



Tree-mendous!

Alcoa Anglesea's World Environment Day activities hit the mark!

alcoa anglesea

environment report

june

2009



australia's aluminium

air

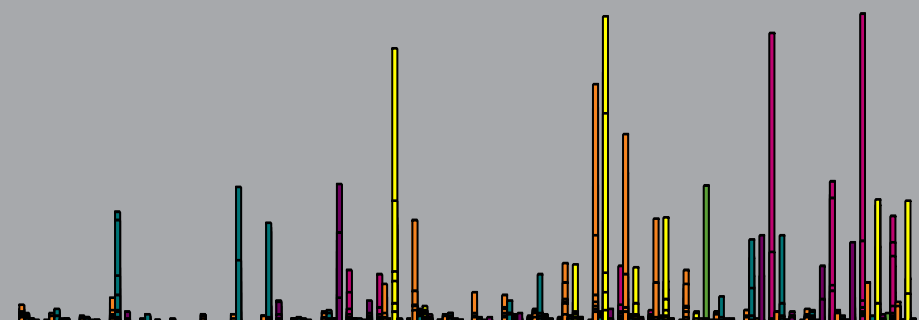
Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.045	0.339
Stack SO ₂ kg/min 1-hour average Licence limit 100kg/min	56.3	67.3

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	0	54
Primary School	1	123
Mt Ingoldsby	3	95
Scout Camp	2	54
Camp Wilkin	3	122
Camp Road	1	55

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
Community Centre	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	0	0	-	-	-	3
Primary School	0	0	0	0	0	0	0	0	0	0	0	21	19	1	1	0	0	2	2	0	22	4	0	1	0	115	0	56	123	42
Mt Ingoldsby	6	3	2	10	1	1	3	3	2	1	4	1	15	40	3	12	10	5	23	95	75	41	20	4	4	4	5	5	15	8
Scout Camp	3	5	2	44	3	-	0	54	39	1	4	1	1	5	3	2	8	19	2	4	3	2	0	10	33	34	4	2	2	1
Camp Wilkin	1	1	1	-	0	-	-	0	1	1	1	109	6	1	1	3	3	23	122	22	41	4	1	1	1	0	1	49	48	
Camp Road	1	1	0	4	1	0	0	0	8	0	0	55	1	3	0	1	2	3	2	1	5	1	0	1	0	35	2	22	32	3

EPA Air Quality Objective
200

Alcoa Local Standard
170



water



Water Storage

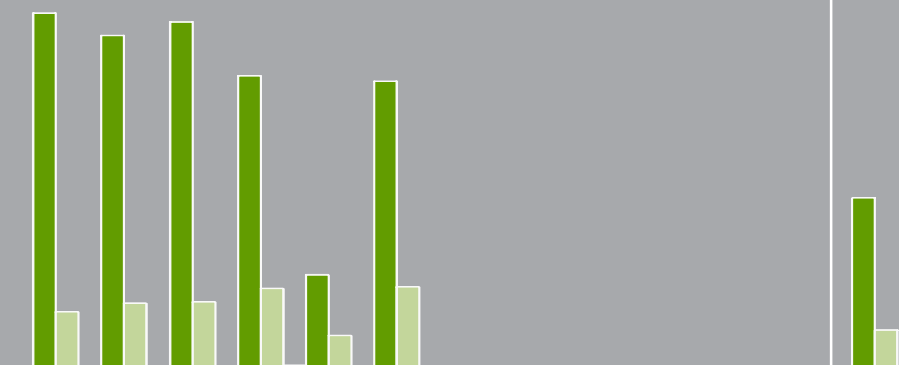
Barwon Water storage levels for the Geelong system at 18.1% capacity. Stage 4 restrictions apply with a Winter exemption to permit limited residential garden watering.

Water Discharge	June	Total
ML		
Ashponds (SP1)	115.6	717.3
Mine (SP4)	0	0

Water Monitoring 18/06/2009	SP1 Ashpond		SP4 Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	8.3	3-9	no	5-9	6.8
Susp. Solids	100	< 4	100	discharge	30	< 4
Colour	50	4	50	at	50	5
Aluminium	10	0.15	10	time	5.5	0.050
Iron	10	0.35	20	of	4.0	0.070
Zinc	0.4	0.006	2.0	sampling	0.30	0.024

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	2.5	1.0	1.5	1.5	2.9	1.6							11
Bore Water	288	270	281	237	76	233							1385
Mine Water	46	53	54	65	27	66							311



World Environment Day 2009



Alcoa Anglesea celebrated World Environment Day on Friday June 5 by joining forces with Parks Victoria and Anglesea Primary School's Grade 5/6F. The group removed Boneseed plants from the Anglesea Heath.

Boneseed (*Chrysanthemoides monillifera* ssp *monillifera*) is a non-native Weed of National Significance, and is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread and economic and environmental impacts. As boneseed reproduces by seed, it is important to remove plants prior to setting seed.

Following an introduction from Parks Victoria, the group hand-pulled the boneseed plants. Due to the ease of regrowth of the plants, the trailer load of collected plants was taken to the Anglesea Landfill for disposal.

Grade 5/6 F teacher, Mrs Helen Flynn said "The kids really enjoyed the morning of boneseed weeding and learnt some important information regarding the conservation of their own backyard."

Alcoa Anglesea and Parks Victoria co-manage the Anglesea Heath, which requires a significant effort to ensure the ongoing management and conservation of the area's biodiversity. The senior students at Anglesea Primary school have shown an interest in preserving the area and participating in these kinds of events. This is another example of the strong environmental link that we share with the primary school and the local community.

In addition to the Boneseed removal, a group of six Alcoa Anglesea employees conducted a tree planting session on site to commemorate World Environment Day. Heath Tea-Tree seedlings were planted in the embankment adjacent to the front gate.

Conservation of the Anglesea Heath and the environment in general is of the highest priority for Alcoa Anglesea, and these World Environment Day activities are fantastic events to highlight this!




ANIMALS OF THE ANGLESEA HEATH

SUPERB BLUE WREN (*Malurus cyaneus*)

Size: 14cm

Male: rich blue + black plumage above and on the throat, the belly is white and the bill is black
Female: brown tail, pale bill and buff patch around the eye

Voice:  soft sharp 'trrt'; trilling 'trreee'; full throated gushing song with downward inflection
click to hear the bird call

Distribution + Habitat: eastern Australia and Tasmania to the south east corner of South Australia; in most habitat types with suitable dense low shrub cover, common in urban gardens

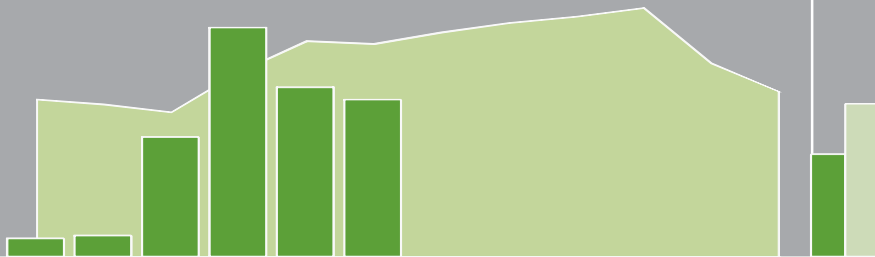
Food: feed on insects and small arthropods
Adult male fairy wrens are strikingly coloured, especially during the breeding season. Males moult completely after this season into a brown eclipse plumage. The Superb Blue Wren is distinguishable from other fairy wrens by its white belly.

SUPERB BLUE WREN



RAINFALL (mm)

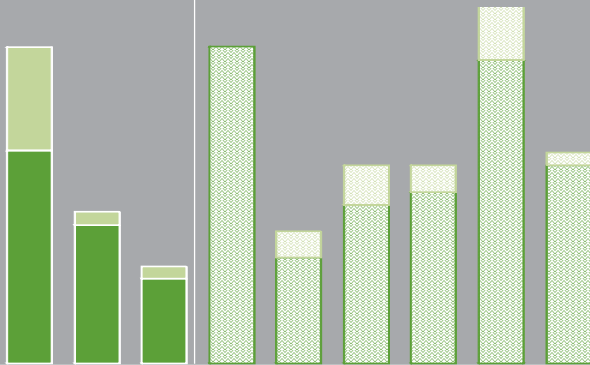
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2009 Rainfall	5.0	5.8	33.4	63.8	47.2	43.8							199.0
1968-2008 Average	43.9	42.5	40.4	51.6	60.2	59.5							298.1



WATER

TOWN WATER USE (ML)

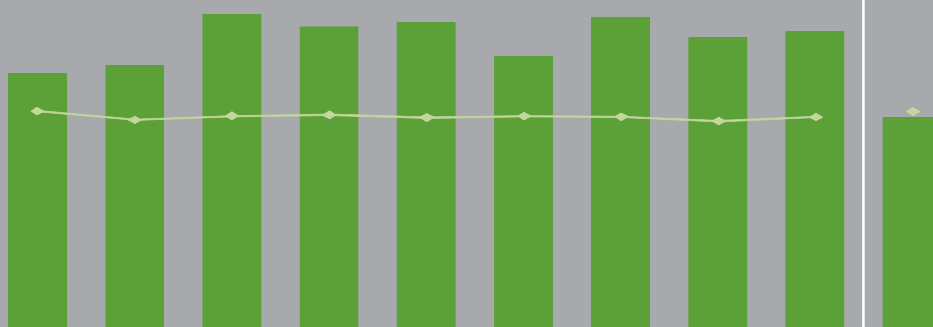
	2000	2008	2009	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	15.5	9.6	2.5	0.8	1.2	1.3	2.3	1.5						
Amenity	11.6	1.5	1.4	0.0	0.2	0.3	0.2	0.6	0.1						



AIR

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
GHG Mt	1.23	1.27	1.50	1.45	1.47	1.31	1.49	1.40	1.42	1.26
◆ GHG t/MWh	1.24	1.19	1.21	1.21	1.20	1.21	1.20	1.18	1.20	1.24



environmental improvement

Environmental Management Targets	June	2009 Total	Forecast	2009 Target
Reportable Environmental Incidents	0	1	1	0
Env Near Miss vs Env Incident Run Rate (ratio)	2.0	3.0	3.0	2.5
Monthly EHS ASAT Audit Completion (%)	100	89	89	90

Air Emission Targets	June	2009 Total	Forecast	2009 Target
Ambient SO ₂ (no. readings > 200ppb)	0	2	2	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions (lost MWh)	789	9354	20556	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.21	1.24	1.24	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0

Water Targets	June	2009 Total	Forecast	2009 Target
Town Water (ML)	1.6	11.0	20.0	14.1
Bore Water (ML)	233	1385	2765	4000

Waste Targets	June	2009 Total	Forecast	2009 Target
Waste to Landfill (t)	0.0	7.2	10.5	8.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0.0

Mine Rehabilitation Targets	2009 Total	2009 Target
2009 Area to Clear (ha)	0.245	0.0
2009 Area to Rehabilitate (ha)	0.658	0.0

OUR ENVIRONMENT AND OUR EMPLOYEE

Hi Dale, tell us a little about your role with Parks Victoria.

I have spent the last 8 years working in partnership with Alcoa to manage the Anglesea Heath. Initially the Heath was pretty degraded, but since the inception of the Anglesea Heath Management Plan in 2002 we have been working to improve the quality of the Heath. This includes track rehabilitation, weed management, fox and cat management and protection of rare and threatened species in the area.

We understand that you are moving on - where are you off to ?

I'm heading to Western Australia to work for Bush Heritage - which is like a private version of Parks Victoria. I will be managing Charles Darwin Reserve - 68,800 ha of former sheep station. It is a hot-spot for biodiversity - much like Anglesea Heath, and it is internationally recognised as such. I will be responsible for basically everything to do with the reserve - there will be heaps to keep me busy!

We wish you the best of luck!

...DALE FULLER

