



dash and concorde
a close up of anglesea's newest additions

alcoa anglesea

environment report

october

2007



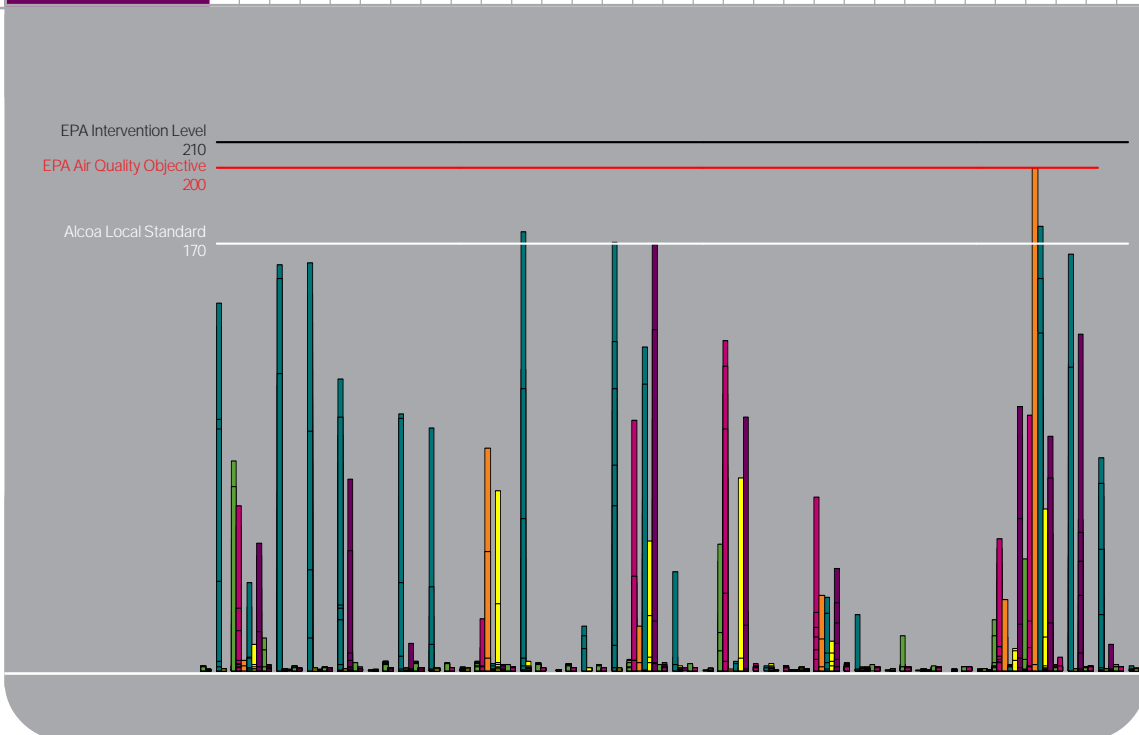
australia's aluminium

air

Air Monitoring	Average	Maximum
Stack Monitors		
Opacity g/m ³ 10-minute average	0.061	0.189
Stack SO ₂ kg/min 1-hour average Licence limit 100kg/min	68.77	86.49

Ambient Monitors	Average	Maximum
SO ₂ 1 hour ppb		
Community Centre	3	83
Primary School	4	131
Mt Ingoldsby	17	200
Scout Camp	13	177
Camp Wilkin	2	77
Camp Road	3	170

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	2	83	13	2	2	3	4	4	3	4	2	3	3	3	5	2	3	50	-	-	-	-	3	14	2	2	20	45	3	2	3
Primary School	1	66	2	1	1	2	1	1	1	21	2	1	1	1	100	3	1	131	3	2	69	4	2	2	2	52	102	6	2	2	
Mt Ingoldsby	0	4	0	0	0	0	0	0	0	89	0	0	0	0	18	0	0	1	0	1	30	0	0	0	0	28	200	0	0	0	
Scout Camp	146	35	161	162	116	1	102	97	2	3	175	0	18	170	129	39	0	4	2	1	29	23	0	0	0	1	2	177	166	85	2
Camp Wilkin	1	11	1	1	1	1	1	1	1	72	4	1	1	1	52	2	1	7	77	3	2	12	2	1	1	1	9	64	1	1	1
Camp Road	0	51	1	1	76	0	11	0	0	3	0	0	0	0	170	1	0	101	1	1	41	2	0	0	0	1	105	93	134	11	1



water



Water Storage

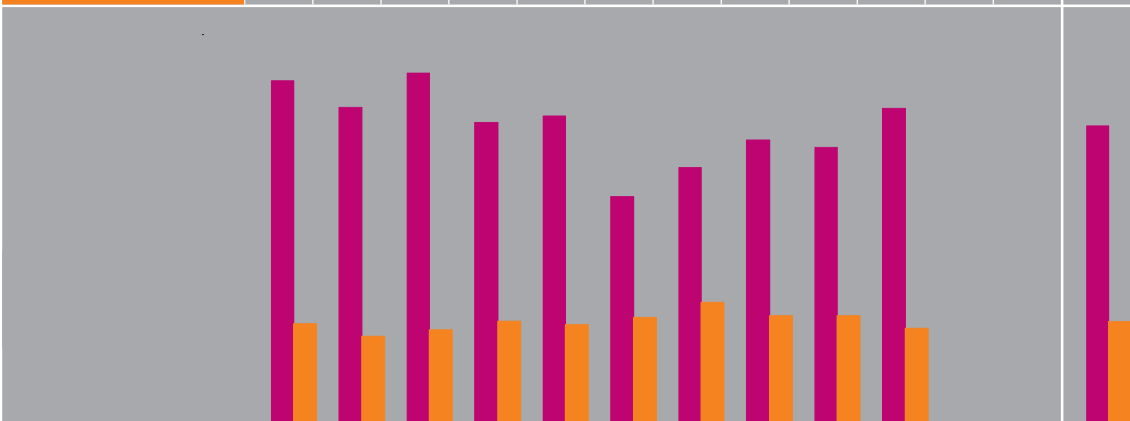
Barwon Water storage levels for the Geelong system at 38% capacity. Stage 4 restrictions apply with a Daylight Savings exemption to permit limited residential garden watering.

Water Discharge	October	Total
ML		
Ashponds (SP1)	124	1341
Mine (SP4)	0	0

Water Monitoring 15/10/2007	SP1 Ashpond		SP4 Mine		SP3 Final	
	EPA limit	Lab Result	EPA limit	Lab Result	EPA limit	Lab Result
pH	4-10	7.6	3-9	-	5-9	7.3
Susp. Solids	100	3	100	-	30	< 2
Colour	50	4	50	-	50	5
Aluminium	10.00	0.39	10.0	-	5.500	0.044
Iron	10.00	0.28	20.0	-	4.000	0.034
Zinc	0.400	0.014	2.000	-	0.300	0.014

WATER WATER USAGE PER MONTH (ML)

Date	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Town Water	0.7	0.7	0.9	1.1	0.9	2.3	1.7	1.9	1.4	0.8			12.4
Bore Water	274	253	280	241	246	182	205	227	221	252			2381
Mine Water	81	71	76	83	80	86	98	87	87	77			826



peregrine falcons



We are proud to formally introduce Dash and Concorde, Alcoa Anglesea's falcon chicks for 2007. The names for our falcon chicks were nominated by students from Anglesea Primary School.

For the fourth year in a row, Peregrine Falcons have returned to Alcoa Anglesea to the nest box on top of the water tower. However, despite laying four eggs, only two have successfully hatched. Whilst there is no explanation for why this has happened, a similar scenario occurred here last year with only one of the four eggs hatching successfully. There are several reasons why an egg may not hatch - drought, adults may be incompatible or an adult may have left the eggs resulting in a drop in incubation temperature.

The positive for having two chicks instead of four is the amount of food each chick receives with less sibling competition. The more food the two chicks receive, the stronger they will be, giving them a better chance of survival. This extra benefit was clearly evident when volunteers from the Victorian Peregrine Project took the travel tower to the

elevated home this month to check on the chicks. Weighing in at a very healthy 905g is our female, Dash, with all the characteristics to be as formidable as her mother. More reserved and weighing in at 590g is our male, Concorde.

Sheila made her presence felt during the expedition up to retrieve the chicks - the hard hats were essential PPE under the circumstances! Whilst both parents exhibited agitated behaviour Sheila didn't hesitate on getting a close look at the bright yellow duco of our hats. The health assessment and banding of the chicks was completed and the chicks returned to the nest box as quickly as possible so that the parents could rest easy.

The webcam at www.alcoa.com/falcons continues to broadcast images from the Peregrine Falcon nest box at Alcoa Anglesea over the internet. There's been plenty of action and more to come as Dash and Concorde continue to grow, change plumage and learn to fly. Regular updates are also included on the website on highlights of the week.

ANIMALS OF THE ANGLESEA HEATH

CRIMSON ROSELLA (*Platycercus elegans*)

Size:	34 cm
Did you know:	technically named the Blue-cheeked Rosella as they can be red, yellow or orange
Description:	the 'Crimson Rosella' has crimson plumage and bright blue cheeks, feathers of the back and wing are black edged with red, flight feathers have blue edges, tail is blue above and pale blue below; the 'Yellow Rosella' has the crimson replaced with light yellow and the tail more greenish; the 'Adelaide Rosella' ranges in colour from yellow to orange
Distribution:	crimson birds occur from Kangaroo Island to Cairns; orange birds are restricted to the Flinders Ranges, yellow ones are found along the Murray, Murrumbidgee and lower Darling Rivers
Habitat:	tall eucalypt forest and wetter forests
Food:	seeds of eucalypts, grasses and shrubs

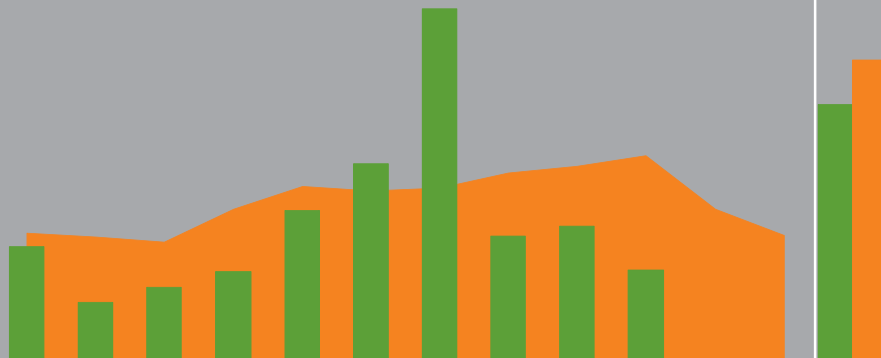
CRIMSON ROSELLA



LAND

RAINFALL (mm)

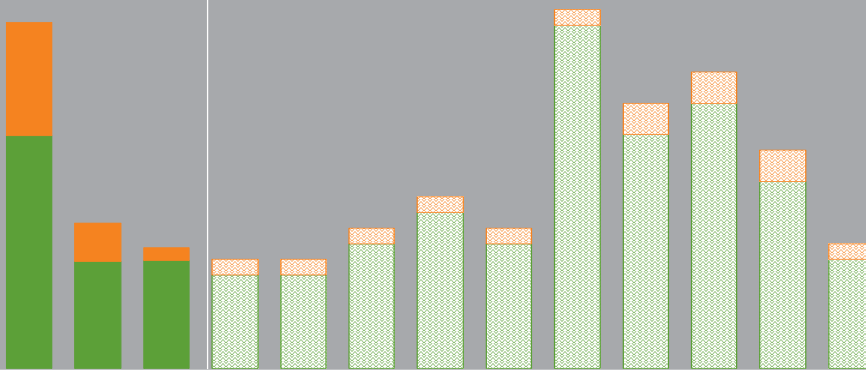
Month	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
2007 Rainfall	40.0	20.2	25.6	31.0	52.8	69.2	124.0	43.6	47.2	31.6			485.2
1968-2006 Average	44.6	43.3	41.5	53.1	61.2	59.6	60.6	65.8	68.3	72.0			570.0



WATER

TOWN WATER USE (ML)

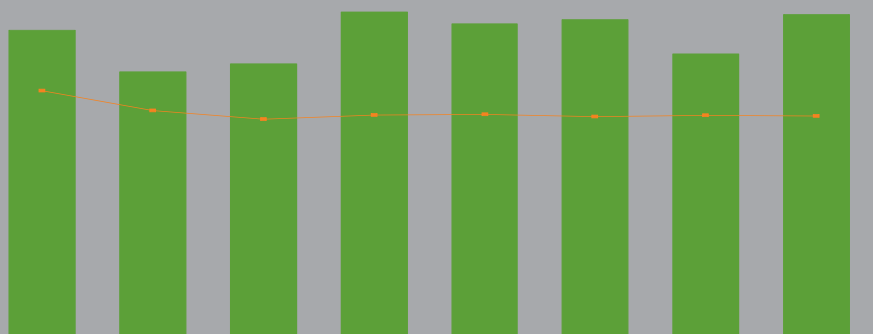
	2000	2006	2007	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Process	23.9	11.0	11.1	0.6	0.6	0.8	1.0	0.8	2.2	1.5	1.7	1.2	0.7		
Amenity	11.6	3.8	1.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1		



AIR

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

	1990	2000	2001	2002	2003	2004	2005	2006	2007
GHG Mt	1.42	1.23	1.27	1.50	1.45	1.47	1.31	1.49	1.38
◆ GHG. t/MWh	1.34	1.24	1.19	1.21	1.21	1.20	1.21	1.20	1.18



environmental improvement

Environmental Management Targets	October	2007 Total	Forecast	2007 Target
Reportable Environmental Incidents	0	3	4	0
Monthly EHS ASAT Audit Completion (%)	100	100	100	90
Air Emission Targets	October	2007 Total	Forecast	2007 Target
Ambient SO ₂ (no. readings > 210ppb)	0	3	4	0
Ambient SO ₂ (no. readings > 200ppb)	0	4	5	0
Stack SO ₂ (no. hrs > 100kg/min)	0	0	0	0
SO ₂ Load Reductions (lost MWh)	4887	23419	28103	N/A
GHG Efficiency (t CO ₂ e/MWh)	1.20	1.18	1.18	1.20
Opacity (10 min av > 0.25g/m ³ normal operation)	0	0	0	0
Water Targets	October	2007 Total	Forecast	2007 Target
Town Water (ML)	0.8	12.4	14.9	14.2
Bore Water (ML)	252	2382	2858	2667
Waste Targets	October	2007 Total	Forecast	2007 Target
Waste to Landfill (t)	3.8	3.8	4.6	9.0
Solid Prescribed Waste to Landfill (t)	0.0	0.0	0.0	0.0
Mine Rehabilitation Targets		2007 Total		2007 Target
2007 Area Cleared (ha)		2.9		3.5
2007 Area Rehabilitated (ha)		5.0		> 3.5
2005 Mine Rehabilitation Species Richness (%)		103		100

OUR ENVIRONMENT AND OUR EMPLOYEES..

Gary, we believe you witnessed the banding of the falcon chicks. What happened? It was very interesting (and noisy). The chicks were retrieved from their nest box on the water tower which did not please the adults. It was however very amusing for the onlookers seeing the handlers swooped and collected by the parents. The helmets did come in handy! The chicks were then brought to the store where the banding and data recording took place.

Any ideas what the banding is about? The chicks were banded for research purposes to determine how far they disperse and so they can recognise where they came from.

Any difference between the two chicks? The chicks are now adorned with their own uniquely coded jewellery, which apparently looks cool if you are a falcon. I was told that the larger of the two is the female and not surprisingly the loudest.

How was the experience? It was interesting to learn that the chicks are banded at three weeks to coincide with their skeletal structure being fully developed. All in all it was a great experience to feel the down of the chicks which was incredibly soft and to appreciate the sheer strength of these powerful birds and their amazing talons.

...GARY HINDLE

