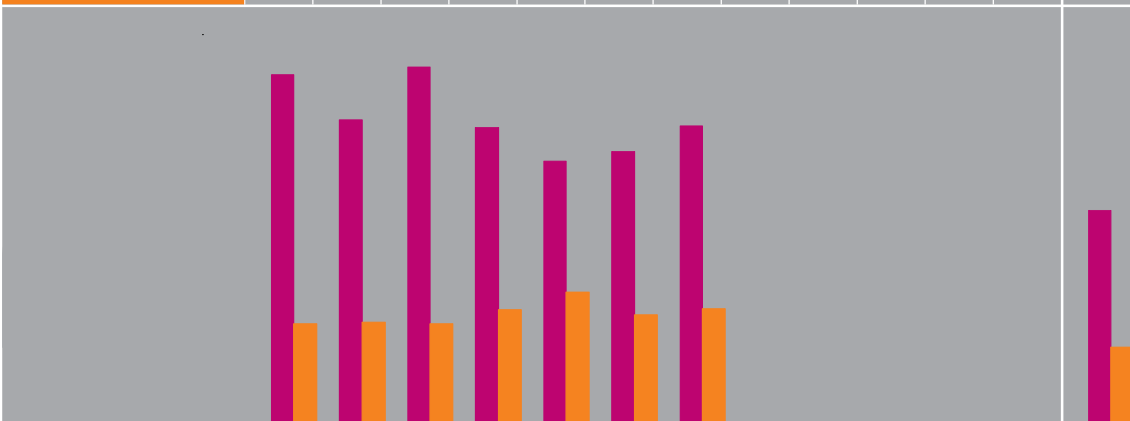
Barwon Water storage levels within the Geelong system at 28.9% capacity. Stage 1 restrictions apply.

Water Discharge	July	Total
ML		
Ashponds (SP1)	153	1008
Mine (SP4)	0	0.8

Water Monitoring 25/07/2006	SP1 Ashpond		SP4 Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	8.5	3-9	-	5-9	7.5
Susp. Solids	100	4	100	-	30	< 2
Colour	50	4	50	-	50	4
Aluminium	10	0.3	10	-	5.5	< 0.1
Iron	10	0.6	0	-	4.0	< 0.1
Zinc	0.4	< 0.1	2.0	-	0.3	< 0.1

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	1.0	1.0	1.0	1.5	1.6	0.8	1.0						7.9
Bore Water	279	243	285	237	210	218	238						1710
Mine Water	81	82	81	92	106	88	93						623



encountering wildlife without feeding



Many people enjoy feeding wildlife because it allows a close interaction with nature. Often, they think they are also helping the animals to survive. But is it a good idea? The consensus is.. not really. While feeding the animals can be fun for humans, it is usually detrimental for the animals, and will be of more harm than help. There are few, if any, benefits for Australian wildlife in being fed. Our mild climate and the mobile nature and adaptations of many of our species means that they can obtain all the natural food they need.

The arguments against feeding wildlife include:

- > diseases are easily passed on at feeding stations;
- > less dominant wildlife is forced away from the areas around feeding stations and more dominant species (eg kookaburras and butcherbirds) get an unnatural advantage;
- > animals that become used to being fed might lose their fear of people. This puts them at risk around people who don't appreciate wildlife; and
- > predators, especially cats and dogs, target wildlife while they are feeding.

An alternative to feeding is to develop an area that reflects the natural environment, providing opportunities for local wildlife to forage for their own food, yet still be observed at close range.

The planting around the mine lunch room area is a perfect example of creating such an area. The garden will benefit local bird species with prickly shrubs providing shelter from predators and flowering shrubs to provide nectar for small birds whilst allowing employees to enjoy the sight and sounds of local birds. A shallow source of water for birds away from vegetation that could conceal predators is an added bonus. Indigenous plants have been used in the garden as local wildlife is attracted to local plants and the indigenous plant's adaptation to the soil type, season, climate and pests in the area means they require less management during establishment and supplementary watering is usually not necessary.

Remember, wildlife in your area has survived because there is available food, water, and shelter to meet their needs but providing additional habitat is a solution that pleases everyone.

ANIMALS OF THE ANGLESEA HEATH

Eastern Spinebill (*Acanthorhynchus tenuirostris*)

Size:	16cm
Male:	grey-black crown which extends on either side of the breast, breast and throat are white with a rufous patch in the centre of the throat, wings and lower back are dark grey, underparts and upper back are buff
Female:	similar to males but less distinct
Voice:	staccato piping, softer 'chee-chee-chee...'
Distribution:	generally found east of the Great Dividing Range from Cooktown in Queensland to the Flinders Ranges in South Australia
Habitat:	common to uncommon resident in forest, woodlands, gardens, thickets and heaths
Food:	feed on insects and nectar, it's beak is particularly well suited to extracting nectar from tubular flowers such as epacrids including <i>Epacris impressa</i> (Pink Heath)

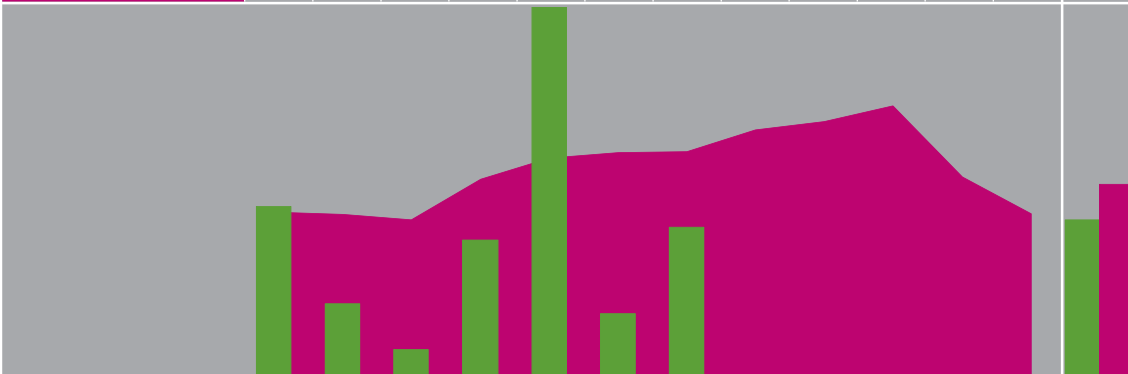
EASTERN SPINEBILL



LAND

RAINFALL (mm)

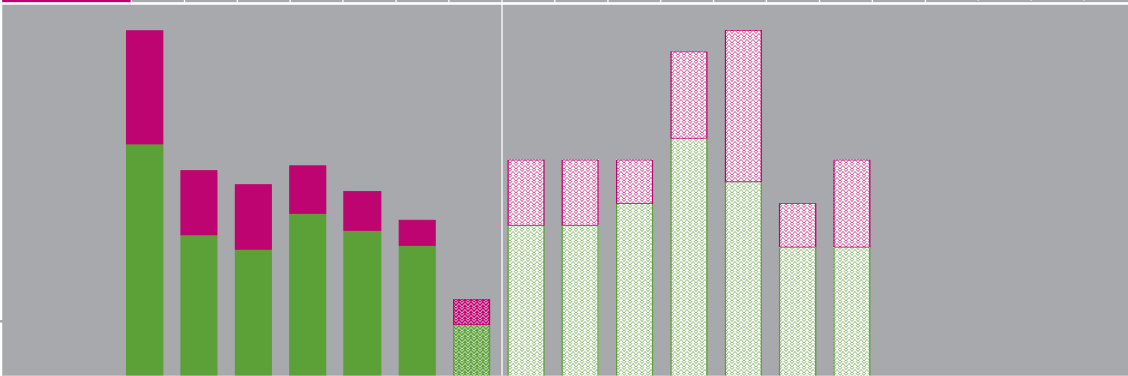
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2006 Rainfall	46.2	19.6	7.3	37.1	129.4	17.0	40.6						297.2
1968-2005 Average	44.6	43.9	42.5	53.5	59.3	60.8	60.8						365.7



WATER

TOWN WATER USE (ML)

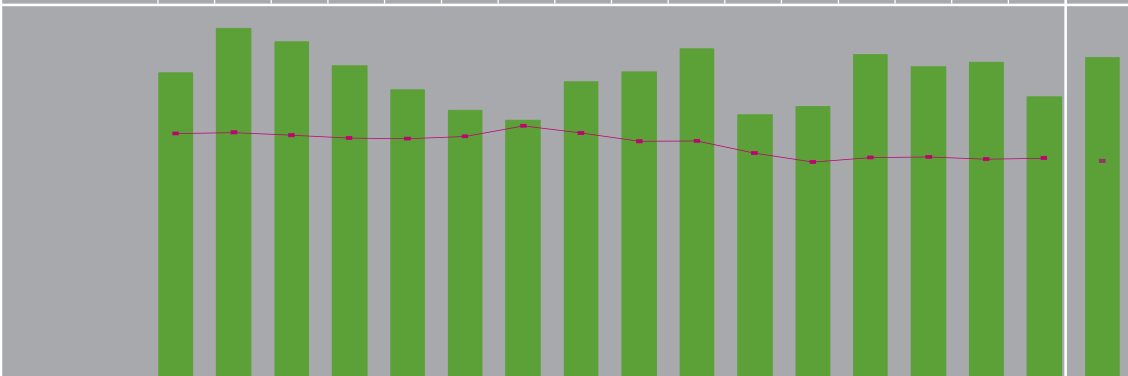
	2000	2001	2002	2003	2004	2005	2006	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	14.6	13.1	16.7	15.0	13.5	5.4	0.7	0.7	0.8	1.1	0.9	0.6	0.6					
Amenity	11.6	6.6	6.6	5.0	4.0	2.6	2.5	0.3	0.3	0.2	0.4	0.7	0.2	0.4					



AIR

GREENHOUSE GAS (GHG) TOTAL (Mt) & GHG EMISSION EFFICIENCY (t/MWh)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
GHG Mt	1.42	1.62	1.56	1.45	1.34	1.25	1.20	1.38	1.42	1.53	1.23	1.27	1.50	1.45	1.47	1.31	1.49
◆ GHG t/MWh	1.34	1.35	1.33	1.32	1.31	1.33	1.38	1.34	1.30	1.30	1.24	1.19	1.21	1.21	1.20	1.21	1.19



environmental improvement

Environmental Management Targets	July	2006 Total	Forecast	2006 Target
Reportable Environmental Incidents	0	0	0	0
Monthly EHS ASAT Audit Completion (%)	50	93	93	90
Air Emission Targets	July	2006 Total	Forecast	2006 Target
Ambient SO ₂ (no. readings > 210ppb)	0	2	3	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions	17	65	111	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.18	1.19	1.19	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0
Water Targets	July	2006 Total	Forecast	2006 Target
Town Water (ML)	1.0	7.9	13.5	17.2
Bore Water (ML)	238	1710	2931	2440
Waste Targets	July	2006 Total	Forecast	2006 Target
Waste to Landfill (t)	0.0	2.7	4.6	10.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0
Mine Rehabilitation Targets	July	2006 Total	Forecast	2006 Target
2006 Area Cleared (ha)		3.3		3.3
2006 Area Rehabilitated (ha)		7.5		> 3.3
2005 Mine Rehabilitation Species Richness (%)		N/A		100

OUR ENVIRONMENT AND OUR EMPLOYEES..

Richard, there were a couple of minor environmental issues in the mine during July. What happened?

There was three environmental incidents that occurred over the weekend of July 22 and 23. The first issue was a ruptured hose on a hired excavator while carrying out road maintenance on the coal haul road. A mist of oil sprayed onto the haul road at the bridge over Marshy Creek. The second was a fuel oil spill at the mine fuel bowser. The equipment was on hire and it's fitting to the bowser hose was faulty so the automatic fuel shut off failed. And finally, a water pipe at the rear of the mine workshop burst and flooded the carpark and sewerage pit.

Were the issues easily resolved?

Yes. The fuel oil on the coal haul road was soaked up into sand and all contaminated material was placed into the landfarm. The fuel oil spill at the bowser was contained within the bund so the machinery just needed a wipe down. The flooded sewerage pit contained treated effluent from the septic system so there was no spill of sewage material. The water was pumped out and the pipe repaired. Environmental incidents were raised for all issues on the day of occurrence and all actions were completed within three days including the pipe repair.

...RICHARD MACHAR

