# **Appendix 1: Engagement Activities Daily Reports**

CALL CENTRE REPORTS									OHOLOGIC OLIV	OHA CIT	TANK TOACATAC		۰	
No. of No. of Calls Info Packs Sent			ON LINE REPORTS	RTS		SHOPPING CENTRE REPORTS	RE .	BRIEFINGS	INFO SESSIONS	GIVEN OUT AT INFO SESSIONS	OUTS	TOTAL KITS SENT	EMAIL ALERTS SENT	ADVERTISE MENTS
	Web	No. of Online Info Requests	No. of Formal Submissions (on-line and postal)	No. of Comments & Queries	No. of Info Packs Sent	Shopping Centres Visited Ha	Info Packs Handed Out	Briefings Held No. of Info Packs Given Out at Driefings	Location of Info Sessions			ALL KITS		
	2,708							Canberra (refer list below) 40			Information kits posted to 805 stakeholders.	845		
Martin Ferguson, Shadow Minister for Aviation and Transport Security, Wurces, David Gazard - Treasurer's O	for Primary Inc Vayne Swan, Mice, Senator	dustries, Re MP, Shadov Kerry O'Bri	sources, Forest w Treasurer, Br ien, Shadow Mir	try and Tourism rad Williams an nister for Trans	i, Peta Lane, id Diana Stai port, Anthon	, Adviser to Senator Carr inlay - Minister Vaile's of y Albanese MP, Shadow	npbell, Ministe fice, Christine / Minister for E	The Hon, Martin Feguson, Shadow Minister for Primary Industries, Resources, Forestry and Tourism, Peta Lane, Adviser to Senator Campbell, Minister for Environment & Heritage, Paul Newlie, Chair - Transport & Regional Services, The Hon. Arch Bevis, MP Shadow Minister for Homeland Security, Camper and Chair Environment and Chair Environment & Heritage, Peta Minister for Industry, Tourism And Machine Fore and Chair State Merity, Wayne State Merity Chair State Merity Platedow, Minister for Environment & Heritage, Media Representatives in Bissane.	sport & Regional Serv net, Kevin Rudd MP, S bane.	ices, The Hon. / Juzanne Combe.	rch Bevis, MP Shadow M s, Adviser to the Hon. lan	finister for Homelan Macfarlane, Ministe	id Security, Sha er for Industry, "	ıdow Fourism
1-Nov-06 43 35 0	0 2,519	20	-	1	65	Wynnum Plaza (8am - 5.45pm), Buranda Plaza (8.00am - 5.30pm)	104					204	Release of Orath CEIS/MDP 1,056	Courier Mail Quest (16) The Australian
2-Nov-06 16 15 1	818	-	-	-	-	Carindale Shopping Centre (8.30am - 5.30pm; 5.30pm - 9.00pm) Bulinbal Library	155				Fact Sheet No. 17: 24 Hour Operation of the Airport mailed to 878 stakeholders	171	Fact Sheet No. 17 - 1,360 emails	
3-Nov-06 25 18 0	0 289	ω	ю		7	Carindale Shopping Centre (8.30am - 5.30pm) Mt Gravatt Plaza	125	The Courier-Wail 2				150	E-F	Redland Times
0 6 6 0	0 376	1	-		1	(o.00dan - 5.30pm)  Carindale Shopping Centre 8.30am - 5.30pm)	120	Holland Park Probus Club 40				177		
5-Nov-06	333		0	2										
6-Nov-06 10 6 0	0 467	41	2	-	13	Fairfield Gardens (8.15am - 5.45pm) Centro Toombul (8.00am - 5.30pm)	18					100		
7-Nov-06 9 35 0	0 288	S	-	0	ß	Cannon Hill Shopping Plaza (8.15am - 5.30pm)	20					06		Courier Mail
8-Nov-06 4 190 0	0 337	ĸ	-	-	2	Hamilton Library (1.00pm - 5.30pm)	က	Councillor Jane Prentice, Councillor 5 for Indooroopilly	Session: Pacific Golf Club, Carindale 2.00pm - 8.00pm	15	Mail CD sets to 205 primary & secondary independent & state schools within 15 km radius of airport	217	0 4	Quest x 16 papers
9-Nov-06 8 16 0	0 290	т	E	0	m	Chermside Shopping Centre (8.15am - 9.00pm)	130		South Info Session: 2.00pm - 8.00pm	15		164	Alert to South Info Session - 1,585 emails	
10-Nov-06 11 48 0	0 338	4	-	0	4	Chermside Shopping Centre (8.15am - 5.30pm)	70		South Info Session: 9.00am - 5.00pm	15		137		Redland Times
11-Nov-06 0 0 0	0 139	2	0	0		Chermside Shopping Centre (8.15am - 5.30pm)	06		South Information Session: 10.00am - 4.00pm	15		105		
12-Nov-06	182	İ	0	0	Ť		T					0		
1	0 367	6	2	0	80	Centro Lutwyche (8 15am - 5 45pm)	35					44		

													Old Old Old Old	00000				
CAL	CALL CENTRE REPORTS	REPORTS				ON LINE REPORTS	TS.		SHOPPING CENTRE REPORTS	<u> </u>	BRIETINGS		INFO SESSIONS	GIVEN OUT AT INFO SESSIONS	DATABASE MAIL OUTS	SENT	EMAIL ALERTS SENT	ADVEKIISE MENTS
Date	No. of Calls	No. of Info Packs Sent	Visits to Info Centre	Web	No. of Online Info Requests	No. of Formal Submissions (on-line and postal)	No. of Comments & Queries	No. of Info Packs Sent	Shopping Centres Visited	Info Packs Handed Out	Briefings Held	No. of Info Packs Given Out at briefings	Location of Info Sessions			ALL KITS		
14-Nov-06	е	43	0	280		0	0	9	Banyo Library (9.00am - 5.00pm)	10	Rotary Brisbane North	30				89	Alert to North Info Session - 1,654 emails	
15-Nov-06	м	ø	0	300	2	0	~	5					North Information Session: Virginia Palms Hotel, Boondall 2.00pm - 8.00pm)	ې		16		
16-Nov-06	Ω.	ß	0	280	4	-	0	4					North Information Session: 2.00pm - 8.00pm	S		14		Courier Mail, Quest x 16 papers
17-Nov-06	က	~	2	174	-	-	0	-			Neil Roberts, Member for Nudgee	10	North Information Session: 9.00am - 5.00pm	S		17		
18-Nov-06	0	0	0	219	ო	0	0	0					North Information Session: 10am - 4.00pm)	ro		5		
19-Nov-06				167		0	0									0		
20-Nov-06	-	21	0	179	ε	0	0	O	McWhirter's Building (9.00am - 5.00pm)	90	The Hon. Paul Lucas, Minister for Transport and Main Roads and Member for Lytton, Redcliffe Probus Club, Airport Fire and Rescue Staff					80		
21-Nov-06	2	ю	0	280	ю	-	m	ю	Toowong Village (9.00am - 5.00pm)	90	Vicky Darling, Member for Sandgate, Regional Airspace Users Advisory Committee, Airport Fire & Rescue	10				99		
22-Nov-06	9	4	~	232	3	0		က			Coorparoo Uniting Church	40				47		Quest x 16 papers
23-Nov-06	е	~	· Θ	95	-	0	2	-	Indooroopilly Shopping Centre (9.00am - 9.00pm)	40	Councillor Kim Flesser, Chris Bombolas, Member for Chatsworth, Airport Fire and Rescue Staff	10				52		
24-Nov-06	-	7	4	150	5	0		5	Indooroopilly Shopping Centre (8.15am - 5.50pm)	25	Councillor Bonny Barry, Member for Aspley	10				42		
25-Nov-06	0	15	2	96	0	-		0	Indooroopilly Shopping Centre (8.30am - 5.15pm)	25						40		
26-Nov-06				131		0										0		
27-Nov-06	4	81	ო	153	0	0		0	Greenslopes Mall (8.15am - 5.45pm)	25						43		
28-Nov-06	-	8	-	176	4	0		4	Macarthur Central, Brisbane City (8.00am - 5.45pm)	80	Brisbane Development Association	150				268	Alert to West Info Session - 1,609 emails	
29-Nov-06	ß	-	2	156	-	4		-	SHOPPING CENTRES DISTRIBUTION COMPLETED		Reddiffe City Council (Mayor and Counciliox). Councilior Faith Hopkins, Councilior for Marchan, BAC's Technical Noise Working Group (TNWG). Brisbane Airport Consultative Committee	45	West Information Session: Bardon Conference Centre 2.00pm - 8.00pm	ی		52		Courier Mail, Quest x 16 papers
30-Nov-06	2	2	7	238	2	2		2			Australian Catholic University	25	West Info Session: 2.00pm - 8.00pm	S		34		
SIVIOI	176	002	00													•		



DECEMBER 2006	R 2006															_
CALL	CALL CENTRE REPORTS	EPORTS				ON LINE REPORTS	αs		SHOPPING CENTRE REPORTS	E.	BRIEFINGS		INFORMATION SESSIONS	NO. OF KITS DISTRIBUTED AT INFO SESSIONS	TOTAL KITS DISTRIBUTED	
Date	No. Of Calls	No. of Visi	Visits to VInfo	Web Hits	No. of Online Info Requests	No. of Formal Submissions (on-line and postal)	No. of Comments & Queries	No. of Info Packs Sent	Shopping Info	Info Packs Handed Out	Briefings Held No. Pack: O	No. of Info Packs Given Out at briefings	Location of Info Sessions			
1-Dec-06	2	1	-	243	4	+	0	4		0		0	West Info Session: Bardon Conference Centre 9.00am - 5.00pm	12		17
2-Dec-06	0	0	0	26	0	0	0	0		0			West Info Session: 10.00am - 4.00pm	16		16
3-Dec-06	0	0	0	131	0	0	0	0		0			INFORMATION SESSIONS CONCLUDED ON 2			0
4-Dec-06	ю	8	23	170	2	-	0	2	9007 J	0	(1) Airport Fire & Rescue Staff (2) Nudgee Beach Residents Briefing held at Community Information Centre (3) Simon Firm State Member for Yearongpilly and representatives from Mocrooka Residents Association	38	DECEMBER 2006			42
5-Dec-06	0	2	15	154	3	2	0	в	əquu	0	(1) Airport Tenants at Community Information Centre, Boronia Road, Brisbane Airport	20				25
6-Dec-06	2	17	-	151	2	<del>-</del>	0	2	PAON[	0	(1) BP Refinery (2) Murarrie Progress Association (3) The Hon. Judy Spence, Member for Mt Gravatt	25				4
7-Dec-06	3	1	0	1,687	0	0	0	0	pəp	0	(1) Councillor Shayne Sutton, Morningside Ward	10				7
8-Dec-06	2	ဗ	2	211	-	0	0	~	ue	0		0				4
9-Dec-06	0	7	4	26	-	0	0	-	) SA	0		0				œ
10-Dec-06	0	0	0	143	0	0	0	0	ej	0		0				0
11-Dec-06	1	10	11	174	1	0	0	-	ds	0		0				11
12-Dec-06	0	4	8	113	0	0	0	0	d su	0	(1) Gateway Upgrade Communication Team at Community Information Centre, 9 Boronia Road, Brisbane Airport	10				4
13-Dec-06	-	78	15	181	~	0	0	-	18 Cen	0	Pinkenba/Myrtletown Community Briefing at Community Information Centre, 9 Boronia Road, Brisbane Airport	30				62
14-Dec-06	0	59	4	215	3	0	0	3	uic	0		0				32
15-Dec-06	2	2	0	245	0	0	0	0	dd	0		0				2
16-Dec-06	1	0	0	137	2	0	0	2	ОЧ	0		0				2
17-Dec-06	0	0	0	107	1	0	0	-	S	0		0				-
18-Dec-06	2	8	6	144	0	1	0	0		0		0				8
19-Dec-06	7	7	-	151	0	0	0	0		0	(1) Briefing: The Hon. Margaret Keech, Minister for Tourism, Fair Trading and Wine Industry Development	10				12
20-Dec-06	1	9	0	162	0	0	0	0		0		0				9
21-Dec-06	0	37	0	66	0	0	0	0		0		0				37
22-Dec-06	-	7	~	112	0	0	0	0		0		0				7
23-Dec-06	0	0	0	71	-	0	0	-		0		0				~

			0	ON LINE REPORTS	RTS		SHOPPING CENTRE REPORTS	CENTRE	BRIEFINGS		INFORMATION SESSIONS	NO. OF KITS DISTRIBUTED AT INFO SESSIONS	TOTAL KITS DISTRIBUTED
Visits to Web Hits Info	Web Hit		No. of Online Solution No. of No. of Online Solution No. of No. o	No. of Formal Submissions (on-line and postal)	No. of Comments & Queries	No. of Info Packs Sent	Shopping Centres Visited	Info Packs Handed Out	Briefings Held	No. of Info Packs Given Out at briefings	Location of Info Sessions		
0	-	138	0	0	0	0		0		0			
0		63	0	0	0	0		0		0			
0		86	2	0	0	2		0		0			
0		145	-	0	0	-		0		0			
0		267	-	0	0	-		0		0			
0		184	က	-	0	е		0		0			
0		108	-	0	0	-		0		0			
0		92	0	0	0	0		0		0			
06	۳	6,093	30	7	0	30		0		143		28	376



CAL														
Date	L CENTR	CALL CENTRE REPORTS				ON LINE REPORTS	Ø		BRIEFINGS		DATABASE MAIL OUTS	TOTAL KITS DISTRIBUTED	EMAIL ALERTS SENT	ADVERTISEMENTS
	No. of Calls	No. of Info Packs Sent	Visits to Info Centre	Web Hits	No. of Online Information Requests	No. of Formal Submissions (on- line and postal)	No. of Comments & Queries	No. of Info Packs Sent	Briefings Held	No. of Info Packs Given Out		ALL KITS		
1-Jan-07	-	0	0	144			0	2		0		2		
2-Jan-07	-	-	1	138	2	-	0	2				6		
3-Jan-07	0	2	2	101	0	-	0	0				2		
4-Jan-07	0	9	0	159	3	2	0	3		0		9		
5-Jan-07	0	4	0	94	0	0	0	0		0		4		
6-Jan-07	0	0	0	158	0	0	0	0		0		0		
7-Jan-07	0	0	0	106	0	0	0	0		0		0		
8-Jan-07	0	0	0	190	2	0	0	2		0		2		
9-Jan-07	2	1	0	219	2	3	0	2	John Mickel, Minister for State Development, Employment & Industrial Relations	5		3		
10-Jan-07	4	21	-	231	_	က	0	-		0		22		
11-Jan-07	2	2	0	212	1	1	0	1		0		3		
12-Jan-07	1	1	1	146	2	2	0	2		0		3		
13-Jan-07	0	0	0	149	1	0	0	-		0		1		
14-Jan-07	0	0	0	180	-	0	0	-		0		1		
15-Jan-07	ო	-	0	223	0	-	0	0		0		_		
16-Jan-07	0	6	3	242	0	5	0	0	Councillor Victoria Newton, Deagon Ward	S		6		
17-Jan-07	2	2	3	385	2	9	0	2	Nudgee Golf Course	10		7	Email alert to all	Advertisement re closure of
													stakeholders re closure of comment period on 6/2/07	comment period on 6/2/07 - Courier Mail and Quest Community Newspapers
18-Jan-07	2	20	3	294	4	0	0	4		0		24		
19-Jan-07	1	0	0	213	1	1	0	1		0		1		
20-Jan-07	0	0	0	120	1	0	0	1		0		1		
21-Jan-07	0	0	0	154	2	0	0	2				2		
22-Jan-07	2	31	-	187	0	2	0	0		0		31		
23-Jan-07	0	2	2	232	0	4	0	0		0		2		
24-Jan-07	2	14	7	224	2	3	0	2		0		16		
25-Jan-07	0	1	0	232	0	3	0	0		0		1		
26-Jan-07	0	0	0	170	0	0	0	0		0		0		
27-Jan-07	0	0	0	196	1	-	0	-		0		_		
28-Jan-07	0	0	0	202	1	0	0	1		0		11		
29-Jan-07	0	20	-	322	_	80	0	-		0		51		
30-Jan-07	3	2	1	279	0	9	0	0		0		2		
31-Jan-07	5	3	2	0	0	6	0	0	Councillor David McLaughlan, Hamilton Ward	5		3		
TOTALS	31	173	28	5,902	32	62	0	32		25		205		

FEBRUARY 2007	7								
	CALL CE	CALL CENTRE REPORTS				ON LINE REPORTS	RTS		TOTAL KITS DISTRIBUTED
Date	No. of Calls	No. of Information Packs Sent	Visits to Info Centre	Web Hits	No. of Online Information Requests	No. of Formal Submissions (on-line and postal)	No. of Comments and Queries	No. of Information Packs Sent	ALLKITS
1-Feb-07	3	4	3	219	-	7	0	_	3
2-Feb-07	2	0	0	174	_	က	0	-	7
3-Feb-07	-	0	0	153	0	0	0	0	0
4-Feb-07				194		4	_		0
5-Feb-07	15	32	2	396	0	17	-	0	32
6-Feb-07	17	22	9	430	8	73	-	3	25
Totals	41	28	11	1,536	5	104	ĸ	5	63



# **Appendix 2: Draft EIS/MDP Locations**

	Brisbane City Council Ward Offices
Bracken Ridge Ward Office	Neighbourhood Centre, Corner Bracken and Barrett Streets, Bracken Ridge
Central Ward Office	Shops 22 & 23 TC Beirne Centre, 315 Brunswick St, Fortitude Valley
Chandler Ward Office	Shop 8, Millennium Centre, 14 Millennium Boulevard, Carindale
Deagon Ward Office	Deagon Ward Office, Cliff Street, Sandgate
Doboy Ward Office	Shop E 1181, Wynnum Rd, Cannon Hill
Dutton Park Ward Office	Fairfield Gardens, 180 Fairfield Rd, Fairfield
East Brisbane Ward Office	Unit 3, 34 Old Cleveland Road, Stones Corner
Enoggera Ward Office	102 Samford Road and Cole Street, Alderley
Grange Ward Office	Shop 2, Corner Kedron Brook Rd & Macgregor Street, Wilston
Holland Park Ward Office	1420 Logan Rd, Mt Gravatt
Jamboree Ward Office	Suite 18, Jindalee Allsports, Shopping Village, 235 Sinnamon Road, Jindalee
Marchant Ward Office	BCC Regional Business Centre North, 960 Gympie Road, Chermside
McDowall Ward Office	Shop 5 & 6, Rode Road shopping Centre, Stafford Heights
Moorooka Ward Office	Shop 2, 122 Beaudesert Road, Moorooka
Morningside Ward Office	219 Oxford Street, Bulimba
Northgate Ward Office	Banyo Municipal Library, 284 St Vincent's Road, Banyo
Pullenvale Ward Office	Suite 18, Floor 1, Kenmore Village shopping Centre, Brookfield
Richlands Ward Office	Inala Customer Service Centre and Library, Inala Civic Centre, Cosair Avenue, Inala
Runcorn Ward Office	BCC Sunnybank Centre, Lister Street, Sunnybank
The Gap Ward Office	477 Waterworks Road, Ashgrove
Toowong Ward Office	50 High Street, Toowong
Walter Taylor Ward Office	Shop 4001A, Level 4, Indooroopilly Shoppingtown, Indooroopilly
Wishart Ward Office	Suite 102, 2072 Logan Road, Upper Mount Gravatt
Wynnum Manly Ward Office	3A/212 Bay Tce, Wynnum

	State Government Electorate Offices
A Ibert Electorate Office	2 Rochester Drive, Mt Warren
Algester Electorate Office	Shops 6 & 7, 1102 Beaudesert Road, Acacia Ridge
Ashgrove Electorate Office	Ashgrove Central, 221 Waterworks Road, Ashgrove
Aspley Electorate Office	Shop 2, 1315 Gympie Road, Aspley
Barron River Electorate Office	Unit 7, Stanton Place, Captain Cook Highway, Smithfield
Beaudesert Electorate Office	Shop 16B, Jimboomba Shopping Centre, Beaudesert Road, Jimboomba
Brisbane Electorate Office	Unit 2, Hill House, 541 Boundary Street, Spring Hill
Brisbane South Electorate Office	Suite 1, 90 Vulture Street, West End
Broadwater Electorate Office	Suite 17, Level 2, Runaway Bay Marina, 247 Bayview Street, Runaway Bay
Bulimba Electorate Office	901 Wynnum Road, Cannon Hill
Bundaberg Electorate Office	WIN Tower, Cnr Quay and Barolin Streets, Bundaberg
Bundamba Electorate Office	Shop 46B, St Ives Shopping Centre, 2 Smiths Road, Goodna
Burkedin Electorate Office	Shop 30, Centrepoint Arcade, Queen Street, Ayr
Burleigh Electorate Office	1 Paradise Avenue, Miami
Burnett Electorate Office	Shop 7, Bargara Beach Plaza, 15-19 See Street, Bargara
Cairns Electorate Office	Office 1 'McLeod South, 78-84 Spence Street Cairns
Callide Electorate Office	64 Callide Street, Biloela

	State Government Electorate Offices
Caloundra Electorate Office	Shop 1, Pia Place, 118 Bulcock Street, Caloundra
Capalaba Electorate Office	Shop 60, Capalaba Park, Mt Cotton Road, Capalaba
Charters Towers Electorate Office	Stock Exchange Arcade, 2/76 Mosman Street, Clermont
Chatsworth Electorate Office	860-862 Old Cleveland Road, Carina
Clayfield Electorate Office	Suite 4, 138 Racecourse Road, Ascot
Cleveland Electorate Office	"Kramer Place" 19 Waterloo Street, Cleveland
Cook Electorate Office	Ground Floor, Andrejic's Arcade, 62-66 Grafton Street, Cairns
Cunningham Electorate Office	Shop 4, Willow Glen Shopping Centre, 833 Ruthven Street, Toowoomba
Currumbin Electorate Office	Suite 1, Samuel Plaza, 1045 Gold Coast Highway, Palm Beach
Darling Downs Electorate Office	14A Cunningham Street, Dalby
Everton Electorate Office	1st Floor, 510-520 South Pine Road, Everton Park
Ferny Grove Electorate Office	Unit 3, Nepean Centre, 6 Nepean Ave, Arana Hills
Fitzroy Electorate Office	Suite 3, Gracemere Plaza, Russell Street, Gracemere
Gaven Electorate Office	Shop 6, Maid of Sker, 39-41 Nerang Street, Nerang
Gladstone Electorate Office	2/191 Philip Street, Gladstone
Glass House Electorate Office	Suite 14, Kingsgate Centre, 42 King Street, Caboolture
Greenslopes Electorate Office	Shop 3, Coorparoo Village Shopping Centre, 358 Old Cleveland Road, Coorparoo
Gregory Electorate Office	Shop 2, Studio Exclusive Arcade, 120A Eagle Street, Longreach
Gympie Electorate Office	Cinema Complex, 82 Monkland Street, Gympie
Hervey Bay Electorate Office	Shop 3, Baiavista,357 Esplanade, Scarness
Hinchinbrook Electorate Office	12 Lannercost Street, Ingham
Inala Electorate Office	Ground Floor, Commonwealth Government Building, 20 Wirraway Parade, Inala
Indooroopilly Electorate Office	Suite 1, 49 Station Road, Indooroopilly
Ipswich Electorate Office	The Booval Professional Centre, 125 Brisbane Road, Booval
Ipswich West Electorate Office	Shop 1, Brassall Shopping Centre, 68 Hunter Street, Brassall
Kawana Electorate Office	Westpac Building 4B/3 Nicklin Way, Minyama
Keppel Electorate Office	Shop 3, Evia Building, 3 Normanby Street, Yeppoon
Kurwongba Electorate Office	Shop 5A, 199 Gympie Road, Strathpine
Logan Electorate Office	1/1 Helen Street, Hillcrest
Lytton Electorate Office	Shop 2B, 84 Florence Street, Wynnum
Mackay Electorate Office	1st Floor, Mackay Day & Night Pharmacy Building, 67-69 Sydney Street, Mackay
Mansfield Electorate Office	12 Mt Gravatt-Capalaba Road, Upper Mount Gravatt
Maryborough Electorate Office	Shop 1, Comet Place, 133 Lennox Street, Maryborough
Moggill Electorate Office	Unit 5, Princeton Court, 18 Brookfield Road, Kenmore
Mt Coot-tha Electorate Office	76 MacGregor Terrace, Bardon
Mt Gravatt Electorate Office	20 Creek Road, Mt Gravatt
Mt Isa Electorate Office	Mt Isa Trades and Labour Council Building, 74 Camooweal Street, Mount Isa
Mt Omnaney Electorate Office	Shop 18, Park Village Shopping Centre, Cnr Horizon Drive and Riverhills Road, Middle Park
Mudgeeraba Electorate Office	Mudgeeraba Professional Centre, Swan Lane, Mudgeeraba
Mulgrave Electorate Office	94-96 Norman Street, Gordonvale
Mundingburra Electorate Office	Shop 3, 246 Ross River Road, Aitkenvale
Murrumba Electorate Office	Shop T28, Deception Bay Shopping Centre, Cnr Deception Bay Road and Bay Avenue, Deception Bay
Nicklin Electorate Office	Shop 3, 51 Currie Street, Nambour



	State Government Electorate Offices
Noosa Electorate Office	Suite 3, 59 Mary Street, Noosaville
Nudgee Electorate Office	Cnr Toombul and Melton Roads, Northgate
Pumiceston Electorate Office	1/43 Benabrow Avenue, Bellara, Bribie Island
Redcliffe Electorate Office	The Pier Centre, 126 Sutton Street, Redcliffe
Redlands Electorate Office	Redlands Corner, Cnr Cleveland-Redland Bay Road and Colburn Avenue, Victoria Point
Robina Electorate Office	Shops 44-45, Level 1, Niecon Plaza, 17 Victoria Avenue, Broadbeach
Rockhampton Electorate Office	Shop 3, 7 Denham Street, Rockhampton
Sandgate Electorate Office	7 Third Avenue, Sandgate
Southern Downs Electorate Office	9 Victoria Street, Stanthorpe
Southport Electorate Office	Shop 2, 24 Musgrave Avenue, Chirn Park
Springwood Electorate Office	Suite 1, 3360 Pacific Highway, Springwood
Stafford Electorate Office	Shop 15, Chermside Place, 725 Gympie Road, Chermside
Stretton Electorate Office	Unit 5, 62 Pinelands Road, Sunnybank Hills QLD 4109
Surfers Paradise Electorate Office	Unit 50, Capri Commercial Centre, Isle of Capri
Tablelands Electorate Office	210 Byrnes Street, Mareeba
Thuringowa Electorate Office	Unit 8B, 48 Thuringowa Drive, Kirwan
Toowoomba North Electorate Office	Suite 2 ABC Building, 297 Margaret Street, Toowoomba
Toowoomba South Electorate Office	Suite 2, Commercial Union Arcade, 566 Ruthven Street, Toowoomba
Townsville Electorate Office	Ground Floor, 31 Sturt Street, Townsville
Warrego Electorate Office	74 Wyndham (corner Bowen) Street, St George
Waterford Electorate	Shops 13/14, Waterford Shopping Centre, 22 Loganlea Road, Waterford West
Whitsunday Electorate Office	Suite 2, Federation House, 20 Chapman Street, Proserpine
Woodridge Electorate Office	Unit 1, 80 Wembley Road, Woodridge
Yeerongpilly Electorate Office	3/116 Beaudesert Road, Moorooka

	Australian Government Electoral Offices
Petrie Electorate Office	Shop 8, Aspley Planet Centre, 46 Gayford Street, Aspley
Moreton Electorate Office	Suite 106, Sunnybank Times Square, Sunnybank Plaza 250 McCullough Street, Sunnybank
Ryan Electorate Office	31 Station Road, Indooroopilly
Fadden Electorate Office	5 Cottonwood Place, Oxenford
Kennedy Electorate Office	Cnr Edith and Owen Street, Innisvale
Dawson Electorate Office	36 Wood Street, Mackay
Bowman Electorate Office	1/19 Middle Street, Cleveland
Capricornia Electorate Office	145-149 East Street, Rockhampton
Groom Electorate Office	Cnr Margaret & Duggan Sts, Toowoomba
McPherson Electorate Office	1045 Gold Coast Hwy, Palm Beach
Hinkler Electorate Office	Suite 1 City Centre Arcade, Woongarra Street, Bundaberg
Oxley Electorate Office	179 Brisbane Road, Goodna
Griffith Electoarte Office	630 Wynnum Road, Morningside
Maranoa Electorate Office	Suite 2, Foodworks Centre, 59 Condamine Street, Dalby
Fairfax Electorate Office	Suite 2, 5-7 Birtwill Street, Coolum Beach
Lilley Electorate Office	1162 Sandgate Road, Nundah
Blair Electorate Office	Shop 28, Brassall Shopping Centre, Brassal
Wide Bay Electorate Office	319 Kent Street, Maryborough

	Australian Government Electoral Offices
Bonner Electorate Office	69 Clara Street, Wynnum
Brisbane Electorate Office	Shop 1, 209 Days Road, Grange
Longman Electorate Office	110 Morayfield Road, Caboolture
Moncrieff Electorate Office	3 Short Street, Southport
Dickson Electorate Office	3/199 Gympie Road, Strathpine
Forde Electorate Office	Main Street, Beenleigh

	Council Administration Centres			
Beaudesert Shire Council	82 Brisbane Street, Beaudesert			
Boonah Shire Council	70 High Street, Boonah			
Brisbane City Council	Brisbane Square			
Caboolture Shire Council	2 Hasking St, Caboolture			
Caloundra Shire Council	1 Omrah Avenue, Caloundra			
Esk Shire Council	2 Redbank Street, Esk			
Gold Coast Shire Council	Southport Road, Nerang			
Gold Coast Shire Council	135 Bundall Road, Bundall			
Ipswich Shire Council	45 Roderick Street, Ipswich			
Logan Shire Council	150 Wembley Road, Logan Central			
Maroochy Shire Council	"Pacific Place",11-13 Ocean Street, Maroochydore			
Maroochy Shire Council	Ground Floor, Eddie De Vere Building, Cnr Currie and Bury Streets, Nambour			
Pine River Shire Council	220 Gympie Road, Strathpine			
Redcliffe City Council	Irene Street, Redcliffe			
Redland Shire Council	Cnr Bloomfield & Middle Streets, Cleveland			

Council Libraries			
Albany Creek	Ferguson Street, Albany Creek		
Amity Point	Ballow Street, Stradbroke Island		
Annerley Library	450 Ipswich Road, Annerley		
Arana Hills	Cobbity Crescent, Arana Hills		
Ashgrove Library	87 Amarina Avenue, Ashgrove		
Banyo Library	284 St Vincents Road, Banyo		
Beaudesert Library	58 Brisbane Street, Beaudesert		
Bracken Ridge Library	Cnr Bracken Ridge & Barrett Street, Bracken Ridge		
Bribie Island Library	Cnr Welsby Parade & First Ave Bongaree Bribie Island QLD 4507		
Bulimba Library	Cnr Riding Road and Oxford Street, Bulimba		
Caboolture Central Library	Ground Flr, 33 King Street, Caboolture		
Canungra Library	12 Kidston Street, Canungra		
Capalaba	Capalaba Town Centre, Noeleen Street, Capalaba		
Carina Library	Cnr Mayfield Road annd Nyrang Street, Carina		
Carindale Library	Carindale Regional Shopping Centre, Creek Road, Carindale		
Central Plaza Library	City Plaza, Lower Ground Floor, Cnr Ann, George and Adelaide Street Central Plaza		
Chermside Library	375 Hamilton Road, Chermside		
Cleveland	Middle Street, Cleveland		
Coopers Plains Library	107 Orange Grove Road, Coopers Plains		
Corinda Library	641 Oxley Road, Corinda		



	Council Libraries				
Dunwich	Ballow Road, Dunwich				
Everton Park Library	561 South Pine Road, Everton Park				
Fairfield Library	Fairfield Shopping Centre, Fairfield Road, Fairfield				
Garden City Library	Cnr Logan and Kessels Road, Upper Mt Gravatt				
Grange Library	79 Evelyn Street, Grange				
Greenbank Library	145-167 Teviot Road, Greenbank				
Hamilton Library	Cnr Racecourse Road and Rossiter Parade, Hamilton				
Holland Park Library	81 Seville Road, Holland Park				
Inala Library	Corsair Avenue, Inala				
Indooroopilly Library	318 Moggill Road, Indooroopilly				
Ipswich Global Information Centre	Ipswich Global Information Centre, 40 South Street, Ipswich				
Jimboomba Library	18-24 Honora Street, Jimboomba				
Kallangur	1480 Anzac Avenue, Kallangur				
Logan Central	150 Wembley Road, Logan Central				
Logan Hyperdome	66-70 Mandew Street, Shailer Park				
Logan North	IKEA Centre, Springwood Road, Rochedale South				
Logan Village Library	Wharf Street, Logan Village				
Logan West	69 Grand Plaza Drive, Browns Plains				
Marsden	Marsden Park Shopping Centre Chambers Flat Road, Marsden				
Mitchelton Library	37 Heliopolis Parade, Mitchelton				
Mt Coot-tha Library	Administration Building, Mt Coot-tha Botanic Gardens, Mt Coot-tha Road, Toowong				
Mt Gravatt Library	8 Creek Road, Mt Gravatt QLD				
Mt Ommaney Library	123 Dandenong Road, Mt Ommaney				
New Farm Library	135 Sydney Street, New Farm				
Nundah Library	1 Bage Street, Nundah				
Pathways	1 The Corso, Mango Hill				
Point Lookout	Point Lookout Public Hall, East Coast Road, Point Lookout				
Rathdowney Library	Memorial Grounds, Mt Lindesay Highway, Rathdowney				
Redbank Plains Library	Moreton Avenue, Redbank Plains				
Redbank Plaza Library	Redbank Plaza Shopping Centre, 1 Collingwood Drive, Redbank				
Russell Island	22 High Street, Russell Island				
Sandgate Library	Seymour Street, Sandgate				
Stones Corner Library	280 Logan Road, Stones Corner				
Strathpine	Crnr Gympie & South Pine Roads, Strathpine				
Sunnybank Hills Library	Cnr Compton and Calam Roads, Sunnybank Hills				
Tamborine Mountain	Cnr Main Street & Yuulong Rd, North Tamborine				
Tamborine Village Library	Tamborine Memorial Hall 1, 867-1875 Waterford Tamborine Road, Tamborine				
Toowong Library	9 Sherwood Road, Toowong				
Victoria Point	Victoria Point Lakeside Shopping Centre, 7-15 Bunker Road, Victoria Point				
West End Library	178 Boundary Street, West End				
Wynnum Library	Bay Terrace, Wynnum				
Zillmere Library	Cnr Jennings Street and Zillmere Road, Zillmere				

# **Appendix 3: Diary of Community Contacts**

Date of contact	Туре	Suburb	Postcode	Method of contact
31-Oct-06	State Govt Elected Reps	Brisbane	4000	Letter
31-Oct-06	Community (individual)	Tarragindi	4121	Email
31-Oct-06	Community (individual)		4011	Email
31-Oct-06	Community (individual)	Clayfield	4011	Email
31-Oct-06	Community (individual)	Ashgrove	4060	Email
31-Oct-06	Community (individual)	Newstead	4006	Email
31-Oct-06	Federal Govt Elected Reps	Grange	4051	Briefing
31-Oct-06	Community (individual)	Clayfield	4101	Email
31-Oct-06	Federal Govt Elected Reps	Preston	3072	
31-Oct-06	Federal Govt Officers			Briefing
31-Oct-06	Federal Govt Elected Reps	Bundaberg	4670	Briefing
31-Oct-06	Federal Govt Elected Reps	Nundah	4012	Briefing
31-Oct-06	Federal Govt Officers			Briefing
31-Oct-06	Federal Govt Elected Reps	Morningside	4170	Briefing
31-Oct-06	Federal Govt Elected Reps	Toowoomba	4350	Briefing
31-Oct-06	Federal Govt Officers			Briefing
31-Oct-06	Federal Govt Elected Reps	Malvern	3144	Briefing
31-Oct-06	Federal Govt Elected Reps	Launceston	7250	Briefing
31-Oct-06	Federal Govt Elected Reps	Marrickville	2204	Briefing
31-Oct-06	Federal Govt Elected Reps	Gladesville	2111	Briefing
1-Nov-06	Community (individual)	Clayfield	4011	Email
1-Nov-06	Community (individual)	Lutwyche	4030	Email
1-Nov-06	Community (individual)	Sunrise Beach	4567	Email
1-Nov-06	Community (individual)	East Brisbane	4169	Email
1-Nov-06	Community (individual)	Fortitude Valley	4006	Email
1-Nov-06	Community (individual)	Carina	4152	Email
1-Nov-06	Community (individual)	Carina	4152	Email
1-Nov-06	Community (individual)	Camp Hill	4152	Email
1-Nov-06	Community (individual)	Tarragindi	4121	Fax
1-Nov-06	Community (individual)	Cleveland	4163	Fax
1-Nov-06	Community (individual)	Banyo	4014	Email
1-Nov-06	Community (individual)	St Ives	2075	Email
1-Nov-06	Community (individual)	Manly	4179	Email
1-Nov-06	Community (individual)	Wynnum	4178	Email
1-Nov-06	Stage Government Officer			Email
1-Nov-06	Community (individual)	Indooroopilly	4068	Email
1-Nov-06	Community (individual)	Toowong	4066	Email
1-Nov-06	Community (individual)	Auchenflower	4066	Email
1-Nov-06	Community (individual)	Morningside	4170	Email
1-Nov-06	Community (individual)	Balmoral	4171	Email
1-Nov-06	Community (individual)	Salisbury	4107	Email
1-Nov-06	Community (individual)	Bulimba	4171	Email
1-Nov-06	Community (individual)	Stafford	4034	Email
1-Nov-06	Community (group)	Sheldon	4157	1800



Date of contact	Туре	Suburb	Postcode	Method of contact
1-Nov-06		Brisbane	4000	Email
	Community (individual)			-
1-Nov-06	Community (individual)	Brisbane	4000	Email
1-Nov-06	Community (individual)	New Farm	4005	Email
1-Nov-06	Community (individual)	Toowoomba	4350	Email
1-Nov-06	Community (individual)	Stafford	4053	Email
1-Nov-06	Airport user	Manly	4179	Email
1-Nov-06	Community (individual)	Bellbird Park	4300	Email
	Community (individual)		+	
1-Nov-06	Community (individual)	Banyo	4014	Email
1-Nov-06	Community (individual)	Morayfield	4506 7008	Email Email
	Community (individual)	Lenah Valley	+	
1-Nov-06	Airport user  Community (individual)	Chermside	4032	Email
1-Nov-06	Community (individual)	Cannon Hill	4170	Email
1-Nov-06	Community (individual)	Carindale	4152	Email
1-Nov-06	Community (individual)	Burbank	4156	Email
1-Nov-06	Community (individual)	Ascot	4007	Email
1-Nov-06	Community (individual)	Murarrie	4172	Email
1-Nov-06	1 '	Kedron	4031	Email
1-Nov-06	Community (individual)  Community (individual)		4178	Email
1-Nov-06	<del> </del>	Wynnum  Brisbane	4001	Email
1-Nov-06	Community (individual)		4170	Email
1-Nov-06	Community (individual)	Morningside	4013	Email
	Community (individual)	Northgate		
1-Nov-06	Community (individual)	Surfers Paradise	4217	Email
1-Nov-06	Community (individual)	Chelmer	4068	Email
1-Nov-06 1-Nov-06	Community (individual)  Community (individual)	Morningside  Nundah	4170	Email Email
	<u> </u>	Norman Park	4012	-
1-Nov-06	Community (individual)	Norman Park	4170	Email
1-Nov-06	Community (individual)	C. relia er r	0000	Email
1-Nov-06	Business (group)	Sydney	2000	Email
1-Nov-06	Community (individual)	Clayfield	4011	Email
1-Nov-06	Business (individual)	Wurtulla	4575	Email
1-Nov-06	Community (individual)	Maroochydore	4558	Email
1-Nov-06	Community (individual)	Coopers Plains	4108	Email
1-Nov-06	Community (individual)	Northgate	4013	Phone
1-Nov-06	Community (individual)	Ascot	4007	Email
1-Nov-06		5 " .		1800
1-Nov-06	Community (individual)	Bulimba	4171	1800
1-Nov-06	Community (individual)	Balmoral	4171	1800
1-Nov-06	Community (individual)	Shorncliffe	4017	1800
1-Nov-06	Community (individual)	Ascot	4007	1800
1-Nov-06	Community (individual)	Woody Point	4019	1800
1-Nov-06	Airport tenant	Spring Hill	4004	1800
1-Nov-06	Business (individual)	Carina Heights	4152	
1-Nov-06	Community (individual)	Bridgeman Downs	4035	1800
1-Nov-06		Forest Lake	4078	1800

Date of contact	Туре	Suburb	Postcode	Method of contact
1-Nov-06		Acot	4007	1800
1-Nov-06		Mitchelton	4051	1800
1-Nov-06	Community (individual)	Ashgrove	4060	1800
1-Nov-06	Community (individual)	Hawthorne	4171	1800
1-Nov-06		Sandgate	4017	1800
1-Nov-06	Community (individual)	Clayfield	4011	1800
1-Nov-06	Community (individual)	Geebung	4034	1800
1-Nov-06	Community (individual)	West End	4101	1800
1-Nov-06	Community (individual)	Archerfield	4108	1800
1-Nov-06	Community (individual)	Norman Park	4170	1800
1-Nov-06	Community (individual)	Kallangur	4503	1800
1-Nov-06	Community (individual)	Hendra	4011	1800
1-Nov-06		Aspley	4034	1800
1-Nov-06	Community (individual)	Coorparoo	4151	1800
1-Nov-06	Community (group)	Balmoral	4171	1800
1-Nov-06		Aldereley	4051	1800
1-Nov-06		Clayfield	4011	1800
1-Nov-06	Community (individual)	Hendra	4011	1800
1-Nov-06		Hamilton	4007	1800
1-Nov-06		Coolangatta	4225	1800
1-Nov-06		Hemmant	4174	1800
1-Nov-06	Community (individual)	Camp Hill	4152	1800
1-Nov-06	Community (individual)	Hawthorne	4171	1800
1-Nov-06		Eagleby	4207	1800
1-Nov-06		Holland Park	4121	1800
1-Nov-06	Business (individual)	Bulimba	4171	1800
1-Nov-06		Arana Hills	4054	1800
1-Nov-06		Rothwell	4022	1800
1-Nov-06	Community (individual)	River Hills	4074	1800
1-Nov-06	Community (individual)	Coorparoo	4151	1800
1-Nov-06	Community (individual)	Coorparoo	4151	1800
2-Nov-06	Community (individual)	Bulimba	4171	Email
2-Nov-06	Community (individual)	Bulimba	4171	Email
2-Nov-06	Media	Russell Island	4184	Email
2-Nov-06		Tarragindi	4121	Fax
2-Nov-06	Community (individual)	Coorparoo	4151	Fax
2-Nov-06	Community (individual)	Balmoral	4171	Email
2-Nov-06	Community (individual)	Weston	2611	Email
2-Nov-06	Community (individual)	Newstead	4006	Email
2-Nov-06	Community (individual)	Bellbowrie	4070	Email
2-Nov-06	Community (individual)	Nudgee	4014	Email
	Business (individual)			
2-Nov-06	Community (individual)	Bulimba	4171	Fax
2-Nov-06	Community (individual)	Carina	4152	Fax
2-Nov-06	Community (individual)	Coolangatta	4225	Email
2-Nov-06	Community (individual)	Seven Hills	4170	Email



Date of contact	Туре	Suburb	Postcode	Method of contact
2-Nov-06	Community (individual)	Hendra	4011	Email
2-Nov-06	Community (individual)	Banyo	4014	Email
2-Nov-06	Community (individual)	Ferny Hills	4055	Email
2-Nov-06	Community (individual)	West Perth	6872	Email
2-Nov-06	Community (group)	Brisbane	4000	Email
2-Nov-06	Community (individual)	Cannon Hill	4170	Email
2-Nov-06	Community (individual)	Nathan	4111	Email
2-Nov-06	Community (individual)	Taigum	4018	Email
2-Nov-06	Community (individual)	Nathan	4111	Email
2-Nov-06	Community (individual)	Ashgrove	4060	Email
2-Nov-06	Community (individual)	Mackenzie	4156	Email
2-Nov-06	Community (individual)	Tarragindi	4121	Email
2-Nov-06	Community (individual)	Bulimba	4171	Email
2-Nov-06	Community (individual)	Hawthorne	4171	1800
2-Nov-06	Community (individual)	Hamilton	4007	1800
2-Nov-06		Scarborough	4020	1800
2-Nov-06		Pinkenba		1800
2-Nov-06	Community (individual)			Email
2-Nov-06		Scarborough	4020	1800
2-Nov-06		Hamilton	4007	1800
2-Nov-06	Business (individual)	Brisbane	4001	1800
2-Nov-06	Community (individual)	Morningside	4170	1800
2-Nov-06	State Govt Officers	Coorparoo	4151	1800
2-Nov-06	Community (individual)	Rochedale	4123	1800
2-Nov-06	Community (individual)	Moorooka	4105	1800
2-Nov-06		Norman Park	4170	1800
2-Nov-06		Balmoral	4171	1800
2-Nov-06		Nudgee	4014	1800
2-Nov-06	Community (individual)	Chermside	4032	1800
2-Nov-06	Community (individual)	Hendra	4011	1800
2-Nov-06		Hendra	4011	1800
2-Nov-06	Community (individual)	Kippa Ring	4021	1800
3-Nov-06	Community (individual)	Balmoral	4171	Fax
3-Nov-06	Community (individual)	Stones Corner	4120	Fax
3-Nov-06	Local Government Local Govt Elected Reps	Banyo	4014	Phone
3-Nov-06	Community (individual)	Balmoral	4171	Fax
3-Nov-06	Community (individual)	Bulimba	4171	Fax
3-Nov-06	Community (individual)	Morningside	4170	Fax
3-Nov-06	Community (individual)	Cannon Hill	4170	Fax
3-Nov-06	Community (individual)	The Gap	4061	Fax
3-Nov-06	Community (individual)	Cannon Hill	4170	
3-Nov-06	Community (individual)	Balmoral	4171	Fax
3-Nov-06	Community (individual)	Morningside	4171	Fax
3-Nov-06	Community (individual)	Norman Park	4170	Fax

Date of contact	Туре	Suburb	Postcode	Method of contact
3-Nov-06	Community (group)	Pinkenba	4008	Email
	Community (individual)			
3-Nov-06	Community (individual)	Hawthorne	4171	Fax
3-Nov-06	Community (individual)	Camp Hill	4152	Fax
3-Nov-06	Community (individual)	Camp Hill	4152	Fax
3-Nov-06	Community (individual)	Cannon Hill	4170	Fax
3-Nov-06	Community (individual)	Norman Park	4170	Fax
3-Nov-06	Community (individual)	Seven Hills	4171	Fax
3-Nov-06	Education	Bulimba	4171	1800
3-Nov-06	Community (individual)	Hendra		1800
3-Nov-06	Community (individual)	Cannon Hill	4170	1800
3-Nov-06	Community (group)			1800
3-Nov-06	Community (individual)	Glass House Mountains	4518	1800
3-Nov-06	Community (individual) other	Windsor	4030	1800
3-Nov-06	Community (individual)	Wellers Hill	4121	Email
3-Nov-06	Community (individual)	Tarragindi	4121	Email
3-Nov-06	Community (individual)	Morningside	4170	Email
3-Nov-06	Business (individual)	McDowall	4053	Email
3-Nov-06	Community (individual)	Wilston	4051	Email
3-Nov-06	Community (individual)	Herston	4006	Email
3-Nov-06	Business (group)	Brisbane City	4001	1800
3-Nov-06	Personal	Churchill	4305	1800
3-Nov-06	Community (individual)	Cleveland	4163	1800
3-Nov-06		Brisbane	4001	1800
3-Nov-06		Bracken Ridge	4017	1800
3-Nov-06		Clayfield	4011	1800
3-Nov-06		Seven Hills	4170	1800
3-Nov-06		Ascot	4007	1800
3-Nov-06		Cooparoo	4151	1800
3-Nov-06	Community (individual)	Hamilton	4007	1800
3-Nov-06	Community (individual)	Hendra	4011	1800
3-Nov-06	Community (individual)	Brisbane	4000	1800
3-Nov-06	Community (individual)	Mt Ommaney	4074	1800
3-Nov-06	Community (individual)	Calamvale	4116	1800
3-Nov-06	Community (individual)	Stafford Heights	4053	1800
3-Nov-06	Community (individual)	Bulimba	4171	1800
3-Nov-06	Community (individual)	Ascot	4007	1800
3-Nov-06	Community (individual)	Lutwyche	4030	1800
3-Nov-06	Business (group)	Brisbane City	4001	Email
3-Nov-06		Bridgeman Downs	4035	Email
3-Nov-06		Nerang	4211	Email
3-Nov-06	Business (group)	St Lucia	4072	Email
3-Nov-06	Business (group)	East Brisbane	4169	Email
3-Nov-06		Albion	4010	Email



Date of contact	Туре	Suburb	Postcode	Method of contact
3-Nov-06		Wooloowin	4030	Email
3-Nov-06	Community (individual)	Aspley	4034	Email
3-Nov-06			41270	1800
3-Nov-06	Business (individual)	Virginia	4014	1800
	Business (group)			
4-Nov-06	Community (individual)		4558	Email
4-Nov-06	Community (individual)	Balmoral	4171	Email
	Business (individual)			
4-Nov-06	Community (individual)	Riverhills	4074	1800
4-Nov-06	Community (individual)	Highgate Hill	4171	1800
4-Nov-06		Mansfield	4122	1800
4-Nov-06	Community (individual)	Banyo	4014	1800
4-Nov-06	Community (individual)	River Hills	4074	1800
4-Nov-06		Carindale	4152	1800
4-Nov-06	Community (individual)	McDowall	4053	Email
4-Nov-06	Community (individual)	Cleveland	4163	Email
4-Nov-06	Community (individual)	Bulimba	4171	Email
4-Nov-06	Community (individual)	Clayfield	4011	Email
4-Nov-06	Community (individual)	Tingalpa	4173	Email
4-Nov-06	Community (individual)	Camp Hill	4152	Email
4-Nov-06	Community (individual)		4558	Email
5-Nov-06	Community (individual)	Hamilton	4007	Email
5-Nov-06	Community (individual)	Kedron	4031	Email
5-Nov-06	Community (individual)	Newmarket	4051	Email
5-Nov-06	Community (individual)	Wynnum West	4178	Email
5-Nov-06	Community (individual)	Enoggera	4051	Email
5-Nov-06	Community (individual)	Hendra	4011	Email
5-Nov-06	Community (individual)	Camp Hill	4152	Email
6-Nov-06	Community (individual)	Lenah Valley	7008	Email
6-Nov-06	State Govt Elected Reps	Ascot	4007	Phone
6-Nov-06	Community (individual)	Morningside	4170	Fax
6-Nov-06	Community (individual)	Morningside	4170	Fax
6-Nov-06	Community (individual)	Murarrie	4172	Fax
6-Nov-06	Community (individual)	Greenslopes	4120	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax
6-Nov-06	Community (individual)	Coorparoo	4151	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax
6-Nov-06	Community (individual)	Kelvin Grove	4059	Fax
6-Nov-06	Community (individual)	Morningside	4170	Fax
6-Nov-06	Community (individual)	Lenah Valley	7008	1800
6-Nov-06	Community (individual)	Lenah Valley	7008	Email
6-Nov-06	Federal Govt Officers		1460	Email
6-Nov-06	Community (individual)	Woolloongabba	4102	Email
6-Nov-06	Community (individual)	Cannon Hill	4170	Fax
6-Nov-06	Community (individual)	Woolloongabba	4102	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax

Date of contact	Туре	Suburb	Postcode	Method of contact
6-Nov-06	Community (individual)	Balmoral	4171	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax
6-Nov-06	Community (individual)	Seven Hills	4170	Fax
6-Nov-06	Community (individual)	Norman Park	4170	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax
6-Nov-06	Community (individual)	Seven Hills	4170	Fax
6-Nov-06	Community (individual)	Balmoral	4171	
6-Nov-06	Community (individual)	Bulimba	4171	
6-Nov-06	Community (individual)	Hawthorne	4171	Fax
6-Nov-06	Community (individual)	Holland Park West	4121	Fax
6-Nov-06	Community (individual)	Coorparoo	4151	Fax
6-Nov-06	Community (individual)	Murarrie	4172	Fax
6-Nov-06	Community (individual)	Coorparoo	4151	Fax
6-Nov-06	Community (individual)	Bulimba	4171	
6-Nov-06	Community (individual)	Cannon Hill	4170	Fax
6-Nov-06	Community (individual)	Holland Park	4121	Fax
6-Nov-06	Community (individual)	Seven Hills	4170	Fax
6-Nov-06	Community (individual)	Bulimba	4170	Fax
6-Nov-06	Community (individual)	Camp Hill	4152	Fax
6-Nov-06	Community (individual)	Hawthorne	4171	Fax
6-Nov-06	Community (individual)	Carina	4152	Fax
6-Nov-06	Community (individual)	Mont Albert North	3129	1800
6-Nov-06	Community (individual)	Tarraginda	4121	1800
6-Nov-06	Community (individual)	Tingalpa	4173	1800
6-Nov-06	Business (individual)	The Gap	4061	1800
6-Nov-06	other	Ashgrove	4060	1800
6-Nov-06	Community (individual)	Bulimba	4171	1800
6-Nov-06	Community (individual)	Murrumba Downs	4503	Email
6-Nov-06	Community (individual)	Morningside	4170	Email
6-Nov-06	Community (individual)	ASCOT	4007	Email
6-Nov-06	Media	Mt Gravatt Plaza	4122	Email
6-Nov-06	Business (individual)	Morningside	4170	Email
6-Nov-06	Community (individual)	Ascot	4007	Email
6-Nov-06	Community (individual)	Moorooka	4105	Email
6-Nov-06	Community (individual)	Ascot	4007	1800
6-Nov-06	Community (group)	Sheldon	4157	1800
6-Nov-06	Community (individual)	Bulimba	4171	Email
6-Nov-06	Community (individual)	Birkdale	4159	Email
6-Nov-06	Community (individual)	Woolloongabba	4102	Question form
6-Nov-06	Community (group)			Meeting
7-Nov-06		Hamilton		1800
7-Nov-06	Business (individual)	The Gap	4061	1800
7-Nov-06	Community (individual)	Hawthorne	4171	Email
7-Nov-06	Community (individual)	Balmoral	4171	1800
7-Nov-06	Community (individual)	Morningside	4170	1800
7-Nov-06	Community (individual)	Wynnum Central	4178	1800



Date of contact	Туре	Suburb	Postcode	Method of contact
7-Nov-06	Community (individual)	Mansfield	4122	1800
7-Nov-06	Business (individual)	Eagle Farm	4009	1800
7-Nov-06		Upper MtGravatt	4122	1800
7-Nov-06		Morningside	4170	1800
7-Nov-06		Hamilton	4007	Email
7-Nov-06	Business (individual)	West Perth	6872	Email
7-Nov-06	Business (individual)	Potts Point	1335	Email
7-Nov-06	Community (individual)	Carindale	4152	Letter
8-Nov-06	Community (individual)	Holland Park West	4121	Fax
8-Nov-06	Community (individual)	Balmoral	4171	Fax
8-Nov-06	Community (individual)	Morningside	4170	Fax
8-Nov-06	Community (individual)	Camp Hill	4152	Fax
8-Nov-06	Community (individual)	Cannon Hill	4170	Fax
8-Nov-06	Community (individual)	Greenslopes	4120	
8-Nov-06	Community (individual)	Hawthorne	4171	Fax
8-Nov-06	Community (individual)	Balmoral	4171	Fax
8-Nov-06	Community (individual)	Bulimba	4171	Fax
8-Nov-06		Balmoral	4171	Fax
8-Nov-06	Community (individual)	Bulimba	4171	Fax
8-Nov-06	Community (individual)	Morningside	4170	Fax
8-Nov-06	Community (individual)	Hawthorne	4171	Fax
8-Nov-06		Tarragindi	4121	Fax
8-Nov-06	Community (individual)	Cannon Hill	4170	Fax
8-Nov-06	Community (individual)	Bulimba	4171	Fax
8-Nov-06	Community (individual)	Greenslopes	4120	Fax
8-Nov-06	Community (individual)	Monringside	4170	Fax
8-Nov-06	Community (individual)	Seven Hills	4170	Fax
8-Nov-06	Community (individual)	Balmoral	4171	Fax
8-Nov-06	Community (individual)	Balmoral	4171	Fax
8-Nov-06	Community (individual)	Bulimba	4171	Fax
8-Nov-06	Community (individual)	Hawthorne	4171	Fax
8-Nov-06	Community (individual)	Carina	4152	Fax
8-Nov-06	Community (individual)	Holland Park	4121	Fax
8-Nov-06	Community (individual)	Hawthorne	4171	Fax
8-Nov-06	Community (individual)	Camp Hill	4152	Fax
8-Nov-06	Community (individual)	Bulimba	4171	Fax
8-Nov-06	Community (individual)	Balmoral	4171	Fax
8-Nov-06	Community (individual)	Cannon Hill	4170	Fax
8-Nov-06	Community (individual)	Wynnum		Email
8-Nov-06	Community (individual)	Cooparoo	4151	Email
8-Nov-06	Community (individual)	Cleveland	4163	Email
8-Nov-06	Community (individual)	Hamilton	4007	Email
8-Nov-06	Community (individual)	Tarragindi	4121	1800
8-Nov-06	Community (individual)	Carina	4152	1800
8-Nov-06	Community (individual)	Hawthorne	4171	1800
8-Nov-06	Community (individual)	Loganholme	4129	Email

Date of contact	Туре	Suburb	Postcode	Method of contact
8-Nov-06	Local Govt Elected Reps	Indooroopilly	4068	Briefing
9-Nov-06	Community (individual)	Cleveland	4163	Email
9-Nov-06	Community (individual)	Bulimba	4171	Fax
9-Nov-06	Community (individual)	Camp Hill	4152	Fax
9-Nov-06	Community (individual)	Balmoral	4171	Fax
9-Nov-06	Community (individual)	Cannon Hill	4170	Fax
9-Nov-06	Community (individual)	Coorparoo	4151	Fax
9-Nov-06	Community (individual)	Coorparoo	4151	Fax
9-Nov-06	Community (individual)	Carina Heights	4152	Fax
9-Nov-06	Community (individual)	Bulimba	4171	Fax
9-Nov-06	Community (individual)	Cannon Hill	4170	Fax
9-Nov-06	Community (individual)	Balmoral	4171	Fax
9-Nov-06	Community (individual)	Norman Park	4170	Fax
9-Nov-06	Community (individual)	Balmoral	4171	Fax
9-Nov-06	Community (group)	Bethania		1800
9-Nov-06	Community (individual)	Castaways Beach	4567	1800
9-Nov-06	Community (individual)	Mansfield	4122	1800
9-Nov-06	Community (individual)	Rochdale	4123	1800
9-Nov-06	Airport user	Carina Heights	4152	1800
9-Nov-06	Business (individual)	Mansfield	4122	1800
9-Nov-06	Community (individual)	Seven Hills	4170	1800
9-Nov-06		Brisbane	4001	Email
9-Nov-06		Morningside	4170	Email
9-Nov-06	State Govt Elected Reps	Moorooka	415	1800
9-Nov-06	Community (individual)	New Farm	4005	Email
9-Nov-06	Community (individual)	Balmoral	4171	Email
9-Nov-06	Community (individual)	Moorooka	4105	Question form
10-Nov-06	Community (individual)	Ferny Hills	4055	Email
10-Nov-06	Community (individual)	Auchenflower	4066	Email
10-Nov-06	State Govt Elected Reps	Moorooka	415	Phone
10-Nov-06	Community (individual)	Bulimba	4171	Fax
10-Nov-06	Community (individual)	Bulimba	4171	
10-Nov-06	Community (individual)	Grange	4051	Email
10-Nov-06	Community (individual)	Deception Bay	4508	1800
10-Nov-06	Community (individual)			1800
10-Nov-06	Community (individual)	Decption Bay	4508	1800
10-Nov-06	Business (individual) Business (group)	Virginia	4014	1800
10-Nov-06	Business (individual)	Brisbane	4000	1800
10-Nov-06	Community (individual)	Camp Hill	4152	Email
10-Nov-06		Burpengary	4105	1800
10-Nov-06	Community (individual)	Dayboro	4521	1800
10-Nov-06	Community (individual)	West Chermside	4032	1800
10-Nov-06	Community (individual)	Strathpine	4500	1800
10-Nov-06	Community (individual)	Moorooka	4105	1800
10-Nov-06	Community (individual)	Morningside	4170	1800



Date of contact	Туре	Suburb	Postcode	Method of contact
10-Nov-06	Project Consultant	Brisbane	4000	Phone
10-Nov-06	Community (individual)	Scarborough	4020	1800
11-Nov-06	Community (individual)	Connells Point	2221	Email
11-Nov-06	Community (individual)	Gaythorne	4051	Email
12-Nov-06	Community (individual)	Isle of Capri	4217	Email
12-Nov-06	Community (individual)	Albany Creek	4035	Email
12-Nov-06	Community (individual)	Banyo	4014	Email
12-Nov-06	Community (individual)	Palmwoods	4555	Email
13-Nov-06	Local Government Local Govt Elected Reps	Balmoral	4171	Letter
13-Nov-06	Business (group)	Brisbane City	4001	Fax
13-Nov-06	Community (individual)	Taringa	4068	Email
13-Nov-06	Business (individual)	Hamilton	4007	Email
13-Nov-06	Community (individual)	Slacks Creek	4127	Email
13-Nov-06	Community (individual)	Bulimba	4171	Email
13-Nov-06	Community (individual)	Margate	4019	1800
13-Nov-06	Community (individual)	Clayfield	4011	1800
13-Nov-06	Community (individual)	Morningside	4170	Fax
13-Nov-06	Community (individual)	Balmoral	4171	Fax
13-Nov-06	Community (individual)	Bulimba	4171	Fax
13-Nov-06	Community (individual)	Hawthorne	4171	Fax
13-Nov-06		Morningside	4170	Fax
13-Nov-06	Community (individual)	Hawthorne	4171	Fax
13-Nov-06	Community (individual)	Morningside	4170	Fax
13-Nov-06	Community (individual)	Balmoral	4171	Fax
13-Nov-06	Community (individual)	Camp Hill	4152	Fax
13-Nov-06	Community (individual)	Hawthorne	4171	Fax
13-Nov-06	Community (individual)	Coorparoo	4151	Fax
13-Nov-06	Community (individual)	Hawthorne	4171	Fax
13-Nov-06		East Brisbane	4169	Fax
13-Nov-06	Community (individual)	Bulimba	4171	Fax
13-Nov-06	Community (individual)	Morningside	4170	Fax
13-Nov-06	Community (individual)	Balmoral	4171	Fax
13-Nov-06	Community (individual)	Hawthorne	4171	Fax
13-Nov-06	Community (individual)	Morningside	4170	Fax
13-Nov-06	Community (individual)	Balmoral	4171	Fax
13-Nov-06		Balmoral	4171	Fax
13-Nov-06	Community (individual)	Cannon Hill	4170	Fax
13-Nov-06	Community (individual)	Balmoral	4171	Fax
13-Nov-06	Community (individual)	Moorooka	4105	Email
13-Nov-06	Community (individual)	Morningside	4170	Fax
14-Nov-06	Community (individual)	Norman Park	4170	Fax
14-Nov-06		Morningside	4171	Fax
14-Nov-06	Community (individual)	Morningside	4170	Fax
14-Nov-06	Community (individual)	Hawthorne	4171	Fax
14-Nov-06	Community (individual)	Hawthorne	4171	Fax

14-Nov-08         Community (individual)         Bullmba         4171         Fax           14-Nov-06         Community (individual)         Murarite         4172         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Ballmorel         4171         Fax           14-Nov-06         Community (individual)         Havithome         4171         Fax           14-Nov-06         Community (individual)         Havithome         4171         Fax           14-Nov-06         Community (individual)         Wymnum         4178         1800           14-Nov-06         Community (individual)         Wymnum         4178         1800           14-Nov-06         Community (individual)         Wiscarett East         4120         Email           14-Nov-06         Community (individual)         Miscarett East         4122         Email	Date of contact	Туре	Suburb	Postcode	Method of contact
14-Nov-06	14-Nov-06		Bulimba	4171	Fax
14-Nov-06         Community (individual)         Cooperoo         4151         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Balmoral         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Bullmba         4171         Fax           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Corenslopes         4120         Emal           14-Nov-06         Community (individual)         Corenslopes         4121         Emal           14-Nov-06         State Govt Officers         BritsBane         4000         Letter	14-Nov-06	,	Murarrie	4172	Fax
14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Balmoral         4170         Fax           14-Nov-06         Community (individual)         Balmoral         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email <td>14-Nov-06</td> <td>,</td> <td>Coorparoo</td> <td>4151</td> <td>Fax</td>	14-Nov-06	,	Coorparoo	4151	Fax
14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Balmoral         4171         Fax           14-Nov-06         Community (individual)         Havthorne         4171         Fax           14-Nov-06         Community (individual)         Havthorne         4171         Fax           14-Nov-06         Community (individual)         Havthorne         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Coopraroe         4120         Email           14-Nov-06         Community (individual)         Coopraroe         4151         Email           14-Nov-06         Community (individual)         Coopraroe         4171         Email           14-Nov-06         State Govt Officers         Brisbane         4000         Letter	14-Nov-06		-	4170	Fax
14-Nov-06   Community (individual)   Morningside   4170   Fax	14-Nov-06	,	-	4170	
14-Nov-06         Community (individual)         Balmoral         4170         Fax           14-Nov-06         Community (individual)         Balmoral         4171         Fax           14-Nov-06         Community (individual)         Momingside         4170         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Coopgaroo         4151         Email           14-Nov-06         Community (individual)         Coopgaroo         4151         Email           14-Nov-06         Community (individual)         Coopgaroo         4151         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         14-Nov-06 <td>14-Nov-06</td> <td>, ,</td> <td>-</td> <td>4170</td> <td>Fax</td>	14-Nov-06	, ,	-	4170	Fax
14-Nov-06         Community (individual)         Balmoral         4171         Fax           14-Nov-06         Community (individual)         Morningside         4170         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Bullmba         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Grenslopes         4120         Email           14-Nov-06         Community (individual)         Coopparoo         4151         Email           14-Nov-06         Community (individual)         Coopparoo         4151         Email           14-Nov-06         Community (individual)         Clayfield         4171         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         1           14-Nov-06         State Govt Officers         Brisbane         4000         1	14-Nov-06	Community (individual)	-	4170	Fax
14-Nov-06         Community (individual)         Hawthorne         4171         Fax           14-Nov-06         Community (individual)         Bulimba         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Clayfield         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         Letter <t< td=""><td>14-Nov-06</td><td>Community (individual)</td><td></td><td>4171</td><td>Fax</td></t<>	14-Nov-06	Community (individual)		4171	Fax
14-Nov-06         Community (individual)         Bulimba         4171         Fax           14-Nov-06         Community (individual)         Hawthorne         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Mt Gravatt East         4120         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Clayfield         4171         Email           14-Nov-06         State Govt Officers         Fortitude Vailey         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         Letter <tr< td=""><td>14-Nov-06</td><td>Community (individual)</td><td>Morningside</td><td>4170</td><td>Fax</td></tr<>	14-Nov-06	Community (individual)	Morningside	4170	Fax
14-Nov-06         Community (individual)         Hawthome         4171         1800           14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Balmoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         BRISBANE         4000	14-Nov-06	Community (individual)	Hawthorne	4171	Fax
14-Nov-06         Community (individual)         Wynnum         4178         1800           14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Balmoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         Letter	14-Nov-06	Community (individual)	Bulimba	4171	Fax
14-Nov-06         Community (individual)         Greenslopes         4120         Email           14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Balmoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         Letter	14-Nov-06	Community (individual)	Hawthorne	4171	1800
14-Nov-06         Community (individual)         Mt Gravatt East         4122         Email           14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Balmoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         BRISBANE         4000         Letter	14-Nov-06	Community (individual)	Wynnum	4178	1800
14-Nov-06         Community (individual)         Coorparoo         4151         Email           14-Nov-06         Community (individual)         Balmoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         Brisbane         4000         4000           14-Nov-06<	14-Nov-06	Community (individual)	Greenslopes	4120	Email
14-Nov-06         Community (individual)         Baimoral         4171         Email           14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         BRISBANE         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Brisbane         4000 <td>14-Nov-06</td> <td>Community (individual)</td> <td>Mt Gravatt East</td> <td>4122</td> <td>Email</td>	14-Nov-06	Community (individual)	Mt Gravatt East	4122	Email
14-Nov-06         Community (individual)         Clayfield         4011         Email           14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         BRISBANE         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           15-Nov-06         State Govt Elected Reps         Business (individual)         The Gap         40	14-Nov-06	Community (individual)	Coorparoo	4151	Email
14-Nov-06         State Govt Officers         Fortitude Valley         4006         Letter           14-Nov-06         State Govt Officers         BRISBANE         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Elected Reps         Bulimba         4171         Email           15-Nov-06         Dusiness (individual)         The Gap         4061         Email           15-Nov-06         State Government         Sandgate         4017         Ph	14-Nov-06	Community (individual)	Balmoral	4171	Email
14-Nov-06         State Govt Officers         BRISBANE         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06	14-Nov-06	Community (individual)	Clayfield	4011	Email
14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           15-Nov-06         Business (individual)         The Gap         4011         Email           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06	14-Nov-06	State Govt Officers	Fortitude Valley	4006	Letter
14-Nov-06         Business (group)         Brisbane         4000           14-Nov-06         State Govt Officers         Brisbane         4000           15-Nov-06         Community (group)         Brisbane         4000           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         State Govt Elected Reps         Goodna         4300         Email           15-Nov-06         State Govt Elected Reps         Ascot         4017         Phone	14-Nov-06	State Govt Officers	BRISBANE	4000	
14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Community (group)         Bulimba         4171         Email           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         Business (individual)         The Gap         4011         Phone           15-Nov-06         State Government         Sandgate         4017         Phone           15-Nov-06         State Government         Northgate         4013         Phone           15-Nov-06         State Government         Northgate         4013         Phone           15-Nov-06         State Government <td< td=""><td>14-Nov-06</td><td>State Govt Officers</td><td>Brisbane</td><td>4000</td><td></td></td<>	14-Nov-06	State Govt Officers	Brisbane	4000	
14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Community (group)         Brisbane         4000           14-Nov-06         Community (group)         Brisbane         4000           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         State Govt Elected Reps         Goodna         4300         Email           15-Nov-06         State Govt Elected Reps         Ascot         4017         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4007         Phone           15-Nov-06         Community (individual)         Chapel Hill         4	14-Nov-06	Business (group)	Brisbane	4000	
14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Community (group)         Brisbane         4000           14-Nov-06         Community (group)         Brisbane         4000           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         State Gover Elected Reps         Goodna         4300         Email           15-Nov-06         State Gover Elected Reps         Ascot         4017         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4007         Phone           15-Nov-06         Sunsyland Hills         4109         Email           15-Nov-06         Community (individual)         Caboolture<	14-Nov-06	State Govt Officers	Brisbane	4000	
14-Nov-06         State Govt Officers         Windsor         4030           14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Community (group)         Bulimba         4171         Email           15-Nov-06         Community (group)         Briefing         Briefing           15-Nov-06         Business (individual)         The Gap         4061         Email           15-Nov-06         Local Govt Elected Reps         Goodna         4300         Email           15-Nov-06         State Government         Sandgate         4017         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4013         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4007         Phone           15-Nov-06         Business (group)         Toowong         4066         Meeting           15-Nov-06         Community (individual)         Chapel Hill         4069         Email           1	14-Nov-06	State Govt Officers	Brisbane	4000	
14-Nov-06         State Govt Officers         Brisbane         4000           14-Nov-06         Community (group)         Bulimba         4171         Email           15-Nov-06         Community (group)         Brisbane         4000         Brisbane           15-Nov-06         Community (group)         The Gap         4017         Brisfing           15-Nov-06         State Govt Elected Reps         Goodna         4300         Email           15-Nov-06         State Govt Elected Reps         Ascot         4017         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4007         Phone           15-Nov-06         State Govt Elected Reps         Ascot         4007         Phone           15-Nov-06         Community (individual)         Chapel Hill         4069         Email           15-Nov-06         Community (individual)         Caboolture         4510         Letter           15-Nov-06         Community (individual)         Bridgeman Downs <t< td=""><td>14-Nov-06</td><td>State Govt Officers</td><td>Brisbane</td><td>4000</td><td></td></t<>	14-Nov-06	State Govt Officers	Brisbane	4000	
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15-Nov-06 Business (individual) The Gap 4061 Email 15-Nov-06 Local Govt Elected Reps Goodna 4300 Email 15-Nov-06 State Government Sandgate 4017 Phone 15-Nov-06 State Government State Govt Elected Reps 15-Nov-06 State Govt Elected Reps Ascot 4013 Phone 15-Nov-06 State Govt Elected Reps Ascot 4007 Phone 15-Nov-06 Business (group) Toowong 4066 Meeting 15-Nov-06 Community (individual) Chapel Hill 4069 Email 15-Nov-06 Community (individual) Caboolture 4510 Letter 15-Nov-06 Community (individual) Bridgeman Downs 4035 1800 15-Nov-06 Community (individual) Tingalpa 4173 1800 15-Nov-06 Community (individual) Coorparoo 4151 Phone	14-Nov-06		Bulimba	4171	Email
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15-Nov-06 State Govt Elected Reps Ascot 4007 Phone 15-Nov-06 Business (group) Toowong 4066 Meeting 15-Nov-06 Community (individual) Chapel Hill 4069 Email 15-Nov-06 Sunnybank Hills 4109 Email 15-Nov-06 Community (individual) Caboolture 4510 Letter 15-Nov-06 Community (individual) Bridgeman Downs 4035 1800 15-Nov-06 Community (individual) Tingalpa 4173 1800 15-Nov-06 Community (individual) Coorparoo 4151 Phone	15-Nov-06		Northgate	4013	Phone
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15-Nov-06 Community (individual) Coorparoo 4151 Phone			_		
	15-Nov-06	Community (individual)	Bulimba		



Date of contact	Туре	Suburb	Postcode	Method of contact
15-Nov-06	Community (individual)	Nudgee	4014	Email
15-Nov-06	Community (individual)	Ascot	4007	Email
15-Nov-06	Community (individual)	Springwood	4127	Email
	Business (individual)			
15-Nov-06	Community (individual)	Nudgee Beach	4014	Event
	Local Govt Officers			
	Local Govt Elected Reps			
16-Nov-06	State Government	Mt Warren Park	4207	Phone
	State Govt Elected Reps			
16-Nov-06	State Govt Elected Reps	Carina	4152	Phone
16-Nov-06	State Govt Elected Reps	Moorooka	415	Phone
16-Nov-06	Community (individual)	South Brisbane	4101	Email
16-Nov-06	Community (individual)	South Brisbane	4101	Email
16-Nov-06	Community (individual)	Taigum	4018	Email
16-Nov-06	Community (individual)	Taigum	4018	Email
16-Nov-06	Community (individual)	Annerley	4103	
16-Nov-06	Community (individual)	Deagon	4017	Phone
16-Nov-06	Community (individual)	Lutwyche	4030	Phone
16-Nov-06	Community (individual)	Paddington	4064	Phone
16-Nov-06	Community (individual)	Bracken Ridge	4017	Email
16-Nov-06	Community (individual)	Bulimba	4171	Fax
16-Nov-06	Community (individual)	Balmoral	4171	Fax
16-Nov-06	Community (individual)	Bulimba	4171	Fax
16-Nov-06	Community (individual)	Balmoral	4171	Fax
16-Nov-06		Bulimba	4171	Fax
16-Nov-06	Community (individual)	Hawthorne	4171	Fax
16-Nov-06	Community (individual)	Morningside	4170	Fax
16-Nov-06		Camp Hill	4152	Fax
16-Nov-06	Community (individual)	Camp Hill	4152	Fax
16-Nov-06	Community (individual)	Bulimba	4171	Fax
16-Nov-06		Bulimba	4171	Fax
16-Nov-06		Camp Hill	4152	Fax
16-Nov-06	Community (individual)	Bulimba	4171	Fax
16-Nov-06	Community (individual)	Bulimba	4171	Fax
16-Nov-06	Community (individual)	Murarrie	4172	Fax
16-Nov-06	Community (individual)	Cannon Hill	4170	Fax
16-Nov-06	Community (individual)	Morningside	4170	Fax
16-Nov-06		Coorparoo	4151	Fax
16-Nov-06	Community (individual)	Ascot	4007	Phone
16-Nov-06	Local Govt Elected Reps	Braken Ridge	4017	Event
17-Nov-06	State Government	Northgate	4013	Briefing
	State Govt Elected Reps			9
17-Nov-06	Community (individual)	Clontarf	4019	Phone
17-Nov-06	Community (individual)	Clayfield	4011	Phone
17-Nov-06	Community (individual)	,		Phone
17-Nov-06	Business (individual)	The Gap	4061	

Date of contact	Туре	Suburb	Postcode	Method of contact
18-Nov-06	Community (individual)	Sunnybank South	4109	Email
18-Nov-06	Community (individual)	Balmoral	4171	Email
18-Nov-06	Community (individual)	Caboolture	4510	Email
18-Nov-06	State Government	Northgate	4013	Event
	State Govt Elected Reps			
19-Nov-06	Community (individual)	Clayfield	4011	Email
19-Nov-06	Community (individual)	Northgate	4013	Email
20-Nov-06	Community (individual)			Email
20-Nov-06	State Government	Wynnum	4178	Briefing
	State Govt Elected Reps			
20-Nov-06	State Govt Officers	Fortitude Valley	4006	Meeting
20-Nov-06	State Govt Officers	Brisbane	4000	Meeting
20-Nov-06	State Govt Officers	Brisbane	4000	Meeting
20-Nov-06		Northgate	4013	Email
20-Nov-06	Community (individual)		4001	Email
20-Nov-06	Community (individual)	Moorooka	4105	Phone
20-Nov-06	Community (individual)	Hawthorne	4171	Fax
20-Nov-06	Community (individual)			Fax
20-Nov-06	Community (group)			Meeting
20-Nov-06	Airport tenant			Meeting
21-Nov-06	Community (individual)	Birkdale	4159	Email
21-Nov-06	other	Milton	4064	Phone
21-Nov-06	Local Govt Officers	Brisbane	4000	1800
21-Nov-06	State Government	Sandgate	4017	Briefing
	State Govt Elected Reps			
21-Nov-06	Community (individual)	Ascot	4007	Email
21-Nov-06	Community (individual)	Wakerley	4154	Email
21-Nov-06	Airport user	The Gap	4061	Email
	Community (individual)			
21-Nov-06	Community (individual)	Mooloolaba	4557	Phone
21-Nov-06	Community (individual)	St Lucia	4072	Email
	Education			
21-Nov-06	Community (individual)	Graceville	4075	Phone
21-Nov-06	Community (individual)	Lenah Valley	7008	1800
21-Nov-06	Business (group)	Nerangba	4504	Briefing
21-Nov-06	Project Consultant	Brisbane	4000	Fax
22-Nov-06	other	Parkes	2601	Email
	State Government			
	Federal Govt Officers			
22-Nov-06	Federal Govt Officers	Canberra	2601	Email
00 N=: 00	Working Group			010 -4 11
22-Nov-06	Community (individual)	0 1 1111	4000	CIC visit
22-Nov-06	Business (individual)	Spring Hill	4000	Phone
22-Nov-06	other	Carindale	4052	Phone
22-Nov-06	other	Carindale	4052	Phone
22-Nov-06	Community (individual)	Tarragindi	4121	Phone
22-Nov-06	Community (individual)	Bulimba	4171	Phone



Date of contact	Туре	Suburb	Postcode	Method of contact
22-Nov-06	Community (individual)	North Melbourne	3051	Email
22-Nov-06	Community (individual)		4001	Email
22-Nov-06	Community (individual)	Burpengary	4505	Email
22-Nov-06	Community (group)	Coorparoo	4151	Briefing
23-Nov-06	7 ,0 ,7	Cannon Hill	4170	Email
23-Nov-06	Community (individual)	Highgate Hill	4101	CIC visit
23-Nov-06	Community (individual)	Morningside	4170	Email
23-Nov-06	Business (individual)	Salisbury	4107	Email
23-Nov-06	Business (individual)	Eagle Heights	4271	Email
23-Nov-06	State Government State Govt Officers Working Group		4000	Email
23-Nov-06	Community (individual)	Balmoral	4171	Email
23-Nov-06	Local Government Local Govt Elected Reps	Banyo	4014	Briefing
23-Nov-06	State Govt Elected Reps	Carina	4152	Briefing
24-Nov-06	State Govt Elected Reps	Aspley	4034	Briefing
24-Nov-06	State Govt Elected Reps	Ascot	4007	Meeting
24-Nov-06	Community (individual)	Bulimba	4171	Fax
24-Nov-06	Community (individual)	Hawthorne	4171	Fax
24-Nov-06	Community (individual)	Camp Hill	4152	Fax
24-Nov-06	Community (individual)	Morningside	4170	Fax
24-Nov-06	Community (individual)	Bulimba	4171	Fax
24-Nov-06		Balmoral	4171	Fax
24-Nov-06	Community (individual)	Greenslopes	4120	Fax
24-Nov-06	Community (individual)	Hawthorne	4171	Fax
24-Nov-06	Community (individual)	Balmoral	4171	Fax
24-Nov-06	Community (individual)	Hawthorne	4171	Fax
24-Nov-06	Community (individual)	Bulimba	4171	Fax
24-Nov-06	Community (individual)	Hawthorne	4171	Fax
24-Nov-06	Community (individual)	Morningside	4170	Fax
24-Nov-06	Community (individual)	Murarrie	4172	Fax
24-Nov-06	Community (individual)	Cannon Hill	4170	Fax
24-Nov-06	Community (individual)	Highgate Hill	4101	Fax
24-Nov-06	Indigenous			Letter
24-Nov-06	State Government other	Wooloongabba	4102	Phone
24-Nov-06	Business (individual)	KEDRON	4031	Phone
24-Nov-06		Sunnybank Hills	4109	Email
24-Nov-06	Business (individual)	Brisbane	4000	Email
24-Nov-06	Community (individual)	Nudgee	4014	CIC visit
24-Nov-06	Community (individual)	Stafford	4053	CIC visit
24-Nov-06	State Govt Officers	Brisbane	4000	Letter
25-Nov-06	Community (individual)	Manly West	4179	CIC visit
25-Nov-06	Community (individual)	Clayfield	4011	CIC visit
27-Nov-06	Community (individual)	Lenah Valley	7008	Email

Date of contact	Туре	Suburb	Postcode	Method of contact
27-Nov-06	Community (individual)			CIC visit
27-Nov-06	Community (individual)	Ascot	4007	CIC visit
27-Nov-06	Community (individual)	Sunnybank Hills	4109	Email
27-Nov-06	Community (individual)	Nundah	4012	1800
28-Nov-06	Community (individual)	Stafford	4053	CIC visit
28-Nov-06	Education	Carina	4152	Email
28-Nov-06	Community (individual)	Bulimba	4171	Email
28-Nov-06	Local Govt Officers	Brisbane	4001	1800
28-Nov-06	Local Govt Officers	Brisbane	4001	Email
28-Nov-06	Local Govt Officers	Brisbane	4001	Email
28-Nov-06	Federal Govt Elected Reps	Mackay	4740	Letter
29-Nov-06	Community (individual)	Spring Hill	4004	Email
29-Nov-06	Business (group)	Virginia	4014	1800
29-Nov-06	Community (individual)	Toombul	4012	Phone
29-Nov-06	Working Group			Briefing
29-Nov-06	Community (individual)	Tarragindi	4121	CIC visit
29-Nov-06	Community (individual)	Dunwich	4183	1800
29-Nov-06	Local Govt Elected Reps	Chermside	4032	Briefing
29-Nov-06	Local Govt Elected Reps	Redcliffe	4020	Briefing
30-Nov-06	Community (individual)	Banyo	4014	Email
30-Nov-06	Community (individual)	Coorparoo	4151	Email
30-Nov-06	Federal Govt Elected Reps	Grange	4051	Email
30-Nov-06	Business (group)	Banyo	4014	Briefing
30-Nov-06	Business (individual)	Balmoral	4171	Email
30-Nov-06	Business (individual)	North Sydney	2060	Email
1-Dec-06	Community (individual)	Wavell Heights	4012	CIC visit
1-Dec-06	Business (individual)	Mitchell	2911	Email
1-Dec-06		Jindalee	4074	Email
1-Dec-06	State Govt Officers	Brisbane	4000	1800
1-Dec-06	Community (individual)	Hawthorne	4171	Email
4-Dec-06	Community (individual)	Karalee	4306	Email
4-Dec-06		Oxley	4075	Email
4-Dec-06	Federal Govt Elected Reps	Townsville	4810	Letter
4-Dec-06	State Govt Elected Reps	Moorooka	415	Briefing
4-Dec-06	Community (group)			
4-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
4-Dec-06	Community (group)	Nudgee Beach		Briefing
4-Dec-06	Community (group)	Nudgee Beach		Briefing
4-Dec-06	Community (group)	Nudgee Beach		Briefing
4-Dec-06	Community (group)	Nudgee Beach		Briefing
5-Dec-06	Business (individual)	Hendra	4011	CIC visit
5-Dec-06	Community (individual)	Sinnamon Park	4073	Email
5-Dec-06	Community (individual)	Wynnum West	4178	Email
5-Dec-06	Community (individual)	Hamilton	4007	Email
5-Dec-06	Community (individual)	Manly West	4179	Phone
6-Dec-06	State Govt Elected Reps	Mt Gravatt	4122	Briefing



Date of contact	Туре	Suburb	Postcode	Method of contact
6-Dec-06	State Govt Officers	Indooroopilly	4068	
6-Dec-06	Airport tenant	Hendra	4011	1800
0 200 00	Business (group)	rioriara		1000
6-Dec-06	Airport user	Laksi		Email
		Bangkok		
		THAILAND		
6-Dec-06	Community (group)			Meeting
6-Dec-06	Business (individual)	Carina	4121	Email
6-Dec-06		Bulwer Island	4025	Meeting
6-Dec-06	Community (individual)	Norman Park	4170	1800
7-Dec-06	Community (individual)	Ascot	4007	1800
7-Dec-06	Community (individual)	Morningside	4170	Email
7-Dec-06	Federal Government	Aspley	4034	Letter
	Federal Govt Elected Reps			
7-Dec-06	Local Govt Elected Reps	Balmoral	4171	Briefing
8-Dec-06	Community (individual)	Kedron	4031	1800
8-Dec-06	Community (individual)	Morningside	4170	1800
8-Dec-06	Community (individual)	Hawthorne	4171	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Balmoral	4171	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Hawthorne	4171	Fax
8-Dec-06	Community (individual)	Hawthorne	4171	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Murarrie	4172	Fax
8-Dec-06	Community (individual)	Murarrie	4172	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Cannon Hill	4170	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Balmoral	4171	Fax
8-Dec-06	Community (individual)	Balmoral	4171	Fax
8-Dec-06	Community (individual)	East Brisbane		Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Greenslopes	4120	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Coorparoo	4151	Fax
8-Dec-06	Community (individual)	Coorparoo	4151	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax

Date of contact	Туре	Suburb	Postcode	Method of contact
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Morningside	4171	Fax
8-Dec-06	Community (individual)	Bulimba	4171	Fax
8-Dec-06	Community (individual)	Morningside	4170	Fax
8-Dec-06	Community (individual)	Cannon Hill	4170	Fax
8-Dec-06	Community (individual)	Hawthorne	4171	Fax
8-Dec-06	Community (individual)	Camp Hill	4152	Fax
8-Dec-06	Community (individual)	Cannon Hill	4170	Fax
8-Dec-06	Community (individual)	Norman Park	4170	Fax
8-Dec-06	Community (individual)	Coorparoo	4151	Fax
8-Dec-06	Community (individual)	Balmoral	4171	Fax
8-Dec-06	Community (individual)	Bulimba	4170	Fax
8-Dec-06	Community (individual)	Norman Park	4170	Fax
8-Dec-06	Community (individual)			1800
9-Dec-06	Business (individual)	Kedron	4031	Email
9-Dec-06	Community (individual)	Beenleigh	4207	CIC visit
9-Dec-06	Community (individual)	Camp Hill	4152	CIC visit
10-Dec-06	Community (individual)	Greystanes	2145	Email
11-Dec-06	Federal Govt Officers Working Group	Canberra	2601	Meeting
11-Dec-06			2600	Meeting
12-Dec-06	Federal Govt Officers		2601	Meeting
13-Dec-06	Business (individual)	Coorparoo DC	4151	Email
13-Dec-06	Community (individual)	Murarrie	4172	1800
13-Dec-06	Community (individual)	Seven Hills	4170	Fax
13-Dec-06	Community (individual)	Camp Hill	4152	Fax
13-Dec-06	Education	Hamilton	4007	Email
13-Dec-06	Community (individual)	Bridgeman Downs	4035	Email
13-Dec-06	Community (group)			
13-Dec-06	Community (group)	Nudgee Beach		Briefing
13-Dec-06	Community (group)	Nudgee Beach		Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (individual)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee Beach	4014	Briefing
13-Dec-06	Community (group)	Nudgee BEach	4014	Briefing
13-Dec-06	Community (group)	Pinkenba		Briefing
13-Dec-06	Community (group)	Pinkenba		Briefing



Date of contact	Туре	Suburb	Postcode	Method of contact
13-Dec-06	Community (group)	Pinkenba	4008	Briefing
13-Dec-06	Community (group)	Pinkenba	4008	Briefing
14-Dec-06	Business (individual)	Fyshwick	2609	CIC visit
14-Dec-06	Business (individual)	Fyshwick	2609	CIC visit
14-Dec-06		Bulimba	4171	CIC visit
14-Dec-06	Community (individual)	Stafford	4053	CIC visit
14-Dec-06	Business (group)	Hendra	4011	Email
15-Dec-06	Local Govt Elected Reps	Wynnum	4178	1800
15-Dec-06	Community (individual)	Hendra	4011	1800
16-Dec-06	Community (individual)	Brighton	4017	Email
16-Dec-06	Community (individual)	Brighton	4017	Email
17-Dec-06	Community (individual)	Banksia Beach	4507	Email
18-Dec-06	Education	Brisbane	4001	Email
18-Dec-06	Community (individual)	Dunwich	4183	1800
18-Dec-06	Community (individual)	Redland Bay	4165	1800
18-Dec-06	Community (individual)	Balmoral		CIC visit
19-Dec-06	State Govt Elected Reps	Mt Warren Park	4207	Briefing
19-Dec-06	Community (individual)	Clayfield	4011	1800
19-Dec-06	Community (individual)	Murarrie	4172	1800
20-Dec-06	Business (group)	Mascot	2020	Phone
20-Dec-06	Community (individual)			1800
20-Dec-06	Community (individual)	Bulimba	4171	Fax
20-Dec-06	Community (individual)	Hawthorne	4171	Fax
20-Dec-06	Community (individual)	Camp Hill	4152	Fax
20-Dec-06	Community (individual)	Tarringindi	4121	Fax
20-Dec-06	Community (individual)	Morningside	4170	Fax
20-Dec-06	Community (individual)	Buderim	4556	Fax
20-Dec-06	Community (individual)	Bulimba	4171	Fax
22-Dec-06		Albion	4010	CIC visit
22-Dec-06	Community (individual)	Jindalee	4074	1800
23-Dec-06	Business (individual)	Nudgee Beach	4014	Email
26-Dec-06	Community (individual)	RBH	4029	Email
26-Dec-06	Community (individual)	Coorparoo	4151	Email
27-Dec-06	Community (individual)	Hendra	4011	1800
27-Dec-06	Community (individual)	Bulimba	4171	Email
28-Dec-06	Community (individual)	Salisbury	4107	1800
28-Dec-06	Media			1800
28-Dec-06	Community (individual)	Hendra	4011	Email
29-Dec-06	Business (group)	Upper Mt Gravatt	4122	1800
29-Dec-06	Community (individual)	Coorparoo	4151	Email
29-Dec-06	Community (individual)	The Gap	4061	Email
29-Dec-06	Community (individual)	Box Hill	3128	Email
30-Dec-06	Community (individual)	Ascot	4007	Email
30-Dec-06	Community (individual)			Email
1-Jan-07	Community (individual)	Murarrie		1800
1-Jan-07	Business (individual)	Victoria Park	6979	Email

Date of contact	Туре	Suburb	Postcode	Method of contact
1-Jan-07	Community (individual)	Ascot	4007	Email
2-Jan-07	Community (individual)			1800
2-Jan-07	Community (individual)	Shorncliffe	4017	Email
2-Jan-07	Community (individual)	Albertslund	DK-2620	Email
2-Jan-07	Community (individual)	Bulimba	4171	Email
3-Jan-07	Community (group)	Pinkenba		CIC visit
3-Jan-07	Community (individual)	Bardon	4065	Email
4-Jan-07	Community (group)	Nudgee Beach	4014	Phone
4-Jan-07	Community (individual)	Greenslopes	4120	Fax
4-Jan-07	Community (individual)	Cannon Hill	4170	Fax
4-Jan-07	Community (individual)	Morningside	4170	Fax
4-Jan-07	Community (individual)	Toorbul	4510	Email
4-Jan-07	Community (individual)	Coorparoo	4151	Email
4-Jan-07	Community (individual)	Coorparoo	4151	Email
5-Jan-07	State Govt Elected Reps	Ascot	4007	Email
8-Jan-07	Community (individual)	Northgate	4013	Email
8-Jan-07	Community (individual)	Banyo	4014	Email
8-Jan-07	Community (individual)	Bulimba	4171	Fax
9-Jan-07	Community (individual)	Norman Park	4170	Phone
9-Jan-07	Community (individual)	Coorparoo	4154	Email
9-Jan-07	Local Government	Banyo	4014	Email
	Local Govt Elected Reps			
9-Jan-07	State Government	Northgate	4013	Email
	State Govt Elected Reps			
9-Jan-07	Federal Govt Elected Reps	Nundah	4012	Email
9-Jan-07	State Govt Officers	Brisbane	4000	Meeting
9-Jan-07	State Govt Elected Reps	Brisbane	4000	Meeting
9-Jan-07	Community (individual)			Meeting
10-Jan-07	Community (individual)	Hawthorne	4171	Email
10-Jan-07	Community (individual)	Nudgee Beach	4014	1800
10-Jan-07	Community (individual)	Balmoral	4171	Fax
11-Jan-07	Federal Govt Elected Reps	Aspley	4034	Email
11-Jan-07	Federal Govt Elected Reps	Wynnum	4178	Email
11-Jan-07	Federal Govt Elected Reps	Strathpine	4500	Email
11-Jan-07	Federal Govt Elected Reps	Woodridge	4114	Email
11-Jan-07	Federal Govt Elected Reps	Sunnybank	4109	Email
11-Jan-07	Federal Govt Elected Reps	Caboolture	4510	Email
11-Jan-07	Federal Government	Fortitude Valley	4006	Email
	Senator			
11-Jan-07	Federal Government Senator	St George	4487	Email
11-Jan-07	Federal Government	Upper Mount	4122	Email
	Fedral Government Senator	Gravatt		
11-Jan-07	Federal Government Senator	Strathpine	4500	Email
11-Jan-07	Federal Government Senator		4000	Email



Date of contact	Туре	Suburb	Postcode	Method of contact
11-Jan-07	Federal Govt Elected Reps	Oxenford	4210	CIC visit
11-Jan-07	Federal Government Senator Federal Govt Elected Reps	Townsville	4810	Email
11-Jan-07	Federal Government Senator Federal Govt Elected Reps	Cairns	4870	
11-Jan-07	Senator	Carina	4152	Email
11-Jan-07	Federal Government Senator	Beenleigh	4207	Email
11-Jan-07	Community (individual)	Banyo	4014	Email
11-Jan-07	Federal Government Senator Federal Govt Elected Reps		4000	Email
11-Jan-07	Federal Government Senator	Forest Lake	4078	Email
11-Jan-07	Federal Government Senator Business (group)	Milton	4064	Email
11-Jan-07	State Government State Govt Elected Reps	Cairns	4870	Email
11-Jan-07	State Govt Elected Reps	Kirwan	4817	Email
11-Jan-07	State Govt Elected Reps	Aitkenvale	4814	Email
11-Jan-07	State Govt Elected Reps	Bardon	4065	Email
11-Jan-07	State Government State Govt Elected Reps	Cannon Hill	4170	Email
11-Jan-07	State Govt Elected Reps	Deception Bay	4508	Email
11-Jan-07	State Govt Elected Reps	Ascot	4007	Email
11-Jan-07	State Govt Elected Reps	Upper Mt Gravatt	4122	Email
11-Jan-07	State Govt Elected Reps	Ashgrove	4060	Email
11-Jan-07	State Govt Elected Reps	Chermside	4032	Email
11-Jan-07	State Govt Elected Reps			Email
11-Jan-07	State Govt Elected Reps	Indooroopilly	4068	Email
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
11-Jan-07	Business (group)	Sydney	2000	Meeting
12-Jan-07	Community (individual)	Chester Hill	2162	Email
12-Jan-07	Community (individual)	Tarragindi	4121	CIC visit
12-Jan-07	Community (individual)	The Hague	2597CS	1800
12-Jan-07	Community (individual)	Bracken Ridge	4017	Email

Date of contact	Туре	Suburb	Postcode	Method of contact
14-Jan-07	Community (individual)	Seven Hills	4170	Email
15-Jan-07	Community (individual)	Stones Corner	4120	1800
15-Jan-07	State Government	Northgate	4013	1800
	State Govt Elected Reps			
15-Jan-07	Local Government	Banyo	4014	Letter
	Local Govt Elected Reps			
15-Jan-07	State Government	Northgate	4013	Letter
	State Govt Elected Reps			
15-Jan-07	Media	Stafford	4053	Letter
16-Jan-07	Community (group)	Nudgee Beach	4014	Briefing
16-Jan-07	State Govt Officers	Brisbane	4000	Meeting
16-Jan-07	Project Consultant	Brisbane	4000	Meeting
16-Jan-07	Project Consultant	Brisbane	4000	Meeting
16-Jan-07	Community (individual)	Murarrie	4172	Meeting
16-Jan-07	Community (individual)			CIC visit
16-Jan-07	Community (group)			Briefing
16-Jan-07	Community (group)			Event
16-Jan-07	Community (individual)	Nudgee	4014	Formal Submission
16-Jan-07	Local Govt Elected Reps			Briefing
16-Jan-07	Community (individual)	New Farm	4005	Email
17-Jan-07	Community (individual)	Holland Park West	4121	Email
17-Jan-07	Community (group)	Ashgrove West	4060	1800
17-Jan-07	Community (group)	Waterford	4133	1800
17-Jan-07	Community (individual)	Norman Park	4170	Email
17-Jan-07	Community (individual)	Cannon Hill	4170	Email
17-Jan-07	Business (individual)	Sydney	2000	Email
17-Jan-07	Business (group)	Fortitude Valley	4006	
17-Jan-07	Business (group)	Hendra	4011	Meeting
17-Jan-07	Business (group)	Brisbane	4000	Meeting
17-Jan-07	Business (group)	Nudgee	4014	Meeting
17-Jan-07	Community (individual)	Adelaide St	4000	1800
17-Jan-07	Community (individual)	Paddington	4064	Email
18-Jan-07	Community (individual)	Ascot	4007	Email
18-Jan-07	Community (individual)	Birkdale	4159	Email
18-Jan-07	Community (individual)	Ascot	4007	Email
18-Jan-07	State Govt Officers	Indooroopilly	4068	Meeting
18-Jan-07	Community (individual)	Clayfield	4011	Email
18-Jan-07	State Government	Northgate	4013	Email
	State Govt Elected Reps			
18-Jan-07	Local Government		4001	Letter
	Local Govt Elected Reps			
19-Jan-07	Airport user	Toorbul	4510	1800
19-Jan-07	Business (group)		4000	Email
19-Jan-07	Community (individual)	Alderley	4051	Email
19-Jan-07	Community (Group)	Ascot	4007	Meeting
19-Jan-07	Community (Group)	Ascot	4007	Meeting



Date of contact	Туре	Suburb	Postcode	Method of contact
19-Jan-07	Community (Group)	Ascot	4007	Meeting
19-Jan-07	Community (Group)	Capalaba	4157	Meeting
20-Jan-07	Community (individual)	Bridgeman Downs	4035	Email
21-Jan-07	Community (individual)	Forest Lake	4078	Email
21-Jan-07	Community (individual)	Upper Coomera	4209	Email
22-Jan-07	Community (individual)	Nudgee	4014	CIC visit
22-Jan-07	Community (individual)	Spring Hill		1800
23-Jan-07	Community (individual)	Gladstone	4680	Email
24-Jan-07	Business (group)	Nudgee	4014	1800
24-Jan-07	Community (individual)	Clayfield		CIC visit
24-Jan-07	Community (individual)	Nundah	4012	1800
24-Jan-07	Community (individual)	Westcourt	4870	Email
24-Jan-07	Business (group)	Nudgee	4014	Email
24-Jan-07	Business (group)	Hendra	4011	Meeting
25-Jan-07	Community (individual)	Norman Park	4170	Fax
25-Jan-07	Community (individual)	East Brisbane	4170	Phone
27-Jan-07	Community (individual)	Narangba	4504	Email
28-Jan-07	Community (individual)	Clayfield	4011	Email
29-Jan-07	Community (individual)	Warwick Farm	2170	Email
29-Jan-07	Community (individual)	VValVVICK Latti	2170	Email
29-Jan-07	Community (individual)	Hamilton	4007	Letter
29-Jan-07		Ascot	4007	Letter
30-Jan-07	State Govt Elected Reps  Community (individual)	Point Lookout	4683	1800
30-Jan-07	Community (group)	Toorbul	4510	Letter
30-Jan-07	Community (group)	Nudgee Beach	4014	Meeting
31-Jan-07	Community (individual)	Seven Hills	4170	1800
31-Jan-07	Community (individual)	Seven Hills	4170	1800
31-Jan-07	Community (individual)	Murarrie	4172	1800
			+	1800
31-Jan-07 31-Jan-07	Community (individual)	Murarrie	4172	
	Local Govt Elected Reps	Ascot	4007	Briefing
1-Feb-07	Community (individual)  Business (individual)	Hamilton	+	Email
1-Feb-07	· ' '	Brisbane	4000	1800
1-Feb-07	Community (individual)	Coorparoo	4151	CIC visit
2-Feb-07	Community (individual)	Tarragindi	4121	1800
5-Feb-07	Community (individual)		4474	1800
5-Feb-07		Balmoral	4171	1800
5-Feb-07	Community (individual)	Dunwich	4183	1800
5-Feb-07		Strathpine	4500	1800
5-Feb-07	Community (individual)	Holland Park	4121	1800
5-Feb-07	Business (individual)	Nudgee Beach	4014	1800
5-Feb-07	Business (group)		4001	1800
5-Feb-07	Community (individual)	Morningside	4170	1800
5-Feb-07	Community (group)	Wurtulla	4575	1800
5-Feb-07	Community (individual)	Hendra	4011	1800
5-Feb-07	Community (individual)	Nudgee	4014	Email
6-Feb-07	Federal Govt Elected Reps	Morningside	4170	Phone

Date of contact	Туре	Suburb	Postcode	Method of contact
6-Feb-07	Business (individual)	Gladstone Park	3043	Email
6-Feb-07	Business (individual)	Virginia	4014	1800
6-Feb-07	Community (individual)	Nudgee	4014	1800
6-Feb-07	Community (group)			1800
6-Feb-07	Community (individual)	Wakerley	4154	Email
6-Feb-07	Community (individual)	Clayfield	4011	Email
6-Feb-07	Business (group)		2000	
6-Feb-07	Community (individual)	Toombul	4012	Email
6-Feb-07	Federal Govt Elected Reps	Morningside	4170	Fax
6-Feb-07	Local Govt Elected Reps	Balmoral	4171	Fax



### **Appendix 4: Diary of Community Briefings**

Diary of Australian Government Briefings			
Martin Ferguson	Shadow Minister for Primary Industries, Resources, Forestry and Tourism	31 October 2006	
Peta Lane	Adviser to Senator Campbell, Minister for Environment & Heritage	31 October 2006	
Paul Neville	Chair - Transport & Regional Services	31 October 2006	
Arch Bevis	Shadow Minister for Homeland Security, Shadow Minister for Aviation and Transport Security	31 October 2006	
Wayne Swan	Shadow Treasurer	31 October 2006	
Brad Williams and Diana Stainlay	Advisors to Minister Mark Vaile	31 October 2006	
Christine Hoystead and Susan Rymer	Department of Prime Minister and Cabinet	31 October 2006	
Kevin Rudd	Leader of the Oppoistion and Member for Griffith	31 October 2006	
Suzanne Combes	Adviser to the Hon. Ian Macfarlane, Minister for Industry, Tourism and Resources	31 October 2006	
David Gazard	Treasurer's Office	31 October 2006	
Senator Kerry O'Brien	Shadow Minister for Transport	31 October 2006	
Anthony Albanese	Shadow Minister for Environment & Heritage	31 October 2006	

Diary of State Government Briefings			
Damien Gould	Advisor to Anna Bligh, Deputy Premies	25 October 2006	
Neil Roberts	Member for Nudgee	17 November 2006	
Paul Lucas	Minister for Transport and Main Roads and Member for Lytton	20 November 2006	
Vicky Darling	Member for Sandgate	21 November 2006	
Chris Bombolas	Member for Chatsworth	23 November 2006	
Simon Finn	Member for Yeerongpilly	4 December 2006	
Judy Spence	Member for Mt Gravatt	6 December 2006	
Andrew Laming	Member for Bowman	13 December 2006	
Margaret Keech	Minister for Tourism, Fair Trading and Wine Industry Development	19 December 2006	
John Mickel	Minister for State Development, Employment and Industrial Relations	9 January 2007	

Diary of Local Government Briefings			
Campbell Newman	Lord Mayor	25 October 2006	
Jane Prentice	Councillor for Indooroopilly	8 November 2006	
Kim Flesser	Councillor for Banyo	23 November 2006	
Bonny Barry	Councillor for Aspley	24 November 2006	
Redcliffe City Council	Mayor and Councillors	29 November 2006	
Faith Hopkins	Councillor for Marchant	29 November 2006	
Carole Cashman	Councillor for Bracken Ridge	30 November 2006	
Shayne Sutton	Councillor for Morningside	7 December 2006	
Geoff Dickie, Russ Davie and	Assistant Coordinator General and Project Managers Major	17 January 2007	
James Ottaway	Projects		
Victoria Newton	Councillor for Deagon	16 January 2007	
Ann Bennison	Councillor for Enoggera	12 February 20007	

Diary of Business/Industry Body Briefings		
Airport Fire & Rescue Staff	20 November 2006	
Regional Airspace Users Advisory Committee	21 November 2006	
Brisbane Development Association	28 November 2006	
BAC's Technical Noise Working Group (TNWG)	29 November 2006	
Brisbane Airport Consultative Committee (BACC)	29 November 2006	
Australian Catholic University	30 November 2006	
BP Refinery	6 December 2006	
Murarrie Progress Association	6 December 2006	
Gateway Upgrade Communication Team	12 December 2006	
Nudgee Golf Club	17 January 2007	
Qantas	11 January 2007	
Wildlife Preservation Society of Queensland	19 January 2007	
Moreton Bay Seafood Industry Association	24 January 2007	
Nudgee Beach Environment Education Centre	30 January 2007	

Diary of Community Group Briefings		
Nudgee Beach Residents Briefing	4 December 2006	
Moorooka Residents Association	4 December 2006	
Pinkenba/Merytletown Community Briefing	13 December 2006	
Nudgee Beach Residents	16 January 2007	
Coorparoo Uniting Church	22 November 2006	
Redcliffe Probus Club	20 November 2006	
Rotary Brisbane North	14 November 2006	
Holland Park Probus Club	4 November 2006	



#### **Appendix 5: Printed Materials for the Public Comment Period**

#### How to make a Formal Submission flyer

#### Formal Submission form



#### Ways to Obtain Important Information flyer



Brisbane Airport Corporation (BAC) has released for Public Comment a Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project, A variety of materials and activities are available to help you gain a better understanding of the Draft EIS/MDP.

#### AVAILABLE MATERIALS

The materials outlined below are available free of charge in electronic or hard copy formats. You can download electronic copies from the New Parallel Runway project pages at www.brisbaneairport.com.au. Hard copies of these materials can be requested online or by calling the Freecall Information Line on 1800 737 075.

#### **Summary of Major Findings**

The Summary of Major Findings provides an overview of the information that is contained within the Draft EIS/MDP for the New Parallel Runway project.

#### Flight Path and Noise Information Booklet

The Flight Path and Noise Information Booklet contains maps of Brisbane illustrating flight paths and noise information for a series of existing scenarios and scenarios into the future.

TNIP is a computer software program that provides access to aircraft noise information related to the New Parallel Runway project.

#### Your Guide to Preparing a Formal Submission

This flyer will tell you how to make your Formal Submission count and where you can lodge a submission related to the Draft EIS/MDP.

#### **AVAILABLE ACTIVITIES**

A number of activities are available to the community to view the Draft EIS/MDP and access information related to the project.

#### **Community Information Sessions**

BAC will be holding a series of Community Information Sessions in locations around Brisbane. These sessions are focused on providing information about the Draft EIS/MDP in a variety of formats.

#### Southern Suburbs

Pacific Golf Club

430 Pine Mountain Road, Carindale

Dates and Times: Wednesday 8 November 2pm – 8pm Thursday 9 November 2pm - 8pm Friday 10 November 9am – 5pm

Saturday 11 November 10am - 4pm

#### Northern Suburbs

Virginia Palms International Hotel Venue: Corner Sandgate & Zillmere Roads,

Boondall Dates and Times: Wednesday 15 November 2pm – 8pm

Thursday 16 November 2pm – 8pm

Friday 17 November 9am – 5pm Saturday 18 November 8am - 12 noon

#### Western Suburbs

Venue: Bardon Conference Centre.

390 Simpsons Road, Bardon

Dates and Times: Wednesday 29 November 2pm - 8pm Thursday 30 November 2pm – 8pm

Friday 1 December 9am - 5pm Saturday 2 December 10am - 4pm



#### **Question form**



# for Public Comment Do you have a question?



If you have a question you would like answered regarding the New Parallel Runway project, write your question in the space provided below.

Please put the form in the enquiry boxes provided or post your question to the Project Team using the Reply Paid address on the back of this form.

If posting the form, please fold and seal in accordance with the instructions on the reverse of this page prior to posting. No stamp is required.

Ensure you provide sufficient contact details so that a member of the New Parallel Runway Project Team can respond to your query.

Please note: Submitting this form does not constitute making a Formal Submission regarding the Draft EIS/MDP. To make a Formal Submission, refer to the flyer "Your Guide to Preparing a Submission Regarding Brisbane Airport Corporation's New Parallel Runway Project" which is available by calling the Freecall Information Line on 1800 737 075 or online at www.brisbaneairport.com.au.

From:	First Name:
	Last Name:
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	Suburb:
	Postcode:
	Email Address:

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#### A4 Question form was designed to be posted back to the reply paid address - sample below

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	- 1111
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BAC	
New Parallel Runway Reply Paid 1433	
MILTON BC QLD 4064	
Secure here with tape or staple.	



#### Fact Sheet #17



# Fact Sheet

### The advantages of 24 hour operations for Brisbane Airport.

#### **About Curfews**

- Curfews are not the norm for Australian capital city airports.
- Capital city curfews are only in operation at Sydney and Adelaide Airports, both of which have residences as close as 600 metres from the end of the runway.
- The nearest community from the end of either runway at Brisbane Airport will be 6.4 kilometres for the new parallel runway and 6.7 kilometres away from the end of the existing runway.
- A curfew does not necessarily mean a total shutdown at night, but rather restricted operations for night time hours (11.00pm to 6.00am).

# The facts as they relate to Brisbane Airport: In 2005 (last full calendar year):

- Even with one runway, up to 80% of all planes in summer and 90%+ in winter that arrive at and depart from Brisbane Airport at night (10.00pm to 6.00am) do so over Moreton Bay and away from residential communities.
- For the calendar year 2005, Brisbane Airport had approximately 162,000 annual aircraft movements of which only 6.5%, or 10,600 annual movements, were in the night period that corresponds to curfew hours in Sydney (11.00pm to 6.00am).
- Of these 10,600 movements, records show that on an annual average, 87.5% were take-offs and landings over Moreton Bay. This figure is even higher during winter months, being 91.9% for April to June inclusive, and 93% from July to September inclusive.
- The figures clearly demonstrate that the vast majority of all aircraft movements are over the Bay during 11.00pm and 6.00am
- The majority of these flights are generally departing from Brisbane for overseas destinations such as Singapore, Kuala

- Lumpur, Nadi, Auckland and Denpasar. The timing for these flights, generally leaving Brisbane before midnight, is based on international scheduling, which is dictated to a large extent by the timing for flights to destinations around the world that operate in different time zones. Brisbane Airport's capacity to process flights at night is important to maintaining business and tourism links for passengers from Brisbane.
- In summer time, when daylight saving is operating in other states of Australia, a number of the flights that are included in the night period occur between 5.00am and 6.00am. This is because many passengers bound for morning meetings in Sydney and Melbourne must leave Brisbane before 6.00am in order to reach their destinations in time

#### In 2015 when the runway opens:

- Based on the forecasts outlined in the Draft EIS/MDP, the number of flights into and out of Brisbane at night will not increase to any great extent in 2015, when the new parallel runway would be operational.
- When the new parallel runway opens, in the night time hours of 10.00pm to 6.00am, no residential areas will experience an increase in jet noise of 70 decibels or more.
- The noise modelling in the Draft EIS/MDP shows there is likely to be a notable reduction in jet aircraft noise over residential areas because of the availability of two runways which in times of low traffic and calm weather, typically at night, can cater for aircraft arriving and departing simultaneously over Moreton Bay.
- While the forecast growth in the number of night time flights is minimal, with two parallel runways, the opportunity exists to increase the potential number of flights that can arrive and depart over Moreton Bay at night. It is estimated that between 85% and 95% of all flights during the night time hours can do so over the Bay.

Airservices Australia, the source of information relating to over bay operations in 2005, collects data for night time using the 11.00pm to 6.00am period. Night time hours in the Draft EIS/MDP for current and future years are 10.00pm to 6.00am. This slight difference in time periods is because noise abatement procedures apply at Brisbane Airport from 10.00pm to 6.00am.



This Fact Sheet is part of a series developed by BAC in relation to its Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP). If you would like further information please contact the NPR hotline

– Freecall 1800 737 075 or email us at info@bacnpr.com.au.

# The benefits to the community of Brisbane Airport operating on a 24-hour basis:

- It is estimated that every international passenger to
  Brisbane spends around \$885.00 in the local economy –
  not on tickets and taxes, but on hotels, taxis, restaurants,
  tourist attractions and so on. Brisbane is seen as a
  desirable destination because its 24-hour status fits with
  the scheduling of international operators.
- The Airport's 24-hour status enables Brisbane to become a hub for the transport of fresh produce to overseas destinations, particularly Asia. This is of significant benefit to local producers of fresh flowers, seafood and other perishable items.
- With Queensland operating in a different time zone
  to eastern states during summer months, a significant
  number of the flights that do occur between 5.00am
  and 6.00am are taking business travellers to morning
  meetings in Sydney or Melbourne. A curfew that meant
  planes were unable to operate in that time zone would
  have significant impacts on doing business in and out of
  Queensland, with flow-on effects into the economy and
  significant inconvenience for travellers.
- Queensland is Australia's most decentralised state with a number of major cities located on its coastline, which have strong business ties to Brisbane, Sydney and Melbourne. The ability to bring regional planes into Brisbane at a time that allows passengers to transfer to morning flights to Sydney and Melbourne is an essential service for regional Queensland.

#### Brisbane's buffer zones

- Brisbane Airport has the largest buffer zones from surrounding communities of any major airport in Australia.
- This planning, which was based on Brisbane operating as a 24-hour airport, means that the nearest communities from the centreline of the existing main runway are over 6.7 kilometres away, and the nearest communities from the centreline of the new parallel runway would be around 6.4 kilometres away.
- In stark comparison, the nearest communities from the runway centreline at Sydney Airport are just 600 metres away.

#### Noise abatement measures

A number of noise abatement measures which are currently in place at Brisbane Airport during the night period include:

- From 10.00pm through to 6.00am, Brisbane Airport is actively managed for reciprocal operations, which require aircraft to arrive and depart over Moreton Bay, weather permitting.
- After take-off over Moreton Bay, aircraft must reach a height of at least 5,000 feet before they are clear to make a turn that would take them over land; and
- In the event that weather conditions preclude take-off over Moreton Bay, aircraft are required to proceed to the furthest end of the runway, thus allowing the plane to take off from the runway earlier, gaining height advantages before they move out of Brisbane Airport land.

#### Addressing the issues

- Brisbane Airport Corporation recognises that in 2006
  there is a plane that departs Brisbane in the early
  morning, which, even when taking off over Moreton
  Bay, does cause noise for surrounding communities.
  This plane is a modified 727, which is acceptable under
  Australian Government standards. BAC is working with
  the Australian Government and the operator to have this
  plane phased out of operation. It will certainly not be in
  commission at the time the new parallel runway opens.
- Advances in aviation technology are being made every year, with new generation aircraft that will take to the skies over the next two years being significantly quieter than their predecessors. As we move towards 2015 and beyond, technology will continue to improve with aviation experts focused on minimising noise with each new generation of aircraft.
- Today in 2006 it is hard to predict what aircraft will be flying in 2015, and it is virtually impossible to predict how aviation will evolve between now and 2035.
   Because of this uncertainty all noise modelling for the new parallel runway has been undertaken using today's aircraft. Therefore, all noise information provided to the community is based on a "worst case" scenario.
- Some people believe that aircraft flying at night are predominantly louder freight planes. This is incorrect.
   The majority of freight that comes into and out of Australia is loaded aboard commercial passenger jets.
   There are very few dedicated freight planes that operate out of Brisbane Airport.

Brisbane Airport was planned as a 24 hour operating airport, evidenced by its huge buffer zones and its design for a parallel runway system that would maximise the number of flights that can occur over Moreton Bay. The costs of a change would be substantial to the community and business.

IMPORTANT NOTICE

This information has been prepared by, or on behalf of, Brisbane Airport Corporation Pty Limited about the New Parallel Runway proposed at Brisbane Airport. While care has been taken to ensure that the information is accurate and up-to-date, it is provided for information purposes only and may change as further information comes to hand. Any images shown are illustrative or conceptual only.



#### Appendix 6: Mail/email Alerts Sent During the Public Comment Period

#### Mail alert 1 - Sent to database 1 November 2006

1 November 2006

Dear

We are pleased to advise that Brisbane Airport Corporation has finalised the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project and has released materials for a public comment period that will extend for over 90 days from Wednesday 1 November 2006 to Tuesday 6 February 2007.

Throughout the period that the Draft EIS/MDP has been prepared we have endeavoured to keep you informed on aspects of the project. With the finalisation of the process, we would like to take this opportunity to send to you a range of materials that also may be of interest, including:

- A 4 x CD/DVD set comprising:
  - All volumes that form the Draft EIS/MDP;
  - Summary of Major Findings Booklet, providing an overview of the Draft EIS/MDP;
  - Flight Path and Noise Information Booklet, with maps of Brisbane illustrating flight paths and noise information for a series of existing and future scenarios;
  - TNIP (Transparent Noise Information Package) software providing access to project-related noise information;
  - DVD overview of the Project in a half-hour presentation;
  - Appendices (reports that are relative to the findings of the Draft EIS/MDP).
- Printed copies of the Summary of Major Findings and Flight Path and Noise Information Booklets;
- 'Your Guide to Preparing a Formal Submission' leaflet and a submission form; and
- 'Ways to Obtain Important Information' leaflet.

Please note that printed copies of the Volumes that form the Draft EIS/MDP can be purchased for \$180.00 (including GST and handling). If you wish to purchase a full set\*, please contact the New Parallel Runway Freecall Information Line on 1800 737 075. \* A full set of the documentation weighs 10 kilograms.

You can also view the Draft EIS/MDP and related materials at a number of other locations:

- Online at www.brisbaneairport.com.au (follow the links to the New Parallel Runway project pages)
- New Parallel Runway Community Information Centre located at 9 Boronia Road, Brisbane Airport
- Offices of many Australian, State and Local Government representatives in Brisbane and South East Queensland
- Local Council Administration Centres in South East Queensland
- Queensland State Library, Libraries in Brisbane, Logan, Ipswich, Redlands, Caboolture, Beaudesert & Pine Rivers
- At major information sessions to be held around Brisbane (details are contained in the enclosed leaflet).

We invite you to call us on 1800 737 075 if you have any queries.

Yours sincerely

CAM SPENCER

Project Director NEW PARALLEL RUNWAY PROJECT

#### Mail Alert 2 - Sent to database 17 January 2007

17 January 2007

Dear

The public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on Tuesday 6 February 2007.

Brisbane Airport Corporation reminds members of the community wishing to make a formal submission in relation to the Draft EIS/MDP to do so before the closing date.

Submissions can be posted to:

Brisbane Airport Corporation

New Parallel Runway

Reply Paid 1433

Milton BC 4064 (no stamp required)

Or lodged online by visiting www.brisbaneairport.com.au and following the links to the New Parallel Runway project pages.

If you require more information about the Draft EIS/MDP or how to lodge a formal submission please visit www.brisbaneairport.com.au or phone the Freecall Information Line on 1800 737 075.

Yours sincerely

BRISBANE AIRPORT CORPORATION

CAM SPENCER - Project Director



#### Email alert 1 - Sent to database 1 November 2006

Good morning,

We are pleased to advise that Brisbane Airport Corporation has finalised the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project and has released this to the community for public comment from Wednesday 1 November 2006 to Tuesday 6 February 2007.

Throughout the preparation of the Draft EIS/MDP we have endeavoured to keep you informed on aspects of the project. With the finalisation of the process, we would like to take this opportunity to alert you to a range of materials related to the Draft EIS/MDP available to you either online at www.brisbaneairport.com.au (follow the links to the New Parallel Runway pages) or by request on 1800 737 075.

Items available online include:

- The complete Draft EIS/MDP, available online in downloadable chapters (PDF files) or on CD ROM by request
- The Summary of Major Findings, providing an overview of the Draft EIS/MDP
- Flight Path and Noise Information Booklet, with maps of Brisbane illustrating flight paths and noise information for a series of existing and future scenarios

Items available by request include:

- DVD overview of the Project in a half-hour presentation
- TNIP (Transparent Noise Information Package) software providing access to project-related noise information
- Appendices (reports that are relative to the findings of the Draft EIS/MDP)

Visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway Project pages to view or request these items. You can also request these items by calling the Freecall Information Line on 1800 737 075.

Printed copies of the Volumes that form the Draft EIS/MDP can also be purchased for \$180.00 (including GST and handling). If you wish to purchase a full set, please contact the New Parallel Runway Freecall Information Line.

You can also view the Draft EIS/MDP and related materials at a number of other locations:

- New Parallel Runway Community Information Centre located at 9 Boronia Road, Brisbane Airport
- Offices of many Australian, State and Local Government representatives in Brisbane and South East Queensland
- Local Council Administration Centres in South East Queensland
- The Queensland State Library, and local libraries in Brisbane, Logan, Ipswich, Redlands, Caboolture, Beaudesert & Pine Rivers
- At major information sessions to be heeld around Brisbane (details are available online).

We invite you to call us on 1800 737 075 if you have any queries regarding the release of the Draft EIS/MDP.

#### Email alert 2 - Sent to database 3 November 2006

Good afternoon.

As you are aware, this week Brisbane Airport Corporation (BAC) has released its Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project. During the course of the public comment period we will continue to prepare Fact Sheets that relate to matters of interest to the community.

Attached is a new Fact Sheet providing key information on the 24-hour operation of Brisbane Airport and the advantages this brings to business and the community. Please do not hesitate to contact us at our Freecall Information line on 1800 737 075 if you have any queries.

Visit our Community Information Centre

If you have further questions, you can also visit our Community Information Centre located at 9 Boronia Road, Brisbane Airport. The Centre has displays on the New Parallel Runway project as well as a viewing area for the Project DVD. You can read the Draft EIS/MDP or take the opportunity to use the computer software package, TNIP, which illustrates flight paths and noise-related information. The Centre is open Monday to Friday from 9.00am to 5.00pm and on Saturday from 10.00am to 4.00pm. Boronia Road is located off Lomandra Drive. The Community Information Centre is located adjacent to Aviation Australia's headquarters.

#### Email alert 3 - Sent to database 9 November 2006

Good afternoon.

Brisbane Airport Corporation (BAC) is holding Community Information Sessions about the New Parallel Runway project for the southern suburbs of Brisbane today, Friday and Saturday.

Location: Pacific Golf Club, 430 Pine Mountain Road Carindale

Dates and Times: Thursday 9 November – 2pm to 8pm

Friday 10 November – 9am to 5pm Saturday 11 November – 10am to 3pm

Sessions are being held during the day, into the evening and on the weekend. These are 'drop-in' sessions that you can come to at a time that suits you.

The sessions are being held to give members of the community the chance to talk to BAC about the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the project which was released to the community for Public Comment on 1 November.

At the Community Information Sessions you can:

- Talk to members of the Project Team about plans for the new runway at Brisbane Airport
- View the project DVD
- Use computer software to view flight path and noise information with the assistance of experts
- Read hard copies of the Draft EIS/MDP
- Pick up copies of the Draft EIS/MDP on CD ROM and other related information to take home

BAC will also be holding Community Information Sessions in the northern and western suburbs of Brisbane in the coming weeks.

For more information about the Community Information Sessions phone the Freecall Information Line 1800 737 075 or visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway project pages.



#### Email alert 4 - Sent to database 14 November 2006

Good morning,

Brisbane Airport Corporation (BAC) is this week holding Community Information Sessions for the northern suburbs of Brisbane about the New Parallel Runway project, starting Wednesday 15 November running through to Saturday 18 November.

Members of the project team will be available during the times listed below to answer your questions about the project.

Location: Kentia Room, Virginia Palms International Hotel Corner of Sandgate and Zillmere Roads (Entrance to car park from Parthenia Street)

Parking: Off street parking at the venue

Public transport options: Bus stop located on Sandgate Road approximately600m from the venue

Dates and Times:

Wednesday 15 November - 2pm to 8pm

Thursday 16 November - 2pm to 8pm

Friday 17 November - 9am to 5pm

Saturday 18 November - 8am to12 noon

Sessions are being held during the day, into the evening and on the weekend. These are 'drop-in' sessions that you can come to at a time that suits you.

The sessions are being held to give members of the community the chance to talk to BAC about the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the project which was released to the community for Public Comment on 1 November.

BAC will also be holding Community Information Sessions in the western suburbs of Brisbane commencing Wednesday 29 November.

At the Community Information Sessions you can:

- Talk to members of the Project Team about plans for the new runway at Brisbane Airport
- View the project DVD
- Use TNIP computer software to view flight path and noise information with the assistance of experts
- Read hard copies of the Draft EIS/MDP
- Pick up copies of the Draft EIS/MDP on CD ROM and other related information to take home

If you can\_t make it to one of these sessions, you can visit the Community Information Centre located at 9 Boronia Road Brisbane Airport. The Centre isopen 9am to 5pm Monday to Friday and 10am to 1pm on Saturday.

For more information about the Community Information Sessions phone the Freecall Information Line 1800 737 075 or visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway project pages.

#### Email alert 5 - Sent to database 29 November 2006

Good morning,

This week Brisbane Airport Corporation is holding a Community Information Session in Brisbane's west for the New Parallel Runway project, starting Wednesday 29 November running through to Saturday 2 December.

If you have questions about plans for the new runway, come and speak to the experts and find out how the project will affect you. The session is being held during the day, into the evening and on he weekend. It is a 'drop-in' session that you can come to at a time that suits you.

Location: Joshua Jeays Room, Bardon Conference Centre, 390 Simpsons Road, Bardon

Parking: Off street parking at the venue

Public transport options: Bus stop located on Simpsons Road close to the venue

Dates and Times: Wednesday 29 November – 2pm to 8pm

Thursday 30 November – 2pm to 8pm Friday 1 December – 9am to 5pm Saturday 2 December – 10am to 4pm

At the Community Information Session you can:

Talk to members of the Project Team about plans for the new runway at Brisbane Airport

View the project DVD

Use TNIP computer software to view flight path and noise information with the assistance of experts

Read the Draft EIS/MDP

Pick up copies of the Draft EIS/MDP on CD ROM and other related information

If you can't make it to the session at Bardon, you can visit BAC's permanent Community Information Centre located at 9 Boronia Road Brisbane Airport. The Centre is open 9am to 5pm Monday to Friday and 10am to 1pm on Saturday.

For more information about the Community Information Session phone the Freecall Information Line on 1800 737 075 or visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway project pages.



#### Email alert 6 - Sent to database 17 January 2007

Good morning,

This email is to remind you that the public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on Tuesday 6 February 2007.

Brisbane Airport Corporation reminds members of the community wishing to make a formal submission in relation to the Draft EIS/MDP to do so before the closing date.

Submissions can be posted to:

Brisbane Airport Corporation

New Parallel Runway

Reply Paid 1433

Milton BC 4064 (no stamp required)

Or lodged online by visiting www.brisbaneairport.com.au and following the links to the New Parallel Runway project pages.

If you require more information about the Draft EIS/MDP or how to lodge a formal submission please visit www. brisbaneairport.com.au or phone the Freecall Information Line on

1800 737 075.

Kind regards,

#### **Appendix 7: Media Releases**

#### MEDIA RELEASE

31 October 2006

# New runway proposal released for public comment

Tomorrow (Wednesday 1 November 2006) Brisbane Airport Corporation (BAC) will release its Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway at Brisbane Airport, concluding an intensive 18-month study into the economic, environmental and social impacts of an expanded runway system to cope with future growth.

A runway located west of and parallel to the existing main runway, has been included in Airport planning documents for over 20 years and in Brisbane street directories for the past nine, with timing for its construction dependent on state and regional population and economic growth, and overall passenger demand.

With Brisbane's population now close to two million and expected to continue to outpace growth across Australia, and with domestic and international passenger numbers growing faster than any other capital city Airport in Australia, BAC has embarked on detailed planning with a view to having the new runway operational by around 2015.

BAC CEO and Managing Director, Koen Rooijmans, said Brisbane Airport was an essential transport gateway and one of the State's most critical pieces of public infrastructure, with the significance of its role to the economy, jobs, business and tourism, community amenity and lifestyle borne out by a recent economic assessment.

"The extra capacity that the New Parallel Runway will deliver to Brisbane Airport will, in simple terms, allow for tens of millions of more passengers every year by 2035 than we would be able to handle without additional capacity.

"The EIS/MDP indicates that these additional passengers will generate around \$5 billion per annum for the Queensland economy, with the benefits flowing directly into a wide range of businesses locally and around the State by way of jobs, investment and of course, the State's critical tourism industry."

Mr Rooijmans said the project, as part of more than \$2.2 billion in infrastructure spending by BAC over the next 10 years, would provide an economic boost to the State through a range of activity – from the many hundreds of construction jobs on the project itself, to the long-term effects on employment, investment and tourism benefits that would flow for the next 20 to 30 years.

"The Airport is a critical piece of State infrastructure, but its capacity must keep pace with demand if the economic benefits are to flow. As such, an Airport is much like a road, such as the Gateway Motorway, which must be upgraded and expanded to cope with the traffic it carries today and into the future.

"With several years of record passenger growth through Brisbane, and a forecast period of further growth, an expansion of the Brisbane Airport runway system is critical if we are to lock in the benefits of sustainable, safe, efficient and timely movement of airline passengers and cargo," Mr Rooijmans said.

New Parallel Runway Project Director, Cam Spencer, said the comprehensive EIS/MDP had carefully looked at all aspects of the project, including the impacts of removing vegetation on Airport land at the site of the new runway; the dredging of around 15,000,000 cubic metres of sand from Middle Banks, Moreton Bay for site filling; economic impacts with and without additional runway capacity; cultural heritage issues; generation of surface traffic; flight paths, and social and health impacts.

"The EIS/MDP responds to the very specific assessment criteria defined by the Australian Government and at the same time provides a valuable resource of information about the Airport and surrounding areas that will be of benefit to others into the future."

He said the net result of the studies undertaken was that a balance in economic, social and environmental outcomes could be achieved in delivering one of Queensland's most important infrastructure projects.



"From an ecological perspective, the project will have some localised impacts, but these will be largely contained to Airport land, with minor to negligible impacts on the ecology of areas beyond. However, while the studies show we can contain and manage impacts, BAC has set aside on-Airport land for a Biodiversity Management Zone that will lock away over 285 hectares as habitat for a range of flora and fauna species."

Mr Spencer said the results of studies at Middle Banks in Moreton Bay, confirmed outcomes of the Queensland Government's Moreton Bay Sand Extraction Study 2000 - 2005, which indicated that subject to further impact studies, sand extraction could occur at Middle Banks with minimal environmental impact.

"After careful and intensive studies of the Middle Banks area, we have selected a narrow, deep dredge footprint that runs along the western edge of the main shipping channel. This footprint avoids seagrass and areas with an abundance of marine life, other commercial extractive operators working in the area, recreational areas and the broad area south of Middle Banks that is known to be used by commercial fishing trawlers."

He said the introduction of a new parallel runway would mean some changes to flight paths into and out of Brisbane, which would result in the reduction of flights over some areas of Brisbane in the early years of operation, while other areas would see planes in their immediate vicinity after the runway opened.

"Safety and noise minimisation for the Greater Brisbane community are key priorities in designing flight paths, the way the airport will operate with two primary runways, and the rules that pilots must follow.

"It is obvious that every new generation of aircraft is demonstrably quieter, more fuel efficient and more environmentally sustainable. While Brisbane Airport's land area is around three times larger than Sydney Airport's land area, therefore containing many of the environmental impacts on Airport land, it is also important to bear in mind that a fast-growing city such as Brisbane will always have areas that will see and hear aircraft.

"Brisbane has arguably the best buffer zones in the country, and aircraft-related noise impacts are very low compared to other airports around the Australia and the world. But our task is to find further ways to minimise the effects of aircraft overflights on residents, while maintaining the key economic advantages that our location and design affords."

Mr Spencer said the north/south direction of the runways, which was in line with the prevailing wind conditions in Brisbane, would play an important role in safety and maximising the Airport's ability to use Moreton Bay as an entry and exit point for the city.

"This is particularly critical during the noise sensitive hours at night and on weekends.

"As a general rule aircraft take off and land into the wind for safety and air traffic management reasons. However, at night wind conditions are generally calmer and traffic is far less, which with the new runway will enable planes simultaneously to arrive and depart over Moreton Bay," Mr Spencer said.

"We do not expect the number of aircraft arriving or departing Brisbane at night to increase substantially over coming years. The EIS/MDP indicates that two parallel runways would ensure Brisbane is able to continue to see up to 90% of all flights at night able to arrive and depart over Moreton Bay.

"During the day when there is more air traffic and wind, the EIS/MDP shows at least 50% of all flights will either arrive or depart over the Bay," Mr Spencer said.

"We recognise it is a very complex issue, so we have prepared a number of user-friendly tools that will help the community to better understand flight paths and their likely effects, including the Flight Path and Noise Information Booklet, which maps and analyses flight paths.

"We have also adapted the Australian Government's Department of Transport and Regional Services' Transparent Noise Information Package (TNIP) software, which simulates flight paths into and out of Brisbane at various times of the day and for a range of years leading up to and after the opening of the runway."

He said the Draft Environmental Impact Statement and Major Development Plan would be on display for over 90 days, during which the community would be able to study the documents and, if they wished, make formal submissions regarding the project.

"It is a requirement of the Commonwealth legislation governing these types of developments that the community's comments be taken into account ahead of submitting the documents to the Australian Government for approval next year. BAC is strongly committed to this approach, and will be undertaking one of the largest public engagement programs ever undertaken in Greater Brisbane," Mr Spencer said.

The documents will be available at the Queensland State Library, all Brisbane City Council libraries and other libraries in South East Queensland, while also being available at the offices of Australian and Queensland State Government elected representatives. A number of public displays will be held, that will be widely advertised and BAC has established a permanent display at 9 Boronia Road, Brisbane Airport. All materials relating to the project will be available on-line at www.brisbaneairport.com.au following the links to the New Parallel Runway site. Enquiries can also be directed to the Freecall Information Line on 1800 737 075.

**ENDS** 



#### **MEDIA RELEASE**

17 January 2007

# New runway public comment period ends 6 February 2007

The public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on Tuesday 6 February 2007.

Brisbane Airport Corporation (BAC) reminds members of the community wishing to make a formal submission in relation to the Draft EIS/MDP to do so before the closing date.

Project Director for the New Parallel Runway project, Mr Cam Spencer, said the Draft EIS/MDP has been on display in many locations throughout South-East Queensland since November 1 of last year.

"The Draft EIS/MDP is a comprehensive study looking at all aspects of the New Parallel Runway project, including the impacts of removing vegetation on Airport land, the dredging of around 15,000,000 cubic metres of sand from Middle Banks, Moreton Bay for site filling, the economic impacts with and without additional runway capacity, cultural heritage issues, road traffic, flight paths, and social and health impacts," Mr Spencer said.

"With nearly three weeks until the public comment period closes, there is still plenty of time to view the Draft EIS/MDP and comment on its content.

"If you haven't already seen the Draft EIS/MDP, you can call our Freecall Information Line on 1800 737 075 to find out where you can view it."

Formal submissions can be posted to Brisbane Airport Corporation, New Parallel Runway, Reply Paid 1433, Milton BC 4064 (no stamp required) or alternatively, lodged online by visiting www.brisbaneairport.com.au and following the links to the New Parallel Runway project pages.

All submissions received during the public comment period will be considered and incorporated as part of the EIS/MDP documentation submitted to the Australian Government for assessment.

If you require more information about the Draft EIS/MDP or how to lodge a Formal Submission please visit www.brisbaneairport.com.au or phone the Freecall Information Line on 1800 737 075.

**ENDS** 

# **Appendix 8: Diary of Shopping Centre/Library Visits**

Date	Location	Times
1 Nov 2006	Wynnum Plaza	8.30am – 5.30pm
1 Nov 2006	Buranda Plaza	8.30am – 5.30pm
2 Nov 2006	Bulimba Library	10.00am – 5.00pm
2 Nov 2006	Carindale Shopping Centre	8.30am – 9.00pm
3 Nov 2006	Mt Gravatt Plaza	8.30am – 5.30pm
3 Nov 2006	Carindale Shopping Centre	8.30am – 5.30pm
4 Nov 2006	Carindale Shopping Centre	8.30am – 5.30pm
6 Nov 2006	Centro Toombul	8.30am – 5.30pm
6 Nov 2006	Fairfield Gardens	8.30am – 5.30pm
7 Nov 2006	Peninsula Fair, Redcliffe	8.30am – 5.30pm
7 Nov 2006	Cannon Hill Plaza	8.30am – 5.30pm
8 Nov 2006	Hamilton Library	12 Noon – 5.00pm
9 Nov 2006	Westfield Chermside	8.30am – 9.00pm
10 Nov 2006	Westfield Chermside	8.30am – 5.30pm
11 Nov 2006	Westfield Chermside	8.30am – 5.30pm
13 Nov 2006	Centro Lutwyche	8.15am – 5.45pm
14 Nov 2006	Sandgate Library	10.00am – 5.00pm
14 Nov 2006	Banyo Library	12.00pm - 5.00pm
20 Nov 2006	McWhirter's Marketplace, Fortitude Valley	9.00am – 5.00pm
21 Nov 2006	Toowong Village	9.00am – 5.00pm
23 Nov 2006	Indooroopilly Shopping Centre	9.00am – 9.00pm
24 Nov 2006	Indooroopilly Shopping Centre	9.00am – 5.30pm
25 Nov 2006	Indooroopilly Shopping Centre	9.00am – 5.00pm
27 Nov 2006	Greenslopes Mall	9.00am – 5.30pm
28 Nov 2006	McArthur Centre (Brisbane City)	9.00am - 5:30pm



## Appendix 9: Advertising (schedule and artwork)

Date	Publication	Ad size (cm)	Ad type	
Wednesday	Courier Mail	148 x 200	Formal Public Notice	
Wednesday 1/11/06	The Australian	148 x 200	Formal Public Notice	
	Courier Mail	186 x 120	Launch ad	
	Caboolture Shire Herald	248 x 148	Launch ad	
	Redcliffe and Bayside Herald	248 x 148	Launch ad	
	Northern Times	130 x 90	Launch ad	
	Pine Rivers Press	248 x 148	Launch ad	
	Northside Chronicle	248 x 148	Launch ad	
	City North News	248 x 148	Launch ad	
	North-West News	248 x 148	Launch ad	
	Westside News	248 x 148	Launch ad	
	City News	248 x 148	Launch ad	
	South-East Advertiser	248 x 148	Launch ad	
	Wynnum Herald	248 x 148	Launch ad	
	City South News	248 x 148	Launch ad	
	South-West News	248 x 148	Launch ad	
	Southern Star	248 x 148	Launch ad	
	Logan West Leader	130 x 90	Launch ad	
	Albert and Logan News	130 x 90	Launch ad	
Friday 3/11/06	The Redland Times	186 x 120	Launch ad	
Tuesday 7/11/06	The Courier Mail	110 x 80	Information session ad	
Wednesday	Caboolture Shire Herald	130 x 90	Information session ad	
8/11/06	Redcliffe and Bayside Herald	130 x 90	Information session ad	
	Northern Times	130 x 90	Information session ad	
	Pine Rivers Press	130 x 90	Information session ad	
	Northside Chronicle	130 x 90	Information session ad	
	City North News	130 x 90	Information session ad	
	North-West News	130 x 90	Information session ad	
	Westside News	130 x 90	Information session ad	
	City News	130 x 90	Information session ad	
	South-East Advertiser	130 x 90	Information session ad	
	Wynnum Herald	130 x 90	Information session ad	
	City South News	130 x 90	Information session ad	
	South-West News	130 x 90	Information session ad	
	Southern Star	130 x 90	Information session ad	
	Logan West Leader	130 x 90	Information session ad	
	Albert and Logan News	130 x 90	Information session ad	
Friday 10/11/06	The Redland Times	110 x 80	Information session ad	
Wednesday	The Courier Mail	186 x 120	Information session ad	
15/11/06	Caboolture Shire Herald	130 x 90	Information session ad	
	Redcliffe and Bayside Herald	130 x 90	Information session ad	
Wednesday	Northern Times	130 x 90	Information session ad	
15/11/06	Pine Rivers Press	130 x 90	Information session ad	
	Northside Chronicle	130 x 90	Information session ad	

Date	Publication	Ad size (cm)	Ad type
	City North News	130 x 90	Information session ad
	North-West News	130 x 90	Information session ad
	Westside News	130 x 90	Information session ad
	City News	130 x 90	Information session ad
	South-East Advertiser	130 x 90	Information session ad
	Wynnum Herald	130 x 90	Information session ad
	City South News	130 x 90	Information session ad
	South-West News	130 x 90	Information session ad
	Southern Star	130 x 90	Information session ad
	Logan West Leader	130 x 90	Information session ad
	Albert and Logan News	130 x 90	Information session ad
Wednesday	Caboolture Shire Herald	130 x 90	Community Information Centre ad
22/11/06	Redcliffe and Bayside Herald	130 x 90	Community Information Centre ad
	Northern Times	130 x 90	Community Information Centre ad
	Pine Rivers Press	130 x 90	Community Information Centre ad
	Northside Chronicle	130 x 90	Community Information Centre ad
	City North News	130 x 90	Community Information Centre ad
	North-West News	130 x 90	Community Information Centre ad
	Westside News	130 x 90	Community Information Centre ad
	City News	130 x 90	Community Information Centre ad
	South-East Advertiser	130 x 90	Community Information Centre ad
	Wynnum Herald	130 x 90	Community Information Centre ad
	City South News	130 x 90	Community Information Centre ad
	South-West News	130 x 90	Community Information Centre ad
	Southern Star	130 x 90	Community Information Centre ad
	Logan West Leader	130 x 90	Community Information Centre ad
	Albert and Logan News	130 x 90	Community Information Centre ad
Wednesday	The Courier Mail	186 x 120	Information Session ad
29/11/06	Caboolture Shire Herald	130 x 90	Information Session ad
	Redcliffe and Bayside Herald	130 x 90	Information Session ad
	Northern Times	130 x 90	Information Session ad
	Pine Rivers Press	130 x 90	Information Session ad
	Northside Chronicle	130 x 90	Information Session ad
	City North News	130 x 90	Information Session ad
	North-West News	130 x 90	Information Session ad
	Westside News	130 x 90	Information Session ad
	City News	130 x 90	Information Session ad
	South-East Advertiser	130 x 90	Information Session ad
	Wynnum Herald	130 x 90	Information Session ad
	City South News	130 x 90	Information Session ad
	South-West News	130 x 90	Information Session ad
	Southern Star	130 x 90	Information Session ad
	Logan West Leader	130 x 90	Information Session ad
	Albert and Logan News	130 x 90	Information Session ad



Date	Publication	Ad size (cm)	Ad type
Wednesday	The Courier Mail	110 x 80	End of public comment period ad
17/01/07	Caboolture Shire Herald	130 x 90	End of public comment period ad
	Redcliffe and Bayside Herald	130 x 90	End of public comment period ad
	Northern Times	130 x 90	End of public comment period ad
	Pine Rivers Press	130 x 90	End of public comment period ad
	Northside Chronicle	130 x 90	End of public comment period ad
	City North News	130 x 90	End of public comment period ad
	North-West News	130 x 90	End of public comment period ad
	Westside News	130 x 90	End of public comment period ad
	City News	130 x 90	End of public comment period ad
	South-East Advertiser	130 x 90	End of public comment period ad
	Wynnum Herald	130 x 90	End of public comment period ad
	City South News	130 x 90	End of public comment period ad
	South-West News	130 x 90	End of public comment period ad
	Southern Star	130 x 90	End of public comment period ad
	Logan West Leader	130 x 90	End of public comment period ad
	Albert and Logan News	130 x 90	End of public comment period ad
Friday 19/01/07	The Redland Times	110 x 80	End of public comment period ad

# **Brisbane Airport Corporation Pty Ltd**



#### **Draft Environmental Impact Statement and Major Development Plan**

#### **NEW PARALLEL RUNWAY PROJECT**

Pursuant to the Airports Act 1996 (Cwth) and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC) (Cwth), Brisbane Airport Corporation Pty Ltd (BAC), as the proponent for a New Parallel Runway (NPR) at Brisbane Airport, has prepared for public comment a Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP). Each Act requires BAC to publish a notice about the Draft EIS/MDP.

#### Brief description and location of the proposed NPR:

- Construction and operation of a new 3.6 km runway, 2 km west and parallel to the existing main (01/19) runway, including associated taxiways, drainage, lighting, navigational aids and other airfield infrastructure. The construction footprint is approximately 475 ha;
- The site is to be prepared and filled with sand dredged and brought from Middle Banks, Moreton Bay by a dredger and pumped to the runway site via a 6 km pipeline from a mooring and pump-out facility to be established at Luggage Point;
- Development of changes to current airspace for the new runway including flight paths and modes of runway operation;
- Initial upgrade (strengthening of pavement) of the shorter east-west (14/32) runway to enable some additional smaller jets to operate (pre-NPR) before conversion to an aircraft taxiway for the NPR.

BAC, in seeking to build a new parallel runway, was advised by the Australian Department of Environment and Heritage that the action was subject to the following controlling provisions of the EPBC Act:

- Wetlands of international importance;
- Listed threatened species and communities;
- Listed migratory species; and
- Protection of the environment from actions involving Commonwealth land.

#### Draft EIS/MDP materials available for the community:

- The four volumes which make up the Draft EIS/MDP (digital or printed);
- The Summary of Major Findings (digital or printed);
- The Flight Path and Noise Information Booklet (digital or printed);
- Transparent Noise Information Package (TNIP) (digital only); and
- Project DVD (digital only).

# Where to view or obtain the Draft EIS/MDP and supporting information:

The Draft EIS/MDP and supporting information can be viewed in a number of locations:

- Online at www.brisbaneairport.com.au;
- Project Community Information Centre, 9 Boronia Rd, Brisbane Airport from Monday to Friday (9am–5pm) and Saturday (10am–4pm);
- Offices of many Australian, State and Local Government representatives in Brisbane and SEQ (check with your local member's office);
- Local Council Administration Centres in SEQ;
- All Brisbane City Council libraries and the Qld State Library, Logan City, Ipswich City, Redland Shire, Caboolture Shire, Beaudesert Shire and Pine Rivers Shire Libraries;
- Office of Australian Government Department of Environment and Heritage, John Gorton Building, King Edward Tce, Parkes ACT; and
- At information sessions to be held in Brisbane (details will be published in The Courier-Mail and Quest Community Newspapers).

Copies of the Draft EIS/MDP and associated information can be obtained during normal office hours from Wednesday 1 November 2006 until Tuesday 6 February 2007 by contacting the Freecall Information Line, emailing info@ bacnpr.com.au or at 9 Boronia Rd, Brisbane Airport. All information is provided free of charge except for the printed copies of the four volumes of the Draft EIS/MDP which can be purchased for \$180.00 (including GST and handling).

BAC invites the public to give written comments about the Draft EIS/MDP by 6 February 2007. Written submissions should be sent to:

New Parallel Runway Draft EIS/MDP "Public Comment" Reply Paid 1433 MILTON BC QLD 4064

For further information contact the NPR Information Line on

1800 737 075



#### Advert 2 - Courier Mail launch ad



#### Advert 3 - Quest launch ad



#### Advert 4 - Information session ad



BAC will be holding a series of Community Information Sessions in locations around Brisbane to give you the opportunity to view and ask questions about the Draft EIS/MDP.

#### **SOUTHERN SUBURBS**

Venue: Pacific Golf Club 430 Pine Mountain Road, Carindale

Dates & Wednesday 8 November 2pm – 8pm Dates & Wednesday 29 November 2pm – 8pm
Times: Thursday 9 November 2pm – 8pm Times: Thursday 30 November 2pm – 8pm
Fiday 10 November 2pm – 5pm Friday 10 November 9am – 5pm Saturday 11 November 10am – 4pm

**NORTHERN SUBURBS** 

Venue: Virginia Palms International Hotel

Cnr Sandgate & Zillmere Rds, Boondall Dates & Wednesday 15 November 2pm – 8pm Thursday 16 November 2pm – 8pm Friday 17 November 9am - 5pm Saturday 18 November 8am - 12 noon

#### WESTERN SUBURBS

Venue: Bardon Conference Centre 390 Simpsons Road, Bardon

Friday 1 December 9am - 5pm

Saturday 2 December 10am - 4pm Or you can visit BAC's Community Information Centre at 9 Boronia Road, Brisbane Airport, open Monday to Friday 9am to 5pm and

#### Saturday 10am to 4pm. For more information

Visit www.brisbaneairport.com.au or call the Freecall Information Line 1800 737 075

#### Advert 5 - Community Information Centre

#### The New Parallel Runway Project

Brisbane Airport Corporation Pty Ltd (BAC) has released its Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project.

# Visit today

### Visit BAC's Community Information Centre

- speak with runway experts
- view interactive displays
- ask questions about the project

#### Location

9 Boronia Road, Brisbane Airport

#### Ope

Monday to Friday 9am to 5pm Saturday 10am to 1pm



For more information phone the Freecall Information Line 1800 737 075 or visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway project pages

#### Advert 6 - End of public comment period

#### REMINDER - Invitation for Public Comment on the New Parallel Runway Project

Brisbane Airport Corporation Pty Ltd advises that the public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on **Tuesday 6 February 2007**.

Members of the community wishing to make a Formal Submission in relation to the Draft EIS/MDP need to ensure their submission is received by the closing date.

#### How to lodge a Formal Submission

#### By post

Send your written submission to:

Brisbane Airport Corporation New Parallel Runway Reply Paid 1433 Milton BC 4064 (no stamp required)

#### On-line

Visit www.brisbaneairport.com.au and follow the links to the New Parallel Runway project pages where you can lodge your submission electronically.

If you require more information about the Draft EIS/MDP or how to lodge a Formal Submission please visit www.brisbaneairport.com.au or phone the Freecall Information Line 1800 737 075.



#### **Appendix 10: Community Briefing Invitations**

1. Nudgee Beach community briefing invitation (letterbox dropped to all houses in Nudgee Beach)



Brisbane Airport Corporation's New Parallel Runway project team would like to extend an invitation to members of the Nudgee Beach community to attend a project briefing on Monday 4 December 2006, commencing at 6.15pm.

The briefing will be held at the New Parallel Runway Community Information Centre at **9 Boronia Road**, **Brisbane Airport**. The spacious Information Centre has been opened to orioided with the recent release of the Draft Environmental Impact Statement and Major Development Plan for public comment and has a wide range of material related to the project available for you to view. There is plenty of parking available.

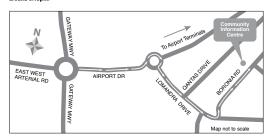
We understand that getting to the Brisbane Airport location may be difficult for some and so we will hire

We expect the briefing to take approximately two hour including question time, so we anticipate the bus will return to the Nudgee Beach Environmental Education Centre by between 8.1 Spm and 8.30pm. We will offer an interim tip back to Nudgee Beach for any people who would like to leave early.

to hire. Please call us on 1800 737 075 or email to

For those who would like to come via their ov transport, we have included a map with directions. So we can provide catering, we would also appreciate it if you could RSVP by Wednesday 29 November 2006 to 1800 737 075 or email on info@bacnpr.com.au.

We look forward to seeing you on the 4th.



2. Invitation to Nudgee Beach briefing at the threshold of the cross-runway (letterbox dropped to all houses in Nudgee Beach)



Runway Project Team would like to extend
Time: 6:30am bus pick up from the an invitation to members of the Nudgee Beach community to visit the threshold of the cross-runway to hear aircraft operating on the main runway at a distance of approximately Venue: Threshold of the cross-runway

The aim of this visit is to give you an indication bring personal sun protection. of aircraft sound at this distance.

Brisbane Airport Corporation's New Parallel Date: Tuesday 16 January 2007

nment Centre Nudgee Beach Enviro 8:30am return to the Centre

Please wear closed in footwear, long pants and

A BBQ breakfast will be served at the threshold

- Aircraft are likely to be landing over the bay and taking off over the city on a summer's morning. This will give a better indication of the sound of aircraft using the northern end of the runway. Please note that weather

  • We will have sufficient light during the conditions will dictate the direction of takeoffs and landings on the moming.
- We have chosen this time for a number

   We have chosen a peak period when a of reasons: number of the larger, international flights are expected to use the runway along with smaller domestic aircraft. This will give you an indication what you can hear at this distance
  - morning peak, but may not during the evening peak, which is why we have chosen an early morning to carry out the visit.

So that we can make travel arrangements and organise catering, we would ask that those who would like to attend the visit please RSVP by Friday 12 January by calling 1800 737 075 or emailing info@bacnpr.com.au.

Should you have any further questions about the visit, please call 1800 737 075 to discuss.

We look forward to seeing you on January 16.

#### 3. Pinkenba community briefing invitation (letterbox dropped to all houses in Pinkenba



Brisbane Airport Corporation's New Parallel Runway project team would like to extend an invitation to members of the Nudgee Beach community to attend a project briefing on Monday 4 December 2006, commencing at 6.15pm.

The briefing will be held at the New Parallel Runway Community Information Centre at 9 Boronia Road, Brisbane Airport. The spacious information Centre has been opened to coincide with the recent release of the Draft Environmental Impact Statement and hajor Development Plan for public comment and has a wide range of material related to the project available for you to view. There is plenty of parking available.

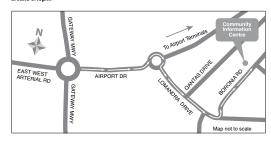
So that we can make arrangements, we would aik that those of you win how thouse under those you win how thouse of the total who will be to travel and those of you will be to travel and the tops of you will be to the average. So that we can make arrangements, we would ak that those of you win how thouse of the tops of the world in the top and the project of the project

to view. I mere is piertly of updating available. We understand that getting to the Britishane Airport location may be difficult for some and so we will here a bus to transport people from Nudique Beach to the Information Centre. Mary-Ann Pattison of the Nudgee Beach Environmental Education Centre has kindly offered the Centre as a central meeting point.

The bus will depart the centre, located at The bus win depart the centre, located at 1588 Nudgee Road, Nudgee Beach at 6.00pm to arrive at the Community Information Centre around 6.15pm.

We expect the briefing to take approximately two hours including question time, so we anticipate the bus will return to the Nudge Beach frorinomental Education Centre by between 8.15pm and 8.30pm. We will offer an interim trip back to Nudgee Beach for any people who would like to leave early.

We look forward to seeing you on the 4th.





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# Appendix 11 Summary of the Changes to the Draft EIS/MDP Proposed in the Supplementary Report

This Appendix lists all proposed changes to the Draft EIS/MDP as outlined in Chapter 5, 3 - 6 of this Supplementary Report.

It should be noted that the table below is intended only a guide to changes and the specific sections within the body of Chapters 3 - 6 of the Report should be consulted for the full text and implications of the proposed changes. In the event of an inconsistency, the text in the body of the Report prevails over the stated changes presented in this Appendix.

**Table:** Changes to the Draft EIS/MDP proposed in the Supplementary Report

Chapter of the draft	Sup. Report	Issue	Changes to draft EIS/MDP
EIS/MDP	Section	CIO Matha alala sa Jasana	N.F.I
A1	3.4	EIS Methodology Issues	Nil
A2	3.5	Justification and Need	Nil
A2	3.6	Impact on Aircraft Noise on Property Values	Nil
A3	3.7	Haulage routes and road issues	Nil
A3	3.8	Runway Separation	Nil
A3	3.9	Runway Layout Options	Nil
A3	3.10	Use of Other Airports	Nil
A4	3.11	Engineering Design and Construction Issues	Inserts new figure into Chapter A4
A4	3.12	Harvesting, re-use and recycling water	Nil
A6	3.13	Public Engagement	Nil
Various in Volume A	3.14	Supportive Submissions	Nil
B1	4.1	Dredge Pump-out operations – Fisheries Issues	Nil
B2	4.2	Land use planning – State and Regional Coastal Management Plans	Amends Table 2.6 and inserts new tables into Chapter B2
B3	4.3	Acid Sulfate Soils	Amends Chapter B14, Appendix A (Acid Sulfate Soil Management Plan)
B3	4.4	Groundwater	To be read in conjunction with information presented in Chapter B3
			Inserts and amends Figures within Chapter B3
B4	4.5	Erosion Issues	Omits text and inserts new subsection within Chapter B4
B5	4.6	Ecology – Birds and Ramsar Values	Nil
B5	4.7	Ecology - Wetland Mitigation	To be read in conjunction with information presented in Chapter B5
B5	4.8	Ecology – Approach Lighting Structure	Nil
B7	4.9	Flooding and Hydrology Issues	Nil
B8	4.10	Surface Water Quality	Amends Chapter B8, Table 8.7j and Chapter B14, Table 14.3e



B8	4.11	Sediment Quality	Amends Chapter B8
			Inserts a new Appendix into Chapter B5
B9	4.12	Amenity Issue at Neighbouring Communities	Nil
B10	4.13	Surface Transport	Nil
B11	4.14	Construction, Traffic and Ground Noise	Nil
B13	4.15	Landscape Issues	Nil
Various in	4.16	Miscellaneous Issues and Clarifications	Changes as indicated in the Table.
Volume B	4.10	- Volume B	Orlanges as indicated in the Table.
C1	5.1	Alternative Locations to Middle Banks for Sand Dredging and Proposed Dredge Methodology	Nil
C1	5.2	Dredge Footprint Plan	Inserts revised figure to replace Chapter C1, Figure 1.6a and Chapter C9, Figure 9.2a
C3	5.3	Beach Erosion Along Moreton Island	Nil
C5	5.4	Marine Ecology – Benthic fauna	Nil
C5	5.5	Marine Ecology – Fisheries Issues	Nil
C5	5.6	Marine Ecology – High Ecological Values Areas (HEVs)	Nil
C5	5.7	Marine Ecology – Species of Conservation Significance	Nil
C5	5.8	Marine Ecology – Nutrient Release and Phytoplankton	Omits paragraph from Chapter C5
C5	5.9	Marine Ecology – Seagrass Issues	Nil
C5	5.10	Marine Ecology – Shorebird Issues	Nil
C9	5.11	Shipping channels and Port Issues	Inserts new information into Chapter C9, Tables 9.6a and 9.6c
Various in Volume C	5.12	Miscellaneous Issues and Clarifications - Volume C	Changes as indicated in the Table.
D3	6.1	Airspace Architecture	Nil
D4	6.2	Noise Assessment Methodology	Nil
D5	6.3	Aircraft Noise Assessment	Omits sentence from Chapter D5, Section 5.10  Outlines minor amendments to TNIP
D6	6.4	Aircraft Emissions and Air Pollution	Nil
D6	6.5	Aircraft Air Emissions – Greenhouse	Nil
D7	6.6	Health – Air Quality	Nil
D7	6.7	Health – Noise and General	Nil
D7	6.8	Sleep Related Issues	Nil
D8	6.9	Hazards and Risk	Minor amendments to text and insertion of new Figures
D9	6.10	Social Impacts – Amenity and Lifestyle	Nil
D9	6.11	Social Impacts - Schools	Nil
D10	6.12	Curfew	Nil
D10	6.13	Draft Parallel Runway Operating Plan	Minor amendments and insertion of footnote to Tables 10.4(a) and (b).

#### Appendix 12 - Technical Issues - Groundwater

This Appendix to the Supplementary Report provides responses to the specific recommendations in the Queensland Government submission made by the Department of Natural Resources and Water regarding groundwater management.

The headings in this Appendix correspond with headings listed under 'Submitter Issues' in Chapter 4, **section 4.4** of the Supplementary Report.

Figures referenced in the text are shown at the end of the Appendix.

#### **Geology and Soils**

Descriptions of the sediments that underlie this area given in DNR&M (2002), which list the following sedimentary environments:

- Undifferentiated coastal plains; mud and sand, with channels or thin cover of clay, silt, and sand deposited by active stream channels, ox bows and low terraces;
- Sand, and shelley sand deposited in beach ridges; and
- Sand, and mud that has accumulated in tidal flats that grades offshore into fringing sublabile sand, muddy sand and sandy mud deposited by shore and delta processes.

Subsurface investigations carried out at the site have encountered primarily fine grained estuarine sediments described as clays, silts, organic or black clays, with occasional fine sand lenses or laminations, or as mixtures of these materials. Shell fragments and thin peat lenses have been recorded in the geotechnical logs and in acid sulfate investigation. Acid sulfate investigations record high potential and actual acidity, being evidence of the existence of sulfide minerals. Parts of the site are buffered by quantities of (calcareous) shell fragments (and possibly by finer carbonate sediments), and by salinity.

The sediments have been deposited onto a pre-existing landform that developed during a time when the sea level was much lower. The pre-existing hilly topography is reflected in the variable depth and thickness of the sediments. The sediments can be divided into two layers with distinct geotechnical and hydrogeological properties. In this document these are referred to as the Upper Holocene alluvia and the Lower Holocene alluvia.

The Upper Holocene alluvia were laid down during the most recent rise in sea level, in shallow fluctuating water bodies, and comprise inter-layered clays, silts and sands, sometimes with peaty inclusions. They are present from ground surface (or from the base of any site fill) and are 7–14 m thick in the area of the new runway. A desiccated, stiffer crust is often present at the top of this layer. Apart from the crust, these alluvia are highly compressible but usually settle relatively rapidly. Primary consolidation is often virtually complete within 6–12 months. Boreholes and cone penetrometer tests indicate that sandy layers are present, but that they generally do not extend over significant lateral distances. This is to be expected given the dynamic nature of the depositional environment in which the Upper Holocene alluvia were deposited.

The Lower Holocene alluvia were laid down in deeper water, either off-shore or in deeper stream channels. They tend to be relatively homogeneous silty clays with very few sandy layers and extend to significant depths, in excess of 30m in places.

The Holocene Alluvia are underlain by Pleistocene soils comprising stiff to hard clayey and medium dense to very dense sandy/gravelly materials. In some places, the Pleistocene soils directly underlie the Upper Holocene Alluvia. Their upper profile was a former land surface, shaped by erosion and stream cutting when sea levels were lower. The buried landscape was probably similar to present-day landscapes further upstream. *Figure 1* (revised version of *Figure 3.2b*) depicts contours of the base of the Holocene alluvium.



The Pleistocene soils overlie basalt. Across the majority of the airport site, the basalt occurs at significant depth (generally >30m). In investigations for the New Parallel Runway basalt was only encountered on the alignment of the proposed link taxiway, where it was encountered at depths between 32m and 36m. Basalt outcrops to the west of the proposed runway alignment (between the runway and Kedron Brook Floodway), in the vicinity of the existing surface water body around 510900 E, 6972800 N. A basalt quarry was previously operated at this location, and the quarry void has subsequently filled with water. The basalt outcrop in this area has the potential to affect local groundwater flow directions as a result of permeability contrasts between the basalt and surrounding sediments. Groundwater flow in this areas is also likely to be affected by interactions with the surface water in the quarry void. This area will remain unchanged during development of the New Parallel Runway.

#### **Existing Environment - Groundwater**

#### **Continued Monitoring of Existing Groundwater Monitoring Bores**

As noted in the Draft EIS/MDP, 17 groundwater monitoring bores have been installed on the site. **Table 1** (repeated from the Draft EIS/MDP) summarises the locations and construction details for the monitoring bores, and the footnote to the table clarifies the methods that have been used to determine surface levels at the monitoring bore locations.

Results of ground water level measurements that were included in the Draft EIS/MDP have been supplemented by continued water level logging in selected monitoring bores, and measurement of water levels in all 17 bores by dipping in December 2006. The results of continued water level logging since July 2006 are presented in *Figure 2* (similar to *Figure 3.3d*, with Jul-Dec 06 results added). Groundwater levels across the site in December 2006 are illustrated in *Figure 3* (similar to *Figures 3.3a*, *b* and *c*, with Dec 06 numbers added). As noted previously, groundwater levels rise rapidly following rainfall, and fall slowly between rainfall events. Groundwater recession between rainfall events is likely due to a combination of drainage to creeks and drains, and evapotranspiration.

Table 1 - Monitoring Well Construction Details

Monitoring Well ID	Easting1	Northing	Surface Elevation2 (m AD)	Slotted Interval (m below surface)	Comment
MW1	512074	6971864	3.6	0.4 to 1.9	Located in existing sand filled area. Water levels should not be directly compared to other locations
MW2	511491	6972100	2.9	0.4 to 1.9	
MW3	511022	6971251	2.6	0.4 to 1.9	
MW4	510635	6971496	2.7	0.4 to 1.9	
MW5	511249	6972690	3.5	0.4 to 1.9	
MW6	511658	6973545	2.9	0.4 to 2.53	
MW7	510973	6972216	3.9	2.5 to 4	
MW8	512500	6973085	2.2	0.4 to 1.9	
MW9	512872	6973580	2.7	0.4 to 1.9	Located in existing sand filled area. Water levels should not be directly compared to other locations
MW9a	512919	6973548	2.7	1.5 to 4.5	Located in existing sand filled area. Water levels should not be directly compared to other locations
MW10	510811	6971914	3.0	1.5 to 4.5	
MW11	511016	6972522	3.0	0.8 to 3.8	

Monitoring Well ID	Easting1	Northing	Surface Elevation2 (m AD)	Slotted Interval (m below surface)	Comment
MW12	511200	6973080	2.8	1 to 4	
MW13	510391	6970851	2.5	1.5 to 4.5	
MW14	510704	6970676	2.5	1.5 to 4.5	
MW15	510916	6970367	2.9	1.5 to 4.5	
MWA	511555	6971329	2.5	1.5 to 4.5	
MWJ	511408	6970839	3.1	1.5 to 4.5	Located in existing sand filled area. Water levels should not be directly compared to other locations

#### **Notes**

- 1 Borehole coordinate geodetic datum is GDA 94 zone 56
- 2 Elevations are to Airport Datum (AD) which is 1.134 m below Australian

Height Datum (AHD) (i.e. Airport Datum (m) - 1.134 = mAHD). Surface level has been surveyed for MW1 to MW8, MWA and MWJ. Surface levels at other locations have been interpolated from ALS survey data. These other locations will be surveyed.

#### **DNRW Groundwater Monitoring Bores**

Limited information is available from regional groundwater monitoring that is recorded in the Department of Natural Resources and Water (DNRW) groundwater database. The locations of monitoring bores for which information is available from the database are illustrated in *Figure 4* (new figure), and measured groundwater levels from the database are presented in *Figure 5* (new figure).

#### Rainfall and Evaporation Data

The data for evaporation and rainfall for long term (70 year), one year (April 2006 to February 2007) and a single month (February 2007) were obtained from the Bureau of Meteorology (BoM).

In the absence of necessary data to calculate evapotranspiration by using physically based equation such as Penman equation, potential evapotranspiration for the site has been assessed by applying a pan coefficient to the measured pan evaporation values. For site conditions, a pan evaporation coefficient of 0.7 is considered to be acceptable. Using this value, **Tables 2**, **3** and **4** present estimated evapotranspiration, rainfall and the difference between rainfall and estimated evapotranspiration for the various time periods listed above.

When long term data is considered (refer **Table 2**), the proportion of time when rainfall is greater than evapotranspiration is about 37%, and the proportion of time when evapotranspiration is greater than rainfall is 63%. From this observation it can be inferred that on average, ground water recharge is expected at least 37% of the time, and on average groundwater will be depleted at most 63% of the time to meet evaporative loss. However, depending on the intensity, duration and recurrence interval of the rainfall, the amount of recharge during the 37% of time may far exceed the amount of depletion during the 63% of time; as a result the groundwater at the site may maintain or increase its water level.

Comparing the long term results (**Table 2**) with the results from a drier than average year (**Table 3** – April 2006 to February 2007) and month (**Table 4** - February 2007) it is found that evapotranspiration is largely greater than rainfall, during the period from April 2006 to February 2007. As a result, there was an overall decrease in water levels during that period (refer to *Figure 2*).



Table 2: Rainfall Minus Estimated Evapotranspiration (ET) value at the Brisbane Airport by Using Long Term Data (year 1929 to 2000)

Element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	ND	171.7	138.5	90.4	98.8	71.2	62.6	42.7	35	94	97	126
ET* (mm)	158.4	127.4	125.8	94.5	69.4	63	69.4	88.97	115.5	136.5	151.2	163.1
Rainfall-ET (mm)		44.3	12.7	-4.1	29.4	8.2	-6.8	-46.27	-80.5	-42.5	-54.2	-37.1

Percentage Time Rainfall is greater than Evaporation = 37%

Table 3: Rainfall Minus ET Value at the Brisbane Airport from April 2006 to February 2007

Month	Rainfall (mm)	*ET (mm)	Rainfall - Evaporation
2006 April	48.4	101.22	-52.82
2006 May	10	90.02	-80.02
2006 June	43.8	59.22	-15.42
2006 July	32.4	64.82	-32.42
2006 August	55.2	84.56	-29.36
2006 September	57	102.34	-45.34
2006 October	21.4	154.7	-133.3
2006 November	85.4	160.58	-75.18
2006 December	82.6	166.18	-83.58
2007 January	99	166.88	-67.88
2007 February	57.2	124.18	-66.98
Percentage Time Raint	fall is greater than Ever	poration - 0%	

Percentage Time Rainfall is greater than Evaporation = 0%

Table 4: Rainfall Minus (ET) Value at the Brisbane Airport for the Month of February 2007

Date	Rainfall (mm)	ET* (mm)	Rainfall - ET
1/02/2007	0		
2/02/2007	8	6.44	1.56
3/02/2007	0.4	4.06	-3.66
4/02/2007	0	4.9	-4.9
5/02/2007	0.2	6.72	-6.52
6/02/2007	0	6.02	-6.02
7/02/2007	0	5.6	-5.6
8/02/2007	0	5.88	-5.88
9/02/2007	0	4.06	-4.06
10/02/2007	0	5.6	-5.6
11/02/2007	15	5.04	9.96
12/02/2007	0.4	4.48	-4.08
13/02/2007	16.6	6.72	9.88
14/02/2007	5.6	0	5.6
15/02/2007	0.8	3.78	-2.98
16/02/2007	0	4.48	-4.48
17/02/2007	1	3.36	-2.36
18/02/2007	1.2	4.2	-3

<sup>\*</sup> Estimated Evapotranspiration

<sup>\*</sup> Estimated Evapotranspiration

Date	Rainfall (mm)	ET* (mm)	Rainfall - ET	
19/02/2007	1.6	3.64	-2.04	
20/02/2007	0	4.2	-4.2	
21/02/2007	1.6	4.62	-3.02	
22/02/2007	0.8	2.52	-1.72	
23/02/2007	0	4.06	-4.06	
24/02/2007	2	3.08	-1.08	
25/02/2007	2	4.62	-2.62	
26/02/2007	0	4.62	-4.62	
27/02/2007	0	6.16	-6.16	
28/02/2007	0	5.32	-5.32	
Developtions Time Deinfell is available to the properties 150/				

Percentage Time Rainfall is greater than Evaporation = 15%

#### **Conceptual Hydrogeological Model**

Before the airport was constructed, the area was largely a marshland in a delta backswamp area, covered by salt marsh vegetation with fringing mangroves along tidal creeks and estuaries. Creeks such as Kedron Brook, Serpentine Creek and Boggy Creek meandered across the salt marsh area, and drains discharging to these creeks were used to lower the water table in farming land. The Kedron Brook Floodway was created during construction of the airport in the 1980's.

The topography of the proposed new runway area is relatively flat at approximately 1.5 m to 3 m AD (Airport Datum). The land is more elevated adjacent to Kedron Brook Floodway and falls slightly towards the Jackson's/Serpentine Creek system that occupies the lowest elevations in the area. Mangroves are present along the creeks and drains in this area, and the remainder of the area is covered in casuarina trees which were planted during the development of the airport in the 1980's.

Hydrogeologically, the site lies in the discharge zone (refer to *Figure 6* below). The characteristics of discharge zone include shallow water table, water logging and salinity outbreaks. This is consistent with the observed groundwater level at the site, which varies from 0.0 m to 2.8 m, and the measured salinity of the groundwater, which in some areas is hyper-saline. Since the site lies in the discharge zone, there is no appreciable recharge except direct recharge from rainfall to shallow groundwater. This recharge is then either discharged very locally to nearby creeks and drains, or is returned to the atmosphere through evapotranspiration. Measured groundwater levels generally indicate a rapid increase in groundwater levels (recharge), followed by a slower recession (discharge and evapotranspiration). This cycle follows rainfall patterns.

Groundwater and surface water also interact in the vicinity of the tidal creeks and drains, which is reflected by the observed groundwater level fluctuations in monitoring bores that are located close to such features. Along the banks of creeks and drains, saline water from the creeks/drains will flow into the estuarine soils of the Upper Holocene alluvia during high tide, and will flow out during low tide.

Runoff is likely to be higher in the currently developed airport area than in the area where the New Parallel Runway will be constructed, as a result of reduced interception by vegetation, and also because of the runoff from paved areas. It is noted, however, that runoff is directed to drains, from which some of the runoff will infiltrate into the sand fill platform on which the airport has been constructed. The balance of rainfall, runoff, evaptranspiration and recharge in this area is such that the measured groundwater levels in the sand fill platform are greater than the groundwater levels that existed in this area prior to development (refer below).

The distribution of subsurface materials, their hydraulic characteristics, and the interactions between groundwater and surface water are illustrated schematically in *Figure 7* (revised version of *Figure 3.3f*).

<sup>\*</sup> Estimated Evapotranspiration



#### **Impacts on Groundwater**

Potential impacts of runway construction on groundwater are as follow:

- 1. Changes in evapotranspirative and evaporation regime due to removal of vegetation and construction of paved surfaces such as runway and pavements;
- 2. Changes in the runoff caused by the changes in the ground cover;
- 3. Changes in groundwater level along proposed drains; and
- 4. Changes in pore pressure and groundwater mounding associated with surcharging of the filled areas.

These impacts were discussed in the Draft EIS/MDP, however additional information has been requested. The Draft EIS/MDP provided a detailed description of the direct impacts resulting from filling and surcharging (Section 3.6.2.3), including results of numerical modelling carried out to quantify the extent of groundwater mounding as a result of surcharging. Estimates of the long-term inflow rates to the proposed drains were also provided. The discussion in the following provides a more detailed discussion of likely changes in evapotranspiration and run-off, and as requested, additional information is provided regarding inflow to the proposed drains.

#### Changes in Evapotranspiration, Runoff and Recharge

Construction of the New Parallel Runway will change the balance between rainfall, runoff, evapotranspiration and groundwater recharge in the area that is to be filled, because of the following changes:

- the change in the nature of vegetation, from casuarinas and mangroves, to grass;
- · covering of significant areas with paved runways and taxiways;
- the change in surface soils from clayey soils to sandy soils.

The changes to the various elements of the water balance could be estimated and used in a simple water balance model to estimate the change in groundwater storage and groundwater level. In principle, the water balance model would be structured as follows.

#### Pre New Parallel Runway Construction:

Where:

Rb = Runoff from the uncleared area

Ei = interception and evaporation of intercepted water

Ef = evaporation of water from the uncleared surface vegetation and undisturbed land

Et = evapotranspiration from vegetation

Ib = groundwater infiltration in a undisturbed area (before New Parallel Runway)

#### Post New Parallel Runway Construction:

Where:

Ra = runoff from the post-construction surface

Ep = evaporation from runway and constructed area

Es = evapotranspiration of water from the disturbed land and unbuilt area

la = groundwater infiltration from the cleared and disturbed land area (during and after New Parallel Runway construction).

For the post-construction case, significant runoff will occur from the paved areas. This water, however, is directed to unlined drains, from which it will infiltrate into the sand fill platform. This interaction between groundwater and surface water would need to be taken into account in any water balance modelling, in order to calculate the effective runoff.

#### Change in Infiltration (Difference between pre and post construction):

$$\triangle I = Ia - Ib = (Ei + Ef + Et) - (Ep + Es) + (Rb-Ra)$$
-----(3)

For:

- $\triangle$  < 0 = Evaporative losses from the cleared and disturbed area would greater than evapotranspiration losses from the uncleared area. In this situation, additional groundwater will be consumed. Groundwater would replace water evaporated from the cleared and disturbed area resulting into lowering of groundwater table.
- $\triangle$  > 0 = Evaporative losses from the cleared and disturbed area are less than evapotranspiration losses from the uncleared area. In this situation, additional groundwater will accumulate, which may give rise to groundwater level or may contribute to increased groundwater discharge and contaminants into surrounding groundwater bodies of receiving environments (Moreton Bay and Kedron Brook Floodway).

The likely overall result of the changes in evapotranspiration and runoff can be judged from the groundwater levels that have been measured in the existing filled area at the airport. The groundwater levels that develop in the area that is to be filled for the runway development are likely to be similar to the groundwater levels in the existing filled area, since the physical characteristics that drive runoff and evapotranspiration will be essentially the same for both areas.

Reference to *Figure 2* and *Figure 3.2d* from the Draft EIS/MDP indicate that groundwater levels in the existing filled area varied between RL 2.1 m and RL 2.5 m datum over the period of measurement (refer to results for MW1). Except for very short periods following heavy rainfall, the groundwater level at MW1 was higher than the levels at other monitoring wells in the proposed development area. It is also higher than groundwater levels that were measured in the airport area prior to site development (as indicated above, boreholes drilled in the early 1980's encountered groundwater at a level of approximately RL 1.8 m Airport Datum)

The overall impact of the changes in evapotranspiration and runoff are therefore likely to lead to an increase in groundwater level in the area to be filled, to a level that will vary seasonally, but which is likely to be in the range of RL 2 m to RL 2.5 m datum after the effects of surcharging have dissipated.

Based on this analysis, it is not considered necessary to undertake quantitative modelling to confirm this estimate (although it could be done using a model similar to that outlined conceptually above). However, it should be noted that if a model were to be developed, it would need to be calibrated in order to yield results that are consistent with the observed water levels in the existing sand fill platform.

#### Changes in Groundwater Discharge from the Site

Groundwater currently discharges from the site to the Jackson's Creek/Serpentine Creek/Landers Pocket Drain system, and to Kedron Brook Floodway. The development that is proposed for the New Parallel Runway will change the groundwater flow system such that groundwater will discharge to the Kedron Brook Floodway, and the proposed Kedron Brook Floodway Drain.

The increase in discharge to Kedron Brook Floodway over that which is currently occurring can be estimated using a simple Darcy-type calculation based on the expected increase in groundwater level in the area to be filled:



DQ = K.A. increased groundwater level/average distance to Floodway from the edge of the fill platform.

Where:

K=hydraulic conductivity

A = cross-sectional area for flow.

Conservatively, a value of 1x10-6 m/s will be adopted for K, and the area will be calculated as 10 m (ie. the average thickness of the upper Holocene alluvium) multiplied by 3000 m (ie. the length of the runway).

For the long-term case, the increased groundwater level will be taken conservatively as 2 m based on the results of measurements to date. A value of 1000m has been used for the average distance to the floodway. Using these values for the various parameters in the above equation, the calculated increased groundwater discharge to Kedron Brook Floodway is 6x10-5 m<sup>3</sup>/s.

For the short-term case during surcharging, the same equation could be used to calculate increased flow to Kedron Brook, using the increased hydraulic head caused by the weight of the surcharge. This is very conservative, since the calculation is based on an increase in the steady-state gradient between the filled area and the floodway, and the increased groundwater pressures due to surcharging will not be sustained long enough for steady state conditions to develop. Using a value of 10 m for the increase in hydraulic head due to surcharging (equivalent to 5 m of fill being placed everywhere, which is greater than what will actually be placed), the calculated increase in discharge to Kedron Brook Floodway is 3x10-4 m<sup>3</sup>/s.

These calculated values of increase in groundwater discharge can be placed in perspective by comparing them to the tidal prism in Kedron Brook Floodway, which has been estimated at 1.8x106 m³ at the mouth of the Kedron Brook Floodway (as referenced in studies of hydrology and coastal processes in other chapters of Draft EIS/MDP). The increased groundwater discharge to the Floodway is therefore insignificant in relation to other components of flow in the Floodway. It is also noted that the shallow, potentially acidic groundwater will pass through the groundwater treatment trench prior to discharge to the floodway.

Steady-state groundwater discharge to the proposed Kedron Brook Floodway was estimated in Section 3.6.2.4 of the Draft EIS/MDP. Using the parameters quoted in the Draft EIS/MDP a simple Darcy-type calculation yields a steady state inflow rate of 2x10-7 m³/s/m length of drain, or approximately 3x10-4 m³/s over the total length of drain. Again, this discharge will be treated by the lime barrier to be placed on the surface of the drain, and is insignificant in relation to the flow in the floodway.

Additional information has also been requested regarding short-term inflows to the drain during its construction. It is possible that the short-term inflows could be up to 10 times greater than the value estimated above, however it should be noted that the drain will be constructed in 100 m length sections, and that the short-term inflows during construction of each section will be collected and treated. The drain will not be connected to the Kedron Brook Floodway until the drain construction is completed with the necessary Acid Sulfate Soils management measures in place.

## Further Testing and Fieldwork

DNRW have requested that additional deep monitoring bores be installed to further characterise the groundwater system at the site. Following discussion with DNRW, additional monitoring bores will be installed adjacent to the existing monitoring bores at MW1 and MW6. At each of these locations, two deeper monitoring bores will be installed to two different depths, to assess the potential for vertical hydraulic gradients, and to carry out further permeability testing.

## References:

DNR&M (Department of Natural Resources and Mines) 2002. South-East Queensland Region, Geoscience data set - SEQ GIS Version 2. Produced by Geological Survey of Queensland, Department of Natural Resources and Mines.

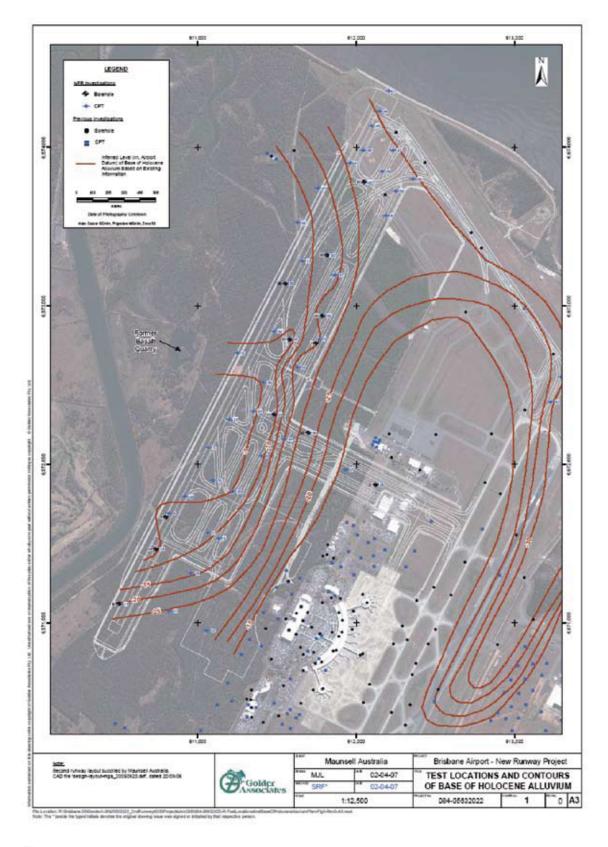


Figure 1



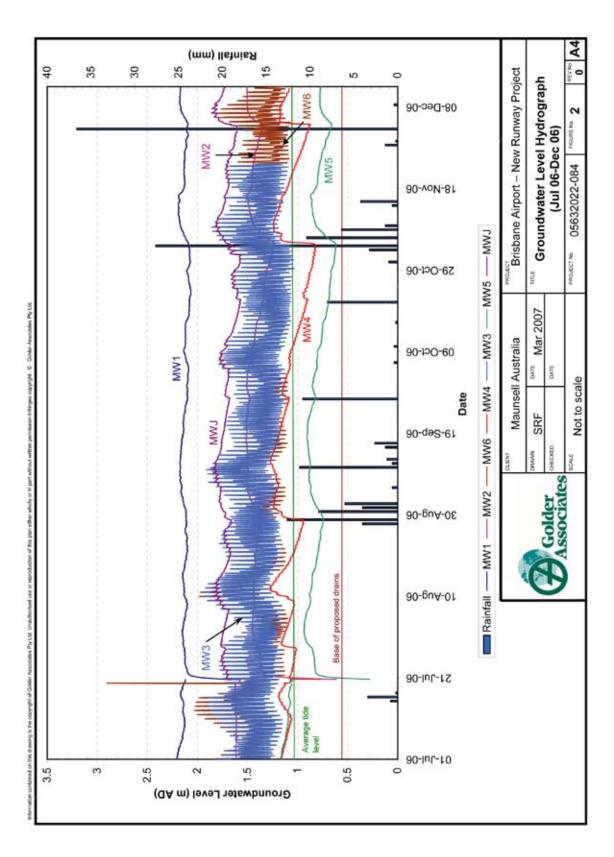


Figure 2

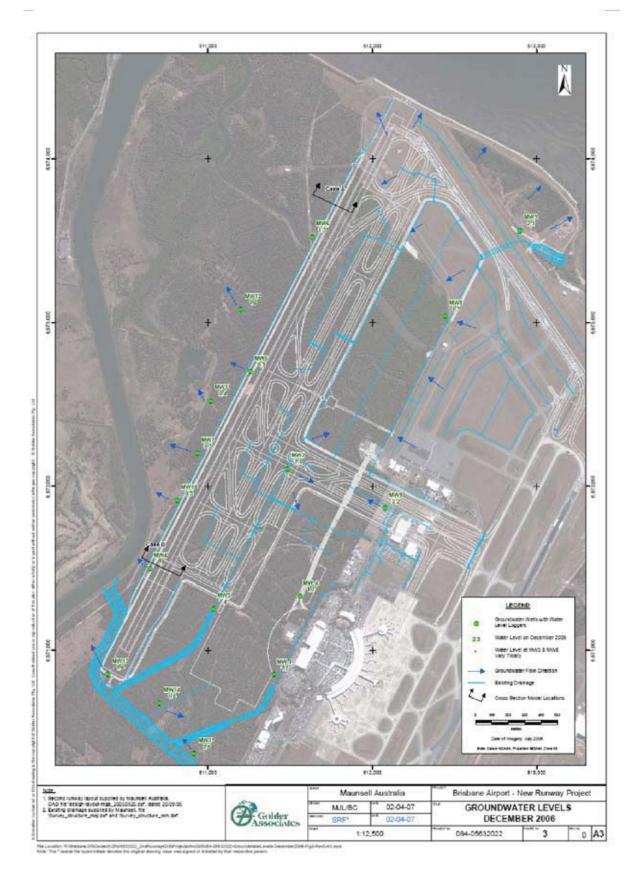


Figure 3



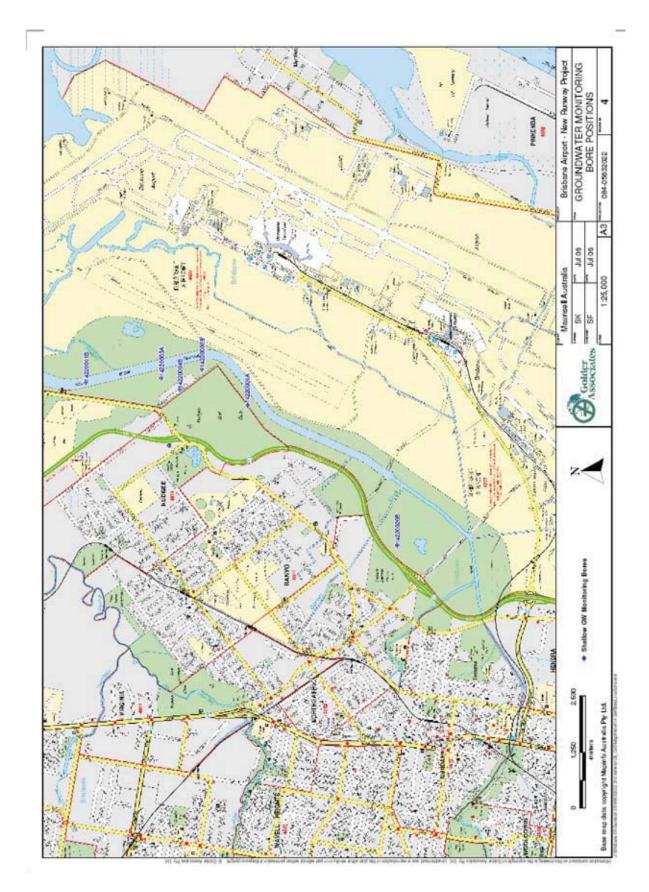


Figure 4

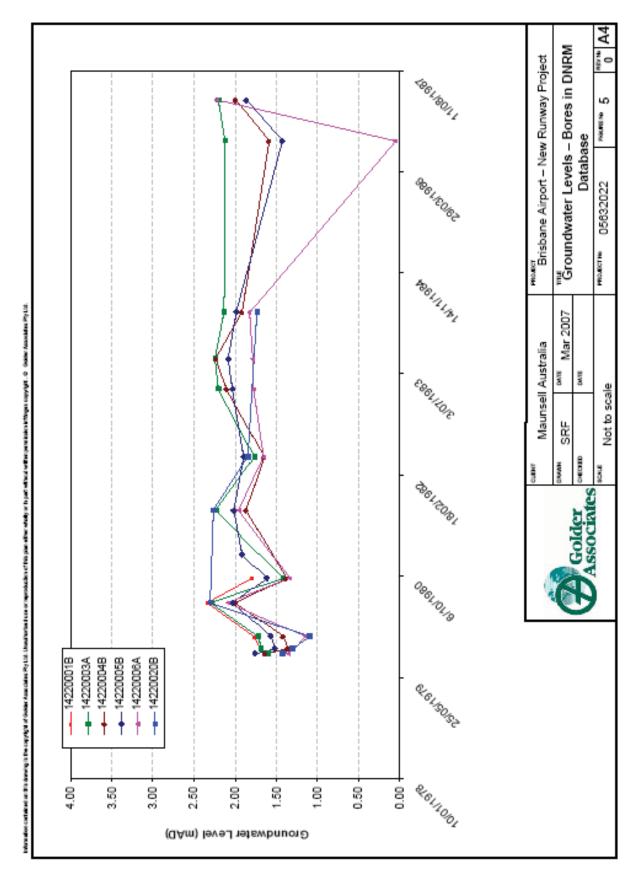


Figure 5



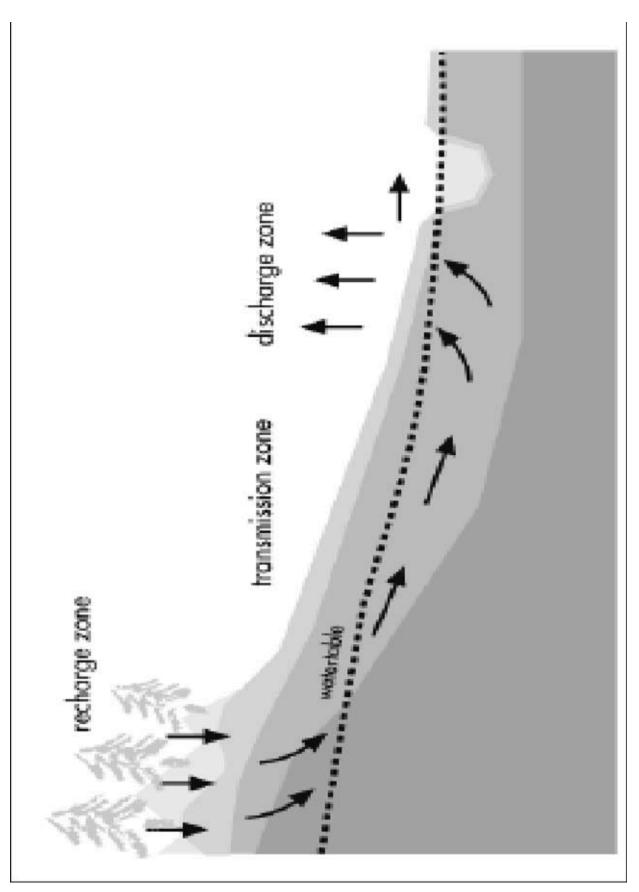


Figure 6: Ground Water Flow Zones (Source: Natural Resources and Mines, Queensland Government, August 2001)

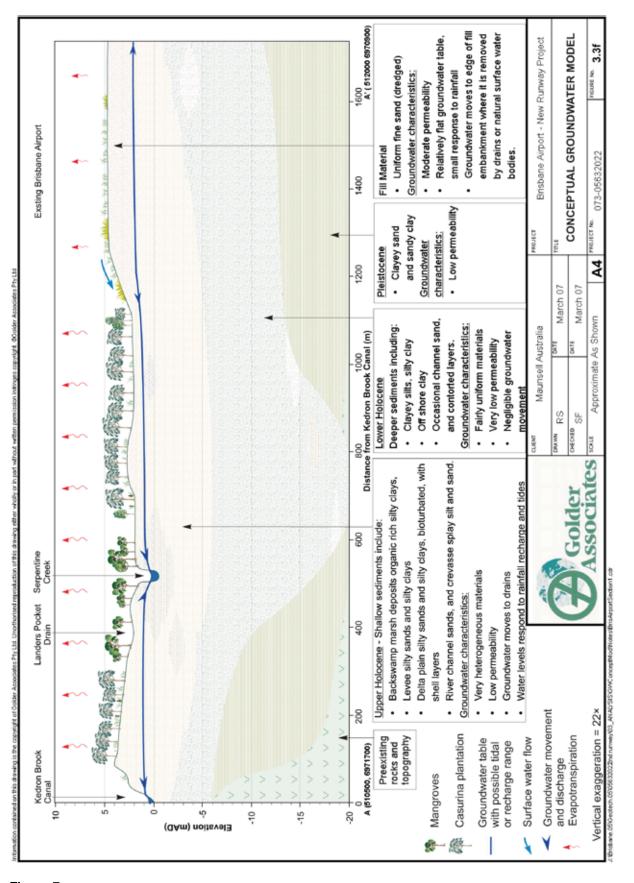


Figure 7



# Mr & Mrs Chris and Stephanie Adamson

Formal Submission #197

**Position** Community individual

Organisation n/a

#### Submission full text

To Whom It May Concern

When we purchased our home in Mc Ilwraith Avenue, Balmoral over 30 years ago, no one could have foreseen the rate of development in neither our suburb nor our city's airport. Sadly, it would appear that much of this development has been at a cost to residents like us who now find our environment becoming more and more noisy and dirty.

It also appears that the Brisbane Airport Corporation seems willing to spend huge amounts of money in producing copious documentation to validate their stance on developing this new parallel runway but did not seem willing to really listen to the residents' concerns about these issues from the very beginning.

In truth, no amount of documentation will ever change the impact of the Airport's expansion. One has only to sit in our lounge room at various times to find that no radio, television, personal conversation or phone calls can be heard when the different aircraft come within a certain distance of our home.

To imagine what this impact will be like when there is a notable increase in overflights as stated, is an absolute nightmare. The night curfew will definitely be necessary to maintain a small sense of calm in our increasingly noisy environment.

With space for future Aviation and Domestic Terminal Facilities clearly still available, it seems incredible that Brisbane Airport Corporation did not fully explore the option of building the new runway out into the bay as other overseas countries have done so successfully. This could minimise the flights over residential areas and share the load more equitably.

It could also decrease the possible degradation or destruction of those very important Conservation Areas and to some of the vulnerable species that inhabit or migrate to them. Though it is stated that most species are tolerant of high and frequent levels of disturbance, there would be great doubt that your surveys could predict the long-term impact on nesting habits and reproduction levels of these species.



Apart from our own and neighbours' well being, we are also extremely concerned at the impact of aircraft flying over so many local schools in our area. Our grandson has commented on the many occasions he could not even hear the teacher, educational videos, guest speakers or classmates when attending Bulimba State School. This disruption to education would be the same for all the other Primary and Secondary schools both State, Catholic and Private, which are in the vicinity of aircraft flight paths.

To state that no suburb, group or individual can demand or expect to be exempt from aircraft noise exposure is in essence probably correct in today's busy world. However, we all have a right to live our lives in the suburb of our choice with a real belief that the relevant authorities have explored all possible avenues to minimise any negative impacts on our health and daily life.

To date, the Brisbane Airport Corporation, seems more driven by profit than by concern for many of Brisbane's residents. This proposed parallel runway and the increased number of flights will have nothing but a negative effect on our quality of life and the future real estate value of our homes.

Yours Faithfully,

Chris and Stephanie Adamson



# Ms T Agli

Formal Submission #76

**Position** Community individual

Organisation n/a

## Submission full text

To whom it may concern,

I am writing to voice my concerns and objections regarding your parallel runway proposal. I would like to ask that you do not move the runway closer to out homes than what is absolutely necessary!

Please think of the environmental impact that the proposed runway will have on Jackson's Creek. I am horrified to think that your corporation would even consider burying mangroves and waterways for the sake of "progress".

I am aware that the international standard for parallel runways is a separation of 1,525m so is it necessary to still take 475m more than what you need or are you just doing it because you can?!

Please just this once listen to the minority and do your bit for the environment, both human and natural.

Do not move the runway any closer than 1,525m. Don't destroy any more of the environment for the sake of progress. We can never replace it otherwise.

I thank you for your time.

T. Agli



## Ms Dora Aitken

## Formal Submission #34

**Position** Community individual

Organisation n/a

## Submission full text

I put forward a 'parallel' idea - perhaps you could think about it and pass on to relevant decision making groups!

The area under the new runway could possibly be a good reservoir site for recycled water for direct return to the city of Brisbane reticulation. As this is so close to Luggage Point there could be 2 options:

- 1. Secondary treated water stores and supplied in dedicated pipelines to nearby industries or, more usefully,
- 2. Tertiary treated water stored and used directly for normal consumption instead of wasteful pumping to existing dams.

Maybe both could be incorporated. This would save the cost of finding other sites to put reservoirs. I realise that there could be problems with salinity on the soils, but there are systems of underground water storage using plastic liners.

Yours faithfully

D.M. Aitken



## Mr Patrick Albina

Formal Submission #60

**Position** Community individual

Organisation n/a

#### Submission full text

TO WHOM IT MAY CONCERN

Reference:

New Parallel Runway Project - Flight Path and Noise Information Booklet

## Introduction

Whilst I am an aeronautical engineer and therefore have an aviation background, I make this submission as a resident of an aircraft noise affected area. In my opinion, Gatling Road is currently the most noise affected residential area in Brisbane therefore having lived at this address for almost 5 years, the contents of this submission is intended to provide constructive feedback to you based on my observations.

Firstly, let me say that I support the Brisbane Airport City concept and that SE QLD is badly in need of an expanded traffic management capacity in terms of air, rail and road. The inevitable NPR will no doubt facilitate the expansion, but its implementation needs to be carefully managed given the sensitivity of this subject due to the high profile impact that aircraft noise has on the quality of life.

Aircraft traffic will inevitably be increased regardless of the NPR or not, and therefore the NPR will facilitate the ability of ATC to distribute the load of aircraft noise in accordance with you Priority 3 Flight Path Procedures.

## **General Observations**

Assuming runway 01 operations:

- Peak period aircraft noise is the worst around 6:00am to 7:30am and 4:30pm to 7:30pm
  - The early mornings are particularly bad with the likes of the B747, B767. B777 and Airbus 330 aircraft coming in from SE Asia/Japan.



- Aircraft noise is compounded with low cloud, often the warm and humid mornings where a
  NE breeze has been blowing.
- Aircraft noise is worse with the older aircraft (despite them having stage 3 hushkits), particularly the JAL 737-300 and some other freighter aircraft.
- Military aircraft are generally the worst, but these are the exception to the rule.

The following is also true during runway 01 operations:

- Aircraft on approach in a constant glideslope with constant spool creates less noise pollution than aircraft spooling up and down.
- The spooling up and down (aircrew adjustment for approach) is much more disturbing than a constant glide setting.
- The above two points are independent of aircraft size, i.e. a B747 in constant glide can be less disturbing than a B737-800 spooling up and down.

Whilst there is also aircraft noise with the use of runway 19 (T/O), the aircraft are generally a lot higher and many have already turned south toward SYD, MEL or CBR.

I also make a note here to thank the ATC. The use and execution of reciprocal mode to avoid aircraft over the Cannon Hill/Morningside residential areas is greatly appreciated.

## After NPR

The majority of noise at peak periods is due to:

- · Incoming N and NW early morning SE Asia/Japan aircraft
- Incoming S early morning and evening aircraft from Sydney and Melbourne

In order to share the aircraft noise between 01L and 01R, the following should be considered:

- 01L should be used for West and North incoming (i.e., ADL, PER, SE Asia, Japan, etc.)
- 01R should be used for South and East incoming (i.e., SYD, MEL, CBR. AKL, etc.)
- Maximise SODPROPSs
- Maximise the use of 01L for landing ops as the runway is staggered 950m to the sea and therefore the aircraft are higher over the densely populated residential areas.
- Always use constant glide slope approach for aircraft fitted with equipment

## Other comments

I believe that there are Noise Monitors located under Flightpath F & G. I believe that you need an extra noise monitor around the Cannon Hill Anglican College (CHAC) area. This is the vicinity that Flight path F & G converge and the current noise monitors do not account for this convergence.



## **Andree Anderson**

Formal Submission #118

**Position** Community individual

Organisation n/a

## Submission full text

Please note on the record that I am concerned about new flight paths associated with the new parallel runway and the increase in flights and noise over our home. There should be very little reason for flight paths to travel over houses when the bay is right next to the airport. Some of the existing flights already come in very low over the houses and it would appear that is not being controlled adequately. In addition, the information provided on this site is insufficient. There is no map that shows the location of suburbs/streets in relation to the new flight plans.

Regards,

Andree Anderson



## Mr Graham Arnold

Formal	Sul	bmi	issi	on	#97
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**Position** Community individual

Organisation n/a

#### Submission full text

New Parallel Runway Draft

EIS/MDP

In response to the proposed new runway I would like to voice my concern. The main one is the environmental destruction of the mangrove and bushland, which will occur with the bulldozing and filling for the runway right up to Jackson's Creek and the Kedron Brook Floodway.

From the lookout in the wetlands off Nudgee Road can be seen virtually the whole area of mangrove and wetland from Boondall to the airport that remains. What is noticeable is that it is not really a large area of land at all. The area that you propose to destroy is an important habitat of 115 hectares, according to my information, which is not an inconsiderable amount.

My secondary concern is, of course, the fear of noise with the closeness of the new runway and the drop in value with the reluctance of buyers to shift into the area. The suburbs of Northgate, Nudgee and Nudgee Beach were in existence long before the new airport was built and residents should be considered on the basis of who was here first.

A newsletter from our Councillor Kim Flesser states it is feasible to have the new runway built 475m to the east. This sounds to me to be a better idea, which would lessen the impact on all involved. Thank you.

Yours Faithfully

Graham Arnold



## Mr Michael Asnicar

<b>Formal</b>	Submission	#214
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**Position** Community individual

Organisation n/a

## Submission full text

I would like to raise my concerns with the proposed location of the NPR. The location will indeed cause an increase in aircraft noise impacts over my home far beyond what we currently experience. Under the proposed NPR, Nudgee's N70 increased from 0 to 110 per day!

Whilst you argue that 0% of residents are in the N70 contour, we are probably around N65 which isn't much quieter.

I am concerned about property values as this will surely decrease values in the area.

I would also implore you to move the NPR 500m to the south in line with the minimum standard for separation distances between runways.

In addition, the introduction of a night time curfew is a must. I'm sure N65 noises in the middle of the night are enough to disturb sleep.

I trust these comments are taken into account.

Regards,

Michael Asnicar



## **S** Austin

#### Formal Submission #109

**Position** Community individual

Organisation n/a

## Submission full text

Re: The Parallel Runway

I oppose the construction of the parallel runway and the construction of it in the proposed position for the following reasons:

- 1. The runway should be constructed as far away from residential areas as possible:
- 2. If the runway were constructed 475m further to the east surely there would be less impact on existing residential areas;
- 3. Why is it necessary to destroy valuable fisheries, bird and other wildlife habitat? Other locations/methods must be available to avoid this?
- 4. Why haven't we been told what the noise impacts on surrounding residential areas are likely to be?
- 5. If affected residents are unhappy with the increased noise levels will the BAC pay for double-glazing, insulation and other noise amelioration products to be installed as required? There are precedents for this eg. Manchester airport.
- 6. The BAC should be considering locating the runway in an area which has the least impact on existing residential areas particularly when you consider that all the suburbs, which will be affected by the parallel runway, existed well before the airport ever did.
- 7. Any loss in property values (directly or indirectly due to the airport development) should be compensated by the BAC.
- 8. A night time curfew of no later than 9pm should be imposed. Curfews exist for many major airports in Australia and worldwide. This would assist residential amenity;



- 9. Will the BAC, because of upstream flooding of the local creeks due to increased stormwater flows into the local creek/stormwater system as a result of the parallel runway and its associated development:
- (a) Pay compensation to affected residents; and
- (b) Pay for any future drainage work required to combat the flooding?
- 10. The existing airport road system is an absolute joke and grossly inadequate. Any further development (i.e. the parallel runway and associated development by the BAC) will only make things worse and have adverse environmental impacts because of the increase in required road systems.

Yours faithfully Susan Austin



# Mr & Mrs Michael and Virginia Balfour

Formal Submission #116

**Position** Community individual

Organisation n/a

## Submission full text

Dear Sir,

I wish to comment on the New Parallel Runway Major Development Plan.

I am writing as a resident of Brisbane, and of the suburb of Bulimba in particular, both of which will be affected by the new runway. I am also the mother of a 2-year Old who will be schooling in kindergarten and schools affected by the new runway proposals.

I have enclosed my comments on the proposals and would be grateful if you would give them consideration.

Yours faithfully

Ginny Balfour

# COMMENTS BY VIRGINIA BALFOUR QUALITY OF LIFE AND HEALTH

Brisbane airport sits on a small piece of land to the north east of the city. It is hemmed in by wetlands to the north, the sea to the east, and the city to the south and west. In an ideal world planes would take off over the sea, but they don't. Climatic conditions mean that a significant amount of the time, planes take off and land over the city, rumbling low over houses as they do. The airport can only expand in the pocket of land between the city and the sea. And so, any expansion will mean more planes flying over residential areas, and with it more noise and disruption for residents.

This is not something affecting a small area of the city or a small proportion of the population. Of the 50 Brisbane suburbs to be affected by the new runway, over a third will have to suffer a significant increase of planes with 70 decibels during the day (1) - and this is the airport's interpretation of 'day' which is 6am to 8pm, which includes time which most of assume is evening



or early morning. Air noise will increase significantly over 17 childcare and kindergartens, there will be communication interference in nine schools, which can only compromise the ability of our children to learn (2).

Brisbane airport is not alone in wanting to expand. I grew up in England and watched several of our airports demand second runways and new terminals. But in England we had double glazed windows and thick stone walls which cosseted us from the noise outside our homes. Queensland is very different. Here houses are designed to let the outside in to keep them cool. Walls are made from wood, open windows and doors line every wall.

The airport admits that in the yard or on the veranda you would experience the full noise level of 70 decibels, nearly 30 per cent more than you'd hear if you were inside with the windows closed (3). We live outside on our verandas, we cool down in our pools, and we socialize in our gardens. In the height of summer, living outside is almost a necessity as the temperatures and humidity rise. And so any increase in noise will affect us far more than it might residents beside other airport expansion schemes.

To be able to eat an evening meal on the veranda in peace, to be able to sleep at night with the windows open without being woken by plane noise, to be able to socialize outside with friends are fundamental human rights, and in Brisbane a virtual necessity. When a large plane flies overhead, it isn't just like the sound of a vacuum cleaner that you can block out by turning the telly up or closing a window. It is a major intrusion into our peace and lifestyle.

## IMPACT ON HOUSE PRICES OF INCREASED AIRCRAFT NOISE AND POLLUTION

The airport says that their studies have concluded that there will be little effect on house prices with the increased amount of air traffic (4). They base this on the fact that at present there is no impact. But of course they are planning a substantial increase in flights - taking Brisbane to the level of flights that only London's Heathrow airport suffers, and that is the world's biggest airport.

American psychologist Zimbardo formulated a theory called 'tipping theory' which was based on the principle of the dumper truck tipping out waste. If you watch one of these trucks you notice that the earth on the back slips slowly off the back up until a certain point, then it all falls out. This is the tipping point. The theory can be used in the case of airport noise as well - a small amount may not make a difference to house prices, but at a certain point it will make a huge difference. People may not mind paying good house prices when the occasional flight goes overhead, but when they are all day and night; it may be a different issue.

## **ROAD CONGESTION**

The airport authority says that passenger numbers will rise to around 50 million by 2035 (5). That's an increase of more than 300 percent on today's figures. Although one could be sceptical about the figures -says who? And based on what? When do the figures plateau? - let's presume they are



true. The airport admits that two thirds of the people who use it take their cars to the airport (6). That would be millions of extra cars on the roads around the already congested artery that links Brisbane to the Gold and Sunshine coasts. New Gateway motorway and bridge expansions are planned, but they stand only to alleviate the present problems of congestion, without this added burden of traffic. The airport says that the new runway will help ease congestion as flights will be spread throughout the day, but they still admit that peak hours for travel are the same rush hours of the working day (7).

Heathrow Airport - which Brisbane would like to think it will compete with in terms of passenger numbers - has three major motorways servicing it. The M25 is a 12 lane motorway, the M4 spreads to 8 lanes at Heathrow, and there is also the 6 lane M40. As any commuter into London will tell you, however, these lanes get clogged up with traffic regularly. In comparison, Brisbane's road networks are woefully ill prepared for any expansion of the airport, and many commuters would find themselves holidaying on the 'Gateway Car Park'.

## **ENVIRONMENTAL EFFECTS**

Dredging Moreton Bay to within three kilometres of the bay on Moreton Island where tourists flock to feed dolphins is something that should be treated with caution. The dredging will be taking place 24/7 for 18 months - that's a lot of dredging. The airport's report into the potential damage to Moreton Bay area admits that spawning, foraging and nursery habitat for some fish will be impacted and that small animals living in or on the sea floor will be affected. Interestingly the report only says that the impacts need further research - skating round the issue rather conveniently (8). Until the impact of dredging can be accurately, independently and fully assessed, no proposals for dredging should be confirmed.

As mentioned above, the development will create much more traffic on our roads. The airport admits that the major cause of pollution to Brisbane comes from cars, so what will all those millions of extra vehicles do to the quality of our air?

We live in an area of outstanding natural beauty and we fight hard to keep it that way. That is why the tourists come. The environmental impact of this large project appear to have been fudged, and a more thorough, independent assessment should be made before final commitment to expansion is confirmed.

## **CONCLUSION**

The airport themselves say that development should balance the economic benefits with the social and environmental impacts. In the future transport may be quieter and less polluting, but we can only plan with the knowledge we have today.



I, like many Brisbanites, am new to the city. The attraction of this city was its clean open green areas, and the lifestyle it offers. It is a fantastic city; vibrant, dynamic, and yet relaxed. It is no wonder its population is growing and tourists are flocking.

The desire for expansion of the airport is therefore perhaps understandable, and some increase in flights may be the inevitable compromise Brisbanites have to accept for our city's growth. But the development has the potential to be a 'Catch 22' situation. If quality of life is compromised and the environment damaged, then the appeal of Brisbane as a destination for tourists, business and immigrants would be lessened.

I believe some compromise should be made and I would therefore like to suggest the following:

A cap be placed on the number of flights that are allowed in and out of Brisbane Airport. A review of the cap could be made in several years' time to evaluate whether aircraft noise and car pollution levels have been reduced by technological advances, but it would protect us against unlimited development which could be detrimental to the health and lifestyle of the population.

During the evenings and at weekends, when people want to relax at home, there should be a curfew. Overnight, from 10pm to 6am, there should be no overflights, and there should be limited flights during the 6-8am and 6pm to 10pm times when families are at home and socializing outside.

Flight paths over schools should be reconsidered at with a view to limiting the number of overflights during school times.

A full, independent assessment of the environmental impact should be made before final plans are agreed.

I understand that these proposals will mean that one can't catch a flight at all times of day, and especially in the early hours of the morning. I believe, however, that they offer a necessary compromise, allowing some expansion of the airport while minimising the impact upon the city's citizens.

Economics will always be put forward as the reason why business expansion is necessary, but in the bigger picture it is a progressive attitude towards our city and how we want it to expand in the future for all of its citizens, not just shareholders and business, which matters. We have witnessed many other cities in the world make the mistake of thinking that business expansion without limit will reap rewards in terms of investment and profits, only to realise after the event that the reduced quality of life and environmental impacts have a detrimental effect. Brisbane is a very special place to live and play. Let's have a vision that tries to keep it that way. It's in all our interests to do so.



## **Footnotes**

- 1- Summary of Findings p132
- 2- Ibid p 144
- 3- Ibid p 131
- 4- Ibid p 20
- 5- Ibid p12
- 6- Ibid p73
- 7- Ibid p15
- 8- Ibid p 23
- 9- Ibid p 78



## Mr Simon Baltaise

Formal Submission #72

**Position** Secretary

**Organisation** Bayside Branch (WPSQ)

#### Submission full text

We submit the following final report in response to the proposed New Parallel Runway Project. The submission examines economic, social and environmental impacts.

## 1.0 Fishing Resources

## 1.1 Background

Our understanding is that the runway and extraction area are known to support a variety of economic fish species.

## 1.2 Runway area

In December 1997 there were estimated to be 144 km2 of mangroves and 50 km2 of salt marsh/claypan between Caloundra and Southport (Hyland and Butler, 1989). It is estimated between 1974 and 1987 that 8.4% of SEQ mangroves and 10.5% of its salt marsh/claypan communities had been lost (Hyland and Butler, 1989). Within Moreton Bay this loss is estimated to be 20% since European settlement, 1240 ha being destroyed within Moreton Bay between 1974 and 1989. The past airport expansion was responsible for a loss of 850 ha of mangroves between 1977 and 1980, representing 12.5% of mangrove loss in SEQ (Coastal CRC,2003; BAD, 1979). There appears to have been little if any mitigation undertaken to reduce the loss of mangroves. The future expansion of the Brisbane Airport will see a further 94 ha lost. It should also be noted Gold Coast canal estates are responsible for the loss of 3% of Moreton Bay's mangroves. These losses are not always due to humans. In November 1997 280 hectares in southern Moreton Bay died due to a hailstorm, resulting in loss of bark, branches and pneumatophores. While natural events cause significant damage, losses in SEQ are primarily due to human activities and unfortunately new sinister impacts are starting to emerge. These include genetic damage to Avicennia marina and Rhizophora sp caused by hydrocarbons found within the sediment derived from stormwater. The damage manifests itself in the form of mutation seen as 'albino' propagules attached to parent trees (Duke et al, 2001). The affected propagules lack chlorophyll and normal green coloration, leaving them yellow or red. If they do establish and grow leaves they soon die once the seedlings reserves are depleted (Duke et al, 2001). Lota Creek, Bulwer Island, Cleveland



and Eprapah Creek, Victoria Point is some of the areas where this genetic damage has been observed. While there have been many losses in the past there have been gains, between 1944 and 1983 the mangroves at Oyster Point Bay, south Cleveland doubled in area. Current losses of mangroves due to permits appear relatively small with permits issued in 1996 allowing 4.09 ha of marine plants to be cleared, of which 2.20ha were for mangroves. Illegal clearing of mangroves continues albeit on a small scale but still an issue. Mangroves provide habitat, food, coastal protection and trap silt and nutrients and like seagrass they are very productive. The United Nations Food and Agriculture Organisation (FAO) estimates in 1985 the average global fishery yield from about 82,000 km2 of mangrove waters is 9 tonnes of fish, crabs and shrimp and 2 tons of snails and bivalves per square kilometre (Czuczor, 1998). We know production of fishery resources in mangrove communities is affected by geographic and climatic conditions and community structure. Moreton Bay mangrove communities appear very productive. Avicennia mangrove communities in the Brisbane River were estimated to produce 2.3 – 3.5 g dry weight m2 day 1 (DPI, 1998). We know there is high biomass and density of fishes using subtropical Avicennia forest, however, there is a possibility of diversity, density and biomass declining with distance inside such forests. This does not detract from their importance as small fishes do use inland mangroves to avoid large predatory fishes, subtropical mangroves being noted to support intermediate carnivorous fishes, which also make up a high percentage of commercial and recreational catch. For example, Avicennia marina (subtropical) forest in Moreton Bay support 42 species of fish at a density of 0.27 ± 0.14 fish m 2, 75% of economic value and 25.3 ± 20.4 g m 2, 94% of economic value.

Past Airport Development reports have identified the mangroves in the Serpentine Creek to be very important and should be protected with steps taken to ensure the maximum area of mangroves is protected (BAD, 1979). Yet in 2007 decisions are being made that will result in further destruction of these important mangroves. The 1979 Airport Development reports emphasized the need to protect the yellow mangrove heath community, the subject area supports 28% of this type of habitat found in Moreton Bay. Unfortunately, the subject EIS FAILED to identify the importance of protecting this community stating,

No regionally restricted flora or locally significant species under BCC's NAPS have been identified on the Study Site, however, the yellow mangrove (Ceriops tagal var. australis) is an uncommon community within the Moreton Bay region (B5 –Terresterial.pdf).

It should be NOTED that the mangroves of the subject site are listed under Brisbane City Councils (BCC) NAPS Policy as Valuable Ecological Features (Schedule 1), as significant sites (Schedule 2) and as a significant vegetation community (Schedule 5). The EIS also FAILS to highlight that some of the coastal wetlands found within the project area are of State Significance under the SEQ Regional Coastal Management Plan. Refer: http://www.epa.gld.gov.au/register/p01361az.pdf

Fishery studies undertaken at the subject site by DPI showed between 1972 and 1974 the average catch of recreational fisherman from the subject area was 0.98 fish/hour, which equated to 41,000 fish during the study (DPI, 1974). At that time Serpentine Creek was thought to be of great value to



the Brisbane Community (DPI, 1974). Commercially it to was valuable, on one occasion alone 900kg of fish was taken by commercial fishers at the mouth of Serpentine Creek (DPI, 1974). Serpentine Creek in 1974 was noted as one of the better habitats for Mud Crabs, *Scylla serrata* (BAD, 1974).

It is NOTED the EIS states (B5-183) there are numerous fish and crustaceans of importance to commercial and recreational fisheries inhabit the waterways within the subject runway expansion area, including: sea mullet, yellowfin bream, tailor, and dusky flathead. Many of these species were juveniles.

It is NOTED mangroves in Moreton Bay have been under continued pressure and suffered extensive losses. Incremental losses do have a major negative impact upon the health of Moreton Bay and the well being of its fish resources. The proposed project will result in the loss of 94 ha of mangroves and 18 ha of equally important Salt marsh. The impact would mean at minimum 2.162 tonnes / day of valuable carbon would be lost to the environment forever. This is perhaps a very conservative figure as past airport reports show quite higher rates of productivity for mangroves. Mangroves were stated in one report as producing 35 t/ha/year (QUT, 1974), this would equate to about 9 t/ha/day (35t/ha/yr \* 94 ha / 365 days). While these figures seem very high if the EIS figure of 0.75% (percentage of Moreton Bay mangroves to be lost) is used with the general figure of 96 tonnes of carbon / day from Moreton Bay mangroves (QLD Museum, 1998) the total tonnage of carbon from the area of mangroves that will be lost will be 720 kg /day. Given the high productivity of the mangroves in this area 1 – 2 tonnes of carbon / day would seem quite possible. Using an arbitrary figure of \$100 per tonne it would mean a loss of \$36,500 per year forever. Further, using the FAO calculations, about 9 tonnes of economic fish product would be lost on an infinitum basis. That is, every year 9 tonnes of fish product would be lost to the system forever. The value of 9 tonnes of economic fish product would equate to \$270,000 per annum (\$30,000 \* 9) over 10 years this would be worth 2.7 million dollars of lost opportunities and this loss would continue to grow each year forever. Further, it is estimated approximately 7.5 percent (%) of the value of the northern Moreton Bay trawl fishery was caught in Central and Middle Bank area of Moreton Bay (EPA, 2005).

Recreational effort has been calculated and it is estimated that the 300,000 recreational fishers in Moreton Bay undertake 1.5 million fishing days. It was determined that if the average daily household catch was approximately 2.5 kg the total recreational catch for Moreton Bay per year would be between 1,875 and 2,800 tonnes (Williams, 1992). In economic terms this equates to about \$56,250,000 per year and a portion of this is directly attributable to the mangroves the subject of clearing during the runway extension. Attributing just 0.1% (0.75% is the amount of Moreton Bay mangroves to be cleared) of this value to the opportunity costs due to the loss of mangroves would equate to \$56,250 per year forever. Expressed another way, a 0.1% impact on \$260 millions Moreton Bay recreational fishing industry (Healthy Waterways, 2006) would equate to \$260,000 per year infinitum.



Finally, we believe the project has not articulated the impacts of incremental development upon Moreton Bay's natural resources and therefore under estimates the impact of this development when examined in this broader context.

We **RECOMMEND** an offset program and a financial contribution that assist with improving the welfare of Moreton Bay's environmental values should replace any loss of mangroves. This financial contribution should remunerate the lost opportunities created by the removal of the mangroves though small in area they are significant in economic contribution.

We **RECOMMEND** affected fishers and community are appropriately compensated for this ongoing loss of natural resource and fish product.

We **RECOMMEND** that a further study be undertaken to assess the incremental impacts upon marine flora and fauna in Moreton Bay by current and potential future development.

## 1.3 Extraction Area

We note the following crab species of commercial interest are found in the exaction area.

- Moreton Bay Bug (Mud Bug), Thenus indicus.
- Moreton Bay Bug (Reef Bug), Thenus orientalis .
- Blue swimmer crab, Portunus pelagicus.
- Spanner Crab, Ranina ranina.
- Three spot crab, P. sanguinolentus.

Further, we believe the area may support important species, such as the Sea Cucumber. Seacumber is commercially important and research shows the Sea Cucumber plays an important role in maintaining the health of marine ecosystems, particularly corals and seagrass, having the capability of filtering large volumes of sediments (bioturbation) and recycling bio-matter and nutrients. Two species of holothurians have been shown to move the equivalent of the upper 5mm of sand in their habitat once a year (Uthicke, 1999) This bioturbation is potentially important in the aeration and cleaning of the sediments and may extend to oxidizing these layers. Given the nutrient load issues pertaining to Moreton Bay, such species are essential in maintaining the health and well being of Moreton Bay.

It should be noted that species like the Moreton Bay Bug, Spanner Crab and Sea cucumber can be difficult to observe. The Moreton Bay bug for example lives on muddy or sandy bottoms in oceanic waters to depths of up to 60m burying itself during the day and is active at night (DPI, 2005a). The spanner crab likewise inhabits intertidal waters to depths of more than a hundred metres, from sheltered bays to surf areas. These crabs prefer bare sandy areas. They are usually found buried in sand, from where they launch attacks on passing prey items such as small, bottom-dwelling fishes. They are opportunistic feeders, preying on many different bottom-dwelling species (DPI, 2005b). Likewise, the fishery report (3.11) for the Marine Based Sand Extraction study indicated many of the small fish found on the subject site were juveniles of species capable



of digging into sand (eg. flounder, sole and flathead). This is not surprising as past studies undertaken by the airport in 1974 showed the Middle Banks to support a moderate rich fauna of small species (amphipod crustacean up to 2000/m2), these being actual and potential food for fish (BAD, 1974).

The various reports created by the Marine Based Sand Extraction study appear not to identify or consider the importance of **meiofauna**. These benthic animals include small crustaceans such as copepods, small molluscs, and worms in the size range 0.1-1 mm. These animals live between loose soil and mud particles, and their numerical density can be high. They can either be temporary residents of this habitat, e.g., young stage of large macro faunal adults such as the edible molluscs. It is stated one million meiofauna individuals 1 mm in size live on 1 m2 of sea bottom; their biomass, however, is only 3 percent of that of the larger animals. Meiofauna produce three generations per year, but their mass-specific metabolism is five times higher than that of macro fauna. Therefore, 3 percent of the meiofauna biomass needs 15 percent of the available food (Gerlach 1971). Meiofauna are considered an important part of the food chain, particularly for crabs and play a major role in nutrient cycling. There is considerable evidence that has demonstrated the importance of meiofauna in the marine and estuarine benthos. Despite their small biomass contribution compared to macro fauna, their relatively high metabolic rates render them potentially important in marine benthic energetics (Gerlach 1971, Fenchel 1978, Coull & Bell 1979, Kuipers et al. 1981, Heip et al. 1985, Vranken et al. 1986).

It is NOTED that during the 1970's Moreton Bay Bug numbers in Moreton Bay were abundant but have now declined to a point that prawn trawlers now rarely catch them (DPI, 2002). Likewise, in 1988 5 – 10% of the Spanner Crab catch was coming from within Moreton Bay and over 20% from the waters just north of Moreton Bay (QLD Fisheries, 2001). It should be NOTED that the stock assessment models and sound biological data still does not exist for Spanner Crabs (DPI, 2006). The possible impacts of Sand Extraction upon crab fisheries, such as Moreton Bay bugs and Spanner Crabs, particularly juveniles, is not known and given the significant decline in the species obtaining such knowledge would appear imperative.

## 2.0 Environmental Issues

## 2.1 Seagrass

Moreton Bay supports 24,000 ha of seagrass. The good news is currently seagrass meadows in Moreton Bay, based on Moreton Bay Community Seagrass Watch data, are relatively stable. However, prior to 2000 the situation was quite different. There has been extensive loss of seagrass particularly on the western side of Moreton Bay. Seagrass loss from southern Moreton Bay is documented to have occurred between 1987 and 1992, southern Deception Bay in 1996 and Bramble Bay most likely in the 1980's (Healthy Waterways, 1999). This loss would exceed 1,000 ha and much of the loss would appear to be related to excess nutrient load and resuspended sediments, with 70% of this sediment coming from 30% of the SEQ catchment, that is, 80% of this sediment is coming from the Brisbane and Logan rivers.



The importance of Seagrass is highlighted by the East Coast commercial catch of tiger, endeavour and red spot prawns for 1995 totalling 3,500 tonnes valued at \$50 million and dependent on seagrass meadows (DPI, 1998). This importance is made evident by the loss of 80% of offshore tiger prawn catch when 20% of the Gulf of Carpentaria seagrass was lost due to cyclone disturbance.

Seagrass, while providing a valuable habitat is also very productive, primary productivity estimated at 2 – 11 g carbon m<sup>-</sup>2 day<sup>-</sup> (Moriarty and Boon, 1989). Put in simpler terms, Moreton Bay seagrass is estimated to produce 105 tonnes of carbon per day (QLD Museum, 1998). Other values of seagrass include sediment retention and nutrient cycling. It is known that Nitrogen-fixing microbial communities have a symbiotic relationship with seagrass roots (bacteria receive carbon from the seagrass and the seagrasses gain N from the bacteria). Higher organic content of seagrass sediment leads to higher rates of microbial decomposition (increasing N and P availability).

It should be NOTED that regardless of the seagrass meadows size or density it is a habitat worthy of strong protection.

## 2.2 Dugongs and seagrass

The subject extraction area does support seagrass. Seagrass is an important food resource for dugongs and green turtles. Utilisation of this area by either species is unclear but it is noted dugongs will utilise seagrass meadows 12 metres below the surface and beyond. Dugongs also appear to have favourite feedings sites and these sites are not dependent upon the extent of the meadow or density of seagrass, as dugongs are known to regularly visit small meadows in estuarine creeks and littoral zones at high tide. Further, recent research does show some dugongs do utilise the northern sections of Moreton Bay, such as work by Chilvers et al, (2005). Seagrass is also an important habitat utilised by many commercial fish species and it is incorrect to suggest even sparse seagrass has no value.

It should be noted that the majority of the dugong stranding and mortalities records for Queensland for the Year 2004 (46%) came from the Moreton Bay Marine Park, this was an increase of 9 from 2003 for the same area. Research on boat strikes fatalities show strikes are due to large vessels.

Further, it should be noted that Moreton Bay is unique, having a dugong population on the doorstep of a major capital city occurs nowhere else in the world. Our knowledge on dugongs continues to expand with recent research showing dugongs regularly dive to between 15 – 20 m and remain at these depths for 3 minutes (Tangalooma & UQ, 2002). This indicates that recently discovered deep-water seagrass in Eastern Moreton Bay are a food source for dugongs.

## 2.3 Whales



Over 30 whales were sighted off the western shore of Moreton Island and within Moreton Bay in 2005 (Tangalooma Wild Dolphin Resort records, 2005). To state whales do not use the area is inaccurate. Noise does have an impact upon whales. With the Group V Humpback whale population growing at about 10% each year the likelihood of whales increasingly using Moreton Bay is extremely high.

We RECOMMEND this matter be given greater priority and attention.

#### 2.4 Coral

Given the inadequacy of the Marine Based Sand Extraction study to find seagrass there is potential for Coral to exist in less mobile areas.

Within Moreton Bay there are 40 species of coral and Flinders Reef, at the northern oceanic section of the bay, supports 119 coral species (QLD Museum, 1998). Moreton Bay's corals are biogeographically distinct from those of the rest of the Indo-West Pacific region, as the particular group of species present in Moreton Bay are unlike any other reported (Johnson & Neil, 1997). In 2002 a new coral community was discovered in eastern Moreton Bay off Moreton Island, *Cycloseris cyclolites*, found in deep water (8m) with *H. spinulosa* and *H. Ovalis* on unconsolidated sediments, such as sand. This species has a symbiotic algae within its cells, which requires light to photosynthesize, therefore, continuation of good water clarity within Eastern Moreton Bay is essential for this species survival.

## 2.5 Benthic species

Important benthic bottom sediment dwellers, such as worms will be destroyed during dredging. Such species are considered significant because they are a source of animal protein for higher organisms and contribute as decomposers of organic detritus (Czuczor, 1998).

## 2.6 Lewin Rail

The proposed buffer to the small but highly significant Lewin Rail population is inadequate. An edge effect is created by the proposed runway extension and must be mitigated. Further, the proponents should not only increase the size of the buffer but also have an obligation to enhance the species habitat to ensure its continued survival.

## 2.7 Biodiversity

In 1974 Serpentine Creek has been identified as an area of high biodiversity with regard to fauna (QLD Museum, 1974a; QLD Museum, 1974b) and though the subject site has been impacted upon by past airport activity the subject habitat is worthy of better protection not further destruction. Past airport reports have recommended that precautions should be taken to ensure that the subject area, particularly the vicinity of Serpentine Creek, should be disturbed as little as possible. With the



projected loss of mangroves and other habitat more needs to be done to secure remaining land for conservation purposes. We RECOMMEND "Other Land" as identified in figure 5.11a (B5 Terresterial.pdf) must be incorporated into the biodiversity Zone.

## 3.0 Economics – general

We NOTE the sustainability model used by the proponents is an out dated model and unlikely to result in sustainable outcomes. Source: Summary of major findings. (pg 42).

While there is a failure to recognise that the environment unpins social and economic values the proposed model is likely to lead to flawed outcomes. Professor Ian Lowe clearly articulated the primary importance of the environment with his decision-making model presented in the 1996 Australian State of the Environment report. Source: Australian State of the Environment Report. 1996.

The EIS has failed to clearly identify the economic values of coastal resources on and adjacent to the subject site. Research by Coastal CRC suggest Australia's coastal natural resources could be worth \$282 billion a year, equivalent to one third of the total value of all goods and services traded in Australia during 2004-05 (Coastal CRC, 2004).

Clearly Australian Marine resources are the source of considerable economic wealth. For example, commercial fishing in 2002 - 2003 was worth \$2.3 billion (ABARE & FRDC, 2004). Marine natural assets (a resource) also generated considerable wealth, the Great Barrier Reef catchment area generated 5.8 billion dollars (gross product 2004 - 2005) and 63,000 jobs (full time equivalent), 80% attributed to tourism (GBRMPA, 2005). In 1996 over 1 million international visitors went swimming, surfed or dived, 468,000 are said to have snorkeled or scuba dived and 136,000 went sailing, yachting or sailboarding (DE, 1997). Australian tourism in 1996 generated \$16 billion dollars.

Protecting our coastline from an economic perspective is crucial. For example, high quality habitat is fundamental to sustainable recreational, commercial and indigenous fisheries (DPI, 2002). When we don't care for our coastal zone a range of problems arises. In the Pumicestone Passage (Moreton Bay) bacteria analysis showed there was a 5 – 10% risk of swimmers experiencing gastrointestinal illness (Cox, 2005). If bacteria rose to an extent that it resulted in a 15% decrease in fishing in aquaculture (shellfish contamination), and a 20% decrease in tourism it would result in 1400 jobs being lost and a decline of overall gross regional production of 2.43% (Cox, 2005). Healthy Waterways findings were even more sobering. They identified that if we don't change our ways by 2026 were are putting \$260 millions recreational fishing industry, \$10,500 million SEQ tourist industry and \$60.1 million commercial fishing industry at risk (Healthy Waterways, 2006).

It should be NOTED that the removal of mangroves and general disturbance to the area will result in a negative impact upon the areas visual amenity, impacting upon the underlying resources to



tourism resulting in a loss of tourism revenue and impacting upon community amenity. These costs have not been calculated in the EIS.

## 3.0 SEQ Regional Coastal Management Plan.

The South East Queensland Regional Coastal Management Plan (SEQRCMP) makes it quite clear that mangroves deserve protection and when cleared mitigation measures must be undertaken. It is NOTED the runway expansion is referenced in the SEQRCMP, refer to policy 2.8.1 and 2.8.2.

## 2.2.2 Erosion prone areas

## Regional Context

 loss and degradation of significant and diverse habitats through damage to sand dunes, and riverine and mangrove plant communities;

## Regional Plan

Plans are to recognise the erosion prone area as a valuable feature for its function as a coastal buffer zone and measures are included to retain these areas free from development, to protect life and property.

## 2.8.1 Areas of state significance (natural resources)

## Regional Policy - Planning

Planning for future infrastructure of State and Commonwealth significance, such as the Brisbane Airport parallel runway and duplication of the Gateway Motorway, ensure impacts on significant coastal wetlands and values are minimised and mitigated through:

(c) identifying measures or strategies to mitigate potential adverse impacts, such as mangrove mitigation, offsetting loss of wetlands and the rehabilitation of other coastal wetland areas to ensure a net gain of coastal resources and values; and

## 2.8.2 Coastal wetlands

## Regional Policy - Planning

Planning for future infrastructure of State and Commonwealth significance, such as the Brisbane Airport parallel runway and duplication of the Gateway Motorway, ensures impacts on coastal wetlands and values are minimised and mitigated through identifying measures or strategies to mitigate potential adverse impacts, such as mangrove mitigation, offsetting loss of wetlands to ensure a net gain of coastal resources and values, and the rehabilitation of other coastal wetland areas.



It is **RECOMMENDED** that if the runway expansion is to occur then a mitigation plan must be applied that ensures the loss of mangrove is addressed recognizing the mitigation must continue in perpetuity unless a similar area of mangroves is restored.

## 4.0 Summary

The loss of mangroves and salt marsh represents a very significant long-term loss of an economic resource and environmental value. Other economic values associated with mangroves has not been calculated in this report but yet very relevant and likely quite extensive, these include.

- visual amenity
- coastal protection
- waste assimilation (N & P) and sediment control
- biodiversity
- wader bird roost sites (a number of migratory birds utilise mangroves for roosting)

There is insufficient information provided by the EIS to clearly identify the economic loss associated with the removal of the mangroves and the damage that will occur to coastal resources, and certainly there appears little mitigation undertaken to offset such loss. Regardless of deficiencies in this submission to determine all the economic costs the costs, if only 50% as stated, would be extremely high and infinitum. The impact upon commercial fishers livelihood would also need some consideration.

Past mitigation on mangrove (850 ha of mangroves lost during last runway extension) and wetland loss has been inadequate and there is little provided to ensure the future loss will be adequately offset.

Seagrass regardless if sparse in nature is a valuable food source for dugongs and a variety of commercial and non-commercial marine species.

Whales and dugongs do use the subject area based on WPSQBB and Tangalooma Wild Dolphin Resort data and both species are impacted by noise and human activity.

The buffer designed to protect the Lewin Rail is inadequate and needs to be increased in size and the species habitat enhanced.

"Other Land" as identified in figure 5.11a (B5 Terresterial.pdf) must be incorporated into the biodiversity Zone.

To date we have seen no data that indicates that there exists a reasonable understanding of the fishing resources found in the subject area. The lack of science requires a precautionary approach. The Precautionary Principle recommends where there are threats of serious or irreversible



environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Yours sincerely Simon Baltais WPSQ Bayside Branch Mb: 0412 075 334

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# **Mr Robert Bell**

Formal Submission #88

**Position** Community individual

Organisation n/a

## Submission full text

I am writing this submission to support Cr Flessor's call for the new runway to be moved 475m to the east. Since being privatised, the BAC has developed the site to the detriment of the quality of life of the local community. For example, increased traffic on the East-West arterial road due to the DFO has led to reduced air quality and traffic congestion. Whilst the new runway may be needed to meet growth demands, all efforts should be made to lessen the impacts from the noise footprint.



# Mr Charles Bill

## Formal Submission #124

**Position** Aircraft Noise Spokesperson

Organisation The Rivermouth Action Group Inc

#### Submission full text

I hereby submit my submission re: New Parallel Runway Brisbane Airport.

I fully support the submission by Mr Simon Baltais of the WPSQ Bayside Branch and submit a copy of it as part of my submission so that all issues & references in it become part of my submission.

Further to that submission I submit that the Brisbane Airport Corporation has not adequately addressed the issue of the "Peak oil Theory" or "Global Warming"

That any approval of this development must include green house gas emission reduction by World Best Practice. That all aircraft leaving and departing the airport are towed between runway and gates by appropriate vehicles.

That any approval of this development requires the aircraft to be able to access mains power from the gates and that stand-alone generators are no longer allowed for this purpose.

That a curfew be imposed between the hours of 10.00 pm and 6.00 am EST for aircraft landing or departing over residential areas of Brisbane. That is no southern departures or landings from the south on the existing 01 19 runway or the proposed new runway.

That if this is not acceptable then no non-modern aircraft without a hushkit is allowed to operate over residential Brisbane 24hours/7days/52 weeks a year.

That no aircraft is allowed to turn over land between 10.00 pm and 6.00 am EST unless they have obtained 10,000 ft elevation.

That substantial monetary penalties be imposed for breaches of such conditions of approval with ever increasing fines to prison time for the decision makers who decided not to comply.

That some action be taken in response to ALL aircraft noise complaints. That some change be implemented as at present absolutely nothing is done about aircraft noise complaints from



residents. There must be some implementation of aircraft noise reduction relating from aircraft noise complaints other that being recorded in a data base of noise complaints for statistical purposes only. These changes are required with 6 months of complaints.

That a noise level limit be set at each and every monitoring station and any aircraft which exceeds that limit by 0.2dB for no matter what reason be fined and after ten (10) such exceedences that that aircraft be banned from the Brisbane Airport including Military aircraft.

That a monthly report to the community be made as to which aircraft exceeded the limit and who operated that aircraft and what action has been taken. Name and Shame the airline industry involved.

Yours truly,

Charles Bill



# **Mrs Dorothy Blount**

Formal Submission #171

**Position** Community individual

Organisation n/a

# Submission full text

As we shall be experiencing a far greater amount of air traffic noise in this area I request that the larger International Aircraft continue to use the existing runway for both take offs and landings. This would allow this air traffic to pass over the least populated areas.



# **Gary Boon**

## Formal Submission #110

**Position** Community individual

Organisation n/a

#### Submission full text

Re: The Parallel Runway

I oppose the construction of the parallel runway and the construction of it in the proposed position for the following reasons:

- 1. The runway should be constructed as far away from residential areas as possible;
- 2. If the runway was constructed 475m further to the east surely there would be less impact on existing residential areas;
- 3. Why is it necessary to destroy a valuable fisheries, bird and other wildlife habitat? Other locations/methods must be available to avoid this?
- 4. Why haven't we been told what the noise impacts on surrounding residential areas are likely to be?
- 5. If affected residents are unhappy with the increased noise levels will the BAC pay for double glazing, insulation and other noise amelioration products to be installed as required? There are precedents or this eg. Manchester airport.
- 6. The BAC should be considering locating the runway in an area which has the least impact on existing residential areas particularly when you consider that all the suburbs which will be affected by the parallel runway existed well before the airport ever did;
- 7. Any loss in property values (directly or indirectly die to the airport development) should be compensated by the BAC;
- 8. A night time curfew of no later than 9pm should be imposed. Curfews exist for many major airports in Australia and worldwide. This would assist residential amenity;



- 9. Will the BAC, because of upstream flooding of the local creeks due to increased stormwater flows into the local creek/stormwater system as a result of the parallel runway and its associated development:
  - (a) Pay compensation to affected residents; and
  - (b) Pay for any future drainage work required to combat the flooding?;
- 10. The existing airport road system is an absolute joke and grossly inadequate. Any further development (i.e. the parallel runway and associated development by the BAC) will only make things worse and have adverse environmental impacts because of the increase in requires road systems.



# **Mr Donald Borchert**

Formal Submission #145

**Position** Community individual

Organisation n/a

#### Submission full text

Formal Submission: Dear Sir/Madam,

I wish to lodge my formal objection to the new parallel runway project proposed by the Brisbane Airport Corporation.

- 1. Insufficient evidence was provided as to why it is necessary that a runway separation of 2000m is required to operate a parallel runway configuration safely and efficiently.
- 2. I would like to point out that the noise modelling data as currently prepared by the BAC assumed that credit has been taken for the noise reduction expected through the operation of a modernised air fleet? "New Parallel Runway Project Flight Path and Noise Information Booklet" The BAC quotes under the "Fleet Mix" Paragraph The use of these new aircraft, which are expected to deliver positive benefits to the community, has been taken into account in the modelling? I believe that you can take credit for this at this stage without also assessing the noise levels from the? Worst case scenario? which should be based on all current mix of aircraft age.

Yours sincerely

Don Borchert



# Ms Lindi Bowen-Needs

## Formal Submission #6

**Position** Community individual

Organisation n/a

#### Submission full text

Building a second runway will be pointless unless you redress the impacts of global warming. The airport is only 2 metres above sea level and will thus end up 4 metres under the new sea level (total 6m rise) within the next few decades to 50 years. What are you planning to do:

- 1) Offset the greenhouse gas emissions and impacts of planes, on-ground vehicles, electricity/power usage, and greenhouse gas emissions inherent in all goods/foods produced and delivered to the airport?
- 2) While building the second runway, what are you putting in place to protect the airport from the rising sea levels, because otherwise every storm from the time it is built will overtop and close and damage the airport?

In addition, what are you going to do to replace (or even improve) the fish breeding grounds that you remove, to ensure that our vastly diminished stocks and breeding grounds are not further diminished by your project both during construction and in the long term?

How about small off-shore barrier islands with lots of mangroves, seagrasses and other habitats? More frequent flooding of the golf course is also not an acceptable solution. Find a way to ensure it is status quo or improved.



# Mr Don Boyd

#### Formal Submission #149

**Position** Chief Executive Partner

**Organisation** Deacons

#### Submission full text

Our Ref: NM

To whom it may concern

Letter of support - New Parallel Runway Project

- 1. We act for Brisbane Airport Corporation (BAC)
- 2. We support BAC's New Parallel Runway Project and consider there is a need for an expansion of the Brisbane Airport
- 3. The Queensland State Government reports that tourism is the State's third largest export earner, generates domestic and international visitor expenditure of over \$18.4 billion and employs almost 140,000.
- 4. Brisbane Airport is an integral part of the development of tourism in Queensland as it is the primary air transport hub for the travelling public.
- 5. In recognition of the tourism industry's economic importance to the State's economy, Queensland Tourism, a statutory authority of the Queensland Government, has developed a new 10 year vision for tourism. The \$48 million Queensland Tourism Strategy issued in November 2006 sets out a holistic industry approach to achieving sustainable tourism targets
- 6. These targets include:
- (i) Increase visitor expenditure by \$1.43 billion above forecast to \$21.6 billion;
- (ii) Increase Queensland's market share from overnight visitors to 29.1%;
- (iii) Increase tourism's economic contribution to Gross State Product by \$900 million above forecast to \$12.5billion; and
- (iv) Create an additional 11,000 tourism jobs above forecasts.
- 7. It is critical for the State's economy that the capacity of Brisbane Airport meets the demands of this projected growth in tourism.
- 8. In our capacity as BAC's independent legal advisors, we have always experienced BAC to be fully aware of its environmental obligations and committed to ensuring compliance with environmental and planning laws to the highest standards.
- 9. The construction and operation of the new parallel runway must comply with a number of environmental and planning laws. These laws apply on a State and Federal level.



- 10. On a federal level, the following environmental laws are applicable:
- (i) Airports Act 1996 and the Airports (Environmental Protection) Regulation 1997 (which include provisions relating to the environmental management of the airport precinct and new development in that area); and
- (ii) Environmental Protection and Biodiversity Conservation Act 1999 (which manages the environmental impacts of developments likely to have a significant impact on matters of national environmental significance, such as certain wetlands and threatened species).
- 11. On a State level, the following environmental laws are applicable;
- (i) Integrated Planning Act 1997;
- (ii) Environmental Protection Act 1994;
- (iii) Coastal Protection and Management Act 1995;
- (iv) Marine Parks Act 2004;
- (v) Fisheries Act 1994; and
- (vi) Nature Conservation Act 1992.
- 12. The project must also comply with the following legislation, which relates to native title and Aboriginal cultural heritage:
- (i) Native Title Act 1993; and
- (ii) Aboriginal Cultural Heritage Act 2003
- 13. The purpose of these laws is to ensure that the environmental impacts of developments such as the new parallel runway project are appropriately managed.

Yours Faithfully

Don Boyd
Chief Executive Partner
Deacons

Contact Person: Tom Young

Tel:61 7 3309 0845

Email:tom.young@deacons.com.au



# **Mr Robert Bradbury**

Formal Submission #44

**Position** Community individual

Organisation n/a

#### Submission full text

## Option 3 is not a good option because:

- 1. The land west of the tower will be cleared unnecessarily. Environmentally this wetland scrub should be spared. If the option five (5) is used this land would remain unchanged.
- 2. Option 3 does not allow greater flexibility for future terminals at all compared to option 5. This argument is non conclusive that you raise.
- 3. Why would you build a parallel runway that is going to fly over suburbs when there is an option to extend an existing runway. Runway 12/30 could serve arrivals from the north and west whilst the existing runway would serve southern arrivals. As an airline pilot operating out of Brisbane regularly, the flow of arrivals/departures could be managed well utilising LAHSO (Land and Hold Short Operations). Departures could taxi to runway 12 when the wind is favouring this runway from new proposed terminal(s). Other airport around the world cope with similar configuration runways with success why not Brisbane?
- 4. Every time I land at Brisbane I question why the runway 19/01 is the main runway when the prevailing wind is rarely northerly or southerly. I understand that originally the runway 01/19 decision was political not practical. Here is the opportunity to make runway 12/30 a main runway that is a much more user friendly and safer option.

To conclude; option 5 is the best option environmentally, it will cost less because less in-fill will be required, operationally, LAHSO works and arrivals/departures will flow as it does internationally and flows will improve over current flows.

Residents reserve the right to limit aircraft noise over their homes. This is BAC's opportunity to extend runway 12/30 and put it in its rightful place as the main runway.

Thank you, Robert Bradbury



# Mrs K Bradley

Formal Submission #58

**Position** Community individual

Organisation n/a

#### Submission full text

I am writing concerning the location of the proposed new parallel runway and how it will affect our suburb.

We have recently purchased a new house for our young family in Nudgee and were drawn to the area because of its quiet location, nearby wildlife habitats and the fact that our house value would be likely to rise in future years.

The location of the new runway will jeopardise the peace of our suburb, the value of our house and the wildlife living in the mangrove along Jackson's creek.

Whilst I realise that improvements need to be made to the airport I would like an explanation as to why the runway could not be located 475m further east.

I look forward to hearing your comments regarding this issue.

Yours faithfully,

Mrs K. Bradley



# Mr Paul Bredereck

Formal Submission #225

**Position** Acting President

**Organisation AUSAC** 

#### Submission full text

#### **AUSTRALIAN AVIATION COUNCIL**

To Whom It May Concern,

The Australian Aviation Council (AUSAC) was formed in 2005 to, among a range of objectives, promote the development of aviation in Australia, promote the Australian aviation industry, aerospace industry and associated training provider elements, while also providing a Council for discussion of matters of interest to the Australian aviation industry.

AUSAC's membership includes most of the country's major aviation organisations and associations and as such seeks to provide a broad industry view of issues of national and regional significance. Several of these bodies may make their own representations on this issue.

As such, we are vitally interested in Brisbane Airport Corporation's Environmental Impact Statement and Major Development Plan for the New Parallel Runway project and in the interest of ensuring the development of a sustainable industry through the provision of vital aviation-related infrastructure, we make the following submission.

- \* The Australian Aviation Council supports Brisbane Airport Corporation's New Parallel Runway project. Brisbane Airport, as a vital transport hub, plays a critical role in facilitating intra and interstate, as well as international business into and out of Brisbane and South East Queensland. These are primary drivers for both a healthy economy and job creation. Its role as a conduit for passengers and freight is of such importance that AUSAC believes this project is of national significance and importance.
- \* AUSAC is opposed to the introduction of restricted operating hours for Brisbane Airport.

  The significant buffer zones that protect the Airport from urban encroachment and its strategic location, which allows maximum use of over water operations, differentiate Brisbane Airport from many in Australia and overseas. As a result of astute forward planning, Brisbane Airport enjoys a competitive advantage that AUSAC believes should be carefully protected because of the benefits



it will deliver for many decades to come to the aviation industry, business, tourism and the wider community.

- \* Further, AUSAC does not believe Government should be swayed by calls to restrict the operations of the Airport. Brisbane Airport has no similarities to Sydney Airport. In Brisbane, the nearest residents from the end of the runway centreline are 6.4 kilometres distant. In Sydney, they are as close as 600 metres. In Brisbane, with the new parallel runway operational, around 95% of flights in noise sensitive times will be over Moreton Bay and not over urban communities.
- \* It is also worthy of note that by the time the New Parallel Runway is operational, aircraft flying in Australia and aircraft technology will have advanced significantly. Older hush kitted Stage 2 aircraft operating today will be obsolete, with a range of quieter Stage 3 and 4 aircraft the norm in Australian skies.
- \* Restricted airport operations, such as the Sydney curfew, causes scheduling bottlenecks resulting in substantial additional costs to the airlines, much more pressure on airport resources with artificial peaks created before and after the curfew. Curfews often lead to inconvenient connections for passengers at both the departure and destination airports, and there is anecdotal evidence to suggest that safety is occasionally compromised with significant added pressure placed upon crews to meet arrival schedules prior to the curfew times.
- \* With the range of operating and noise abatement procedures available to be utilised in conjunction with Brisbane Airport's location, design and weather conditions, there is absolutely no justification for restricted operations.
- \* The Queensland Government is a strong supporter of the aviation and airline industry and has publicly stated its intention to forge strong partnerships with the aviation industry to attract new and increased air services to Queensland. AUSAC supports the Government's initiatives. The provision of greater capacity at Brisbane Airport through the provision of new infrastructure, such as the New Parallel Runway, is an essential ingredient to the success of the Government's stated initiatives.
- \* The EIS/MDP contemplates the closure of the 14/32 cross runway at Brisbane Airport once the New Parallel Runway is operational. We do not support this proposal. AUSAC believes that existing runway infrastructure should be protected regardless of the availability of the new runway. The 14/32 runway could prove vital in providing a range of runway options to enhance the capacity of the Airport and the ability to structure arrivals and departures away from communities, while expanding the runway options for air traffic control in certain weather conditions.
- \* Furthermore, the closure of runway 14/32 will have a significant affect on the overall safe operations of the Airport with the regional, aeromedical and lighter aircraft most significantly impacted. Although prevailing winds do not often cause crosswinds that prevent operations on the 01/19 direction runways, they are sufficiently frequent that safety could be compromised for the



smaller aircraft that usually have much lower demonstrated crosswind capability than the larger jets.

\*In the rare event of an emergency that could see the closure of one runway with a disabled aircraft, Brisbane Airport would still have two operational runways if runway.

14/32 remains in service substantially increasing the capability of the Airport.

\*AUSAC considers the cross runway 14/32 a valuable asset that should be retained as part of the operational infrastructure for Brisbane Airport.

Brisbane Airport is one of Queensland's, and indeed Australia's, most valuable assets. Forward planning today for the delivery of additional infrastructure in the future will be of critical importance to the state and its community. It is essential that the Airport be developed responsibly to ensure the efficient and safe management of the inevitable growth in air traffic that we as a State are actively encouraging. Brisbane Airport Corporation's New Parallel Runway is a fundamental element of the City and State's future.

Paul Bredereck Acting President AUSAC



# **Brisbane North Development Forum**

Formal Submission #125

**Position** Chairman

**Organisation** Brisbane North Development Forum

#### Submission full text

## Background

Brisbane North Development Forum Inc. {previously known as Brisbane's Middle North Local Economic Development Strategy (BMNLEDS)) was established in 2002 as a strategic partnership between Brisbane North Chamber of Commerce, Brisbane City Council and the Department of State Development. Following its incorporation in 2005 its strategic partnership expanded to include Pine Rivers, Caboolture, and Redcliffe Councils.

Brisbane North Development Forum Inc. (BNDF) is a not-for-profit regional economic development organisation promoting a sustainable and liveable future for the Brisbane North region by engaging, linking and working together with local businesses, community and government. It aims to find innovative and successful methods to bring prosperity to local communities through employment growth, business growth and sustainability, improved training and education opportunities, commercial development and emerging industry growth.

In summary, BNDF supports the New Parallel Runway (NPR) and perceives the benefits to the wider community far outweigh any possible negative impacts, which we believe can be substantially minimised. The benefits (economic, social and hopefully environmental) will be not only felt by the immediate local community but throughout the entire region. The NPR will provide the catalyst to expand not only the BAC's current business, but more important to BNDF, it will provide opportunities for new businesses and services to enter the marketplace as part of supply-chain relationships. Details of key issues as perceived by BNDF are outlined below.

## **Key Issues**

#### **Noise Management**

It has been noted in Brisbane Airport Corporation 'Flight Path and Noise Information Booklet' that some suburbs will receive an increase in aircraft noise once the NPR is operational, which was to be expected. Whilst we don't believe that the new flight paths will cause any great disturbance to the residents of these suburbs, we do believe that a public perception (rightly or wrongly) on



aircraft noise will have some minor impact on potential investment, and therefore property prices, in the affected suburbs.

We believe this can be largely offset through strategic local government noise management planning, resulting in the introduction of new building codes and/or standards for new developments in the affected suburbs. Any extra cost associated with the new standards would be negligible to the total development cost and further advancement in building materials will only reduce this even more. Market forces will, in turn, encourage existing residences to invest in noise-proofing products in an attempt to keep up with buyers' expectations.

#### **Non Curfew**

We fully support the no curfew policy that is currently in use at the Brisbane Airport. This provides Brisbane with an economic advantage that would be severely altered if restrictions were placed on the airport between 10 pm and 6am.

According to Brisbane Airport Corporation's fact sheet 17, 'up to 80% of all planes in summer and 90%+ in winter that arrive and depart from Brisbane Airport at night (10.00pm to 6.00am) do so over Moreton Bay and away from residential communities'. It is predicted that around 85-95% of flights at night will be over Moreton Bay.

The BAC's Flight Path and Noise Information Booklet shows that all night-time flights over suburban areas will be from the existing runway and existing flight path even with the new parallel runway.

Currently, domestically, with Queensland being out of sync with the rest of the eastern seaboard in regards to Daylight Savings, it becomes essential that early morning departures are available to businesses. Flights are needed well before 6:00am to provide Queensland business men/women the opportunity to arrive at their interstate destination for the start of the working day. If a curfew was put in place, it would force thousands of Queensland business men/women to fly out the evening before, spending a night in a hotel at their intended destination. This would, in turn, take money out of the Queensland economy, add cost to business operations, and further stress the imbalance of work-family life.

The ability to remain open 24 hrs also opens up opportunities for growth in the number of flights in and out of Brisbane, particularly those with international destinations. Currently travellers have the benefits of direct flights to destinations such as Singapore, Auckland and Kuala Lumpur, to name but a few. Many of these flights are between I 0:00pm-6:00am, which are dictated by international flight schedules and time zones from international carriers servicing major airports that have greater impact on market forces than Brisbane Airport. Currently, Brisbane, through night-time departures, fits into these international schedules.



As it currently stands, the ability to travel on direct International flights provides international tourists a wonderful incentive to start and end their holidays in Brisbane. With every international tourist estimated to spend on average \$855 in the local economy it's imperative that this incentive remains available and encouraged.

If curfews were to be placed on Brisbane, the likelihood is that Brisbane Airport's ability to continue to fit into these international schedules would decrease dramatically, potentially causing the cancellation of a number of direct international flights in and out of Brisbane. If this were to occur, the economical impact on the Queensland State economy would be devastating.

Brisbane Airport has the largest buffer zones from surrounding communities of any major airport in Australia, with the nearest communities currently over 6.7km away and 6.4km if the proposed parallel runway is built. This large buffer zone is another justification for the continuation of no currently applies at Brisbane Airport.

#### NPR Economic and Environmental Implications

The "Smart State" policies have resulted in continuous economical growth at a higher rate than the Australian national average. This has led to a continuous increase in passenger numbers both locally and internationally. It is anticipated that passenger growth will continue to rise at a rate of approximately 3.7\*/o per year until 2035. This will add increasing strain on the current runway and will lead to an increase in flight delays by 2014. Without the NPR flight delays will continue to grow to over I hour by 2035.

The result of these delays would invariably be the loss of both international and domestic passengers, which could be as high as 18 million per year as estimated by BAC. This equates to a potential loss of up to \$7.5 Billion dollars per year from passenger spending in the Queensland economy.

BDNF would find it inconceivable that this injection of funds was allowed to be lost to the Queensland economy, especially considering that no direct ratepayers' money is being spent on the project. Added to the economical implications, BNDF perceives that the NPR will bring environmental benefits as a consequence of less or no flight delays. Flight delays will result in aeroplanes having to circle and recircle over Brisbane causing more fuel consumption and extra pollution in addition to the loss of business opportunities.

In addition, fitting with international flight schedules mentioned earlier provides extra competitive advantage to the fresh produce farmers. The NPR coupled with no curfew policy would enable Queensland fresh produce farmers to have their products leaving Brisbane and reaching their destination in record time.



# **Community Benefits**

While we do not believe that the Brisbane Airport will in any way compete with the Brisbane CBD as the financial, commercial and legislative heart of Queensland, we see the Brisbane Airport becoming what has been internationally termed an 'Aerotropolis'. This would result in an "Airport City" which is a dynamic virtual city based initially around air travel and the services needed to support that, but over time, taking on an urban environment providing for the needs of its surrounding communities.

The wider community will experience spin-offs through an increase in passenger growth (16 million in 2005 to 50 million in 2035), which, in turn, will lead to a rise in both tourist and business-based spending.

The airport currently provides services such as state-of-the-art aviation-based educational and training facilities (which will continue to be expanded), as well as the hugely popular Discount Factory Outlet (DFO) shopping centre. The airport is also currently developing Airport Drive One, which will provide a shopping centre, hotel, commercial offices, as well as a childcare centre, golf course and gymnasium. These and any future developments would have a ripple impact on the wider community and, in particular, the local community.

## **Supporting Infrastructure**

Forecasts produced by BAC estimate by the year 2035 that some 40,000 employees will work on a daily basis at Brisbane Airport. This surge in employment provides great challenges not only for BAC but also the surrounding local councils to provide infrastructure and services to accommodate these employees and their families.

BAC's Master Plan provides a detailed insight into the airport's future direction and its ability to meet infrastructure needs in a timely and appropriate fashion. This plan also provides for some flexibility to cater for changes in needs and priorities. However, while the plan provides a good deal of comfort in regards to the level of infrastructure available within the airport precinct, our major concern is whether this will be matched outside BAC confines.

With such growth in employment at the airport, suburbs within an arc of 15 - 20 kilometres of the airport would be expected to provide the majority of this workforce. This will place substantial pressure on already strained infrastructure and support services. This will not only put pressure on the surrounding road networks but also on education, health and leisure services.

The need to provide these services and the ability to link them with reliable public transport is essential and careful co-ordination of routes and timetables needs to occur to meet the growing community needs for these services.



We strongly believe that a working group should be formed between Local and State Governments, BAC and a community-based organisation such as BNDF to provide a co-ordinated approach to quantifying these needs with a view to alleviating, as much as possible, the "growing pains" on these surrounding suburbs.

It is our strong belief that all parties should be supportive of the process as the benefits to be derived from the growth of the airport will be shared by all.



# Mr Christopher Brown

## Formal Submission #202

Position Managing Director & CEO

**Organisation** TTF Australia

#### Submission full text

Draft Environmental Impact Statement and Major Development Plan for a New Parallel Runway at Brisbane Airport

Thank you for the opportunity to provide comment on Brisbane Airport Corporation's (BAC) Draft Environmental Impact Statement (EIS) and Major Development Plan (MDP) for a New Parallel Runway (NPR) at Brisbane Airport.

This is a joint submission by TTF Australia and Infrastructure Partnerships Australia (IPA) written on behalf of the Australian Tourism industry and Australia's Infrastructure sectors (including transport, utilities energy, water and telecommunications, social infrastructure and general property).

TTF Australia and IPA represent 330 of the most prestigious corporations and institutions in the Australian transport, property, tourism and infrastructure sectors.

Tourism is Queensland's third largest export earner. In 2005/06 Queensland attracted over 19 million domestic and international overnight visitors and 28 million day visitors, who collectively spent about \$15 billion.'

Brisbane Airport alone accommodated over 16 million international and domestic passengers over the same period.

As a major gateway for Australia and Queensland, Brisbane Airport is therefore a critical piece of national infrastructure.

To date, BAC has complemented its regional area, brought jobs to the local economy, added to Gross State Product (GSP) and renewed urban precincts and surrounding infrastructure otherwise long in need of investment. BAC's draft EIS and MDP has followed in that tradition balancing economic benefit with social and environmental impacts.



In recognition of the relationship between airports and communities TTF Australia, in partnership with Queensland University of Technology and BAC is undertaking a \$3.8 million study into the development of airport cities and harmonisation with their surrounding Urban areas.

The need to facilitate investment in critical infrastructure such as that proposed by BAC and its NPR is vital to the Australian Tourism industry.

Both the Australian Government's Tourism White Paper and Queensland's Tourism Strategy (QTS) have also stated the importance of facilitating investment in infrastructure for tourism:

"for Australia to optimise its tourism opportunities .... continued investment in infrastructure will be essential over the coming years" Tourism White Paper (2003)

"Access is critical to Queensland's future tourism performance. Investment in.... air transport infrastructure needs to keep pace with tourism growth, particularly in Queensland's south-east" Queensland Tourism Strategy (2006)

Industry is concerned demand is forecast to exceed existing runway capacity at Brisbane Airport by 2014, These constraints will lead to delays which have significant economic consequences for commerce, industry and tourism.

I understand the forecast capacity constraints at Brisbane Airport will put upward pressure on airfares. This will amount to an annual cost to passengers of more than \$500 million by 2035,

TTF Australia and IPA are also alarmed by the prospect that by 2035 the opportunity cost of BAC not having an NPR would lead to:

- a loss of 12 million passengers including 3.2M international and 8.8M domestic passengers;
- this loss in passengers equates to over \$5 billion per annum in lost tourism expenditure alone (calculated in 2006 dollars); or
- a loss equivalent to one third of tourism expenditure in Queensland today.

## TTF Australia and IPA therefore:

- support the need for the NPR;
- support the analysis and forecasting undertaken by BAC. By way of background TTF Australia is a member of the Australian Government's Tourism Forecasting Committee, which provides consensus forecasts of activity across international, domestic, and outbound tourism sectors.
- Are satisfied with BAC'S:



- Investigation into the impact of the proposed NPR on airport land, its fringes and surrounding areas;
- Endeavours to identify the best location to source sand and minimise the impacts on Middle Banks and Morton Bay;
- Design and location of the NPR in order to maximise aircraft movements over
   Morton Bay and minimise the noise impacts on surrounding communities; and
- Environmental management framework, Dredge Management Plan and Operational Noise Management Plan.

I commend BAC on its rigorous and comprehensive Draft EIS and MDP.

Both TTF Australia and IPA consider that the NPR will provide safe passenger and aircraft movements that meet the demands of future growth in air travel, traffic and freight.

On behalf of the Australian Tourism Industry and Australia's peak infrastructure forum I therefore have no hesitation in strongly supporting the NPR.

Should you wish to discuss anything further, please feel free to contact Dr Mark Dimech, National Manager Aviation on (02) 9240 2015 or at <a href="mailto:mdimech@ttf.org.au">mdimech@ttf.org.au</a>

Yours sincerely

CHRISTOPHER BROWN

Managing Director

TTF Australia

Deputy Chairman

Infrastructure Partnerships Australia

GARRY BOWDITCH
Executive Director

Infrastructure Partnerships Australia

## Foot note

'Tourism Research Australia, National Visitor Survey June Quarter (2006) Table 21, 24. International

Visitor Survey June Quarter (2006) Table 26.



# Mr & Mrs Rod & Kath Brown

Formal Submission #196

**Position** Community individual

Organisation n/a

#### Submission full text

CONCERN; INCREASED FLOOD LEVELS UPSTREAM TOOMBUL SHOPPING TOWN, HENDRA HIGH SCHOOL AREA IN KEDRON BROOK FLOODWAY DUE TO RECLAIMING FLOODPLAIN FOR NEW PARALLEL RUNWAY.

REFERENCE: NEW PARALLEL RUNWAY PROJECT. SUMMARY OF MAJOR FINDINGS 2006.

It would seem to indicate from the information on Page 66 of the above findings that in a 1 in 100 year flood the expected level of floodwater in the reclaimed area for the new parallel runway would be 1.5 m to 2 m.

From reading the associated information the only compensation for the proposed filling of flood plain is the construction of the Kedron Brook Floodway Drain at right angle to the general flow of floodwater. When floodwaters reach this drain, which then would be an obstruction to the general flow, the flood level would rise in the upper reaches of Kedron Brook Floodway. Floodwaters would be restricted as it is channelled through the vastly decreased area between the reclaimed new runway and the Nudgee Golf Club grounds. There does not seem to be any attempt to provide an alternate area for the floodwater, which would normally flow in the reclaimed area.

Tidal surges and high tides also have an effect on flood heights in the Kedron Brook Floodway. Reclaiming the floodplain and filling Jackson Creek and Landers Pocket Drain must eventually affect flood heights.

After the 1974 flood when Kedron Brook and Schultz Canal were realigned and dredged the State Government and Brisbane City Council advised us that the area along Kedron Brook and Schultz's Canal to Moreton Bay was very sensitive to flooding and would need to be carefully managed in the future. At that time they said that under no circumstances would any filling of the flood plain be allowed. Their advice then was that any filling whatsoever could have an effect on flood levels. We believe that the re claiming of the flood plain to the extent that is envisaged to construct the new Parallel Runway is a major change to the flood plain which will result in increased flood levels. This will therefore have a detrimental effect on our property during heavy rainfall and/or tidal surges.



When the Airtrain line was constructed we were advised at that time that the pylons for the line were designed so that they would have negligible effect on the flow of floodwater on the floodplain.

Impact of the pylons to the flow of floodwater would be miniscule compared to the extensive filling of floodplain for the new parallel runway.

Climate change studies now in progress, less frequent rain, very heavy rain when it does arrive - HAS ALL THIS BEEN TAKEN INTO CONSIDERATION?



# **Mr Neil Bruce**

## Formal Submission #18

**Position** Community individual

Organisation n/a

#### Submission full text

Firstly, the two booklets were excellent. I have had to do smaller type things in my line of work and know the effort required.

Secondly, I note the proposed layout of terminal buildings and remember a previously proposed layout that had the new terminal semi-circular.

If this was adopted the railway could be made to loop around, instead of a dead end.

As the airport gets busier, a station to set down and a station to pick up could be handy and would permit more trains.

Tourist wise, it would make it possible for new electric trains i.e. loco hauled trains, to use the terminal. Thus passengers could transfer from air to tourist train.

It could become a continuous circular platform if the curve radius was sufficient to ensure the gap between door and platform is neat.



# **Mr Alan Brumpton**

Formal Submission #198

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir,

Re: Objection to New Airport Runway- Noise.

I commend you on your farsighted approach to a solution of our airports future growth, except for the noise factor; great documentation and diagrams.

I know that Air Services Australia say where planes fly and when, so you can rightly say "it's nothing to do with us". It is, you know! in my view.

Your ASA say planes do not cause inconvenient aircraft noise overload. You both emphasise that planes take off and land over Moreton Bay (with provisions). I contend that you both pay lip service only to this. It's really A to B a.s.a.p., and save time and fuel - isn't it?

I will also predict, on my experience with noise, in industry, affecting residents, that you will have trouble with flight paths overhead of the like of me here, immediately below, where plane noise is beyond that allowable under state law. I have written to you and ASA a lot over the years, It falls I know on deaf ears. I get treated like a noise nut! Time will tell and I predict you'll end up with a strict curfew. Politicians won't save you in the end. Sensible noise abatement may.

Yours faithfully

Alan Brumpton

P.S. I lost out on Brisbane River dredging noise, now banned.



# Mr Brendan Butler

Formal Submission #68

**Position** Community individual

Organisation n/a

# Submission full text

The proposed new runway is almost directly aligned with the location of my home and some flight paths will pass over us. Sound levels will impose on our quality of life, particularly the use of our deck area. An alternative, which does not direct planes over heavily populated inner city residential areas should be chosen. I object to the preferred proposed runway option.



# Mr M Byrne

## Formal Submission #21

**Position** Community individual

Organisation n/a

# Submission full text

I think the existing runway should be lengthened towards Moreton Bay to the edge of the Mangroves at Serpentine Creek Inlet.

Leave the mangroves undisturbed, i.e. don't extend it to the water's edge. Just to where the mangroves start.

This will allow jets taking off towards the city to climb higher before reaching houses and jets approaching over the city can stay higher over the houses.

M Byrne



# **Mrs Patrice Calleja-Chainey**

Formal Submission #177

**Position** Community individual

Organisation n/a

#### Submission full text

RE: NEW PARALLEL RUNWAY PROJECT DRAFT EIS/MDP FOR PUBLIC COMMENT

As residents of Brisbane's Southside we wish to register our grave concerns relating to the Draft Environmental Impact Statement and Major Development Plan. Although the information is comprehensive there seems to be two major oversights in the overall noise management plan:

- 1. The omission of a curfew for flight operations between the hours on 11pm and 6am is extremely worrying to us. Although there is not presently a curfew we believe that in view of the significant increase of aircraft movements a curfew is now absolutely essential in order to prevent any further reduction in the quality of residents' lifestyle. Bearing in mind that four other airports in Australia namely Sydney, Coolangatta, Essendon and Adelaide all have existing curfews we cannot see why Brisbane should not also have a curfew implemented.
- 2. There is no provision for undertaking independent noise monitoring. Aircraft noise is already a key source of concern in our area, with the existing noise levels often interrupting and disturbing conversation, radio and TV. We feel it is only fair and reasonable that residents are given free and direct access to an independent noise monitoring service in order to keep in check the noise levels set out in the Draft Environmental Impact Statement and Major Development Plan.

We look forward to hearing the appropriate measures you will implement to ensure a satisfactory solution to our points of concern.

## Yours Faithfully

NAME	STREET ADDRESS
1. Daphne Eales	86 Plimsoll Street Greenslopes QLD 4120
2. Greg Eales	86 Plimsoll Street Greenslopes QLD 4120
3. Jo-Anne Brown	23 Plimsoll Street Greenslopes QLD 4120
4. Brett Collins	23 Pimsoll Street Greenslopes QLD 4120
5. Beverley Ehrich	19 Plimsoll Street Greenslopes QLD 4120
6. John Ehrich	19 Plimsoll Street Greenslopes QLD 4120



8. D. Ehrich         19 Plimsoll Street Greenslopes QLD 4120           9. Jan Craft         59 Latimer Street Holland Park QLD 4121           10. Simon Craft         59 Latimer Street Holland Park QLD 4121           11. Ann Hill         88 Sackville Street Greenslopes QLD 4121           12. Danny Byrne         17 Penton Street Camp Hill QLD 4152           13. Liz Cullinan         4 Baringa Street Morningside QLD 4170           14. Simon Bradley         4 Baringa Street Morningside QLD 4171           15. Dorothea Hickey         34 Apollo Road Bulimba QLD 4171           16. Tobias Clith         34 Apollo Road Bulimba QLD 4171           17. Sue Richter         17 Plimsoll Greenslopes QLD 4121           18. Daniel Cuskelly         17 Plimsoll Greenslopes QLD 4121           19. Zac Cuskelly         17 Plimsoll Greenslopes QLD 4121           20. Matt Cox         20 Susan Street Greenslopes QLD 4120           21. Greg Gatley         20 Susan Street Greenslopes QLD 4120           22. Michael Cassidy         12 Susan Street Greenslopes QLD 4120           23. C. Chaney         23 Plimsoll Street Greenslopes QLD 4120           24. G. Collan         22 Susan Street Greenslopes QLD 4120           25. Mr. & Mrs Cameron         19 Susan Street Greenslopes QLD 4120           26. G. Rolanosen         7 Susan Street Greenslopes QLD 4120           27. Kyl	7. Nellie Burrow	21 Plimsoll Street Greenslopes QLD 4120
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18. Daniel Cuskelly         17 Plimsoll Greenslopes QLD 4121           19. Zac Cuskelly         17 Plimsoll Greenslopes QLD 4121           20. Matt Cox         20 Susan Street Greenslopes QLD 4120           21. Greg Gatley         20 Susan Street Greenslopes QLD 4120           22. Michael Cassidy         12 Susan Street Greenslopes QLD 4120           23. C. Chaney         23 Plimsoll Street Greenslopes QLD 4120           24. G. Collan         22 Susan Street Greenslopes QLD 4120           25. Mr & Mrs Cameron         19 Susan Street Greenslopes QLD 4120           26. G. Rolanosen         7 Susan Street Greenslopes QLD 4120           27. Kyle Roberts         54 Plimsoll Street Greenslopes QLD 4120           28. Amanda Roberts         54 Plimsoll Street Greenslopes QLD 4120           29. Corey Beaumont         72 Plimsoll Street Greenslopes QLD 4120           30. Renee Atkinson         72 Plimsoll Street Greenslopes QLD 4120           31. Kiri Christensen         72 Plimsoll Street Greenslopes QLD 4120           32. Karen McCarthy         59 Plimsoll Street Greenslopes QLD 4120           33. Mark McCarthy         59 Plimsoll Street Greenslopes QLD 4151           35. Ross Smith         22 Jackson Street Coorparoo QLD 4151           36. Jill Hall         32 Solar Street Coorparoo QLD 4151           37. Diane Schwartz         54 Love Street Holland Park QLD 4151	16. Tobias Clith	34 Apollo Road Bulimba QLD 4171
19. Zac Cuskelly 17. Plimsoll Greenslopes QLD 4121 20. Matt Cox 20. Susan Street Greenslopes QLD 4120 21. Greg Gatley 20. Susan Street Greenslopes QLD 4120 22. Michael Cassidy 12. Susan Street Greenslopes QLD 4120 23. C. Chaney 23. Plimsoll Street Greenslopes QLD 4120 24. G. Collan 22. Susan Street Greenslopes QLD 4120 25. Mr & Mrs Cameron 19. Susan Street Greenslopes QLD 4120 26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54. Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54. Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72. Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72. Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72. Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59. Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59. Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19. McLey Road Coorparoo QLD 4151 35. Ross Smith 22. Jackson Street Coorparoo QLD 4151 36. Jill Hall 32. Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54. Love Street Holland Park QLD 4121 38. Nancy Lockley 277. Cavendish Road Coorparoo QLD 4151 40. Camni Smith 20. Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20. Orion Street Coorparoo QLD 4151 42. Des Hall 32. Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60. City View Street Comparoo QLD 4151 44. John Loneragan 172. Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60. City View Road Camp Hill QLD 4152 47. Doug Miller 26. Wonersh Street Carina QLD 4152	17. Sue Richter	17 Plimsoll Greenslopes QLD 4121
20. Matt Cox         20 Susan Street Greenslopes QLD 4120           21. Greg Gatley         20 Susan Street Greenslopes QLD 4120           22. Michael Cassidy         12 Susan Street Greenslopes QLD 4120           23. C. Chaney         23 Plimsoll Street Greenslopes QLD 4120           24. G. Collan         22 Susan Street Greenslopes QLD 4120           25. Mr & Mrs Cameron         19 Susan Street Greenslopes QLD 4120           26. G. Rolanosen         7 Susan Street Greenslopes QLD 4120           27. Kyle Roberts         54 Plimsoll Street Greenslopes QLD 4120           28. Amanda Roberts         54 Plimsoll Street Greenslopes QLD 4120           29. Corey Beaumont         72 Plimsoll Street Greenslopes QLD 4120           30. Renee Atkinson         72 Plimsoll Street Greenslopes QLD 4120           31. Kiri Christensen         72 Plimsoll Street Greenslopes QLD 4120           32. Karen McCarthy         59 Plimsoll Street Greenslopes QLD 4120           33. Mark McCarthy         59 Plimsoll Street Greenslopes QLD 4120           34. B. Hayes         4/19 McLey Road Coorparoo QLD 4151           35. Ross Smith         22 Jackson Street Coorparoo QLD 4151           36. Jill Hall         32 Solar Street Coorparoo QLD 4151           37. Diane Schwartz         54 Love Street Holland Park QLD 4121           38. Nancy Lockley         277 Cavendish Road Coorparoo QLD 4151 <td>18. Daniel Cuskelly</td> <td>17 Plimsoll Greenslopes QLD 4121</td>	18. Daniel Cuskelly	17 Plimsoll Greenslopes QLD 4121
21. Greg Gatley       20 Susan Street Greenslopes QLD 4120         22. Michael Cassidy       12 Susan Street Greenslopes QLD 4120         23. C. Chaney       23 Plimsoll Street Greenslopes QLD 4120         24. G. Collan       22 Susan Street Greenslopes QLD 4120         25. Mr & Mrs Cameron       19 Susan Street Greenslopes QLD 4120         26. G. Rolanosen       7 Susan Street Greenslopes QLD 4120         27. Kyle Roberts       54 Plimsoll Street Greenslopes QLD 4120         28. Amanda Roberts       54 Plimsoll Street Greenslopes QLD 4120         29. Corey Beaumont       72 Plimsoll Street Greenslopes QLD 4120         30. Renee Atkinson       72 Plimsoll Street Greenslopes QLD 4120         31. Kiri Christensen       72 Plimsoll Street Greenslopes QLD 4120         32. Karen McCarthy       59 Plimsoll Street Greenslopes QLD 4120         33. Mark McCarthy       59 Plimsoll Street Greenslopes QLD 4120         34. B. Hayes       4/19 McLey Road Coorparoo QLD 4151         35. Ross Smith       22 Jackson Street Coorparoo QLD 4151         36. Jill Hall       32 Solar Street Coorparoo QLD 4151         37. Diane Schwartz       54 Love Street Holland Park QLD 4121         38. Nancy Lockley       277 Cavendish Road Coorparoo QLD 4151         40. Camni Smith       20 Orion Street Coorparoo QLD 4151         41. Jenine Nisbet-Smith	19. Zac Cuskelly	17 Plimsoll Greenslopes QLD 4121
22. Michael Cassidy 23. C. Chaney 23. Plimsoll Street Greenslopes QLD 4120 24. G. Collan 22. Susan Street Greenslopes QLD 4120 25. Mr & Mrs Cameron 19. Susan Street Greenslopes QLD 4120 26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54. Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54. Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72. Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72. Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72. Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59. Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59. Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19. McLey Road Coorparoo QLD 4151 35. Ross Smith 22. Jackson Street Coorparoo QLD 4151 36. Jill Hall 32. Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54. Love Street Holland Park QLD 4121 38. Nancy Lockley 277. Cavendish Road Coorparoo QLD 4151 40. Camni Smith 20. Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20. Orion Street Coorparoo QLD 4151 42. Des Hall 32. Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60. City View Street Camp Hill QLD 4152 44. John Loneragan 172. Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60. City View Road Camp Hill 4152 46. Gloria Miller 26. Wonersh Street Carina QLD 4152 47. Doug Miller	20. Matt Cox	20 Susan Street Greenslopes QLD 4120
23. C. Chaney 23. Plimsoll Street Greenslopes QLD 4120 24. G. Collan 22. Susan Street Greenslopes QLD 4120 25. Mr & Mrs Cameron 19. Susan Street Greenslopes QLD 4120 26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54. Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54. Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72. Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72. Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72. Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59. Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59. Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19 McLey Road Coorparoo QLD 4151 35. Ross Smith 22. Jackson Street Coorparoo QLD 4151 36. Jill Hall 32. Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54. Love Street Holland Park QLD 4121 38. Nancy Lockley 277. Cavendish Road Coorparoo QLD 4151 39. John Beech 2/6 Mackay Street Coorparoo QLD 4151 40. Camni Smith 20. Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20. Orion Street Coorparoo QLD 4151 42. Des Hall 32. Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60. City View Street Camp Hill QLD 4152 44. John Loneragan 172. Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60. City View Road Camp Hill 4152 46. Gloria Miller 26. Wonersh Street Carina QLD 4152 47. Doug Miller	21. Greg Gatley	20 Susan Street Greenslopes QLD 4120
24. G. Collan 22 Susan Street Greenslopes QLD 4120 25. Mr & Mrs Cameron 19 Susan Street Greenslopes QLD 4120 26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54 Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54 Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72 Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72 Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72 Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59 Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59 Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19 McLey Road Coorparoo QLD 4151 35. Ross Smith 22 Jackson Street Coorparoo QLD 4151 36. Jill Hall 32 Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54 Love Street Holland Park QLD 4121 38. Nancy Lockley 277 Cavendish Road Coorparoo QLD 4151 39. John Beech 2/6 Mackay Street Coorparoo QLD 4151 40. Camni Smith 20 Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20 Orion Street Coorparoo QLD 4151 42. Des Hall 32 Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60 City View Street Camp Hill QLD 4152 44. John Loneragan 172 Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60 City View Road Camp Hill 4152 46. Gloria Miller 26 Wonersh Street Carina QLD 4152	22. Michael Cassidy	12 Susan Street Greenslopes QLD 4120
25. Mr & Mrs Cameron 26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54 Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54 Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72 Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72 Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72 Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59 Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59 Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19 McLey Road Coorparoo QLD 4151 35. Ross Smith 22 Jackson Street Coorparoo QLD 4151 36. Jill Hall 32 Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54 Love Street Holland Park QLD 4121 38. Nancy Lockley 277 Cavendish Road Coorparoo QLD 4151 40. Camni Smith 20 Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20 Orion Street Coorparoo QLD 4151 42. Des Hall 32 Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60 City View Street Camp Hill QLD 4152 44. John Loneragan 172 Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60 City View Road Camp Hill QLD 4152 46. Gloria Miller 26 Wonersh Street Carina QLD 4152	23. C. Chaney	23 Plimsoll Street Greenslopes QLD 4120
26. G. Rolanosen 7 Susan Street Greenslopes QLD 4120 27. Kyle Roberts 54 Plimsoll Street Greenslopes QLD 4120 28. Amanda Roberts 54 Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72 Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72 Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72 Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59 Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59 Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19 McLey Road Coorparoo QLD 4151 35. Ross Smith 22 Jackson Street Coorparoo QLD 4151 36. Jill Hall 32 Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54 Love Street Holland Park QLD 4121 38. Nancy Lockley 277 Cavendish Road Coorparoo QLD 4151 39. John Beech 2/6 Mackay Street Coorparoo QLD 4151 40. Camni Smith 20 Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20 Orion Street Coorparoo QLD 4151 42. Des Hall 32 Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60 City View Street Camp Hill QLD 4152 44. John Loneragan 172 Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60 City View Road Camp Hill 4152 46. Gloria Miller 26 Wonersh Street Carina QLD 4152 47. Doug Miller	24. G. Collan	22 Susan Street Greenslopes QLD 4120
27. Kyle Roberts  54 Plimsoll Street Greenslopes QLD 4120  28. Amanda Roberts  54 Plimsoll Street Greenslopes QLD 4120  29. Corey Beaumont  72 Plimsoll Street Greenslopes QLD 4120  30. Renee Atkinson  72 Plimsoll Street Greenslopes QLD 4120  31. Kiri Christensen  72 Plimsoll Street Greenslopes QLD 4120  32. Karen McCarthy  59 Plimsoll Street Greenslopes QLD 4120  33. Mark McCarthy  59 Plimsoll Street Greenslopes QLD 4120  34. B. Hayes  4/19 McLey Road Coorparoo QLD 4151  35. Ross Smith  22 Jackson Street Coorparoo QLD 4151  36. Jill Hall  32 Solar Street Coorparoo QLD 4151  37. Diane Schwartz  54 Love Street Holland Park QLD 4121  38. Nancy Lockley  277 Cavendish Road Coorparoo QLD 4151  39. John Beech  2/6 Mackay Street Coorparoo QLD 4151  40. Camni Smith  20 Orion Street Coorparoo QLD 4151  41. Jenine Nisbet-Smith  20 Orion Street Coorparoo QLD 4151  42. Des Hall  32 Solar Street Coorparoo QLD 4151  43. Scott Kirkman  60 City View Street Camp Hill QLD 4152  44. John Loneragan  172 Barton Road Hawthorne QLD 4171  45. Jacqui Kirkman  60 City View Road Camp Hill 4152  46. Gloria Miller  26 Wonersh Street Carina QLD 4152	25. Mr & Mrs Cameron	19 Susan Street Greenslopes QLD 4120
28. Amanda Roberts 54. Plimsoll Street Greenslopes QLD 4120 29. Corey Beaumont 72. Plimsoll Street Greenslopes QLD 4120 30. Renee Atkinson 72. Plimsoll Street Greenslopes QLD 4120 31. Kiri Christensen 72. Plimsoll Street Greenslopes QLD 4120 32. Karen McCarthy 59. Plimsoll Street Greenslopes QLD 4120 33. Mark McCarthy 59. Plimsoll Street Greenslopes QLD 4120 34. B. Hayes 4/19. McLey Road Coorparoo QLD 4151 35. Ross Smith 22. Jackson Street Coorparoo QLD 4151 36. Jill Hall 32. Solar Street Coorparoo QLD 4151 37. Diane Schwartz 54. Love Street Holland Park QLD 4121 38. Nancy Lockley 277. Cavendish Road Coorparoo QLD 4151 39. John Beech 2/6. Mackay Street Coorparoo QLD 4151 40. Camni Smith 20. Orion Street Coorparoo QLD 4151 41. Jenine Nisbet-Smith 20. Orion Street Coorparoo QLD 4151 42. Des Hall 32. Solar Street Coorparoo QLD 4151 43. Scott Kirkman 60. City View Street Camp Hill QLD 4152 44. John Loneragan 172. Barton Road Hawthorne QLD 4171 45. Jacqui Kirkman 60. City View Road Camp Hill 4152 46. Gloria Miller 26. Wonersh Street Carina QLD 4152	26. G. Rolanosen	7 Susan Street Greenslopes QLD 4120
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	46. Gloria Miller	26 Wonersh Street Carina QLD 4152
48 John Thompson 59 Ashton Street Camp Hill QLD 4152	47. Doug Miller	26 Wonersh Street Carina QLD 4152
	48 John Thompson	59 Ashton Street Camp Hill QLD 4152



49. Karyn Matthew	25 Carramar Street Morningside QLD 4170
50. Jocelyn Thompson	150 Sapphire Street Holland Park QLD 4121
51. Barry Smith	3 Monkera Street Mansfield QLD
52. Barry Ingham	88 Sackville Street Greenslopes QLD 4120
53. Alex Poulsen	82 Sackville Street Greenslopes QLD 4120
54. Kerry Lyons	86 Sackville Street Greenslopes QLD 4120
55. Steven Livanes	5 Susan Street
56. Hwan-Jin Song	2/28 McLay Street Coorparoo QLD 4151
57. Mai-Hyang Han	28 McLay Street Coorparoo QLD 4151
58. Jennifer Smith	22 Jackson Street Coorparoo QLD 4151
59. Joyce Leighton	39 Plimsoll Street Greenslopes QLD 4151
60. Ellen Andrews	18 Burlington Street Holland Park QLD 4121
61. Gladys	62 Harold Street Holland Park QLD 4121
62. Dorothy Sharrock	12/6 High Street Mt Gravatt QLD 4122
63. Laina Griffith	10/49 Douglas Street
64. R. Leighton	39 Plimsoll Street Greenslopes QLD 4151
65. George Fanourgakis	64 Latimer Street Holland Park QLD 4121
66. Stergoula Fanourgakis	64 Latimer Street Holland Park QLD
67. Steve Fanourgakis	64 Latimer Street Holland Park QLD 4121



# Mr & Mrs Noel and Fe Carter

Formal Submission #46

**Position** Community individual

Organisation n/a

#### Submission full text

It is ironical to think that the Airport Corporation's designated impact study planning of the surrounding airport boundaries for an extra runway is ill-conceived and has lack of foresight planning. It is totally unacceptable and irresponsible to us. It does not fully take into account or consideration the flight path corridors over our suburb now in the close vicinity to these boundaries as well the major impact it will have on its people, especially the older citizens ("Senior Citizens" and "Retirees"), their quality of life and mental stability ("Sickness") due to the high volume of noise pollution from your aircraft over our suburbs ("Our Homes"). At this point in time, it is at an unbearable high level, the constant daily assault, this onslaught is horrendous, already affecting our health making us sick. I do believe that in future reference the consequences and ramifications that would arise through litigation claims from recourse action taken from the families of the sick or deceased the fall out could be paramount.

We deserve better after our working life ("Working hard all our lives") to pay off our only real asset ("Our family home") as well paying heavy taxes and to fight for our country. All we ask and expect is to live out the rest of our natural life in peace of mind and with some quality of life in the security of our family homes.

Therefore, I iterate your impact study planning draft should be made to include all the people of the communities at large in the close vicinity and the disastrous impact flow-on effect it will have from your future outlook endeavours. All avenues have to be examined and explored thoroughly and not this ill conceived inappropriate, unacceptable proposal idea of a plan.



# **Ms Trish Cavanagh**

# Formal Submission #193

# **Position**

**Organisation** Moreton Island Protection Committee

# Submission full text

# **SUBMISSION**

# **NEW PARALLEL RUNWAY PROJECT DRAFT EIS/MDP**

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# 1. INTRODUCTION



It appears that decisions were made dating at least as far back as the 1970's to proceed with this project. Subsequent studies and decisions have all endorsed the plan. It appears there is no chance at all that it will either not proceed or vary in any significant detail.

Although the project team are very helpful, the public consultation process appears to be a public relations exercise to promote and sell the project to the public.

That being the case, members of the public cannot really obtain an objective understanding or assessment of the project and/or provide a valid response as most of us do not have the resources – financial, time, knowledge, qualifications etc available to the BAC. All we can do is merely skim the surface.

Consequently comments have been restricted to just a few areas.

# 2. OPTIONS AND ALTERNATIVES

An examination of alternatives with regard to location is based on the premise that the new runway will be located within the present site. All options cited are variations on the same theme in the same location. Queensland historically is considered to be very decentralised, but more and more services are being concentrated in the very southeast corner. This is resulting in increasing pressure on roads, water supply, land and the environment in this area, and neglect of needs in the remainder of the state. The majority of passenger traffic will of necessity be channelled through Brisbane. The conclusion that a new runway is needed in Brisbane is based on projected population and passenger trips to and from Brisbane. Perhaps some of these passengers are from Ipswich or Maryborough, Bundaberg or further a field.

The "need" for more and larger airports, freeways, dams etc will never be satisfied. If services are increasingly concentrated in Brisbane, then they will increasingly need to be concentrated here.

# 3. ACID SULPHATE SOIL

Investigations reveal that most of the site contains potential or actual acid sulphate soil close to the surface. It appears that in some areas this soil will be excavated and reburied, and in others compression of the site will occur (surcharge). Leachate from this process is likely to contaminate the site. In an extremely high tide, storm surge or flood this would have serious consequences for the environment particularly if uncontrolled flooding occurred. Sulphuric acid would be rapidly released into drainage points and into the nearby Ramsar site affecting plants, fish and other animals.

"Serpentine Inlet Drain and Kedron Brook Floodway Drain will be the primary discharge points for stormwater from the northern and southern ends of the NPR respectively." (p 32)

## 4. LIGHTING



The "Summary of Major Findings" booklet (p33) indicates that a lighting structure to support runway approach lighting will extend 600m offshore from the Moreton Bay shoreline. It is likely to comprise a series of precast desk panels and handrails. A total of five perpendicular side jetties are proposed at regular intervals to support the structure.

As the project site is adjacent to the Ramsar Area within Bramble Bay, this structure will extend 600 m into the Ramsar site. This will obviously have an impact on the Ramsar site during both construction of the structure and operation of the airport.

Yet the report concludes that: "No significant impacts to Ramsar Wetlands would occur as a result of the NPR project. (p59)

#### 5. MANGROVES

An area of 850 ha of mangroves was lost between 1977 and 1980 due to previous airport expansion; 94ha will be removed if the proposed project proceeds. This represents 47% of the current mangrove population within airport lands. According to Table 5.8b – a 47% loss is regarded as "high" resulting in a "measurable impact to ecosystem function". However in "Summary of Major Findings" it is stated "The NPR Project will not represent a loss of ecosystem function at this scale. (P55)

Past Airport Development reports identified the mangroves in Serpentine Creek as being very important and recommended protection. Likewise the report emphasized the need to protect the yellow mangrove heath community on the subject site, which represents 28% of this type of habitat in Moreton Bay.

It is significant that the current EIS did not identify either of these aspects, which leads one to question whether these communities have since been destroyed or (in the case of *Ceriops spp*) mistaken for *Bruguiera spp*.

The mangroves on the project site are listed under BCC Naps Policy as valuable ecological features (Sch 1), significant sites (Sch 2) and significant vegetation community (Sch 5). Some of the coastal wetlands in the project site are also of state significance under the SEQ Regional Coastal Management Plan. I have been unable to find mention of this in the EIS/MDP. In Queensland, all mangroves and any part of a mangrove are specifically protected under the Queensland Fisheries Act, no doubt due to the significance of Mangroves in the lifecycle of many marine species.

Moreton Bay continues to experience loss of Mangroves due to both storm events and continued clearing. Mangroves in Moreton Bay have also experienced genetic damage. This manifests as albino propagules attached to parent trees. These die soon after establishment.



The Moreton Bay habitat is under increasing pressure so any loss of a mangrove community is extremely significant in view of the important role mangroves play in an ecosystem.

#### 6. SAND DREDGING

It has been decided that Middle Banks is the site from which sand is to be extracted for the purpose of construction of the runway. Moreton Bay is a Marine Park and Middle Banks is within the General Purpose Zone of this Marine Park. A "General Purpose Zone" is to provide for the general use and public enjoyment of the zone in ways that are consistent with the conservation of the Marine Park. I do not see that extraction of 15Mm3 of sand over a relatively short period of time (18 months) is consistent with this purpose.

I note that there are other operators extracting sand from Middle Banks albeit a lesser amount per year but probably over a greater time frame.

I cannot argue with the technical aspect – the modelling, data or the conclusions presented – I cannot understand most of it. This was written by professionals and is largely incomprehensible to most people.

It appears that Moreton Bay is increasingly being regarded as a "resource" to be mined.

#### 7. SEAGRASS

Moreton Bay is reputed to support a large area of seagrass (approximately 24,000ha). In recent years a concerted effort has been made by a number of agencies to reduce the nutrient load and other sediments entering the Bay. This has slowed the decline in seagrass meadows and the situation now appears relatively stable.

I am surprised that this EIS/MDP found only limited areas of seagrass in the study area. In the eastern area of Moreton Bay beside Moreton Island the water clarity is extremely high, and seagrass species *H. spinulosa and H.ovalis* have been found at depths of 12m. It has been estimated that these species are growing close to their minimum light requirements. Consequently their survival will be sensitive to very small changes in water clarity. (These species have also been found growing on the Great Barrier Reef at depths of 30m.) Analysis of dugong diving profiles in Moreton Bay indicates that there is likely to be more than 10km2 of deep seagrass meadows south and west of Tangalooma Point.

Community Seagrass Watch Volunteers monitor numerous sites around the Bay on a regular basis so any changes to seagrass habitats and the resident species will be noted.

#### 8. ANIMALS - WHALES, DOLPHINS, DUGONGS AND TURTLES

**Whales** - I do not have access to 2006 figures, but 30 whales were sighted within Moreton Bay in 2005 some from Tangalooma Resort, which is opposite Moreton Banks. Those sighted in other



areas of the bay would have been passing through and travelling between Moreton Island and the mainland. The Humpback population has been growing at about 10% each year so increasing numbers are likely to be using Moreton Bay.

**Dolphins** – Dolphins visit Tangalooma Resort on a daily basis, which is 2.5 km from the extraction site. As any regular visitor to Moreton Island will advise, dolphins regularly surf the bow waves and the wake of vessels that steam from Brisbane to Tangalooma and The Wrecks.

**Dugongs** – As indicated in Section 7 above, dugongs are likely to be feeding in deep seagrass beds south and west of Tangalooma Point. A 2005 study indicates that dugongs also use the northern section of Moreton Bay, which suggests travel between north and south.

**Turtles** – Turtles are not confined to the southeastern area of Moreton Bay and can be sighted throughout. Stranded turtles have been observed on the beach south of Tangalooma. They can also be observed swimming along Moreton Island north of The Wrecks as well as from vessels travelling between Brisbane and Moreton Island.

I understand the dredge will operate in the extraction zone for 3 x 2 hour periods per day plus the time taken to steam to and from the site to the pump out station at Luggage Point – 20 km away. Interaction with any of the above species is entirely possible.

#### 9. SUMMARY

#### Options and Alternatives -

I had expected that this section would really examine the options particularly with regard to location. For example it may have been preferable to locate an airport in another site further north or west of Brisbane to alleviate the pressure being experienced in the southeast corner.

#### Acid Sulphate Soil -

Although the EIS/MDP details strategies to neutralise acid sulphate soils, I remain concerned about the possibility of contamination to the Bay due to the considerable disturbance that will occur to ASS and PASS particularly if an unusual weather event is experienced.

#### Lighting -

The lighting structure to support runway approach lights will extend 600 m offshore into a Ramsar site. There will obviously be some impact to the site although the EIS minimised the impacts.

#### Mangroves -

Species identified as worthy of protection in previous Airport Reports have not been cited in the current EIS. I understand that the mangroves on the project site are also listed under BCC Naps Policy and in the SEQ Regional Coastal Management Plan but this is not mentioned in the current report.



Mangroves in Moreton Bay are an important species and the loss of 94 ha is significant. If the project proceeds and the mangroves are cleared, compensatory measures should be implemented.

#### Dredging -

Dredging of this volume of sand is not consistent with the zoning in this area. The removal of 15Mm3 in 18 months will leave a considerable trench. The EIS has minimised the impact on coastal processes. I do not have the capacity to assess the validity of these findings but remain unconvinced.

#### Seagrass -

The current study has found only minimal amounts of seagrass in the vicinity of Middle Banks. This contradicts other recent studies. Seagrass appears to relatively stable at present, so I would not have expected such a difference.

#### Animals - whales, dolphins, dugongs and turtles.

While these animals may be found in greater concentrations in other areas of the bay, their occurrence is not restricted solely to feeding grounds, as they are sighted throughout the bay.

The EIS seeks to minimise the possibility of a strike or disturbance but the vessel will be in the water for a considerable time so interaction is entirely possible.

#### 10. CONCLUSION

The EIS/MDP is well researched and presented. However it is a very complex, difficult and bulky document. It also has a great deal of complicated analysis and jargon, which is beyond the understanding of most people.

I found it extremely difficult to navigate through even the limited area I tried to source. It would have been useful to have a printed booklet containing tables of contents with page numbers, so relevant sections could be accessed more readily.

The project team advisors have been very obliging and helpful however I would also have liked to obtain some independent advice and assessment. The public comment period although extensive (3 months) was entirely located within the university vacation period so it was not possible to approach any of the universities for an independent assessment or opinion.



## Ms Janene Clarke

Formal Submission #90

**Position** Community individual

Organisation n/a

#### Submission full text

I want to register my concern about not having a curfew for Brisbane's airport. I am on a hill in Morningside, and tolerate the current noise pollution created by air traffic. I think we need to have a curfew, sleep is important to everyone, some of these planes fly very low and are extremely noisy. I can feel the house shake occasionally when they are at their lowest.



## **Ms Barbara Cochrane**

Formal Submission #61

**Position** Community individual

Organisation n/a

#### Submission full text

I have been a resident of Balmoral for 69 years - 22 years living at 36 Pollock Street, Balmoral and 37 years living at 20 Taylor Street Balmoral.

I supported Kevin Rudd's appeal against a second runway and admire him for his stance.

However, I accept we have no choice but to accept the new BAC God - money - will always win despite my belief the second runway should be closer to the original one.

However, whilst BAC God - money - may be good for Queensland I strongly object to the extra noise, which the home-owners will be exposed to.

My submission is that:

WE MUST HAVE A CURFEW PLACED ON BAC FROM 11PM TO 6AM FOR THE SAKE OF THE MANY RESIDENTS WHOSE VIEWS HAVE BEEN TOTALLY OVERLOOKED BY YET AGAIN "BIG BUSINESS."

I AM NOT INTERESTED IN HAVING FREIGHT BOUGHT IN ALL NIGHT EVERY NIGHT AND BELIEVE MY 59 YEARS OF LIVING ARE UNDER THREAT BY NOTHING MORE THAN A MONEY HUNGRY BAC.

Barbara Cochrane



### Mr Alan Collier

Formal Submission #150

**Position** Community individual

Organisation n/a

#### Submission full text

Brisbane Airport New Parallel Runway (Third Runway) Notice of Objection

I am the owner of a property in, and a resident of, Hamilton who will be affected by the proposal to build a second parallel runway at Brisbane Airport. I give notice of my objection to the proposal to build the proposed third runway at Brisbane Airport, and this letter sets out the basis of my objection. Further, I request that regulatory authorities give consideration to the immediate imposition of a curfew on aircraft movements at Brisbane Airport similar to those imposed on Sydney Airport.

#### Background

The following facts are relevant to my objection:

- The owners of Brisbane Airport are not subject to planning controls applicable to the general community - Brisbane Airport being subject to federal law - and have demonstrated their preparedness to ignore public concerns on planning matters;
- The proposed development consumes a vast area of green space within the Brisbane area and will have a significant adverse effect upon a variety of ecological systems in the area. In fact, the proposed development is almost entirely built on what is now native wetland.
- The South-East conurbation presently has at least three major airports in addition to Brisbane Airport: Archerfield, Maroochydore and Coolangatta. In addition, Brisbane has a further potential airport available at Amberley;
- The road system servicing Brisbane Airport, the costs of which have not been, and will not be, borne by the owners of Brisbane Airport, are inadequate for current purposes, and inevitably will be inadequate for the foreseeable future taking account of the additional proposals and likelihood of further property development planned for and likely at Brisbane Airport;



- There is no compelling evidence to demonstrate that Brisbane Airport needs a third runway, when compared to other, and larger, Australian cities such as Melbourne;
- Population growth in the South-East of Queensland will not occur so much in the Brisbane
  City Council area served by Brisbane Airport, but by areas closer to the urban fringes and
  other areas of the conurbation such as Archerfield, the Gold Coast, Maroochydore and
  Ipswich, making a better case for new or expanded airports in these areas;
- The increased aircraft movements that result from the additional take-off and landing slots
  arising from a third runway will have a significant and material adverse effect on a very
  large number of residents of Brisbane because of additional noise and vibration, over and
  above that presently suffered.

### **Substance of the Objection**

#### **Planning Controls**

Brisbane Airport Corporation (BAC) has demonstrated its preparedness to ignore State planning laws that apply to almost all other entities in Queensland through the development of extensive retail and other facilities within the airport bounds in the face of opposition from the Brisbane City Council as well as local residents and businesses. Additional aircraft and passengers through Brisbane airport is very likely to stimulate BAC to further expand its retail and other facilities at Brisbane Airport irrespective of the wishes of the local community expressed through the Council or individuals.

The increase in the number of people and vehicles that would arise from an additional runway would give BAC licence and incentive to expand its non-airport developments such as retail, office and other facilities, with the result that the community would again be shut out of the approval process.

#### **Adverse Ecological Impact**

The proposed third runway will be built upon what is presently an existing wetland area within the border of the airport land. There can be no realistic suggestion that this will have anything but a significant adverse effect on the ecology of the area concerned (and adjacent areas) to the detriment of flora and fauna. This will have a permanent adverse effect on the amenity of the area for those living in the region.

In addition, the owners of Brisbane Airport have earlier demonstrated a preparedness to ignore the wishes of the local community in planning matters, so there can be no confidence that they have any objective other than to extract maximum profits from the property without regard to the Community cost involved, Any assurances that may be given by the owner of Brisbane Airport as to the ecological impact of the proposed development would be viewed with extreme scepticism in view of their single-minded pursuit of profit from this asset.



#### **Existing Airport Facilities**

Brisbane Airport is only one of at least five commercial and general airports in the South-East Queensland conurbation. There are sound reasons for encouraging the development of airports outside the Brisbane City area in preference to continued expansion of Brisbane Airport. For example, the development of alternative airports to higher standards provides a higher level of safety and reliability for all air travellers by providing, for example, suitable alternatives in the event of emergency or weather disruption at Brisbane Airport.

It would also seem unfair to other airports in the region for BAC to be given preference in terms of physical expansion and increased air movements when others could, and would be willing, to provide increased capacity and facilities if they were able to compete on a fair basis.

#### **Road System**

It is quite clear that the road system in the vicinity of Brisbane Airport is inadequate to meet the existing demands being placed on it. There is no reasonable likelihood that the road system could be upgraded without enormous and, in view of the alternatives available, unnecessary expenditure. Road upgrades in the area, if they proceed, will be done at a cost to the taxpayer for which the private operators of BAC will obtain the benefit; not just in terms of the additional aircraft movements it would support, but also in exploiting the fact that BAC may develop the airport precinct without regard to planning issues.

It seems that any road improvements benefiting Brisbane Airport will lead to BAC obtaining significant economic benefits without cost to BAC and with minimal regulatory constraint on BAC's activities.

#### No Need for a Third Runway

Brisbane Airport does not have the present demand from either patronage or aircraft operators to justify a third runway, nor is it likely to arise within any foreseeable time. For comparison, Melbourne Airport, which serves a population considerably larger than Brisbane, does not have three runways. Indeed, an alternative to Tullamarine is being actively developed at Avalon to serve growth in outer areas. Like Melbourne, the development of alternatives should be given higher priority than expanding Brisbane Airport with all the attendant problems that such an expansion will bring.

#### **Population Growth**

Population growth in the region served by Brisbane Airport is, essentially, static. Growth in the South-East Queensland region is occurring substantially in the urban fringes and growth corridors north and south of Brisbane. This would suggest that the long-term benefits of increased aircraft movements will accrue to outer regions rather than the area served directly by Brisbane



Airport. Given that there are existing airports serving the growth regions that are capable of economical expansion, all of which would benefit from upgrading and development, this option should be pursued in preference to the continued expansion of Brisbane Airport.

#### Increased Noise and Vibration from Additional Air Movements

It is already a major inconvenience to the residents of Brisbane to have regular and, in some cases, almost constant, noise and vibration arising from existing aircraft movements. It would be unconscionable and unfair to increase noise, vibration and other adverse effects on already affected residents of Brisbane by a factor of up to 2 by permitting the construction of a third runway at Brisbane Airport.

Rather than any consideration being given to increasing noise and vibration by permitting the construction of a third runway at Brisbane Airport, serious consideration should he given immediately to the imposition of a curfew on its present operation, in the same manner as imposed on Sydney Airport. Brisbane Airport and its associated approach and take-off corridors are as much within residential areas as are those of Sydney, and similar limits on noise and vibration imposed by the curfew in Sydney should be immediately imposed in Brisbane.

The effects of such a curfew would be significantly reduced if the much more appropriate approach of developing regional airports in preference to Brisbane Airport was adopted.

In summary, I strongly oppose the development of a third runway at Brisbane Airport and encourage regulators to consider the upgrade of suitable regional airports to higher standards to meet the demands of operators to these airports.

Yours faithfully

Alan Collier



# **Mr H Compton**

Formal Submission #47

**Position** Community individual

Organisation n/a

#### Submission full text

Because global warming is accelerating so rapidly, partly due to emissions from jet planes, and sea levels will soon be rising fast, any new construction near sea level is likely to have a short life.

H. Compton



## Mr Gil Cook

#### Formal Submission #8

**Position** Community individual

Organisation n/a

#### Submission full text

An additional runway is a definite requirement to cater for obvious future increases in air traffic from both population growth and increased tourism (International travellers in and out) (Both local and overseas).

- Costs of construction increases daily, hence need to commence construction ASAP.
- The amount of sand required comes from a large site and will only temporarily impact on the Marine Environment, which will rapidly recover.
- The Northern Access Road is a boon to all northern users greatly facilitating access.
- Noise objections in local suburbs are, I believe, only thinking of possible negative impact on house/land values. I was principal of Hendra Catholic School for the last 10 years up to retirement in July 2006, and <u>never in all that time did Airport noise effect the school or was greatly noticeable.</u> I do not believe this to be a legitimate objection.
- People purchasing residences or businesses in the flight paths knew that the Airport was nearby
- Certainly some late night flights overhead, even here at Redcliffe, can be disturbing, particularly when they rarely occur.
- I highly compliment the BAC and all associated with the in-depth preparation and presentation of all associated information.



# **Ms Evelyn Cross**

#### Formal Submission #42

**Position** Community individual

Organisation n/a

#### Submission full text

My concerns relating to the new parallel runway are as follows:

- There will be significantly more aircraft flying over my home.
- Consequently, I will have greater exposure to aircraft noise over my home than what I am currently experiencing with the position of the present runway.
- Aircraft emissions will cause a film of dirt, which will have an impact on washing hanging on clothes lines; and the exterior/interior surfaces and contents of the building (eg dirty television screens).
- The value of my home may be reduced and this has been my most important financial investment.



### Mr Ben Cue

Formal Submission #80

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Nundah, I would like to add my support to Brisbane City Councillor Kim Flesser's proposal to locate the new runway further to the east of the current proposed location. My concern with the proposed location lies with the increased noise and impact on adjacent residential suburbs like Nundah and Banyo. I believe Cr Flesser has proposed relocation of the runway by approx 475m to the east. I would like to add our family's support to this proposal.



## **Cr Peter Cumming**

#### Formal Submission #205

**Position** Councillor for Wynnum Manly

Organisation Brisbane City Council

#### Submission full text

Dear Sir/Madam,

I am writing to support the new parallel runway for the Brisbane Airport and also to oppose the idea of a curfew.

The parallel runway will greatly increase the capacity of the airport, which has experienced rapid increases in traffic volumes and will continue to do so. A high quality airport is essential to facilitate the strong growth in jobs in South East Queensland.

The parallel runway will minimise the amount of flights travelling anywhere near my ward of Wynnum Manly. The alternative, a crosswind runway would mean plenty of air traffic over my ward and the Redlands area.

The current airport is extremely convenient for Wynnum Manly residents and can be reached in 15-20 minutes most days and times of the week.

In addition I am opposed to a curfew because of the massive inconvenience and extra expense for stopovers that it would cause so many travellers. The new runway will maximise the number of flights out over the bay thus minimising the aircraft noise over residents. In addition modern planes are getting quieter. As well many of the current residents who claim to be affected by aircraft noise (which is a tiny number to start with ) have bought their houses after the airport was built and therefore should have anticipated the aircraft noise. "Buyer beware " is the old warning they have failed to heed.

Thank you for the opportunity to comment on the proposed new parallel runway.

Yours sincerely,
Peter Cumming
Councillor for Wynnum Manly Ward



## **Mr Edward Cusack**

Formal Submission #165

**Position** Community individual

Organisation n/a

#### Submission full text

To whom it may concern

My wife and I are elderly pensioners who will be significantly affected by the increase in air traffic as a result of the new parallel runway ("NPR").

In particular, the NPR will cause an increase in both air and noise emissions. The air emissions will decrease our air quality. Both types of emissions will adversely affect our quality of life, our health and our general well being.

I have emphysema and I am particularly concerned about the effect of these matters on my health.

I am also concerned about increased air traffic over residential areas, including schools. In particular, there is greater public exposure to safety risks.

Yours sincerely

Mr Edward Cusack



## Ms Bianca Da Silva

#### Formal Submission #229

**Position** Community individual

Organisation n/a

#### Submission full text

#### **NEW PARALLEL RUNWAY - ITS AFFECT ON THE COMMUNITY**

As a long time resident of Northgate I understand that you are considering the location for the new parallel runway and this letter is to ask if you can consider moving the proposed location further to the east.

#### Five points for you to consider;

- 1. Current proposed position sees this project only 1,500 meters away from properties with families living within, the affect of which sees planes landing 475 meters within these homes;
- 2. What compensation is going to be given to families living within the area. If this proposal goes through the value of properties will drop;
- 3. Jackson's Creek habitat will lose fish and prawn breeding areas with the dumping of 15 million cubic meters of sand;
- 4. Storm water control;
- 5. ANEF research data on noise control

Concerned resident

Bianca Da Silva



# Ms Helena Daley

Formal	Sub	miss	sion	#43
	OUN		,,,,,,,	"

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir,

I am writing to object to the introduction of the proposed second runway at Brisbane Airport.

I am objecting on the basis of increased noise and pollution that will result from the increase in aircraft usage by allowing extra capacity from a second runway. The areas that will now be affected by increased noise and pollution are having this imposed on them against their will. To say areas will not be subjected to increased noise is pure fantasy. There will still be noisy aircraft in 2015.

Why are we accepting aircraft usage increase and an increase in carbon emissions when the current thinking is around how to reduce carbon emissions?

Yours faithfully

Helena Daley



### Ms Tineke De Vries

#### Formal Submission #207

**Position** President

Organisation Nudgee Banyo Northgate Citizens Action Group Inc.

#### Submission full text

#### INTRODUCTION

98% of the residents of Nudgee Beach are passionately opposed to the proposed location for the New Parallel Runway.

Residents are also of the view that the BAC has not prepared any strategies to mitigate the loss of environmental values and amenity that are particular to the suburb of Nudgee Beach.

Detailed discussions, meetings and polling of residents of Nudgee Beach over the last three months have distilled down to seven major points of concern and objection regarding the proposed parallel runway.

#### OBJECTION TO THE PROPOSED SECOND RUNWAY

As a resident of Nudgee Beach, I object to the proposed New Parallel Runway for the following reasons:

- 1. Air pollution from aircraft using the second runway. This will impact most severely on the young and the elderly in our community.
- 2. The boundary of the airport will move much closer to Nudgee Beach, and so will the bird strike guns which will service two runways instead of one. Currently this noise is intrusive. With the new runway it will be unacceptable.
- 3. The proposed landing light structure will intrude into an open landscape, one of the superb qualities of Nudgee Beach is out ability to see the night sky.
- 4. Property values at Nudgee Beach will be negatively affected. During October 2002 and October 2004, the average price of real estate in the suburb went up 141.94%. This benefit will be lost.



- 5. A major city is planned for Brisbane Airport. This city will operate 24 hours a day, 7 days a week. We face a potential future of un-relenting noise, light and fumes coming from the airport. The proposed airport boundary will be less than a kilometre away from the nearest house in Nudgee Beach. The peacefulness and tranquillity of our suburb is under severe threat.
- 6. We reject the claim that a distance of 2000m between the runways will make for safer operations. A distance of 1525m is considered safe under international standards and practices and is also sufficient to accommodate terminal buildings and usable taxiways. We want to see the proposed new runway placed 1525m from the main runway to maximise the buffer zone between it and the residents of Nudgee beach.
- 7. Not a single meaningful noise and emission reduction strategy has been offered to the residents of Nudgee Beach on the BAC Major Development Plan. This is deceitful considering the huge impact the new runway will have on the residents and the environment at Nudgee Beach.

NAME	ADDRESS
1. Tracey Attard	139 O'Quinn Street Nudgee Beach QLD 4016
2. Nathan Partridge	139 O'Quinn Street Nudgee Beach QLD 4016
3. David Wardrop	133 O'Quinn Street Nudgee Beach QLD 4016
4. Amanda O'Donnell	133 O'Quinn Street Nudgee Beach QLD 4016
5. Sue O'Donnell	133 O'Quinn Street Nudgee Beach QLD 4016
6. G. O'Donnell	133 O'Quinn Street Nudgee Beach QLD 4016
7. J.W. Kunpe	131 O'Quinn Street Nudgee Beach QLD 4016
8. Genevieve Condon	123 O'Quinn Street Nudgee Beach QLD 4016
9. Darren Condon	123 O'Quinn Street Nudgee Beach QLD 4016
10. Eichmann	122 O'Quinn Street Nudgee Beach QLD 4016
11. Cheyanne	122 O'Quinn Street Nudgee Beach QLD 4016
12. Frances Beades	121 O'Quinn Street Nudgee Beach QLD 4016
13. Michael Schafer	120 O'Quinn Street Nudgee Beach QLD 4016
14. John Bishop	118 O'Quinn Street Nudgee Beach QLD 4016
15. Kristelle Greenstreet	118 O'Quinn Street Nudgee Beach QLD 4016
16. Leonard Chaplin	116 O'Quinn Street Nudgee Beach QLD 4016
17. Ron Chaplin	116 O'Quinn Street Nudgee Beach QLD 4016
18. Billie Chaplin	116 O'Quinn Street Nudgee Beach QLD 4016
19. Barry King	115 O'Quinn Street Nudgee Beach QLD 4016
20. D.King	115 O'Quinn Street Nudgee Beach QLD 4016
21. Bruce Sutherland	111 O'Quinn Street Nudgee Beach QLD 4016
22. Dee Turner	111 O'Quinn Street Nudgee Beach QLD 4016
23. Helen Vince	109 O'Quinn Street Nudgee Beach QLD 4016
24. S. Jeffrey	108 O'Quinn Street Nudgee Beach QLD 4016
25. Jim Jeffrey	108 O'Quinn Street Nudgee Beach QLD 4016
26. J. Wyllie	107 O'Quinn Street Nudgee Beach QLD 4016



27. L. Wyllie	107 O'Quinn Street Nudgee Beach QLD 4016
28. Daniel Hayes	105 O'Quinn Street Nudgee Beach QLD 4016
29. Miles Smedley	102 O'Quinn Street Nudgee Beach QLD 4016
30. E.R. Trueman	99 O'Quinn Street Nudgee Beach QLD 4016
31. B.M Trueman	99 O'Quinn Street Nudgee Beach QLD 4016
32. Maurie Burndred	98 O'Quinn Street Nudgee Beach QLD 4016
33. Peter Markey	93 O'Quinn Street Nudgee Beach QLD 4016
34. Cheryl Markey	93 O'Quinn Street Nudgee Beach QLD 4016
35. Troy Duncan	92 O'Quinn Street Nudgee Beach QLD 4016
36. Peta Martin	92 O'Quinn Street Nudgee Beach QLD 4016
37. Noel Weick	92 O'Quinn Street Nudgee Beach QLD 4016
38. Shane Martin	92 O'Quinn Street Nudgee Beach QLD 4016
39. Maree Angus	90 O'Quinn Street Nudgee Beach QLD 4016
40. Anne Boucher	89 O'Quinn Street Nudgee Beach QLD 4016
41. Barry Calm	89 O'Quinn Street Nudgee Beach QLD 4016
42. Mary England	89 O'Quinn Street Nudgee Beach QLD 4016
43. Caren Perry	87 O'Quinn Street Nudgee Beach QLD 4016
44. Helen King	87 O'Quinn Street Nudgee Beach QLD 4016
45. Allan Gordon	86 O'Quinn Street Nudgee Beach QLD 4016
46. Kevin Irons	85 O'Quinn Street Nudgee Beach QLD 4016
47. Deborah Brown	81 O'Quinn Street Nudgee Beach QLD 4016
48. David Bath	78 O'Quinn Street Nudgee Beach QLD 4016
49. P.L. Butler	74 O'Quinn Street Nudgee Beach QLD 4016
50. R. Beasley	71 O'Quinn Street Nudgee Beach QLD 4016
51. Wayne Abdy	61 O'Quinn Street Nudgee Beach QLD 4016
52. W. Walker	60 O'Quinn Street Nudgee Beach QLD 4016
53. Peter Angus	53 O'Quinn Street Nudgee Beach QLD 4016
54. Celestine Janssen	50 O'Quinn Street Nudgee Beach QLD 4016
55. Ernest Janssen	50 O'Quinn Street Nudgee Beach QLD 4016
56. Edward Flynn	49 O'Quinn Street Nudgee Beach QLD 4016
57. Theresa Flynn	49 O'Quinn Street Nudgee Beach QLD 4016
58. Robin Barron	47 O'Quinn Street Nudgee Beach QLD 4016
59. Cora Barrow	47 O'Quinn Street Nudgee Beach QLD 4016
60. G. Eliason	45 O'Quinn Street Nudgee Beach QLD 4016
61. Hazel Carrow	43 O'Quinn Street Nudgee Beach QLD 4016
62. Hazel Carrow	43 O'Quinn Street Nudgee Beach QLD 4016
63. T. McConecky	42 O'Quinn Street Nudgee Beach QLD 4016
64. W. Bashford	42 O'Quinn Street Nudgee Beach QLD 4016
65. Robin McConecky	42 O'Quinn Street Nudgee Beach QLD 4016
66. Shirley Fleming	40 O'Quinn Street Nudgee Beach QLD 4014
67. Gary Warburton	39 O'Quinn Street Nudgee Beach QLD 4014
68. Muriel Warburton	39 O'Quinn Street Nudgee Beach QLD 4014



70. Gary Masterson 3 71. Matthew Gilpin 2 72. Jim Gilpin 2	39 O'Quinn Street Nudgee Beach QLD 4014 36 O'Quinn Street Nudgee Beach QLD 4014 29 O'Quinn Street Nudgee Beach QLD 4014
71. Matthew Gilpin 2 72. Jim Gilpin 2	
72. Jim Gilpin 2	29 O'Quinn Street Nudgee Beach QLD 4014
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73. Stacev Gilpin 2	29 O'Quinn Street Nudgee Beach QLD 4014
	29 O'Quinn Street Nudgee Beach QLD 4014
74. Kathryn Gilpin 2	29 O'Quinn Street Nudgee Beach QLD 4014
75. Joseph Gilpin 2	29 O'Quinn Street Nudgee Beach QLD 4014
76. Gary Simpson 2	22 O'Quinn Street Nudgee Beach QLD 4014
77. Laraine Barnes 2	22 O'Quinn Street Nudgee Beach QLD 4014
78. M. Bliss 2	21 O'Quinn Street Nudgee Beach QLD 4014
79. Ian Munro	15 O'Quinn Street Nudgee Beach QLD 4014
80. B. Aitkenhead	10 O'Quinn Street Nudgee Beach QLD 4014
81. C. Browning	9 O'Quinn Street Nudgee Beach QLD 4014
82. LW Davis 7	7 O'Quinn Street Nudgee Beach QLD 4014
83. Suzanne Jeffery 7	7 O'Quinn Street Nudgee Beach QLD 4014
84. EJA de Vries	1 O'Quinn Street Nudgee Beach QLD 4014
85. Tineke de Vries	1 O'Quinn Street Nudgee Beach QLD 4014
86. signature illegible 7	77 O'Quinn Street Nudgee Beach QLD 4014
87. Kirsten Kent	1588 Nudgee Road Nudgee Beach QLD 4014
88. Jenny Langdon	1587 Nudgee Road Nudgee Beach QLD 4014
89. D Wockner	1564 Nudgee Road Nudgee Beach QLD 4014
90. CCrellin & R Coyle 7	71 Chaseley Street Nudgee Beach QLD 4014
91. John Brooks	65 Chaseley Street Nudgee Beach QLD 4014
92. J. MacDonald	59 Chaseley Street Nudgee Beach QLD 4014
93. Andrew Jeremijenko 5	55 Chaseley Street Nudgee Beach QLD 4014
94. Richard Gailey	43 Chaseley Street Nudgee Beach QLD 4014
95. C. Gailey	37- 43 Chaseley Street Nudgee Beach QLD 4014
96. Keith Kearney	19 Chaseley Street Nudgee Beach QLD 4014
97. Aidan Dunne	19 Chaseley Street Nudgee Beach QLD 4014
98. T & R Ghanimeh	14 Chaseley Street Nudgee Beach QLD 4014
99. signature illegible 5	5 Chaseley Street Nudgee Beach QLD 4014
100. K Tran 5	54 Lima Street Nudgee Beach QLD 4014
101. P.T. Tran 5	54 Lima Street Nudgee Beach QLD 4014
102. Donna Needham	28 Lima Street Nudgee Beach QLD 4014
103. lan Kirton	18 Lima Street Nudgee Beach QLD 4014
104. Richard Thornton	14 Lima Street Nudgee Beach QLD 4014
105. Sarah Thornton	14 Lima Street Nudgee Beach QLD 4014
106. Dean Thornton	14 Lima Street Nudgee Beach QLD 4014
107. Claude Corrie	12 Lima Street Nudgee Beach QLD 4014
<u>-</u>	10 Lima Street Nudgee Beach QLD 4014
109. Burk 8	B Lima Street Nudgee Beach QLD 4014
110. Nola Sheppard 6	6 Lima Street Nudgee Beach QLD 4014



111.Bridgitte Sugden	4 Lima Street Nudgee Beach QLD 4014
112. Kim Flesser	15 Elkington Drive Nudgee QLD 4014
113. signature illegible	53 O'Quinn Street Nudgee Beach QLD 4016



## Mr Alan Dellit

#### Formal Submission #120

**Position** Community individual

Organisation n/a

#### Submission full text

I refer to the proposal to establish a parallel runway at Brisbane Airport.

Can I please be advised as to the following:

- 1. Is it a fact that the international standard for separation of parallel runways is 1,525 metres?
- 2. If so, why is it proposed that the runway be some 475 metres closer to our suburb than is necessary?
- 3. Would it not be beneficial to the fish/prawn breeding area around Jackson's Creek to have the proposed runway some 475 metres closer to the existing runway?

I look forward to your advice.

Alan Dellit



### Mr John Dobson

Formal Submission #143

Position Co Chair

**Organisation** Moreton Bay Environmental Alliance

#### Submission full text

MORETON BAY ENVIRONMENTAL ALLIANCE Caring and Protecting the Bay Environment

Dear Sir or Madam

The Moreton Bay Environmental Alliance is pleased to submit a report in response to the New Parallel Runway Project. Some issues of economic, social and environmental impacts are examined.

#### 1.0 General Comment.

The Alliance is concerned about the lack of consideration for the future of our society. With global warming, fuel costs and availability, fish stock depletion and a fragile present hold on what many call our "economic prosperity" more should have been done in the EIS to examine future scenarios in more detail. We are seeing in the document only a "more of the same' scenario with a lack of true value being given to our natural world and resources. As we have seen in the recent past there appears to be more emphasis on providing more land for the development of non aircraft related activities such as shopping centres. In this EIS we once again see the use of the term "insignificant" to describe the impacts of many of the proposed activities associated with the building of this second runway. We would have thought that by now it would have realised that the sum of all of our "insignificant" activities has resulted in a serious situation that will provide a lasting impost on generations to come.

#### 2.0 Coastal Wetlands

The Alliance is concerned about the impact on coastal wetlands including a further loss of mangroves by this development. The EIS has failed to identify the importance of this loss and that some of the wetlands found within the project area are listed of State Significance under the SEQ Regional Coastal Management Plan. Associated with this loss of wetlands is the impact on the fish stocks of Moreton Bay.

The Alliance recommends that any loss of coastal wetlands should be subject to an offset program with a financial contribution being made to specifically help improve the environmental values of



Moreton Bay. Also that affected fishers and the community be compensated at realistic values for the ongoing loss of natural resources and fish product.

#### 3.0 Dredging/mining of Sand Filling Material from Middle Banks in Moreton Bay

The Alliance believes that the EUS should examine the other more direct ways of mining the material from the Bay. The simplest method may be with the use of a cutter suction dredger with booster pumps to pump material directly to the airport site. With Middle banks not being, by present day dredging standards, a long way from the airport, the option to accept a possible cheaper tender for the dredging should not be ruled out. Use of this type of dredger gives better control on the position and depth of the sea bed excavation.

The Alliance does not believe that the importance of the extraction area to marine species and fisheries has been adequately addressed. There are a number of crab species of commercial interest caught in the extraction area and regardless of the sea grass meadow size and the apparent "insignificant" impact on the melofauna it is still habitat worthy of both note and strong protection.

#### 4.0 Fresh Water Use

The EIS states that large quantities of water will be required during the construction phase. The Alliance believes that the EIS should examine the option for the airport to supply its own needs using the extensive run-of from its present paving and building areas.

#### 5.0 Seawall Construction

The Alliance would like to see the impacts of the reconstructed sea wall on the Moreton Bay/Airport boundary addressed. The effects from erosion and scour due to wave action from a solid wall are well documented world wide.

#### 6.0 General Environmental Effects

The EIS again falls back on the accepted sole use of road transport for all construction materials especially the 600 000 cubic meters of pavement and structural material. The Alliance believes that the option of using the existing rail line should be examined given that the line will need to be extended or looped through the airport infrastructure in the future. The northern access road system should also be built before work commences on this project.

Yours Sincerely,

John Dobson Co Chair



## Mr & Mrs Joseph and Marie Dodd

Formal Submission #194

**Position** Community individual

Organisation n/a

#### Submission full text

I wish to make a submission regarding the Brisbane Airport Corporations draft EIS/MDP for new parallel runway project.

As a resident of Seven Hills I object to the North Parallel Runway and the Draft Environment Impact Statement. This does not allay my fears that the following impacts will be reduced or eliminated in any way.

#### 1. NOISE LEVELS

The EIS does not give any assurance that the noise levels will decrease from this date. I live approximately 13-14 k from the end of the current East/West Runway and the noise level at crucial times during most days is unbearable. Noise is not fairly shared at the moment so it is difficult for residents to believe that it will be shared in the future.

There is no guarantee that future aircraft will have less noise emission and the over flight noise generated chart (covering my area) appears to be completely incorrect based on my on-site experience.

#### 2. CRASH INCIDENTS

Risk of major crash incidents on residents. Although the EIS states this is as low as reasonable and anyhow the additional N.P.R. will spread the risk of crash incidents in any particular area. This is unacceptable, as a new North/South Runway would reduce this risk by arriving and departing aircraft approaching over the Bay.

#### 3. OFF SITE POLLUTANTS



The concentration of pollutants will be higher than existing and there is no guarantee that aircraft technology will improve emissions. This is unacceptable as the current pollutant levels are particularly high in our area.

#### 4. CURFEW

In relation to aircraft noise levels and the Draft Environment Impact Statement's lack of assurance that the construction of the N.P.R. will alleviate the impact, I call for a curfew as currently exists at Sydney, Coolangatta, Melbourne and Adelaide Airports between the times of 11.00 p.m. and 6.00a.m.

All the above problems could be overcome by alternative runway options with landings and take-offs over the Bay at all times. The EIS does not appear to take into consideration the <u>BRISBANE RESIDENTS LIFESTYLE</u> which includes outdoor living, open windows etc. and does not generally include closed indoor living with air-conditioning.

Joseph & Marie Dodd



## **Mr Patrick Doyle**

Formal Submission #121

**Position** Community individual

Organisation n/a

#### Submission full text

Thank you for this opportunity. I live in reasonable proximity of Brisbane Airport and agree largely with the multitude of objections to its use. I address my comment as a member of the public to those who see past the last line of a financial report or the result of an election and look to our welfare. We who live in Brisbane often have to live with decisions made by those who often don't live here. The injunction, 'If you don't like it go elsewhere' is of course fatuous nonsense. It requires the question "Why can't the runways do that?".

A fast transport system to an aircraft would replace a walk down the ramp. The other change would be the great benefit to the aircraft occupants and the Brisbane public in the operation of the aircraft. The dissension (continuing) over danger, noise, exhaust pollution, curfews etc would 'be at least diminished. Think of the value of the land that should be released within that distance of Brisbane CBD.

Sincerely,

Patrick Doyle



## Mr J. Dwyer

Formal Submission #122

**Position** Community individual

Organisation n/a

#### Submission full text

I now live under the flight path for the existing runway and have to experience irritable noise from approaching planes. A pattern seemed to develop (before the announcement of the 2nd runway) whereby planes would always use this approach over my house on a Sunday - at first I did not take much notice but then appeared to be too much of a coincidence. I don't think the wind direction had anything to do with why this approach path was always used on a Sunday. (I challenge you to provide we with approach paths on a Sunday over the last six years).

I also see where your company has not offered any type of noise reduction insulation in the homes that are going to experience considerably more noise. Why not?



## Mr Gavin Edgar

Formal Submission #19

**Position** Community individual

Organisation n/a

#### Submission full text

We are writing with concern over the proposed Major Development of the parallel runway for Brisbane Airport. We have reviewed the flight path maps and now seek the Brisbane Airport Corporation to undertake a noise management plan to determine how the impact of this increased noise is to be addressed. This noise plan should identify the predicted impacts to the community and provide action plans to address the noise created by increased aircraft movements.

Similar to Sydney Airport, it should review the need for curfews and noise sharing arrangements to ensure that the communities that reside under these flight paths are not unduly penalised. It may also extend to sound proofing schools, businesses and households that have the most dramatic impact.

The plan should also address the effects of Daylight savings and planned actions during that time. Queenslanders are required to fly out early to conduct business with other states. These departures and arrivals of aircraft are earlier than the acceptable Sydney Airport curfew of 6am. Similarly, it is predicted that international air traffic through Brisbane Airport will increase exponentially over the new few years and the times and routes for these flights should be considered.

We urge the BAC and Federal Government to listen to the community and respond to our needs and insist that this Noise Management Plan be undertaken and made public before final development approval is granted.

Yours sincerely,

Gavin and Katrina Edgar



# **Mr Kerry Elliott**

Formal Submission #216

**Position** Community individual

Organisation n/a

#### Submission full text

Thank you for the opportunity to make this submission regarding the proposed parallel runway at Brisbane Airport. The basis for my submission is the positioning of the 3600m NPR proposed as per option 3 in the summary of major findings 2006 booklet. I have read the booklet with interest. I have had a detailed telephone conversation with the chief project officer Paul Couglan.

My main submission point is that the NPR finishes 150 m from Moreton Bay- the Northern end. I believe from a safety issue it should be 500m from Moreton Bay.

In the future an Australian Government will declare an open skies policy for international airports. For instance Dubai has this policy and 125 airlines utillse the airport. Neither you or I can guarantee the quality of the training or the experience of the officers in command of any aircraft flying into Brisbane (or Dubai), now or in the future. However we have the opportunity to create the safest possible environment and that starts with the positioning of the NPR.

I refer you to the enclosed article in the courier mail 05/01/07. We cannot say it won't happen here. I refer you to the enclosed article from the flight safety digest Nov-Dec 05. Re: Air France A340 overrunning the runway at Toronto-Canada. We cannot say it won't happen here.

I have a good view of the storms that overrun the Brisbane Airport area from where I live. I have been in a aircraft crash as a result of wind shear and downdraft. The new runway will be in service for at least the rest of this century.

By moving the NPR south and taking your projection figures into account regarding the movements of most aircraft at night will be to and from Moreton Bay. Residents of Hendra and the apartments along the Hamilton reach will still rest peacefully.

On page 22 of the 06 summary booklet the southern approach lighting area of the NPR is short of the bio-diversity zone.



I don't believe that the environment will suffer permanently if the NPR is situated south of the proposed position. You have both authority and responsibility to make it happen. I can only draw your attention to the ramifications of your final decision.

Yours sincerely,

Mr Kerry Elliott



# **Mr Timothy Elmer**

Formal Submission #161

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir/Madam,

Please find herein brief comment on the Draft Environmental Impact Statement and Major Development Plan for a New Parallel Runway at Brisbane Airport.

- 1. The methodology used in the Statement, to determining that aircraft noise has no effect on residential real estate prices (A2-86), appears dangerously flawed. The methodology considered house price increases, between 1985 and 2005, within a 10km radius of the airport. The figures presented suggested that the average price of houses in suburbs with louder aircraft noise had increased at a rate 20% higher than the average rate of increase of all houses within that 10km radius. The Statement then interprets this higher rate of increase to imply that louder aircraft noise has had no effect on real estate prices. One could equally say that the figures suggest louder aircraft noise has actually improved real estate prices, a conclusion that even the Brisbane Airport Corporation would have to agree is patent nonsense. Clearly, the reason for the variation in prices is far more complex than considered and to use the figures in the way they have been used is not only disingenuous but calls into question the tenor of the document in general.
- 2. The document appears to attempt to deflect the likely noise impacts on inner southern residential areas, particularly the suburbs of Balmoral, Hawthorne, Bulimba and Morningside.

The study completely ignores the cumulative impact of twin, parallel, closely spaced, flight paths over south Brisbane, especially over Balmoral and Hawthorne where the N70 contours from the parallel flight paths start to merge. In peak periods, under operating Mode 2, up to 60 aeroplanes an hour (figure 2.5d) will potentially pass over the Hawthorne/Balmoral/Bulimba area; up to one a minute. All of these relatively low altitude flights will be visible and audible from most dwellings in these suburbs, as is currently the case with the progression of aircraft over Balmoral during peak periods. In this situation the use of N70 contours is highly misleading because the complete area will generally be blanketed with aircraft noise.

The document explains in some detail that runways do not operate at steady state over a 24 hour period but have peak periods, in this instant from 7.00am-10.00am and from 5.00pm to 8.00pm



with the peak hours being 8.00am and 6.00pm (Chapter A2). This issue is a core component of the justification for the timing of the new runway however these peak periods are ignored in noise evaluation discussions where average figures are emphasised. This is especially the case with the N70 contour maps where only total flights over substantial blocks of time (i.e. 6.00am to 6.00pm, 6.00pm to 10.00pm and 10.00pm to 6.00am) are considered. The format of the N70 contour maps tends to minimise the periodic impact of peak periods, periods that correspond with the time of day when residents are starting the day/preparing for school or trying to relax/prepare dinner after the working day.

The inclusion of respite figures in noise charts (page 131, Summary Document) may well be useful for areas crossed by only one flight path but they are highly misleading for areas subjected to more than one flight path such as Hawthorne which is traversed by 3 flight paths, two arrival and one departure and effected by two additional flight paths to the east that traverse Balmoral. A more honest presentation would have include composite respite figures for areas traversed by multiple flight paths so that residents might better understand the full implications of their situation. On the information available, it is impossible to estimate respite days for the Hawthorne/Balmoral/Bulimba area but, based on projected levels of activity, one can only assume that by 2035 there will be minimal plane free days.

The document notes (D4-59) that the INM model does not allow for calculation of the effect of atmospheric conditions such as wind and temperature inversions on sound propagation?. It is assumed from this that the model also makes no provision for the effect of cloud cover on sound propagation. Subjective observations indicate that current aircraft noise levels over the Hawthorne/Balmoral area are significantly amplified on windy, overcast days. As importantly, there appears to be a bias towards aircraft departing over the southern suburbs on wet, overcast days, further amplifying noise levels. It is therefore suggested that not only have noise levels, over the inner southern suburbs, been generally underestimated for these weather conditions but that the cumulative noise effect of twin flight paths on wet, windy overcast, days will be substantially higher than indicated by the published N70 contours.

3. One of the stated flight path development parameters notes that no suburb, group or individual can demand or expect to be exempt from aircraft noise? (p117, Summary Document). This point is accepted as realistic for inner city based airports however the development parameters also state that noise should be fairly shared whenever possible? The inner southern suburbs of Brisbane appear already to be the recipient of more that their fair share of aircraft noise and this situation will only be exacerbated with the commissioning of the Parallel Runway. The inner southern suburbs appear to bare the brunt of increased noise levels from development of the Parallel Runway (table 5.4) however commentary on this fact is almost non existent.

Hawthorne/Bulimba is traversed by three flight paths, two arrival (G and J) and one departure (the combined H and I). In all cases except with the flight paths over Hawthorne/Bulimba the departure flight paths deviate away from arrival flight paths virtually as soon as the aircraft is airborne. This is not the case with the flight paths over Hawthorne/Bulimba where the departure and arrival paths



are stacked on top of each other. Not only is the Hawthorne/Bulimba area subjected to the noise from the confluence of every aircraft landing from the south, but is also directly subjected to noise from at least half the aircraft departing to the south. This is in direct conflict with the stated flight path development parameter (Summary-p118) Residential areas overflown by departing aircraft should not to the extent practical also be overflown by arriving aircraft? One needs to ask, why does the combined flight path (H and I) not deviate to the west after departure?

It is appreciated that current operating procedures include a number of noise mitigating parameters with the primary parameter being that aircraft depart and land (Reciprocal Mode) over Morton Bay when possible. It is also understood that this procedure will be continued with the new runway via the development of the SODPROPS and DODPROPS modes and much discussion is focused on these operating modes as demonstrating a commitment to noise mitigation over the southern suburbs. Unfortunately, it would appear that weather conditions and other operating constraints limit the functionality of these modes, particularly during daylight and evening hours, to the extent that by 2035 the SODPROPS and DODPROPS modes will only be used for night traffic (table 5.2k). Even in 2015, the commissioning date for the new runway, SODPROPS only accounts for around 10% of day and evening traffic (table 5.2j) and DODPROPS, again, is only used at night. It is disappointing to observe therefore that these operating modes apparently remain the primary, noise mitigating parameter and that there is little in the way of additional noise mitigating innovations for the expanded airport plan.

The document notes that Brisbane has the largest buffer zone of any major capital city in Australia (Summary-p114) insinuating that Brisbane residents, especially southern residents, should be grateful that things are not a lot worse. There is no doubt that the buffer to the south limits, to some extent, the coverage of N70 contours but the comments ignore not only the open lifestyle embraced by Queenslanders but also the open, wooden construction of the typical Brisbane house, a construction technique that is not designed to be sealed up and artificially ventilated by air conditioning. As importantly, it is this style of house that gives Brisbane it's distinctive character and the type of house that characterises the inner southern suburbs. Simply, the options available in other areas to mitigate noise such as double-glazing and air conditioning are not appropriate to the classical Queensland house or climate. Additionally, the enormous issue of global warming and the need to reduce the requirement for power intensive air conditioning systems is becoming an increasing important consideration in house design. Rather than highlighting the issue of the fortuitous buffer zone around the airport the Corporation perhaps could have given some consideration to the appropriateness of the N70 contour as the benchmark noise parameter in a city where the majority of houses are difficult to soundproof and the lifestyle is centred around outdoor living.

Some discussion on future technological improvements is noted in the document (section 5.10.1.1) including the concept of Continuous Descent Approach. Whilst this concept is lauded, in the document, as both an important potential noise reducing and fuel saving innovation, no comment is made as to why it is not being introduced or any indication provided of a potential timetable for it's evaluation or introduction. Unless there is some major disadvantage with this concept, and no



disadvantages are discussed, one would have imagined that some definitive information on its inclusion in the new operating parameters, if not before hand, would have been appropriate.

As a concluding comment, large buffer zone or not, aircraft noise is already disruptive and socially damaging to one of the more pleasant and attractive residential areas of Brisbane; the inner southern suburbs. Construction of the Parallel Runway, by doubling aircraft movements, will exacerbate this damage, probably to the extent that living conditions will become, if not extremely unpleasant, at least severely compromised with respect to the typical, Brisbane lifestyle. This is particularly the case in the Hawthorne/Bulimba/Balmoral/Morningside area because this area will be subjected to the combined noise pollution from all aircraft activity approaching or leaving the southern ends of the runways.



## **Mr Peter Eltherington**

Formal Submission #130

**Position** Community individual

Organisation n/a

#### Submission full text

I wish to lodge my concerns over the proposed second runway development. These are basically:

- 1) Your runway will introduce air traffic to currently quiet suburbs and you cannot guarantee there will be no flights over houses and schools.
- 2) There is currently no curfew in operation at the airport and I am sick of being woken by transport aircraft making an approach over my house using the ILS at 2:30am. It is not good enough and I have given up lodging complaints because it is ineffective. There MUST be a curfew to cover both the existing runway and the second runway operating the same time schedules as Sydney and yes I know it may reduce your profits but I do not care as you do not care about my broken sleep.
- 3) The sand dredging from Moreton Bay to supply 15M cubic metres of landfill is appalling. If sand must be taken it should not be from either sensitive areas of the bay near Tangalooma on Moreton Island or where animal species will be impacted. The dredging should take place on the edges of shipping channels, which are being closed in by sand drift from the Tweed River operation.
- 4) The money proposed for the parallel runway should be invested in the cross runway to increase it capability to take larger aircraft and stop flying over people's homes.
- 5) The pollution from the planes fallout as they fly over homes has not been adequately addressed. Volume D p139 is grossly understating the current and future fallout of fuel from aircraft. My house, roof and decks get covered with the greasy black residue of aircraft emissions, which prohibit me from drinking rainwater tank collections without the expensive use of reverse osmosis filtering and water diversion systems. Is the BAC going to fund these initiatives for all the residents no, I didn't think so.

I have concerns over the literature produced for this project. Appendix D p139 implies future technologies "there is likely to be improvements to aircraft technology and emissions that MAY offset any increased impacts". What sort of scientific appraisal is there, basing solutions to real problems on possible future technologies - this should not have been included.



We have been severely affected by the existing runway compared to what it was like before the existing runway was built. We as a community, were lied to by authorities as we were told there would be no impact. A lot of long-term residents left the area because it was driving them insane and they were getting nowhere fighting the authorities including Air Services Australia. Your figures on expected health consequences and social impacts are based on the existing poor situation and not on what it was like before and any increases are significant even though your literature states minor (p141). Where is the offer to clean the black greasy pollution off resident's buildings, roofs and furniture and what would be the long-term maintenance costs on your budget.

Your approach has not respected the residents of the areas you impact upon and it appears that a political solution may be the only option available to us as a community. I am sure the decision to personally have costs awarded against Kevin Rudd, who was fighting this fight on behalf of all disaffected residents, has made the BAC look like a very poor greedy corporate citizen and in hindsight was a foolish decision.

I do not support the new parallel runway or the EIS to support your case.

A curfew must be imposed on you to restrict the impact on quality of life.



### **Ms Maree Evans**

Formal Submission #28

**Position** Community individual

Organisation n/a

#### Submission full text

I am against the proposed plan for the new parallel runway. The existing noise at the moment is almost non-stop. I do not think the community has any say in the matter. I suppose the complaint will be thrown away without little thought. Government should be answering to the public. I don't know why we pay taxes!

Yours sincerely,

Maree Evans



### Mr & Mrs BA and DA Fahey

Formal Submission #13

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir/Madam

RE: Proposed Parallel Runway- Brisbane Airport

We wish to voice our concerns with regard to the proposed parallel runway, and in particular the impact this runway will have on our lives. We live in Balmoral and our two children attend Bulimba State School (right on top of Balmoral Hill), and we enjoy a great lifestyle, spending a lot of our time outdoors with our children and entertaining friends on weekends.

We currently have our share of aircraft coming over the top of our house on their landing approach, which we have become used to, but with the proposed new runway, and the massive increase in air traffic, we fear that our lifestyle will be lost to the noise of aircraft.

We also have major concern about the noise levels over Bulimba State School, and the impact this will have on our children's learning, constantly being interrupted every time aircraft goes over.

Not only will we suffer from aircraft noise, what will this proposed new runway do to the value of our property?

What is the government proposing to do for residents whose quality of life and property values will be greatly affected by the proposed new runway?

Yours sincerely

BA & DA Fahey



### **Mr Grant Fenn**

Formal Submission #206

**Position** Executive General Manager

**Organisation** Qantas

#### Submission full text

Qantas, in principle, supports the requirement for a New Parallel Runway at Brisbane Airport in the future. A second runway, parallel to the existing main runway, will allow Qantas and other users of Brisbane Airport to expand capacity, increasing services into and out of Brisbane.

Qantas supports construction of the proposed runway when the new runway is critical to meet capacity requirements at Brisbane. Qantas is working with Brisbane Airport Corporation to determine the most appropriate time for construction of the proposed parallel runway.

Yours sincerely,

Grant Fenn
Executive General Manager



### Mr John Ferguson

Formal Submission #29

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir/Madam

Re: Constructive Suggestions On New Runway Brisbane and Traffic Noise

As a resident of the above address for the past 18 months or so we feel that we can add to suggestions. We raise these points for all homes affected around Brisbane rather than just looking after our interests.

Firstly we are situated under one of the main approaches especially when a northerly breeze is blowing but also when there is little or no breeze as well. When craft are not coming in we also have a good share of craft departing overhead.

#### Imagine a loud noise shattering the silence every 3 minutes. That is what is happening.

Your BAC spokesperson claims in the paper that the flight paths has been gauged at 70 decibels ("<u>about the noise of a vacuum cleaner</u>"). If this is the case then why are planes louder than this allowed over homes, as many are louder than this. Either your spokesperson is incorrect or the planes coming overhead are exceeding the permitted noise levels. We would ask you to place a monitor here to check this statement.

If we take yesterday and last night for example Wednesday 22/11/06 we had many aircraft over our home and well into the night after 9pm. In this regard we note the comment from one of your people that over 90% of air traffic will come in over the bay. Why does this not happen now. This would at least give some relief during the night?

In talking with people around this area who are both elderly and their families, they also have noticed the ever increasing traffic and the new runway should assist with some reduction however that is a fair way off.

As most of the Australian public want to travel by air, it should be something that should be shared by a greater group rather than the existing numbers suffering more and more traffic.



We note from the new plan that there is a wide area shown as the approach path. It would be good if existing sufferers of the noise can have reprieve by spreading the approach over a wider area. We notice that even when they are a suburban block away the noise is greatly reduced. This would then provide a greater share of the noise rather than the existing homes on both sides of Brisbane receiving more and more aircraft noise.

We have also noted that some aircraft are much noisier than others and those types should be made to come from the bay side at all times. After all Wellington has only one approach and that must be safe otherwise it would not be permitted. The same applied with Hong Kong some years ago.

From earlier discussions with Airservices Australia we have suggested that all craft come in over the bay as this would greatly assist many people around Brisbane.

In summary we would see the following suggestions as worthy of review for all homes around Brisbane that are currently affected.

- As most persons use aircraft travel it should be a shared arrangement for aircraft noise rather than only small tracks taking the full noise burden. This burden is only going to increase with time.
- More incoming path rather than just one or two main paths to spread the noise problem. That is for northerly breezes as an example there could be three paths used at different times during the month to share the load and impact on existing homes. With changes to apply from, the start of the new runway this is the times to bring in much needed change.
- Over 90% of aircraft should be coming over the bay now rather than when the new runway is built to at least give some relief to homes during the night. This is not currently happening judging by aircraft activity noticed over the past few weeks at least.
- If a large number of aircraft can come in over the bay of a night then why can't this also apply during the day as with Wellington NZ for example as noted above.
- If aircraft are noisier than a 'vacuum cleaner' as quoted by your BAC spokesperson then they should all be redirected to come in over the bay.

We hope that some consideration can be give to the above suggestions as it is becoming more and more of a burden on those homes that have put up with noise from ever increasing traffic with more to come over the future.

Yours faithfully, John Ferguson



### Ms Julie Fitzgerald

Formal Submission #23

**Position** Community individual

Organisation n/a

#### Submission full text

I wish to lodge a formal complaint regarding the New Parallel Runway Project. I understand it is in the testing stages for which I am grateful. The noise I am experiencing over my house at the moment is not tolerable and it appears to me these aircraft have intentionally been constructed to extrude a noise that is not compatible to human hearing. Having lived in Balmoral Heights in Brisbane as a child and brought up there until I was 20 years of age, I am more than familiar with aircraft noise. We would have several planes passing across the roof of our home, this is going back 30 years ago, and there is no way the volume of noise was anywhere near the extent I am experiencing at the moment. The planes in those days were extremely large and heavy and one wonders with modern technology how on earth there has been no advancement in modifying aircraft noise in this time.

Another factor for which I can see no reason is, if this is proposed to be a parallel runway to the existing runway why can't you set up flight paths that run parallel to the existing flight paths where the planes progress over sea area and non-habitable land areas.

To choose a suburb like Coorparoo, with its adjacent business area, stately homes, peaceful shady streets to suddenly introduce a bombardment of planes and resulting noise irritation to its residents is not conforming to social justice and I am certain would be in breach of an Act somewhere along the line. The flight path corridor directly targets the street in which I live and should by some mercenary act this project proceed I for one will almost certainly be seeking legal advice for compensation. I only purchased the home two months ago and the major factor in determining the purchase was the fact the street was quiet and there appeared to be minimal distribution within the street. I most certainly will be seeking legal advice during the review period.

Just to give you a detailed account of what I am experiencing, the planes seem to follow the same flight path each time, this occurs during set periods throughout the day. For instance the planes might start up at 6.00pm and continue through til 9.00pm. The numbers vary but usually there are 8 or 9 planes within two hours. My bedroom is at the front of the house and as the plane's path is diagonally across the house it means this area is targeted. Therefore I can't consider retiring for the night until at least 9pm. Once asleep I have occasional recollections of stirring around about 11.30pm when a plane is progressing through the flight path and then perhaps again at 3.30pm.



This sort of disruption to your sleep reflects on a persons abilities the next day and as I work full time it is important that I feel well rested to perform at work. To give you a description of the actual noise when the plane is going over, it starts out like a rumbling noise off in the distance and then progresses into almost a grinding noise which is highly irritating to the ears as it progresses over the house. As a matter of fact when the planes first started up and numerous planes were flying over my hearing became quite irritated and sensitive.

My final comment is - You have got to be joking!

I can take comfort in the fact there is an impact assessment in progress and feel confident there will be an uprising of the Brisbane public which will prevent this project from eventuating and disrupting the lives of many people.

The only benefit from all this will be a multitude of university graduates will have been given a chance to display their academic abilities in the form of a booklet for public distribution.

Yours faithfully

Julie Fitzgerald



### Cr Kim Flesser

#### Formal Submission #114

**Position** Councillor for Northgate

**Organisation** Brisbane City Council

#### Submission full text

Att: Cam Spencer- Manager NPR Project

Dear Cam,

Re: Submission to EIS/MDP for the New Parallel Runway at Brisbane Airport

I recognise it's important for the Brisbane Airport to continue to grow to assist the economic development of Brisbane and Queensland.

However, I have a strong view that the Brisbane Airport Corporation (BAC) should build the proposed new parallel runway (NPR) as far away from residential homes as possible. The proposed location will see the NPR constructed just 1500 metres away from my constituents' homes in Banyo. Noise from aircraft arrivals and take-offs will also affect residents in Nudgee Beach, Nudgee and Northgate.

Noise associated with flight paths for aircraft using the NPR will have a detrimental effect on residents, businesses and schools in Nundah, Hendra, Hamilton, Doomben and Ascot.

Modern passenger jets are extremely safe and are progressively becoming quieter. But never-theless, with the expected massive increase in flights into and from Brisbane, if the airport can be designed to reduce the proximity of aircraft to residential homes, surely it's prudent to do so.

Accordingly, I am calling on the BAC to construct the NPR as far away from residential areas as is possible, by moving the proposed location further to the east. The separation distance from the existing north-south runway should be reduced from the 2000m proposed, to as close to 1525m as possible.

Sydney's international airport has no problems operating its main parallel runways with a separation distance of 1,076m. The International Civil Aviation Organisation (ICAO) recommended standard for safe separation of runways with maximum flexibility for simultaneous arrivals and departures is 1525m(1).



I've prepared an alternate parallel runway map that shows the NPR can be moved further to the east (2).

In addition to having a strong view the NPR should be located further away from residential homes, I wish to also raise the following points;

- 1. BAC should be mitigating the loss of vital mangrove and wetlands environment through a package that includes acquisition and/or restoration of similar habitat. A principle of 'no net loss of mangroves' in the Moreton Bay region should be applied to the NPR project.
- 2. The stormwater management for the NPR should be focussing on recycling. Drainage retention basins or tanks should be constructed to harvest collected rainwater for use on the BAC site.
- 3. Stormwater should not be channelled directly into Kedron Brook. I am concerned that a heavy downpour, combined with storm surge, increasing sea levels from global warming and/or high tide will exacerbate upstream residential flooding in Cannery Creek and Pound Drain.
- 4. There is a growing community concern regarding the need for a reasonable night-time curfew for the airport, as flights become more frequent over residential areas. The issue of night-time curfews should continually be assessed for Brisbane Airport. If the NPR proves to cause unacceptable noise problems for residents, a curfew system should be introduced either by agreement or through Federal Government regulation.
- 5. BAC should be providing greater transparency regarding noise evaluation of the effects of NPR. The EIS/MDP focuses on N70 noise contours. N70 identifies the number of noise events above 70dBA, but it doesn't communicate how high those events might be.

It's my understanding that another problem with using N70 as the noise measuring tool, it that it assumes there is a 10dBA noise reduction inside residential homes. While this degree of reduction of noise might be relevant in colder climates where homes are insulated, that is not generally the case in Brisbane. The maps produced by BAC showing noise contours, give the impression that the N70 line indicates the limit of expected intrusive noise.

The use of the N70 as a standard measurement of a 'noise limit line' was superseded in 1994 in the Australian Standard 2021: Acoustics-Aircraft Noise, Building Siting and Construction, which recommended a living room criteria of 60dBa. The latest Australian Standard, AS 2012-2000, recommends an acceptable noise level limit of only 55dBA for living spaces.

AS 2012-2000 recommends a limit of 50dBA for bedrooms that might be exposed to aircraft noise. If the average noise attenuation of Brisbane's homes is 5dBA (not 10dBA as it might be in colder climates), maps with N55 noise contours would give a more appropriate indication as to noise effects on residents.



Given the above information, BAC should produce maps that show N55 and N60 noise contour lines, so that the community can properly assess the noise impacts of the NPR. Those maps should be distributed to all residents and businesses within the N55 contour and no decision on the approval of the EIS/MDP should be made without a further community consultation period.

There should be full transparency regarding noise predictions from the NPR. Maps showing N55 and N60 noise contours are an essential part of that process.

I look forward to working with the BAC in addressing the issues I've raised in this submission.

The new parallel runway will clearly add to the economic development of the region. But we need to ensure this economic benefit is not 'traded off' through a lessening of our urban amenity and natural environment.

Kind regards

Kim Flesser

- 1. ICAO Manual on Simultaneous operations on Parallel or Near parallel Instrument Runways s2.2.1.1.
- 2. alternate Parallel Runway Map



# Mr & Mrs Thomas and Frances Foley

Formal Submission #215

**Position** Community individual

Organisation n/a

#### Submission full text

As residents and present owners of the home at the above address & having had connection with this area for many decades, we are concerned about aircraft noise and consider a curfew should be imposed on all night-time flights even before and especially after the parallel runway is implemented.

We are led to believe that this area of Balmoral will be in a direct line from the new parallel runway.

We would appreciate consideration being given to this matter.



# **Mr Syd Forster**

Formal Submission #65

**Position** Community individual

Organisation n/a

#### Submission full text

I feel this is real progress. After talking with your people at Pacific Golf Club I cannot see how it will have an adverse effect on our suburb.



### **Mr William Fox**

Formal Submission #117

**Position** Community individual

Organisation n/a

#### Submission full text

Submission Regarding the Brisbane Airport Corporation's Environmental Impact Statement and Major Development Plan

Subtitle: The urgent need to halt expansion of the present Brisbane Airport and to commence planning of the development of a second major international airport to serve South East Queensland.

#### Introduction

The Environmental Impact Statement and Major Development Plan (EIS/MDP) of the Brisbane Airport Corporation (BAC) is an inadequate document. Nevertheless, it provides sufficient information to demonstrate that the approval of the construction of the second runway at the present Brisbane Airport would be a catastrophe for the residents of inner Brisbane. It illustrates that the BAC has little if any concern for those residents. No doubt the BAC and the Federal Government believe the approval process to expand the airport has been completed and the only issues left to be settled, are how this expansion should take place. However, the flight path data and the forecasts of aircraft traffic movements along these paths, made available for the first time in the EIS/MDP, create such a nightmarish noise scenario that it is incumbent on the Federal Government to reject the BAC's plans to construct a second runway and to commence urgently the planning process to construct a second major international airport to serve South East Queensland.

After arguing that the present airport should not be expanded, this submission then turns to the BAC's case for expansion. It will be argued that the flight path and noise information in the EIS/MDP is a mixture of inadequate and irrelevant information. Examples of the BAC's disingenuity are then provided to show that the stated intentions and assurances of the BAC should be treated with the utmost scepticism. Some environment issues are then addressed, and finally it is argued that as the BAC has focused on what for it is the most profitable option. If a second runway is to be built, governments should intervene and subsidise an option, which is less profitable for the BAC but which is more satisfactory for society as a whole.



That the EIS/MDP should be released just weeks before Christmas with submissions due early in February is just another example of the BAC's complete disregard for the people who will be most adversely affected if the expansion of the airport proceeds. The time period the BAC has set for the preparation of submissions is the period when most of the population of Brisbane would be anticipating holidays or at the very least contemplating spending some quality time with their families during the festive season. The EIS/MDP is a substantial four volume document full of what for many people would be arcane concepts. A significant amount of this information fails to tell people what they really need to know. Nevertheless, they must at least make some attempt to wade through it in case, buried within the irrelevant, is something that is helpful. The BAC should be forced to extend the time for public comment by at least two months.

# Urgent need to halt expansion of the present Brisbane Airport and to commence planning of a second major international airport to serve South East Queensland.

If, as the BAC claims, Brisbane is Australia's fastest growing city and Brisbane Airport is Australia's fastest growing airport, then these facts alone should be sufficient evidence to cause the Federal Government to utilise its powers and block any further expansion of the Brisbane Airport. The location of the Brisbane Airport is absurd. Effectively, it is at the centre of a semi-circle with the most densely populated suburbs of Brisbane filling the semi-circle to the north, west and south. During those periods when aircraft traffic is at its busiest, half this traffic will be arriving or departing over the semi-circle. If the BAC forecasts are correct (see discussion below on Flight paths and noise information) by 2035 on some summer weekdays some suburbs will experience aircraft passing overhead on average every three minutes. Many of these aircraft may not be emitting 70 decibels of sound, the noise generated by a vacuum cleaner three metres away and the noise standard adopted by the BAC, but, as argued below, they will be emitting noise not far below this level. As a consequence life in these suburbs on these days will become unbearable.

It was absurd to redevelop the Brisbane Airport in its current location. The opportunity should have been taken when redevelopment was necessary to relocate the airport further away from residential areas. Melbourne made such a move when Tullamarine Airport was developed. Melbourne survived. Notwithstanding approvals already granted by the Federal Government for a second runway at Brisbane Airport, the time has come for the Government to recognise the aircraft noise nightmare, which is developing at the present airport. Building the second runway as far out into Moreton Bay as possible will reduce the noise problem to some extent. However, it is a very costly solution and has environmental and shipping lane implications. The only real alternative is to develop a second international airport amongst the pine plantations on the Sunshine Coast. The area is already connected to Brisbane by divided highway and electric train. The extent of the pine plantations is such that arriving and departing aircraft would be at an altitude that would ensure little noise at ground level if their flight paths took them over residential areas. The Federal Government would have to act quickly, though. Current development on the Sunshine Coast is being undertaken without a substantial international airport in mind. If the decision to act is delayed, residential development may make an airport on the Sunshine Coast as inappropriate as is expansion of the present Brisbane Airport.



In view of the approval for a second runway that has already been given to the BAC, that organisation may believe that a refusal to grant approval to proceed at this stage was a breach of faith. However, the BAC would not have commenced the approval process for a second runway in the 1990s if it didn't at that time have a reasonable idea of future aircraft traffic movements. That reasonable idea of aircraft traffic movements would also have given it some idea of the aircraft noise that would be generated over Brisbane. It held back on the "detailed" Flight Path and Noise Contour information hoping that the approval process would have gone too far to be stopped when the enormity of the problem became evident. Under these circumstances the BAC is not entitled to cry foul now. It has misled, or at least ill-informed, the Federal Government and the people of Brisbane and therefore deserves no sympathy.

#### Flight path and noise information

If a second runway is built at the present Brisbane Airport, the most important information for the vast majority of people who will be affected by the airport's expansion is what impact will this expansion have on aircraft noise over the area where these people live. On this issue alone the BAC's draft EIS/MDP is so inadequate the draft should be rejected out of hand by the Federal Government, and the BAC instructed to present a new draft with more adequate information.

The BAC bases its aircraft noise information on Flight Path and Noise Charts which incorporate N70 Noise Contours in the Flight Path and Noise Information Booklet. These charts fail to provide all the information users need for a number of reasons. Firstly, The charts provide information only for the years 2005, 2015 (without the BAC's preferred new runway), 2015 (with the BAC's preferred new runway), and 2035 (with the BAC's preferred new runway). There are additional Flight Path and Noise Charts amongst the appendices to Volume D of the EISMDP but these appear to be little more than variations on the charts listed above.

The BAC was required to provide in the EIS flight path information for its preferred runway option. However, failure to provide flight path and aircraft noise information for other runway locations makes it impossible to assess relative impacts of various runway locations on residential areas of Brisbane. The much vaunted Transparent Noise Information Package software which allegedly was provided to help answer questions not covered directly by the EIS/MDP is totally useless in this regard. The software is based on the BAC's preferred runway location and there is no facility within the software to relocate a runway and assess the impact of the change. There is no doubt that building a new runway out into Moreton Bay would be a more expensive option than that preferred by the BAC. Nevertheless, a runway in Moreton Bay would also be likely to generate less aircraft noise over residential areas. Only by knowing how much the aircraft noise would be reduced is it possible to assess whether the increase in construction costs would be worthwhile.

Secondly, a feature of the Flight Path and Noise Charts is the N70 Noise Contours. These give an indication of the number of planes that pass overhead emitting 70 decibels or more of sound.



#### The BAC admits:

An aircraft noise event of 70 decibels is one that may disturb conversation, television viewing or using the telephone inside a house with open windows. (Flight Path and Noise Information Booklet, p 5.)

As the BAC's display at Brisbane Airport equates 70 decibels of sound with the noise emitted by a vacuum cleaner three metres away, "may disturb" in the above quotation could be seen as an understatement. The Flight Path and Noise Information Booklet shows that, in 2015 on summer weekdays when all windows will be open to catch any breeze, the residents of Balmoral (our suburb) will experience an aircraft passing over head emitting 70 decibels or more at least two to four times an hour. Anyone who thinks that it is possible to work or relax while a vacuum cleaner is coming through your room two to four times an hour hasn't had much experience with housework. Setting 70 decibels as some kind of acceptable standard is totally unacceptable. It is placing the interest of the BAC and the airline operators well ahead of the people living beneath the flight paths. A far more acceptable noise level standard, in the sense that it would not create an undue disturbance, is of the order of 35 decibels. Noise contours based on aircraft emitting 40 or at most 45 decibels should then have been developed so that it would be apparent just how much of Brisbane is being disturbed now and will be disturbed in the future by the absolutely absurd decision to redevelop the Brisbane Airport virtually in the middle of the city's residential area.

The third failure of the Flight Path and Noise Charts flows directly from the second. Aircraft do not just fall out of the sky and start emitting 70 decibels of sound. An aircraft approaches the airport emitting an increasing level of sound as its altitude declines or leaves the airport emitting a gradually decreasing level of sound as its altitude increases. Using N70 Noise Contours, aircraft, which are only emitting 65 decibels do not feature in the contour. However, the disturbance they would be causing on the ground would be only marginally less than the aircraft included in the contours. Once again the software provided by the BAC to assist people making submissions is totally useless. 70 decibels is the standard in the software and there is no way of changing it.

Thus we have been told who will experience 70 decibels but have no way of establishing who will be experiencing noise levels which are less than 70 decibels but which are still unacceptable. My wife and I live very close to the red line noise contour for a summer day in 2015. That is, we and the thousands of people who live in our suburb and those adjacent to us can expect to be disturbed on a summer day by many more aircraft per hour emitting noise levels presumably in the 60 to 69 decibel range than just the two to four aircraft an hour emitting 70 decibels of noise which the BAC predicts.

Just how many more is unclear and leads to the fourth failure of the Flight Path and Noise Charts. Each of these charts contains a table, which provides various types of data for each flight path. Two key columns of data are the "Average number of flights on flight path" and the "Expected minimum and maximum numbers of jet flights on path". There are two arrival flight paths and two departure flight paths, which will affect our suburb if the BAC's preferred runway option is



implemented. Clearly, wind direction will determine whether the arrival or the departure paths are being used on a particular day when aircraft pass overhead. By the time these flight paths reach our part of Brisbane they have come together to be effectively one arrival flight path and one departure flight path. So what do we do with the two arrival averages, minimums and maximums and the two departure averages, minimums and maximums? Do we just add them together? If so, on some summer days in 2015 we will have an aircraft passing overhead on average every six minutes! This figure will increase to one on average every three minutes on some summer days in 2035! Further, as argued above, because of our proximity to the 70 decibel noise contour line, these aircraft will be emitting noise levels very close to seventy decibels. Is it reasonable to allow a situation to develop in which thousands of residents will experience the noise equivalent of only slightly less than a vacuum cleaner passing through their home every three minutes on average for twelve hours of a day?

Adding these data together may not be correct. However, the information supplied by the BAC does not explain how the data should be used. Once again the software also fails to assist. The software shows flight tracks not flight paths. Apparently, adding a number of flight tracks together produces a flight path. However, we can find no information that tells us which tracks make up Flight Paths G, H, I and J, the four which will affect our area. Even if this information is available it is of no use. The Noise Charts generated by the software do not appear to provide the accompanying table of average, maximum and minimum jet flights. This is the data that is crucial. Data tables for arrival Flight Paths G and J combined and departure Flight Paths H and I combined must be provided for those suburbs where G and J are effectively one arrival flight path and H and I are effectively one departure flight path.

Before addressing other matters some final comments about the Transparent Noise Information Package software are warranted. It is stated on the DVD presentation distributed by the BAC that the software is easy to use and in any case there is an on-screen tutorial to assist users having difficulties. In response to this statement: firstly, and as argued above, we don't believe the software is very useful but helps create the erroneous appearance that the BAC has gone out of its way to provide every conceivable aid to those who wish to make a submission. Secondly, using sophisticated computer software is an integral part of my daily work. Therefore, I am computer literate. Nevertheless, just what the software is capable of doing that is genuinely useful remains a mystery to me. Thirdly, the on-screen tutorial is only available if your computer is connected to the internet and only runs properly if you have a rapid data transfer internet connection. As we have a cable internet service the tutorial ran on our computer quite satisfactorily. However, the internet connection speeds most people have in Australia would mean the tutorial would not have run satisfactorily on most home computers. Not that that would have mattered. I found the tutorial to be virtually useless. The alternative was to download a manual. My experience with computer manuals is they are also virtually useless.

#### The BAC's Disingenuity



In 1999 I wrote a submission to the then federal Minister for Transport and Regional Development urging him to reject the BAC's application to build a second runway at Brisbane Airport. Included in my arguments was the point that a second airport of international standard built outside the main residential areas of Brisbane would not only reduce aircraft noise over Brisbane but also would mean there would be direct competition between the Brisbane Airport and the new airport thus ensuring charges imposed by airports would be kept low. My submission to the Minister was ignored. However, more importantly, the BAC, in putting its case for a second runway, at no time suggested to the Federal Government that a second major airport in the region was a viable alternative. It is, therefore, disingenuous to say the least that the BAC now argues:

Other South-East Queensland airports will be complementary to Brisbane Airport rather than providing realistic alternatives if a new runway is not provided. (A3-99)

There would have been a realistic alternative if my proposal for a second airport had been adopted in 1999.

The BAC's preferred new runway location is Option 3. According to Table 3.3, Volume A this option involves constructing a 3,600 metre runway in a staggered parallel configuration with the present main runway and a downgrading of the existing cross-runway. The two parallel runways would presumably meet the demand for aircraft movements forecast by the BAC. Why then were Options 1, 2 and 6 still in the Master Plan as recently as 2003 but dismissed in the EIS/MDP as totally unacceptable for reasons the BAC should have been aware of in 2003? Each of these options have three runways. So they are not directly comparable with Options 3, 4 and 5, which happen to be the options the BAC focuses on in the EIS/MDP. Options 1, 2 and 6 would have involved excess capacity based on the BAC's forecasts. Also, they would have involved greater construction cost, even ignoring the fact that under Option 6 one of the runways would have been located entirely in Moreton Bay.

Was the BAC trying to confuse the public by overwhelming it with options or was it merely a public relations exercise in which the BAC appeared to be still considering all ramifications? That the latter may be the case is demonstrated in the BAC's explanation for moving the proposed Option 3 runway closer to Moreton Bay. The BAC has stated (in the DVD presentation) this was done to reduce the impact of aircraft noise over residential areas. However, the BAC's reasons for dropping Options I and 2 show how disingenuous this explanation is. If the BAC hadn't moved the proposed runway under Option 3 closer to Moreton Bay, that option would not have been viable for the same reasons Options I and 2 weren't. The runway would have been incompatible with the Airtrain and the Northern Access Road.

It should also be noted that Figure 3.3a, Volume A shows the present length of the main runway as 4,100 metres; whereas, as noted above, Table 3.3, Volume A refers to the present main runway's length as 3,600 metres. It would appear from Figure 3.3a that the BAC intends extending both the present runway and the new parallel runway by 500 metres at some stage in the future. This will



bring both runways 500 metres closer to residential areas and will shift the noise level contour lines out over more residences particularly in Brisbane's southern suburbs.

The BAC's maintenance of strawmen (Options 1, 2, 6), its disingenuity regarding the movement of the runway under Option 3, and, as far as I can see, its failure to fully detail future intentions regarding lengthening of the runways suggest all its stated intentions and assurances should be treated with the utmost scepticism.

#### **Environmental Issues**

The only difference between Options 5 and 6 would appear to be that under Option 6 there is an extra runway out in Moreton Bay. Both options include an extension into Moreton Bay of the existing cross-runway. On page A3-102 the BAC rules out Option 6 on the grounds of cost, ecological impact, need for compensation and/or land resumption at Nudgee Beach, and the impact on the behaviour of the Kedron Brook Floodway and on the coastal processes within Moreton Bay adjacent to the airport. Apart from the cost most of these problems are also cited in Table 3.3, Volume A as reasons why Option 5 is inferior to Option 3. That is, most of the Bay-related environmental problems are caused by extending the existing cross-runway into Moreton Bay. But this extension is totally unnecessary. As argued above, if a 3,600 metre runway is built further out in Moreton Bay, as proposed under Option 6, the BAC will have the same capacity as it will have under Option 3. Under Option 6 it can downgrade the cross-runway as it proposes to do under Option 3.

Option 6 without the extension of the existing cross-runway provides the capacity the BAC requires, removes the noise and other adverse affects on the residents at Nudgee Beach, and removes most of the environmental problems, especially regarding the Kedron Brook Floodway. It could be improved as an option if, for operational reasons, the staggered parallel configuration is preferred. Rather than the new runway being at an angle to the existing runway as under Option 6, the new parallel runway could be located in Moreton Bay but along the current alignment for the new runway under Option 3. Every kilometre the new runway is built further out into Moreton Bay is another kilometre further away from residential areas. I will refer to the location of the Option 6 runway in the Bay but along the same alignment as the BAC's Option 3 as modified Option 6.

I appreciate that building the runway in the Bay would be more costly and would have environmental and shipping lane implications. I will return to the cost issue below. I don't know how great the impact of modified Option 6 would be on the environment. However, I'm sure it would be no greater and probably less than the impact on Moreton Bay of the development of the Port of Brisbane. I think the environment is being used by the BAC, when it suits it to support the option it desired in the first place. The BAC provides considerable information about the environment when that information supports its case but retreats behind expressions such as "minimal impact", "as little disruption as possible" and "best practice methods to provide as much protection as possible" when its preferred option is going to have an adverse impact on the environment. The DVD presentation alone is peppered with expressions of this type.



People are also part of the environment. The BAC admits that, if Option 3 is adopted, during the summer when all windows will be open to catch any breeze, there will be days when some suburbs experience numerous aircraft an hour passing overhead emitting a noise level of 70 decibels or more. And, as argued above, many more suburbs will experience many more aircraft emitting a noise level not much less than this. This is an environmental impact that can't be swept under the carpet in the interests of the BAC and the airlines. Tens of thousands of people living in the densely populated suburbs of Brisbane that make up the semi-circle described above will be affected. Think of the number of schools under some of the flight paths. The disruption as aircraft pass overhead will make teaching next to impossible in some areas. The BAC argues that the second runway will assist in ensuring aircraft movements during night hours are mainly over the Bay. There are times, however, when wind conditions still make impossible simultaneous arrivals and departures over the Bay when aircraft traffic is light. We live in Balmoral and are not affected now as much as we would be if the BAC's Option 3 runway is built. Nevertheless, there have been nights when, presumably because of wind conditions, there have been a steady stream of aircraft overhead and we have been able to get very little sleep. The new runway presumably will bring even more aircraft overhead on such nights.

#### **Costs and Benefits**

The BAC has stated that the cost of Option 6 would be six times that of Option 3. This is an overestimate because it includes the unnecessary extension of the existing cross-runway. However, even allowing for the six to one ratio and the current estimate of \$ 1 billion for Option 3, a modified Option 6 would cost \$6billion or \$5billion more than Option 3. To put this amount in perspective it represents about half the Federal Government's budget surplus for the current year. The DVD presentation says that the expansion of Brisbane Airport will bring an extra \$5billion per year to the region's economy by 2035. The new runway presumably will have a life of at least fifty years. Therefore the increased construction cost will be miniscule compared with the economic benefit.

When I studied Economics, admittedly almost forty years ago, market economics did not mean what it seems to mean today and the world is poorer for the change. Today, market economics seems to refer only to the private sector, that is, only private sector costs and revenues are taken into account and government's seem to feel they have little or no role beyond trying to ensure there is competition in the market place and applying other regulations they deem necessary. Thus in today's economic environment the BAC would be expected to foot the extra \$5billion in costs if a modified Option 6 was implemented.

In a world before economic rationalism and user-pays, market economics took into account not only private costs and revenues but also social costs and benefits. In theory at least social costs were added to private costs and social benefits were added to private benefits. When a project, such as the expansion of the Brisbane Airport, was considered and "a market" for the product didn't exist, a decision to proceed would be informed by a cost-benefit analysis that took into account all private and social costs and benefits.



The BAC's draft EIS/MDP addresses some, but not all, of the social costs and benefits associated with the new runway. However, it does so in a peripheral way. The benefits are presented as an argument to justify the construction of the new runway and, by implication, to justify the social costs, especially aircraft noise. There is no attempt to develop a proper cost- benefit analysis of all the alternatives with all their costs and benefits included.

Clearly, extending the new parallel runway into the Bay would have an environmental impact that would be a social cost. But moving the runway further away from residential areas would be a social benefit. On the other hand locating the new runway as proposed by the BAC under Option 3 brings it closer to residential areas. The BAC is not very forthcoming about the adverse environmental aspects of Option 3 but Option 3's impact on people compared with the modified Option 6's impact is clear. Modified Option 6 would reduce aircraft noise over the affected suburbs when compared with Option 3. As I don't have the environmental knowledge to make a judgement between Option 3 and modified Option 6 on environmental grounds, all I can do is make a judgement on the impact of the two options on people living under the flight paths. It seems no more than common sense that as Option 3 would lead to more people being adversely affected by aircraft noise Option 3 would entail a greater social cost.

In the version of market economics I was taught dollar amounts would be put on the various social costs and social benefits of each the two options (3 and modified 6) and these amounts would be added to each option's private costs and revenues. Whichever showed the greatest overall net benefit or the least overall net cost would then be the option that would be adopted. An option that delivered an overall net cost would only be considered if there were difficult-to-quantify social benefits that were common to both options and were of sufficient magnitude that, if they could be quantified and included in the cost-benefit analysis, they would convert the overall net cost of one, if not both options, into an overall net benefit. The Brisbane Airport expansion is a perfect illustration of this process. Irrespective of whether the second runway is built under Option 3 or under modified Option 6 the same difficult-to- quantify general economic benefits will accrue to the region as will the more specific benefits to tourism. Therefore these benefits can be ignored when comparing the two options but assumed to be substantial if one or both options record an overall net cost when all quantifiable items have been included in the cost-benefit analysis.

The BAC dismissed its version of Option 6 because of cost. This is demonstrated by the fact that it retained Option 5, which is identical to Option 6 except for the Option 6 runway, which is located entirely in the Bay. This means that when only the BAC's private costs and revenues are taken into account, naturally the BAC has chosen the cheaper and therefore more profitable option. Apart from the net revenues flowing from increased aircraft movements, the BAC does not receive directly any of the social benefits flowing from the general economic expansion and the increase in tourism. The BAC also does not gain any of the social benefit delivered to residents near the airport if modified Option 6 is implemented, nor does it carry any of the social cost to these same residents if Option 3 is implemented.



Given that there is a substantial social benefit to the economy in general and tourism in particular there is a role for government here. As there is very limited opportunity for competition from other airports in the region, the BAC is in a position to earn monopoly profits from aircraft movements. Therefore, if the Brisbane Airport is to be expanded, a thorough and independent review of the BAC's costs and revenues is necessary. If the BAC is earning excessive profits, then, depending on the extent of these profits, the BAC should be forced to fund at least in part the construction of modified Option 6, the option delivering the greatest social benefits. If the BAC's profit margin is such that it cannot reasonably be forced to fund all or part of modified Option 6, then the Australian and Queensland governments, recognising the social benefits to the economy and tourism of the expanded airport, and recognising the social cost to residents near the airport if Option 3 is implemented, should provide that part of the \$5billion in additional costs incurred by implementing modified Option 6 which it is unreasonable to ask the BAC to fund.

#### Conclusion

Spending \$5billion to extend the second runway into the Bay, though, would be only a partial solution to a major problem and therefore, in the long run, a waste of money. South East Queensland is growing so rapidly it is only a matter of time until its population rivals that of Melbourne. Airports in the region have to service this population together with the rapidly growing population in North East New South Wales. Further, Brisbane's proximity to Asia means its airports will be the arrival and departure points for more tourists than Melbourne's airports. Thus a second major international airport in the region is inevitability. There does not appear to be room for a third parallel runway at Brisbane Airport even if the aircraft noise implications of such a development were ignored. It is essential, therefore, to commence planning now for that second airport before residential development ensures that, no matter which location is chosen, aircraft noise will be a major burden for some part of the population.



### **Mr Andrew Frawley**

Formal Submission #66

**Position** Community individual

Organisation n/a

#### Submission full text

Formal Submission: I strongly object to the planned construction of the new runway. The location of the new runway will significantly increase the amount of noise coming from the airport and will disturb the sleep and general living conditions of myself and my family.

The new runway does not have to be 2 km away from the existing runway. This is about twice the distance between the runways in Sydney and they don't have any safety problems.

The BAC, and especially Koen Rooijmans, has been misleading everyone by saying that the closest homes will be 6.4 km away from the runway. This is not true as my house will be about 2 km away and other houses even closer. Even now planes make a lot of noise especially at night and if the new runway is built as proposed then the noise will be intolerable.

I would like to know what the BAC intends to do regarding compensation so that homes can be soundproofed and air conditioning installed. And what about the inevitable reduction in house values. I am sure that the BAC would not stand by while someone did something to reduce the value of one of there assets.



### Mrs Verena Fuehrer

Formal Submission #81

**Position** Community individual

Organisation n/a

#### Submission full text

Morningside is a densely populated area. Property prices are relatively high. And so are property taxes we pay! We are on a hill and we got low flying planes over our house day AND NIGHT! The planes fly sometimes way too low (manual landing .. required from pilots for a certain number of times per year). Planes are way too loud at certain days. On these days it is impossible to watch TV, talk on the phone, have a normal conversation in your own home, work from home (cannot concentrate properly) or GET A GOOD NIGHTS SLEEP!

What I want for myself, my family, my neighbours and my 14 year old daughter is simple:

less planes! lower frequency! NO PLANES AT NIGHT!!
I want a proper curfew for this area!
I want a better quality of life!!



# **Ms Sally Gand**

Formal Submission #11

**Position** Community individual

Organisation n/a

#### Submission full text

To Whom it May Concern,

I wish to lodge my protest to the proposed Parallel Runway as the extra noise will be very detrimental to our household.

I am totally opposed to the runway, but if it must go ahead I want to know what measures will be made to reduce noise pollution.

Yours sincerely,

Sally Gand



### Mr Tom Gordon

Formal Submission #213

**Position** Community individual

Organisation n/a

#### Submission full text

I want an investigation into determining why a level of tolerance exists in the waters of Moreton Bay- is it because of the refinery, the impact of shipping, and the arrival/departures of airplanes over the bay (or all three man made causes).

- I strongly object to the fact that you will remove 94 hectares of mangrove and only creating 3 hectares in return. I want BAC to be permanently held responsible for financial and environmental program/SITRS within SEQ that will permanently provide for an ecological benefit greater than that which is bringing cost and which promotes and delivers on actual mangrove regrowth along coastal areas.
- I strongly object to the fact that you will remove 209 hectares of Casuarina plantation. I
   want BAC to replant 2090 hectares (ten times that loss) of trees within SEQ immediately.
- I strongly object to the fact that post 2035 that BAC still have the right to build a 3rd series of runways that will protrude into Moreton Bay (in the space provided by excluding it from RAMSAR) and to extend (in the future) the length of the new proposed runway also. Your solution causes maximum negative ecological impact upon the environment (land/river) and nature whilst minimising any negative economic/financial impact upon BAC's long-term bottom line.
- You don't seem to consider being quick in undertaking some "PR' related exercise for offsite mitigation projects - this will only be cosmetic and very minimalistic I expect.
- You don't seem to be too concerned about silt up of the Kedron Brook from discharge over the long term.
- You have not considered the visual impact of Sandgate/Shorncliffe residents in terms of the new flight paths. There will be more planes then birds flying along the shortline/ skys of the bay.



#### Mr & Mrs M & C Graham

Formal Submission #126

**Position** Community individual

Organisation n/a

#### Submission full text

My submission is for a curfew to be imposed for the Brisbane Airport between the hours of 11pm and 6am to reduce the noise exposure for Southside residents.

Figures released for the June 2006 quarter show Brisbane Airport (2.2 million) surpasses Melbourne Airport (2 million) with more international visitors in the past 12 months. BAC states that the majority of aircraft movements during 11pm and 6am are generally flights for overseas destinations. BAC has indicated that the number of aircraft movements will increase from 160,000 to over 220,000 when the second runway comes into operation. Reports predict that Morningside can expect a 1% increase in the number of flights.

With aircraft noise already a key concern in the Morningside area, the existing noise levels adversely affect my and my family's way of life - interrupted sleep patterns ultimately affect a person's ability to operate competently and cause health issues. Records from the AirServices Australia complaint line will prove that I have regularly experienced unacceptable noise traffic activity throughout the night. With the imposition of additional noise exposure in our suburb, a nightly curfew would provide some reprieve from aircraft traffic activity that my family has been subjected to over the last five years. As a resident of Morningside for 34 years, I have witnessed an increasingly targeted and unfairly shared change to aircraft traffic activity in our area.

Four other airports in Australia - Sydney, Coolangatta, Essendon and Adelaide - all have a curfew in operation between the hours of 11pm and 6am and continue to operate efficiently.



# Mr Ken Gray

Formal Submission #158

**Position** Community individual

Organisation n/a

#### Submission full text

2000 metre runway separation is too great. The new runway will be too close to habitation. Loss of mangroves is unacceptable.



### **Mr Daniel Gschwind**

Formal Submission #204

**Position** Chief Executive

**Organisation** QLD Tourism Industry Council

#### Submission full text

To whom it may concern

Brisbane Airport Corporation's New Parallel Runway Draft EIS/MDP

On behalf of Queensland Tourism Industry Council (QTIC), and the tourism industry as a whole, I would like to offer your support for Brisbane Airport Corporations (BACs) planned major development of the New Parallel Runway Project.

The tourism industry has recently articulated its vision for the future in the Queensland Tourism Strategy (QTS), a document jointly released by the Queensland Government and the industry. In the QTS the pivotal role of aviation access has been prominently identified and both industry and state government have stated a strong commitment to improving the aviation infrastructure for Queensland:

"Access is critical to Queensland's future tourism performance. Investment in road, rail, sea and air transport infrastructure needs to keep pace with tourism growth as well as the rapid economic and population growth that is occurring, particularly in Queensland's South East...

Brisbane will have grown in importance as a primary gateway to Australia for inbound tourist and a major hub for domestic traffic. A range of Australian and international airlines will have a significant presence at Brisbane Airport with aircraft movements exceeding 200,000 per year by 2016" (QTS, p.34).

As a labour intensive industry, the tourism industry creates at least 150,000 jobs in this state. The industry's job creating capacity has been explicitly recognised by the Queensland government in the context of its workforce and skills policies and also in its initiatives for regional development.

The critical role of adequate air services in tourism cannot be overstated. The BAC's 2006 Annual Report indicates that in 2006 more than six million Australian visitors to Queensland arrived through Brisbane Airport. Added to this, it is estimated that Brisbane Airport was used by two



million international visitors in 2006. Any growth of either domestic or international visitation to Queensland is critically dependant on an expansion of the capacity at Brisbane Airport.

Without adequate air services, thousands of businesses in this state will be affected, and thousands of jobs will not be maintained or created in the future. These objectives further illustrate that the airport's continued development is not about providing services to people from other states and overseas, it is about giving the local community a chance to prosper and seize the economic opportunities that are being created through air travel.

It should further be added that also about two million trips from Queenslanders by air to other states and similarly, half a million trips by Queenslanders overseas are facilitated through Brisbane Airport.

Brisbane Airport now receives the second largest amount of international tourists into Australia, behind Sydney airport only, and this overseas passenger growth reflects Brisbane and Queensland's growing reputation as an international destination. This presents an enormous opportunity for this state and offers Queensland a competitive advantage domestically as well as internationally.

The tourism industry shares with BAC a vitally interest in building businesses in a way that is compatible with the natural environment and is supported by the community because, ultimately, that his exactly what we sell: the natural environment and the community spirit both of which form part of the tourism experience. BAC and the tourism industry share an interest in preserving those two aspects of the experience.

The development of Brisbane airport over the years has added a considerable competitive advantage to our industry and, unlike some other major airports; the opportunity was seized early to implement a long-term vision prior to urban development constraining the outcome. As a result, we have an airport that is located within a reasonable distance of the city, but further away from residential dwellings than any other capital airport. The comparison with Sydney's major airport for example could not be starker.

The problems currently experienced in Sydney in reconciling residents' concerns with transport needs are almost insurmountable and are affecting community welfare and affecting tourism as well. The situation at Brisbane Airport gives us an opportunity to go forwards without the same type of conflict, QTIC is confident that the airport will continue to prosper and, in doing so, will contribute significantly to the welfare of the local population.

We believe that the development of the parallel runway is not only an economic necessity but also an opportunity to further entrench a competitive advantage that Brisbane enjoys in relation to aviation access for both airlines and passengers. Specifically, the continuation of a curfew-free regime for flight movements keeps Brisbane in a position more likely to deliver the outcomes that are envisaged under industry and government plans, including the QTS.



The imposition of a curfew will remain unnecessary thanks to the long range planning since the construction of the airport which was resulted in sufficient separation of residential development from current and future runways.

BAC has demonstrated over the ten years under the current management arrangements that it has both the capacity and willingness to engage and consult extensively with the local community and address any operational concerns with them. We are confident that this approach provides a credible basis to proceed with the current development plans for the parallel runway.

QTIC believes that the development will be beneficial to the tourism industry, the community in general and indeed the State of Queensland and we fully support BAC's development plans.

Kind regards

Daniel Gschwind Chief Executive



### Ms Jani Haenke

Formal Submission #220

**Position** Community individual

Organisation n/a

#### Submission full text

The NPR & BAC have provided me with the documents: new parallel runway project... summary of major findings 2006, and flight path and noise information booklet. I have visited the public display in Boronia Place, and been given an enlightening explanation of the Draft EIS/MDP on CD ROM.

Being particularly interested in environmental issues, I should have asked for more information on volumes B and C. I'd like to know.

- If searches were carried out in the Saltmarsh/Saltpan areas (about vol B pp 55-57) for evidence of Xeromys miodes, the rare water mouse. On p 59 of the same document is the information 'No significant impacts to Ramsar Wetlands would occur as a result' of the NPR project. What are the reasons given for this sweeping statement?
- As a resident of North Stradbroke I deplore the fact that yet over again this island is off the
  map. Certainly there are less residents there than on the western side of Moreton Bay, but
  it is too glib to describe the "over bay operations" without showing flight paths beyond
  Dunwich, forgetting that thousands of people are being affected by them. I have been told
  of the probable routes to be taken by aircraft over North Stradbroke Is. and these should
  also be on the airspace maps.
- When I am not on Stradbroke I suffer day and night and on weekdays and weekends from noisy aircraft.
- 70dB (A) flights over my house at Balmoral stop my hearing for at least 2 minutes. The
  more frequent flights after the use of the NPR begins will cause me to move from my
  mainland home to another suburb.

Despite the extremely distressing outcome for me personally, I think that the planning which has produced the SODPROPS and DODPROPS modes shows great ingenuity. If the NPR is not used between 10pm and 6 am (and if the existing runway has this same curfew), there should be less disturbance to a greater proportion of the Brisbane population than without the NPR.



With my reading of the documents so far, I have not found reference to the concepts of Peak oil or global warming (and consequent sea level rise), which single or together may cause the whole airport to be abandoned by 2035. Even if I don't experience it, peace should descend on my house then!

Yours sincerely,

Jani Haenke



### Mr Rupert Keith Hafner

#### Formal Submission #164

**Position** Community individual

Organisation n/a

#### Submission full text

#### 1. General Comments

- Changing global weather renders future patterns unpredictable, this projected arrival and departure flight paths cannot be accurately forecast.
- Duplicating existing runways 10, 19 and closing existing cross runway 32, 14 allows no flexibility, thus reducing efficiency.
- A totally fresh approach (see conclusion) needs to be adopted to obviate aggravating and increasing the following issues.

#### 2. Aircraft noise

- Pages 132, 133 EIS charts of suburbs experiencing 70 and > 70 decibels overflying aircraft noise show the neat transposition of this noise from certain suburbs to the adjoining ones.
   This is confirmed on page 144 EIS Social Impacts, Major Findings bullet points (3) and (4). Similarly this transference of 70 and >70 decibels overflying aircraft noise occurs with adjoining suburbs educational facilities stated under bullet points 8 and 9 page 144 EIS Social Impacts major findings.
- NPR Flight Path and Noise Information booklet pages 10 to 57 inclusive years 2005-2035 flight paths F,G,H,I, & J (3 arrival, 2 departure) converge over some of the above mentioned worst affected suburbs is at odds with bullet point 7 Environment page 117 EIS "Residential areas overflown by departing aircraft should not to the extent practicable also be overflown by arriving aircraft".
- Thus duplicating the existing runway 10, 19 does not solve or reduce aircraft noise but merely transfers the problem.

#### 3. Air quality



- Page 140 EIS Winter and Summer Air Movements around Brisbane charts illustrate that
  polluted air is trapped mixing with subsequent new emissions causing a build up confirmed
  on page 139 EIS Air Quality Major Findings Greenhouse Gases bullet point 3.
- Page 142 EIS Health Impacts Major Findings Bullet Points 2,3,4,6,7 report a negligible increase in health risk and bullet points 1,5,8,9 state that regional air pollution and some identified pollutants are not expected to have an impact on community health, as a result of the NPR.

Thus the health impacts major findings report and health risk increase or are inconclusive.

 The increasingly polluted rain from aircraft emissions would be another adverse affect of current 10,19 duplication as rainwater harvesting must occur throughout Brisbane via roof collection tanks and stormwater runoff if we are to survive as a city through the current and predicted droughts.

#### 4. Conclusion

- The cumulative effect of decreasing air and water quality with noise increase, identified in the NPR EIS must be adverse and hazardous to current and future Brisbane citizens.
- A stress-free, healthy, clean First World Capital City like Brisbane is worth preserving.
- Siting a new International airport outside of and connecting to Brisbane by fast rail/freeway must be a more effective and acceptable alternative to prevent the above listed problems.
- The "INCONVENIENT TRUTH" as forecast of Greenhouse Gas build up with subsequent Global Warming and weather pattern changes causing sea level rises plus tidal/storm surges are reasons enough to site a priority 1 asset such as a new International airport well away from an extremely vulnerable waterfront area as the current 10-19 runways will become.



### Mr Arthur Hall

#### Formal Submission #107

**Position** Community individual

Organisation n/a

#### Submission full text

Thank you for forwarding all the details and updates for the New Parallel runway Project. I have studied them all very carefully and personally discussed aspects of he project with your staff at the Bardon Business Centre.

I have delayed this submission to assess the effect of the extra Christmas and New Year flights out of Brisbane. The projected increase in flight traffic is, I feel, realistic. We are much travelled people, visiting most of the large airports in the world.

There is only one aspect of the project that is of great concern to us and many other people in our area. We have lived here for 43 years.

In the booklet "Flight Path and Noise Information" Page 6 the exist flight path D is clearly defined and with the clever overlay page it shows its path is directly over Manly and the Bayside.

This is definitely unacceptable. Over the past many months this flight path has been inforce as your Fact Sheet #17 acknowledges Queensland time differences make 5am flights essential. The thunderous crackle of these aircraft has never before been a problem.

The solution is very practical according to my flight captain associates who have flown out of Brisbane for years on former flight paths.

Flight path D should not turn back to such a sharp angle, and climbing as aircraft do would see them over North Stradbroke Island and the sparsely populated area south of Wellington Point at a much higher altitude. This Bayside area has experienced a large population growth over the past four year with hundreds of new homes in Gumdale, Wakerly, Manly West and environs and a new Boys College (At the school on Manly road I had to pause in a conversation to allow an aircraft to pass directly overhead - this will not do!)

It may well be that your population database for the area is out of date.



Will you please give this problem your immediate attention and experiment with this alternative before reaching any final decisions.

Yours faithfully,

Arthur Hall



# **Mr Wade Hansen**

Formal Submission #7

**Position** Community individual

Organisation n/a

#### Submission full text

We support the new parallel runway.



## Mrs Andrea Hansen

Formal Submission #73

**Position** Community individual

Organisation n/a

#### Submission full text

I am writing to express my support for the new parallel runway. By constructing the new runway, air traffic will be more fairly distributed across Brisbane, relieving areas like Camp Hill who have traditionally bared the brunt of Brisbane's air traffic. As can be seen by increasing house prices in Camp Hill, the current flight plan does not affect house value so shouldn't adversely affect new flight path suburbs.



### **Mr John Harbison**

Formal Submission #154

**Position** Secretary

**Organisation** Keep Sandgate Beautiful

#### Submission full text

Formal Submission: I object to the proposed Brisbane Airport expansion for the many reasons outlined in the points below.

- 1. Expansion of the Brisbane Airport is not necessary because domestic air travel in Australia is likely to decline in the near future and be largely replaced by moderate to high-speed rail travel. The simple extrapolation of recent trends in the Draft EIS overlooks some important recent political and social developments. For many regional journeys, rail is preferable to aviation on price alone even though transit times are longer. The longer rail journey is statistically safer than air travel, more comfortable (considerably more leg room), and more greenhouse-friendly. For example, a flight between Brisbane-Melbourne-Albury costs between \$242 and \$782 and takes between 4 and 8 hours (terminal to terminal). An economy rail trip costs \$100 and takes 25 hours. The time of many rail trips will soon be reduced dramatically as more money is spent on rail line upgrades by governments. Australian Rail Track Corporation is investing \$240 million in upgrading the line between Sydney and Melbourne reducing transit times by 3 hours. Likewise, the Brisbane to Sydney trip is expected to be reduced by 4 hours. The decline in air travel following the September 11th bombings will place into insignificance compared to the effects of a) oil depletion and b) the likely imposition of a carbon tax on aviation within 3 years. The energy efficiency of non-urban rail is 0.86 passenger km per Megajoule compared with 0.34 passenger km per Megajoule for domestic airlines, and 1.06 passenger km per MJ for non-urban buses (Appelbaum Consulting Group Pty Ltd and Dept of Industry, Science and Resources, 2001). Passenger tilt trains with good load factors would have a higher energy efficiency than buses. Furthermore, on ethic and economic grounds consumers will elect to make fewer trips in future, especially domestic flights.
- 2. Personally, in the last year I have flown less than in previous years (Rockhampton-Brisbane, Melbourne-Brisbane (x2)) and have travelled considerably further on non-urban journeys by rail and bus (Brisbane-Rockhampton by tilt train, Brisbane-Geelong (x2), Geelong-Warrnambool (return)). I plan to make many more train journeys this year and have no plans for any air travel.
- 3. For the reasons outlined above, airport expansion will not lead to an increase in airport activity and, therefore, the projections of employment in the Draft EIS will not be met.



- 4. The proposed airport expansion involves the net loss of 90 ha of mangroves and wetlands. This destruction is additional to the much greater loss of wetlands associated with the original airport construction and this habitat loss viewed in its totality is unacceptable. I have used Jackson's Creek for recreation and regret the proposed loss of this waterway.
- 5. Inclusion of large discount factory outlets at the Brisbane Airport and not central to residential areas is community-unfriendly and, being a car-based activity, it is also greenhouse-unfriendly.
- 6. The proposed airport expansion will be accompanied by an unacceptable increase in noise and air pollution. There is no need for the second runway to be positioned so close to Kedron Brook Floodway. The second runway can be moved closer to the existing main runway by at least 500m.



### Mr Jim Harrison

Formal Submission #33

**Position** Community individual

Organisation n/a

#### Submission full text

I would like to compliment all concerned with the development of the second runway. All aspects have been covered and all interested know what is planned.

I am 87 years young, and have followed developments since ever I saw Kingsford Smith land at Eagle Farm and also saw Amy Johnson land, if not smoothly.

I have a few thoughts about your plans.

- 1. I was a gunner at Cowan near Tangalooma from November 1939 to mid 1941. At that time, the beach was about 220 feet wide plus and nowhere near the gun (one only x SS Sydney, now at the Maritime Museum at South Brisbane). I was at Cowan within the last twelve months and was shocked, as the beach was only a few yards from the old gun emplacement. I am a little concerned that the large quantity of sand which you propose to take from Middle Banks which is not that far from Cowan will have some further erosion from the beach as far as Tangalooma which has a lot of buildings near the shore. Food for thought.
- 2. As you are putting lights out in the sea to show the approach to planes at night, why not extend the runway out in the water to reduce complaints from noisy planes, particularly at night. Sydney did it, and got plenty of complaints, but everyone got used to it.
- 3. Otherwise I think you are doing a good job. Best of Luck. I hope I am there for the opening. But do not think so.



### Mr & Mrs John and Helen Heinrich

#### Formal Submission #128

**Position** Community individual

Organisation n/a

#### Submission full text

My family and I moved to Banyo in 1969. Our children are now grown up and we were looking forward to remaining here in our retirement. However the airport noise - both from arriving and departing aircraft - and ground noise particularly at night) have become an unwelcome intrusion in our lives.

In view of the proposed change to flight paths, we would like to feel protected from excess noise from these sources.

On page 68 of the Draft Airport Environment Strategy 6.3.8 BACL mentions the development of a noise pollution incident investigation system. How will this be monitored and implemented? What sort of action would have to be taken by the public before incident investigation?

We feel that it is the responsibility of BACL to control noise levels, which emanate from the airport both now and in the future.

From looking at the plan it would appear that the proposed O1L/19R runway will be two kilometres audibly closer to us.

Page 54 of the above draft - 5.2.8 mentions that monitoring of ground-based noise is not currently being undertaken - why?

Page 55 of the draft states that a complaint investigation system to evaluate performance of noise sources against the environmental impact benchmarks is a POSSIBLE future management action - why? Why would a complaint need to be made about excessive noise before the problem is investigated and dealt with? What provision is being made regarding noise buffer zones?

When the area between Luggage Point and Juno Point was first cleared, many mangrove trees were removed leaving only a small number to be viewed from the water level in Moreton Bay. What is the situation with regrowth? How are the people who now live at Pinkenba, Myrtletown and Nudgee Beach coping with the noise and vibration from the aircraft? What is BACL doing for them now?



Aircraft noise is now so loud at our home at times that it drowns out the sound of the T. V. On the night of 10/6/98 at 10.50 p.m. an aircraft passed loud and low over our home, presumably to landwhy not the Moreton Bay approach?

When playing Golf at Nudgee Golf Club there is at times a strong smell, which would appear to be Aviation Fuel. What provision will be made to check air quality in our area?

Will homeowner's be compensated for the drop in market value of their homes upon resale? Is any soundproofing of homes envisaged?

The volume of traffic accessing Toombul Road will make it even more difficult for us to enter and exit our suburb, particularly at peak periods. How will the infrastructure be altered to cope with this?

Thank you for asking us for our comments and inviting us to your meeting.

Yours faithfully

John and Helen Heinrich



### Mr Martin Hoelscher

#### Formal Submission #228

Position Group Manager Network Property, Data & Coordination

**Organisation** Energex Ltd

#### Submission full text

ENERGEX Limited (ENERGEX) is a Queensland Government Owned Corporation (GOC) responsible for South East Queensland's electricity distribution network.

ENERGEX requests that the Brisbane Airport Corporation's Draft Environmental Impact Statement (EIS) and associated Major Development Plan (MDP) be amended to accommodate the future construction of a replacement transmission line to provide electricity to among others, the airport and its precinct. Specifically we request that the Obstacle Limitation Surface (OLS) next to the eastern most corner of the Nudgee Golf Course be relaxed to accommodate a future 32.3m AHD structure in lieu of the present and acceptable 31.8m AHD structure, a difference of 0.5m.

The basis for this request is:

- 1. Section 8.7.3 Hazards Posed to Infrastructure and Surrounding Areas, pD8-350 notes of the potential for crash incidents into lower level powerlines in the nearby Nudgee area. Item 4 of this section advises that an assessment of the power line using the ICAO published guidelines found that the presence of the existing ENERGEX supply network structures to be an <u>acceptable risk</u>.
- 2. As noted above, the existing ENERGEX tower next to the eastern most corner of the Nudgee Golf Course impacts the OLS for the proposed future runway. A photograph of the base of this special right angle bend tower is provided on page B13-606 of the EIS. This tower has a total height of 31.8m AHD and penetrates the OLS by approximately 2.8m. A height and associated penetration that is considered an acceptable risk.
- 3. ENERGEX or Powerlink (A GOC which connects ENERGEX's distribution network to major generation points in Queensland,) may in the future replace and or upgrade the existing ENERGEX 110 kV sub-transmission line to the Nudgee substation which provides electricity to the airport and its precinct. Reference to this project in noted in the Queensland State South East Queensland Infrastructure Plan 2006-2026, p54. Reference to this aspect of the Queensland State South East Queensland Infrastructure Plan 2006-2026 appears to have been omitted from the EIS.



- 4. The most economical design for a structure to replace the existing special right angle tower next to the eastern most corner of the Nudgee Golf Course requires a minimum structure height of 32.3m AHD being 0.5m taller than the existing structure which is considered an acceptable risk.
- 5. Provided the Brisbane Airport Corporation's Draft EIS, MDP and any other associated or relevant documentation can be amended to accommodate this request, ENERGEX would be able to accommodate the OLA requirements in the remainder of the future transmission line without further delay.

We trust that you are able to accommodate this request which is only a minor increase on the height of the existing structure which has been analysed using the ICAO published guidelines found to be an acceptable risk. Please contact our Project Manager, Mr Dennis Cucchiaro on 3407 4643 should you require further information regarding this submission.

Yours sincerely

Martin Hoelscher

Group Manager Network Property, Data & Coordination



### Ms Leanne Hunter

Formal Submission #234

**Position** Community individual

Organisation n/a

#### Submission full text

I am writing to register my concerns regarding the development of a new parallel runway. I understand the challenges in providing the necessary infrastructure for a growing city however I am extremely concerned about the impact of additional flights over the Bulimba area. Over the past few years I have become disillusioned with the Brisbane airport Corporation's easy dismissal of community concerns regarding the social, health and environmental costs of the development of this runway.

Specific concerns with the Draft Environmental Impact Statement and Major Development Plan:

Brisbane Airport Corporation New Parallel Runway Proposal:

- Increased noise due to new flight paths over intensely developed residential areas in the southern suburbs of Brisbane
- Poor investigation into alternative runway options
- Poor investigation into curfew options
- Poor investigation into monitoring and auditing programs, which will evaluate the impact of increased aircraft noise.

I request that further investigations be undertaken in the areas listed above.

Yours faithfully

Leanne Hunter



# **Dr Michael Hurley**

Formal Submission #176

**Position** Community individual

Organisation n/a

#### Submission full text

I object to the New Parallel Runway (NPR) Project, as outlined in the Draft Environmental Impact Statement and Major Development Plan (EIS/MDP) for a new parallel runway at Brisbane Airport and in the flight path and noise information booklet, on the following grounds:

- With regard to my residence at 8 Leura Terrace, Hawthorne, the flight paths with the NPR from 2015 seem erroneous (flight path and noise information booklet pages 34-57) and should be altered since.
- Far too many flights at low altitudes on Arrival Path J and Departure Paths H and I, are
  planned to occur over my residence, nearby areas and across and down the Bulimba
  Reach of the Brisbane River resulting in:
- An unacceptably high level of Aircraft noise and damaging environmental, social and above all health impacts (see attachment A), which, I believe, may have been underestimated in the Draft EIS/MDP (pages 141-142 and 144).
- As a resident of Hawthorne, a doctor and a psychiatrist, I am well aware of the negative health impacts likely to result from the horrendously high levels of aircraft noise resulting from the projected range of N70 flights and the inclusion of my area within the N70 noise contours. I am well aware of the serious concerns of patients in this area regarding likely noise effects which may disadvantage in particular, nursing mothers, infants and young children, the elderly, the terminally and chronically ill and persons suffering from mental illness. Such impacts may likely be profound, prolonged, widespread and continuing well beyond 2015.
- I submit that the planned flight paths with the NPR from 2015 should be redirected for more
  equitable impact and also for minimal impact of likely aircraft noise effects over residential
  areas.
- Prior to operations on the existing runway at Brisbane Airport (1988-2007) and when I first came to live at 8 Leura Terrace, Hawthorne, frequent low altitude aircraft flight paths across



and down the Bulimba Reach of the Brisbane River produced horrendous levels of noise for my home and nearby areas, in 1987 and during 1988. Numerous patients in the area at that time frequently complained of the stress of aircraft noise, related sleep deprivation and overall effects on their health.

- Since 1988 there appears to have been a significant increase in public awareness of
  individual rights, health and welfare and a corresponding increase in personal injury claims.
  Should these factors and claims for adverse effects on property values and amenities result
  in individual and class actions, the unpredictable financial consequences could potentially
  erode the intended commercial benefits of the NPR.
- Some years ago I heard that there was levy on air travel for such an eventuality i.e. to meet
  claims resulting from the NPR. Even so, there may be a significant risk that the proceeds of
  such a levy many prove inadequate should claims prove numerous. I also heard that this
  levy was not made public. If such a levy has existed and currently exists the travelling
  public may feel they have a right to know about it.
- I note that insufficient attention appears to have been given to noise abatement, nor much
  detail appears to have been provided as to noise abatement procedures (beyond one page
  145 in the draft EIS/MDP). Wherever appropriate flight paths may be finally directed, much
  more stringent and detailed noise abatement procedures should be planned and outlined.
- Along with these, a curfew on all aircraft flights over residential areas would need to be
  initiated, between the hours of 10pm and 6am, 365 days a year. This may particularly apply
  to freight aircraft that otherwise may tend to operate in these night-time hours.

Thank you for accepting my submission.

Yours sincerely Michael Hurley

Attachment A:

Health Impacts:

The stress of excessive aircraft noise, especially within N70 noise contours, possibly may have widespread impacts on individual and public health and welfare but particularly potentially affected persons suffering from:

- Cardiovascular and Respiratory Disorders
- Gastrointestinal Disorders
- Mental illness and emotional disorders where severe noise intolerance may be present
- Neoplastic disorders especially secondary (metastatic) Malignancy.



- Sleep disorders- and as previously mentioned
- Nursing mothers, infants and young children, the elderly, the terminally and chronically ill.
- To name a few as well as a wide range of other possible health effects and secondary health effects reactive to noise related stress such has: sedative, alcohol and substance abuse and dependence, overeating, weight gain, obesity, and metabolic syndrome.



# **Mr Toby Hutcheon**

Forma	l Su	bmiss	ion	#23	5
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**Position** Coordinator

**Organisation** Queensland Conservation Council

#### Submission full text

Dear Sir/Madam,

Queensland Conservation (QCC) is the 'peak' environment organisation in Queensland.

We write in support of the submission by Dr Andrew Jeremijenko.

The QCC notes that the new parallel runway is likely to impact upon mangroves and salt marsh in the surrounding areas, with incremental impacts upon marine flora and fauna in Moreton Bay. We also note that the surrounding Boondall Wetlands and associated RAMSAR wetlands are of international significance. These provide habitat for a range of endangered and migratory birds, including the Lewin's Rail.

We urge that the EIS takes account of comments made by Dr Jeremijenko and takes all reasonable measures to ensure that no significant impacts are made to the surrounding wetlands, mangroves and species dependent upon these habitats.

Regards,

Toby Hutcheon Coordinator



# **Ms Rosemary Jamnadas**

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**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir,

Walking through the Westfield Shopping Centre in Carindale I picked up a pamphlet about the New Parallel Runway. I view this project with alarm and trepidation. I have vivid memories of the opening of an additional runway at Sydney Airport.

My family lived at Newtown directly under the flight path. The mental and physical anxiety they suffered was considerable. It seems selfish to enquire whether I will be affected by this proposal? No one should have to suffer.

Yours sincerely,

Rosemary Jamnadas



### Ms Sandra Janssen

Formal Submission #208

**Position** Community individual

Organisation n/a

#### Submission full text

In the "Flight Plan and Noise Information Booklet" on page 60, Priority 3- Environment, it states that while no suburb, group or individual can expect to be exempt from aircraft noise exposure, noise should be fairly shared wherever possible.

Upon reviewing all of the flight path and noise charts provided, it appears to me and my husband that NPR aircraft noise exposure is going to be concentrated over our suburb and neighbouring suburbs. (Morningside, Balmoral, Hawthorne and Bulimba). This does not follow the BACs "Procedures for Defining Flight Paths' on page 60 (see reference above), which state noise should be fairly shared wherever possible.

The new parallel runway noise will impact our quality of life, our community and our property values in Morningside adversely. The noise should be more fairly shared not concentrated over these Southside Suburbs.



# **Mr Laurie Jeays**

Formal Submission #94

**Position** Community individual

Organisation n/a

#### Submission full text

Comment on EIS New Parallel Runway Project

I wish to make the following comments regarding the possible impacts of the proposed new parallel runway for the Brisbane Airport.

I accept the need for the expansion however I am concerned about the extent of the land footprint particularly on the North West side of the proposed development.

- (1) I believe that bringing the proposed runway 500 metres closer to the existing runway would reduce the environmental impacts on both the floodway and the beach flat areas considerably. It would also lessen the impact on the northern suburb of Nudgee Beach.
- (2) The areas of salt marsh, mangrove and fringe vegetation saved would all contribute to maintaining the fragile ecosystems within the area. I have not found in the plans any reference to some means of providing a shutoff barrier on the permanent tidal drains to be constructed on the Northern side of the runways to be used in case of a major oil spill on the runways.

Of the Options listed, Option 4 would appear to have the least impact in the area. I would accept Option 4.

I respectfully ask that these comments be considered.

Yours faithfully

Laurie Jeays



# **Mr Mark Jeffery**

#### Formal Submission #69

**Position** Community individual

Organisation n/a

#### Submission full text

I have previously made comments as part of the consultations process for the 2nd runway. However, I have not received specific feedback about my concerns.

My key area of concern is regarding environmental and green space. When the new railway was constructed I was not aware that trees were planted to replace those removed.

I have previously expressed a similar concern about trees that will be removed as part of the 2nd runway project.

This is my main concern.

Any trees removed must be permanently replaced either on the BAC site or near by.

I also request a formal reply to my concerns and my questions about tree replacement.



# Dr Andrew Jeremijenko

Formal Submission #190

**Position** Community Individual

Organisation n/a

#### Submission full text

#### **EXECUTIVE SUMMARY.**

The Brisbane Airport Corporation has published a draft of the Environmental Impact Statement for the New Parallel Runway Project. The project borders a Ramsar wetlands and many rare and protected bird habitats. Severe damage to this wetland has already occurred due to previous developments.

The formal submission raises these concerns:

- 1. **Need for the project.** Gatwick (UK) and Newark (USA) airport are able to handle more flights with a smaller footprint. It is important that Brisbane airport makes its footprint as small as possible
- 2. **Options and Alternatives.** Option 4 with the new runway 1600 metres west of the current runway is a more favourable option then Option 3, which is 2000 metres west.
- 3. **Lewin's Rail habitat.** Option 4 would be preferable to Option 3 for the Lewin's Rail and its habitat, as it would move the runway 400 metres further away (east), the public safety area would no longer encroach into the habitat and this rare and protected birds habitat would no longer be right at the end of the runway, exposed to overruns, and noise and chemical hazards.
- 4. Bird Strikes. "Boats on one side, planes on the other and birds in between is a recipe for disaster." The runway is located close to Kedron brook. A white-bellied sea eagle classified as the most dangerous for bird strikes (ATSB 1) nests on the proposed site of the runway. This eagle and the Eastern Grass Owls are protected under a CAS.
- 5. **Legal obligations.** The BAC has made a habitat to protect the Lewin's rail and Ramsar birds are protected under international law at the other end of the runway, but CASA and aviation law demands they scare birds away from these habitats.
- 6. **Significant impact on Ramsar site.** There will be significant impacts on the Ramsar site. The report stated there would not be.



- 7. **Mangrove/ Jackson Creek / Benthic fauna / Marine animal destruction.** Option 3 would destroy more mangroves, more of Jackson's creek and contribute to greater benthic fauna and marine animal destruction than option 4.
- 8. **Health Impact Assessment.** Option 4 would reduce the size of the footprint, increase the distance of the runway from residential sites and thus reduce the health impacts associated with the NPR.

In summary Option 4 for the new parallel runway currently at 1600 metres separation, (1535 metres separation also possible) would be significantly better then Option 3 at 2000 metres for many reasons. The BAC needs to ensure that they reduce risks to as low as reasonably possible (ALARP). The BAC has not demonstrated this. The current option 3 endangers rare species, protected wetlands and human health and may contribute to plane crashes.

#### **FORMAL SUBMISSION**

The airport and surrounds including Boondall Wetlands and the associated RAMSAR Area on the shores of Bramble Bay is of international conservation significance. It provides habitats for endangered and migratory wading birds and other wetland species. Australia has obligations under three international agreements to protect the wetlands and its endangered or migratory birds.

The New Parallel Runway Project (NPR) will develop land that is remarkable because:

- It survives and provides valuable ecosystems within one of Australia's largest city
- Its wetland ecosystems produce rich resources of fish and invertebrates, which are shared by humans and a large diversity of wildlife
- Its habitats are crucial for many threatened plant and animal species
- It contains important mangroves and salt marshes

There are many threats to this area. Migratory bird habitats and wetlands are being rapidly lost or damaged as consequences of development and recreational use. The Port of Brisbane development including Brisbane airports current runway has had significant environmental impacts. Wader numbers have fallen over 90% in and around Nudgee Beach and the RAMSAR site, which is "severely degraded". The Boondall wetlands and RAMSAR site suffers from the ongoing impacts of human activity, introduced plants and animals, horse riding, and boating and other recreational activities.



These international wetlands' have been the focus of a broad planning process involving a diverse array of experts and many other key stakeholders and specialists in the environment over many years. The proposed second parallel runway will result in major impacts on these wetlands during and after its development. The whole concept of an "airport city" not just a city airport in such a sensitive area needs further consideration. I would like to raise the following issues with the Brisbane Airport Corporation, BAC with respect to their draft environmental impact statement for the New Parallel Runway at Brisbane Airport.

#### With regards to

#### 1. Need for the project

The arguments presented are based on increased number of flights and travellers in the future and the inability of current facilities to deal with these flights. There is no review of the ability for other airports such as Coolangatta, Sunshine Coast, Archerfield and Amberley's capacity to assist in the meeting the need. The BAC has not highlighted comparisons to other airports in large cities I have attached photos of Gatwick, near London and Newark near New York below. Both these airports service a very high number of flights with a much smaller footprint then the one proposed by the BAC in this ecologically sensitive area. Airports like all other organizations should strive to leave the smallest footprint possible. If large airports such as those in USA and England can function with smaller footprints, BAC should be able to as well. For instance it is noted that the parallel runways can be 1,525 metres apart and comply with all relevant regulations. It would make sense to use this minimum distance rather then 2000 metres apart to minimize the footprint.

Picture - Summary of major findings p 22

Brisbane Airport with proposed new parallel runway is a bigger footprint then both of these major airports

#### 2. Options and alternatives

The use of other airports was not listed in the alternatives. It was noted that option 4 would give the smallest footprint especially if the Future Aviation Facility Areas (FAFA) were relocated. It was noted that Option 4 separates the 2 runways at a distance of 1600 metres. The minimal distance is 1525m and this would be the preferred separation for Option 4 as this would minimize footprint even further.

When comparing the options by the tables in the draft EIS, the differences noted by the BAC between Option 3 (the preferred option) and Option 4 were minimal, (p 112-114 Volume A). Option 3 allowed the FAFA, future terminals, car park and surface interchange facilities to be between runways. Option 3 was also seen to be over better soil (option 4 over Marine Clay) and would require less time for soil settlement. In all other areas, such as environmental concerns, hydrology, water quality and coastal processes etc the BAC seemed to note little difference between the two options.



In summary the choice for Option 3 over Option 4 was not made on environmental impact. It will be demonstrated that Option 4 is a more desirable choice that could significantly reduce health and environmental impacts for humans and protected species and reduce the overall footprint. Option 4 could be 1525m apart not 1600m

#### 3. Lewin's Rail habitat

The Lewin's Rail habitat in located at the southern end of the runway in Option 3. The public safety area extends into and encompasses over a third of the habitat. This is the area that this rare bird is expected to continue to live. "Queensland Government State Planning Policy 1/02 requires provision of Public Safety Areas (PSAs) at the end of the main runways at major airports where increased risks to public safety arise. The PSA is trapezoidal in shape with a 350m wide base centred on the runway centreline at the runway end. The zone tapers to a width of 250m at a distance of 1,000m from the runway end." (1)

The habitat of the Lewin's Rail is significantly impacted by being so close to the end of the runway. Noise induced hearing loss is well understood in humans (indeed an early symptom is not being able to hear a bird sing) but is less understood in birds. Bird songs and calls are integral to Lewin's Rail. It is highly likely that hearing damage will occur due to aircraft taking off and landing in such close proximity to the habitat. (Humans are required to wear hearing protection due to the significant noise exposures on runways, taxiways etc) Though it is known that birds can recover from noise induced hearing loss, (unlike humans) the exact time frame of recovery is not known in the Lewin's Rail. It is thought generally it takes a few weeks for hair cells to recover. (2)

The BAC predicted Nudgee Beach would experience the largest increase relative to the current air quality goals, but did not state the likely effect on air quality in the Lewin's rail habitat. Benzene was predicted to cause one additional case of leukaemia per 25 million people using these calculations but similar calculations and the effect on the Lewin's rail habitat was not mentioned.

The BAC stated on ABC news on Friday 29th December, 2006 that they had done studies that showed that the Lewin's rail can live at the end of the runway (e.g. in the public safety area) without ill effect. BAC has not published or referenced such studies regarding Lewin's rails response to aircraft noise and the effect of emissions such as Benzene, CO, formaldehyde, Nitrogen Dioxide (NO2), Particulate matter (PM10/ PM2.5), toluene and Xylene.

www.maroochy.qld.gov.au/sunshinecoastairport/documents/airports mp runwayrequirements.pdf

2) The Journal of Experimental Biology 207, doi:10.1242/jeb.00755 Noise induced stress response and hearing loss Michael E. Smith, Andrew S. Kane and Arthur N. Popper. Department of Biology and Center for Comparative and Evolutionary Biology of Hearing, University of Maryland, College Park, MD



As this bird is a rare and protected species in Queensland, studies exposing it to noxious chemicals and physical hazards would be improbable. Lastly if a plane were to overrun the runway, this would obviously cause severe damage to the habitat. This is a possibility that should be considered with regards to a rare and protected species.

Option 4 would be preferable to Option 3 for the Lewin's Rail and its habitat, as it would move the runway 400 metres further away (east)./ This would avoid the public safety area encroaching into the habitat. This rare and protected bird's habitat would no longer be right at the end of the runway, exposed to overruns, and noise and chemical hazards. No formal assessment between Option 3 and Option 4 was made with respect to effect of the Lewin's rail habitat.

#### 4. Bird Strikes

It is acknowledged in the EIS that Brisbane airport has one of the highest number of bird strikes each year. (e.g. highest number in 2002 and 2003 Volume D Table 8.7d). Bird strikes have caused plane crashes and human deaths on multiple occasions. As an example on the 15 July 1996 a Belgian C-130 aircraft struck a flock of birds during approach in Eindhoven, Netherlands and crashed short of the runway. All four crew members and 30 of the 37 passengers were killed.

Recent studies commissioned by BAC confirm the flying vertebrates which pose significant problems are: • Ibis species • Kestrel species • White-bellied sea-eagles • Other raptor species • Lapwing species • Egret species • Heron species • Duck species • Cormorant species • Torresian crows • Flying foxes (EIS Volume D Hazards and risks of airport operation)

Ibis are listed as ATSB category 2 (second most dangerous) and are noted along Kedron Brook in large numbers daily. Ibis are a very serious hazard to aircraft as they are relatively large and form flocks. It is possible for more than one bird to be struck which can potentially cause the failure of one or more engines. They have caused 7% of the bird strikes in Brisbane airport. Plovers which also flock (ATSB 17) account for 7.3% of strikes are also commonly seen on Kedron Brook.

The proposed runway is located close to Kedron Brook and actually runs alongside the brook just before the Lewin's rail habitat. The Ibis (ATSB 2), Plovers, Pelicans, Kites (ATSB 7), White Bellied Sea Eagle (ATSB1) and other flocking birds can be seen flying along Kedron Brook. Dr Ian Smith, who is a pilot as well as a senior EPA conservationist, and was a consultant for the Sunshine Coast airport management plan, stated "that runways near waterways are significantly more likely to experience bird strikes as birds fly along the waterways." Actions on the waterways such as boating (boat ramp) on Kedron Brook may force these birds to fly towards the proposed runway site. Ensuring runways are located as far away from waterways as possible and designs to reduce water bird numbers is important (5) The landfill site near Kedron Brook is known to harbour large numbers of birds and is another bird strike hazard.



"Planes on one side, humans and boats on the other, and birds in between is a recipe for disaster."

Option 4 is significantly better than Option 3 with regard to this as it moves the runway 400 m further away from the waterway rather then next to it and creates a buffer zone between the runway and Kedron Brook.

The White Bellied Sea Eagle nests on the proposed runway site and is classified as ATSB category 1 (most dangerous) The BAC has not stated in the EIS how it will manage this hazard. The Brisbane City Council has issued a conservation action statement (CAS) regarding the White Bellied Sea Eagle (www.ausraptor.org.au/pdf/ForumReport-final20060724.pdf) but this is not mentioned in the report. The BAC needs to clarify how it will comply with this CAS and manage this bird strike hazard. The Eastern Grass Owls are also captured under that CAS, and are a significant bird strike hazard. The Lewin's rail is a rare and protected species and also poses a bird strike hazard. RAMSAR international regulations state that their sites must be protected.

The Civil Aviation Safety Authority legislation requires BAC to have a bird management strategy which gathers information on the risk of bird strikes, counts bird numbers and develops action plans to manage high risk species. "To minimise the likelihood of bird strike BAC employs a number of staff dedicated to bird control techniques. These may include methods such as: • Monitoring of bird activity by Airport Operations Officers (AOO), • Reducing the amount of water lying on the Airport grounds to avoid attracting ducks etc; • Maintaining the grass at a length which deters birds; • Minimising available food; and • Harassing birds using: – Vehicle lights and horns; – Cracker shot; and/or – Live shotgun rounds."

The conundrum occurs as the BAC is legally obliged to protect birds such as the Lewin's rail and their habitats, and other birds in the RAMSAR site, but is also legally obliged to scare them away and employs people to do this. Likewise the BAC is required to protect other species of significance such as the grass owl, and White Bellied Sea Eagle but also must scare them away. Because "approximately 70 percent of bird strike incidents at Brisbane Airport occur in the landing roll phase of operation" the BAC will be required to scare the Lewin's rail from its habitat at the end of the runway.

It is important to keep the runway as far away as possible from bird habitats (Lewin's rail), the RAMSAR site, the white Bellied Sea Eagle nest and the other birds mentioned. **Option 4 would** be preferable to option 3 as it would allow a buffer between the proposed runway and the Lewin's rail habitat, and other habitats in particular Kedron Brook which is used by a number of birds known to cause bird strikes.

Bird strikes can potentially cause millions of dollars worth of damage, crashes, deaths (people and birds) and environmental impacts such as emergency dumping of fuel in Moreton bay. Thus putting the runway on a waterway, and close to bird habitats is hazardous and can lead to further environmental damage. In Appendix 1 there is a media release from CASA regarding bird strikes and some of the information regarding birds of significance for Nudgee Beach. In Appendix 2 there are some examples from US about bird strikes and the damage they cause



#### 5. No significant impacts on Ramsar site

The EIS draft report states that "No significant impacts to Ramsar Wetlands would occur as a result of the NPR project." Ramsar wetlands are recognised as a matter of national environmental significance under the EPBC Act's assessment and approval provisions.

A person must not take an action that has, will have, or is likely to have, a significant impact on the ecological character of a Ramsar wetland, without approval from the Commonwealth Environment Minister. Management plans for Ramsar wetlands must be consistent with Australia's obligations under the Ramsar Convention and with the Australian Ramsar Management Principles.

#### Significant impact criteria

An action is likely to have a significant impact on the ecological character of a declared Ramsar wetland if there is a real chance or possibility that it will result in:

- a substantial and measurable change in the hydrological regime of the wetland, for example, a substantial change to the volume, timing, duration and frequency of ground and surface water flows to and within the wetland; (The NPR project area borders the wetland and may affect ground and surface water. The plan is to put the storm water into Kedron Brook which flows directly to the Ramsar site.)
- the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependant upon the wetland being seriously affected; (the habitat and the lifecycle of native species will be effected by the noise and air quality changes bordering the NPR project and in the flight path in the Ramsar site.)
- a substantial and measurable change in the water quality of the wetland for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland, or water temperature which may adversely impact on biodiversity, ecological integrity, social amenity or human health; (pollutants are used in cleaning runways, spills on runways, and emergency dumping of fuel over the RAMSAR site all may adversely impact biodiversity, FAFA can be environmentally hazardous and its placement is important with respect to this)

The impacts on the Lewin's rail habitat are the same impacts on the RAMSAR site at the other end of the runway. The Public Safety Area (PSA) space will extend into the RAMSAR site. Lighting will be placed in the Ramsar site, and birds and other fauna in the flight path will be affected by physical hazards such as noise and chemical hazards such as CO2, Toluene etc. The airport will have to use methods to reduce bird numbers as the runway is adjacent to the Ramsar site on the northern end. It is noted that the RAMSAR site does not run along the coast but is indented to allow for the effects of the diagonal runway. Picture from EIS Summary of Major Findings p - 60



A recent example that highlights the potential effects on the bordering RAMSAR site occurred in Sydney on 2nd February 2007. A Qantas international flight was forced to dump its fuel in the ocean after a fire in the engine possibly caused by a bird strike.

The statement that there will be no significant impact on the RAMSAR should be clarified and studies that clearly show no significant impact have not been cited.

#### 6. Mangrove / Jackson Creek / Benthic Fauna and marine animal destruction.

As can be seen on the below diagram taken from the EIS draft, there is a large amount of mangroves (94ha) and saltmarsh (18ha) on the NPR project area. "Infilling of waterways and saltmarsh vegetation within the NPR Project Area" would result in a reduction of in the available habitat for some fish and crustacean species, the proposal would result in the loss of benthic fauna and aquatic vegetation, and may result in the reduction of marine animals of both commercial and environmental significance.

Picture EIS Summary of major finding p 56.

Option 3 would destroy more mangroves, more of Jacksons creek and contribute to greater benthic fauna and marine animal destruction than option 4.

If the future FAFA in option 4 was not built or built in a different location (and there are many other potential options for FAFA), Option 4 could retain much of this natural environment. This is a significant important wetland habitat that is closely related to the Ramsar internationally protected site.

#### 7. Health Impact Assessment (HIA)

I am currently the Chief Medical Officer for Woodside Energy. I have worked for over 10 years with industry, and in particular have studied the health effects from industry on employees and communities in particular noise. I have been involved in a number of health impact assessments and health risk assessments for industry. HIA as 'a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.

In brief Option 4 is better than option 3 as it would reduce the size of the footprint, increase the distance of the runway from residential sites and thus reduce the health impacts associated with the NPR.

The noise levels and maps provided show that at 2km there is significant impact on residential areas. If one looks at the N70 noise contour with the NPR at 2015 and 2035, the impact on residential and other communities is significant and could be reduced by bringing the runways closer together. For examples one of the major findings include an increase of 17 childcare and kindergartens subject to potential noise induced wakenings and a number of educational facilities



with an increase in overflights. If the runway were positioned at the minimal difference 1525 m the impact on residences, schools and kindergartens could be reduced.

The Australian Standard AS/NZS 2107:2000 prescribes suitable noise levels for educational facilities, living quarters, offices and public buildings and requires that buildings are built to these standards. As an example the noise in sleeping areas in hotels should not exceed 40 dB(A) and the noise levels in teaching spaces in schools should not exceed 45 dB (A). These were set to minimize negative health impacts from noise and ensure sleep or education is not disturbed. Studies conducted in both Los Angeles and Munich found that average blood pressure levels were slightly elevated in a group of schoolchildren exposed to aircraft noise. Fransenn et al published that aircraft noise around a large international airport does impact on general health and medication use. Their results suggest association between community exposure to aircraft noise and the health indicators of poor general health status, use of sleep medication, and use of medication for cardiovascular diseases.

The noise levels at Nudgee Beach sleeping quarters and at the educational facilities mentioned in the report will consistently exceed those recommended in the standard when the NPR begins to function as can be seen on the N70 contour maps. No significant noise reduction strategies have been offered to seriously affected residents (e.g. Nudgee Beach, schools, daycare or kindergarten facilities. There are ways to improve sound insulation to protect the homes or schools from excessive noise levels.

With respect to air pollution, Nudgee Beach was seen to have the largest increase of ambient air pollution. Benzene, Carbon Monoxide, Fomaldehyde, Nitrogen Dioxide, Particulate matter Toluene and Xylene were all considered. Option 4 by being further away would reduce concentrations and give more favourable results with respect to air pollution and the suggested increase in respiratory disease, leukaemias etc, in the report.

I have also been in Indonesia studying avian influenza and my team diagnosed the first cluster of avian influenza in Indonesia. I have done research including sampling of birds, cats, pigs and humans for influenza. H5N1 is a very real pandemic threat. It is hypothesized that the destruction of wetlands is one of the root causes that have forced intermingling of domestic and wild birds. Long term impacts such as H5N1 due in part to widespread destruction of wetlands is never considered in short term EIS. It is important to preserve as much wetland and keep as much space between the runway, the wetlands and people as possible.

In summary Option 4 for the new parallel runway currently at 1600 metres separation, (1525 metres separation also possible) would be significantly better then Option 3 at 2000 metres for many reasons. The BAC needs to ensure that they reduce risks to as low as reasonably possible (ALARP). The BAC has not demonstrated this. The current option 3 endangers rare species, protected wetlands and human health and may contribute to plane crashes.



I would like to thank

The environmental team at Woodside for their voluntary assistance

Dr Ian Smith Senior Conservationist EPA / pilot,

Dr Linda Selvey and Dr Frances Hayter; Queensland Conservation Council,

#### Appendix 1.

CASA Media Release - Monday, 14 March 2005

New aviation warning: control birds

Aerodrome operators are being warned they need to look closely at the steps they are taking to minimise the risk of aircraft bird strikes in Australia. Each year more than 1300 aircraft bird strikes are officially reported, with around 150 planes damaged by collisions with birds. The cost of a bird strike to a major airline in repairs and lost operating time can run into millions of dollars if a bird strikes a jet engine. The cost and frequency of bird strikes has prompted a warning that it is possible legal action could be taken against people or organisations that have failed to take reasonable steps to prevent bird strikes.

Reducing the risk of bird strikes is a feature story in the Civil Aviation Safety Authority's flagship publication, Flight Safety Australia magazine. The story says more than 90 per cent of bird strikes occur at aerodromes because most birds only fly close to the ground.

"Aerodrome operators therefore must take a high level of responsibility for managing the risk of bird strike," Flight Safety Australia says. "It is mainly large and flocking species of birds that present the biggest problems." These include ibis, ducks, bats and galahs. Birds of prey also pose a risk.

Aerodromes must have a bird management strategy which gathers information on the risk of bird strikes, counts bird numbers and develops action plans to manage high risk species. Action plans to control birds include removing food and habitats near aerodromes, using pyrotechnics to scare birds, culling, dog patrols, using birds of prey and lasers. Designing creeks and dams to reduce water bird numbers is very important.

#### **BIRDS OF PREY**

Other Name

Raptors

Strike Risk

Birds of prey are a serious risk to aircraft due to their size and predatory behaviour. Between 1991 and 2001 there were 394 bird strikes reported to ATSB which involved the various types of birds of prey.

The following table shows the breakdown of figures for each group:



Group strikes	ATSB rank	Number of strikes	%Cause damage %	Affecting flight	% Multiple
Strikes					
Eagle	1	38	55.3	13.2	0
Kite	7	90	14.4	4.4	8.8
Hawk	8	156	12.8	5.1	4.5
Falcon	17	18	0	5.6	5.5
Kestrel	19	92	1.1	0	5.4

Ranking and figures were obtained from The Hazard Posed to Aircraft by Birds (ATSB 2002).

#### **IBIS**

Strike Risk

ATSB rank 2 \*

Between 1991 and 2001 there were 39 bird strikes reported to ATSB which involved ibis. Of these:

- \*41% resulted in damage to aircraft
- \*17.9% had an effect on planned flight

Ibis are a very serious hazard to aircraft as they are relatively large and form flocks which can over-fly or thermal above airports. It is possible for more than one bird to be struck which can potentially cause the failure of one or more engines.

\*Ranking and figures were obtained from The Hazard Posed to Aircraft by Birds (ATSB 2002). http://www.atsb.gov.au/aviation/research/birdstrike.cfm

#### **Ibis at Airports**

The main attractions for ibis at airports include:

#### \*Grasslands

Grassed areas of airports are attractive to ibis, particularly during and after mowing or rainfall. Mowing kills and/or exposes invertebrates and small vertebrates for ibis to feed on. Rainfall forces soil-borne invertebrates to near the surface where ibis can use their specialised bill to seize them. Dry grasslands can also attract ibis, particularly Straw-necked Ibis where grass is sparse and short, there is easy access to the soil for prey items.

#### \*Food waste

Ibis are opportunistic scavengers and are able to forage on a variety of human food wastes. These may be available at or adjacent to airports where waste management practices are poor or where people feed birds.

<sup>\*17.9%</sup> involved more than 1 bird



#### \* Waterways

Australian White Ibis are attracted to forage along the edges of waterways or within shallow waterbodies.

#### \*Transit Routes

Australian White Ibis can fly up to 30kms between foraging and roosting sites in large flocks at low altitude, potentially coinciding with aircraft flight paths.

#### **Active Management**

Active bird management involves scaring or removing birds from the airport. There are numerous options available for the task, some of which have limited effect in the long term as birds become used to them. Generally, a combination of techniques provides the best results. For ibis, the following active management options can be considered:

- \*Disperse ibis using pyrotechnics (such as cracker shells), portable distress callers, sirens, lights and/or vehicles.
- \* Occasional killing (shooting) may be required (under permit from the relevant state or territory authority) to reinforce the impact of equipment used for dispersal. It should not, however, be considered as the primary solution for airports.
- \* Using trained animals such as birds of prey and dogs to disperse birds from airports has been highly successful in North America and Europe. This can be a costly operation, requiring specially trained animals and experienced handlers. Permit requirements for such activities vary between states and territories in Australia.
- \*Off-airport active management may include removal of eggs and nests at breeding colonies to limit population increase. An integrated management strategy which involves a variety of stakeholders may be required to manage overabundant ibis populations at a regional level. Limiting food supply at landfills and other foraging areas is necessary to reduce regional ibis populations and can be achieved by dispersing ibis using a combination of active management techniques

#### **MASKED LAPWING**

Vanellus miles Strike Risk ATSB rank 14\*

Between 1991 and 2001 there were

143 bird strikes reported to ATSB which

involved "plovers" (Masked Lapwings). Of these:

- \* 7% resulted in damage to aircraft
- \* 2.8% had an effect on planned flight
- \* 35% involved more than 1 bird



\*Ranking and figures were obtained from The Hazard Posed to Aircraft by Birds (ATSB 2002). http://www.atsb.gov.au/aviation/research/birdstrike.cfm
Prior to breeding season, Masked Lapwings form flocks. During breeding season Masked Lapwings pair off, become highly territorial and are reluctant to move from their territory even for large aircraft. This makes them particularly prone to being struck.

Active bird management involves scaring or removing birds from the airport. There are numerous options available for the task, some of which have limited effect in the long term as birds become used to them. Generally, a combination of techniques provides the best results. For Masked Lapwings active management options can be considered:

- \* Disperse Masked Lapwings using pyrotechnics (such as cracker shells), portable distress callers, sirens, lights and/or vehicles.
- \* Occasional killing (shooting) may be required (under permit from the relevant state or territory authority) to reinforce the impact of equipment used for dispersal. It should not, however, be considered as the primary solution for airports.
- \* Destroy eggs and nests of nesting pairs (permits required).
- \* Using trained animals such as birds of prey to disperse birds from airports has been highly successful in North America and Europe. This can be a costly operation, requiring specially trained animals and experienced handlers. Permit requirements for such activities vary between states and territories in Australia.

#### **SILVER GULL**

Larus novaehollandiae Strike Risk ATSB rank 6 \*

Between 1991 and 2001 there were 136 bird strikes reported to ATSB which involved gulls.

Of these:

- \* 15.4% resulted in damage to aircraft
- \* 3.7% had an effect on planned flight
- \* 31% involved more than 1 bird

Although they are only medium-small birds, Silver Gulls present a serious risk to aircraft as they form large, dense flocks which can fly unpredictably. Frequently, more than one bird is struck which can potentially cause the failure of one or more engines.



#### Land use planning near airports

Developments such as landfills, fisheries, feedlots, wildlife refuges, sewage lagoons, and some agricultural activities can harbour large numbers of birds. Where these are near an airport, a significant bird hazard to aircraft may develop and appropriate planning controls should be adopted.

Australia does not have consistent regulations between states/territories regarding planning policies which restrict land uses within the vicinity of airports.

Each airport should be aware of the pertinent regulations in their state or territory. In the UK any potential bird attracting developments within 13km of an airport must be assessed for bird strike risk before being permitted. However, some birds may travel much greater distances than this to reach food and may cross aircraft flight paths. Therefore it may be necessary to consider certain developments which are further away.

Remedial actions such as netting landfills or designing lakes which limit bird attraction can be considered as viable alternatives to the prohibition of the land use.

Civil Aviation Regulations 1988 – Reg 96 restricts the dumping of rubbish on or near aerodromes. See:

http://scaleplus.law.gov.au/html/pastereg/0/51/0/PR004680.htm

#### Managing bird populations at waste landfills

Silver Gulls have developed skills in acquiring food from waste landfills. This has created artificially large urban populations of these species in some areas. The key to limiting such populations is to deny bird's access to the food available at landfills. Good practices of keeping tipping faces small and covering waste will make the following options more effective:

- \* Netting the landfill area to exclude bird entry. This has been done successfully in the UK but at a cost of over £1million it is very expensive.
- \* Suspending monofilament wire or nylon line horizontally over waste landfills at 5 metre intervals. This has been successful in other parts of the world and can also be considered for use at places where gulls breed, roost or feed.
- \* Using a range of dispersal tools including gas cannon, distress caller and stock whip.
- \* Converting to more environmentally friendly closed waste systems where waste is turned into energy or composted. This avoids the need to dump food waste in the open for birds to access. (\* Land fill obviously occurs just across Kedron Brook close to the proposed NPR)



# Appendix 2 BIRD STRIKE EXAMPLES

The following examples demonstrate the widespread and diverse nature of the bird strike problem and are not intended to criticize individual airports. Many of the strike examples reported here occurred off airport property during descent, approach or climb

#### **Large Military Aircraft**

**15 July 1996; Belgian Air Force Lockheed C-130; Eindhoven, Netherlands:** The aircraft struck a flock of birds during approach and crashed short of the runway. All four crew members and 30 of the 37 passengers were killed.

**14 July 1996; NATO E-3 AWACS; Aktion, Greece:** The aircraft struck a flock of birds during takeoff. The crew aborted the takeoff and the aircraft overran the runway. The aircraft was not repaired, but none of the crew was seriously injured.

22 September 1995; U.S. Air Force E-3 AWACS; Elmendorf AFB, Alaska: During takeoff as the aircraft was passing rotation speed, the aircraft struck about three dozen geese, ingesting at least three into engine two and at least one into engine one. The aircraft was unable to maintain controlled flight and crashed in a forest about 1 mile (1.6 km) beyond the runway. All 24 occupants were killed.

**September 1987; U.S. Air Force B1-B; Colorado, USA:** Aircraft lost control and crashed after a large bird struck the wing root area and damage a hydraulic system. The aircraft was on a low level, high speed training mission. Only three of the six occupants were able to successfully bail out.

**1980; Royal Air Force Nimrod; Kinloss Scotland:** Aircraft lost control and crashed after ingesting a number of birds into multiple engines.

#### Civil Aircraft (USA)

Date: 03 June 1995 Aircraft: Concorde

Airport: John F. Kennedy (NY)
Phase of Flight: Landing roll

Effect on Flight: Aircraft was towed to gate

Damage: Engines

Wildlife Species: Canada geese

Comments from Report: Aircraft ingested a Canada goose into the #3 engine which had an uncontained failure causing parts to go into the #4 engine. Both engines were destroyed. Flames



and smoke were seen coming from both engines. Cost was over \$9 million. Aircraft was out of service for 5 days. The NY Port Authority paid \$5.3 million in compensation for losses.

Date: 10 December 1995

Aircraft: B-747

Airport: John F. Kennedy (NY)

Phase of Flight: Approach (7500' AGL)

Effect on Flight: Not reported

Damage: Engines, cowling, wing, fuselage

Wildlife Species: Snow geese

Comments from Report: As the aircraft broke through a cloudbank at 7500 feet, it was struck by a flock of snow geese, which sounded like sandbags hitting. The impact destroyed one engine, damaged several fan blades on another and extensively damaged the airframe. Repairs cost approximately \$6 million.

Date: 31 March 1996

Aircraft: B-737

Airport: Kansas City Intl. (MO) Phase of Flight: Take off

Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: Medium to large bird

Comments from Report: Airport operations found a piece of inlet cooling duct on runway from a B-737 that had just taken off. Aircraft returned and landed safely. Engine had several damaged guide vanes. Aircraft was out of service about 24 hours.

**Date: 2 June 1996** 

Aircraft: B-737

Airport: Chicago Midway (IL)
Phase of Flight: Climb (100' AGL)
Effect on Flight: Precautionary landing

Damage: Engine
Wildlife Species: Gull

Comments from Report: Ingested a gull during climb out. Tower observed flames from #2 engine and advised pilot who declared an emergency and returned to land without incident. Emergency equipment was on the runway. Aircraft landed using single engine landing procedures. Core and all fan blades were damaged. Engine was rebuilt.

Date: 7 January 1997

Aircraft: MD-80

Airport: Dallas-Fort Worth (TX)
Phase of Flight: Climb (50' AGL)

Effect on Flight: Precautionary landing



Damage: Engine & wing

Wildlife Species: Blackbirds (437)

Comments from Report: Aircraft struck over 400 birds just after take off. Almost every part of the plane was hit. Pilot declared an emergency and returned to land without event. Substantial damage was found on various parts of the aircraft. #1 engine had to be replaced. Runway was closed for an hour. Personnel were sent to disperse another large flock on the airfield.

Date: 27 January 1997

Aircraft: DC-10

Airport: Los Angeles Intl. (CA)

Phase of Flight: Climb

Effect on Flight: Engine shut down

Damage: Engine
Wildlife Species: Gull

Comments from Report: Crew thinks they hit a gull shortly after take off. #3 engine had a vibration with oil quantity fluctuation. When oil quantity dropped to zero, \_ of the way to Japan, the engine was shut down. Crew had planned to divert to Anchorage but decided against it due to poor weather. Feathers found in engine after landing. Cost \$1.5 million.

Date: 15 November 1997

Aircraft: Airbus 320

Airport: John Wayne (CA)
Phase of Flight: Take off

Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: Large bird

Comments from Report: A large bird was ingested into one of the two engines causing a fire. Passengers heard a loud boom, then the aircraft dropped momentarily before recovering altitude. The aircraft circled for 30 minutes before making an emergency landing. There were no injuries. Bird hit blades on starboard fan which broke or bent all blades causing damage to cowling and to system behind the fan. Engine changed. Time out of service 30+ hrs. Cost of repairs \$300,000 and other cost \$800,000.

Date: 17 December 1997

Aircraft: Bellanca Super Viking
Airport: Jefferson County (OH)

Phase of Flight: Take off

Effect on Flight: Aircraft lost power

Damage: Destroyed

Wildlife Species: White-tailed deer

Comments from Report: Aircraft hit a deer on take off and lost power, crashing into a heavily wooded area. Aircraft was destroyed. Pilot was life-flighted out and passenger had minor injuries.



Date: 09 January 1998

Aircraft: B-727

Airport: Houston Intercontinental (TX)
Phase of Flight: Climb (6,000' AGL)
Effect on Flight: Precautionary landing
Damage: Engine, radome, right wing

Wildlife Species: Snow geese

Comments from Report: Aircraft was climbing through 6,000' when a flock of snow geese was encountered. Three to five birds were ingested. Engine lost all power and was destroyed, radome was torn from the aircraft and leading edges of both wings were damaged, pitot tube for first officer was torn off. Intense vibration in airframe and noise level in cockpit increased to the point that communication between crewmembers became difficult. Emergency was declared. Flight returned safely to Houston. Time out of service was 216 hours and cost was \$468,000.

Date: 22 February 1999

Aircraft: B-757-200

Airport: Cincinnati/Northern Kentucky Intl. (KY)

Phase of Flight: Take off (rotation)
Effect on Flight: Emergency landing
Damage: Both engines and wing
Wildlife Species: European starlings

Comments from Report: Number 2 engine was destroyed. Extensive damage to right wing.

Massive clean-up of 400 birds. Cost of repairs at least \$500,000. NTSB investigating.

Date: 12 June 1999 Aircraft: Beechcraft 90

Airport: Westchester County (NY)

Phase of Flight: Take off

Effect on Flight: Aborted take off

Damage: Landing gear, nose, engines, props, wings, fuselage, lights

Wildlife Species: Coyote

Comments from Report: Nose gear was torn from aircraft causing other parts of plane to be damaged. Time out of service 5 months, lost revenue \$55,000 and cost of repairs \$550,000.

Date: 14 July 2000 Aircraft: Fk-100

Airport: Chicago O'Hare Intl. (IL)

Phase of Flight: Takeoff

Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: American crow



Comments from Report: Pilot heard a thump and felt the aircraft yaw slightly to the right. A foul odour filled the cabin. Engine caution light came on. Pilot pulled back power on engine and returned to land. Emergency equipment was standing by. Engine was destroyed.

Date: 23 August 2000

Aircraft: B-747

Airport: Philadelphia Intl. (PA)
Phase of Flight: Take off

Effect on Flight: Aborted take off

Damage: Engine, wing

Wildlife Species: Canada geese

Comments from Report: The aircraft flew through a flock of about 30 Canada geese and ingested 1 or 2 in the #1 engine. The high-speed aborted take off resulted in 9 flat tires. The aircraft was towed to the ramp. Time out of service was 72 hours. Engine was a total loss. Cost was \$3 million.

Date: 27 August 2000

Aircraft: B-747

Airport: Los Angeles Intl. (CA)
Phase of Flight: Climb (500' AGL)
Effect on Flight: Emergency landing

Damage: Engine

Wildlife Species: Western gull

Comments from Report: At least one Western gull was ingested just after take off. Bystanders on a beach heard a giant backfire and saw the jet spewing flames. Three pieces of the engine fell to the ground, one 5-ft piece landed on a beach where people were having a cookout. No one was injured. The pilot dumped 83 tons of fuel over the ocean and then made an emergency landing. The flight had 449 people who were not able to get another flight until the next day. The costs reported do not include room and board. Time out of service was 72 hours and cost of repairs was \$400,000.

Date: 08 November 2000

Aircraft: Saab-340

Airport: Aberdeen Regional (SD)
Phase of Flight: Approach (400' AGL)
Effect on Flight: Aircraft was grounded
Damage: Fuselage, wiper, propeller

Wildlife Species: Snow geese

Comments from Report: A flock snow geese was struck. The windshield wiper broke off, hit the prop which broke it into several pieces and threw it through the fuselage. A passenger was injured in the leg with the piece of metal and was taken to the hospital.

### 06 December 2000



Aircraft: Emb 120

Airport: Yeager Airport (WV)
Phase of Flight: Landing roll

Effect on Flight: None

Damage: Prop and fuselage

Wildlife Species: White-tailed deer

Comments from Report: Aircraft collided with 2 deer just after landing. The tip of a propeller blade

(4" x 3") had separated and punctured the fuselage, injuring a passenger, who later died.

Date: 05 January 2001

Aircraft: B-757

Airport: Miami Intl. (FL)

Phase of Flight: Climb (100' AGL)

Effect on Flight: Precautionary landing, engine shut down

Damage: Engine

Wildlife Species: Turkey vulture

Comments from Report: The number 2 engine ingested one or more turkey vultures just after lift off. There were at least 20 circling vultures. The engine failed and the captain returned to land without incident. Time out of service was 7 days and cost was estimated at between \$200,000 and

\$2 million.

Date: 14 January 2001

Aircraft: Learjet 60

Airport: Troy Municipal (AL)
Phase of Flight: Landing

Effect on Flight: Aircraft slid off runway

Damage: Aircraft destroyed

Wildlife Species: White-tailed deer

Comments from Report: The Learjet collided with two deer and ran off the end of the runway into a ditch because the thrust reversers would not operate. The aircraft burst into flames. Rescuers kept the fire from reaching the pilots for about 40 minutes until they could be removed. The pilot and first officer had serious injuries and were flown to a hospital. The plane was owned by the Dallas Cowboys owner. Cost to replace aircraft \$9.5 million. Other costs \$25,000.

Date: 21 January 2001

Aircraft: MD-11

Airport: Portland Intl. (OR)
Phase of Flight: Take off

Effect on Flight: Aborted take-off, engine shut down

Damage: Engine

Wildlife Species: Herring gull

Comments from Report: The #3 engine ingested a Herring gull. The engine stall blew of the nose cowl that was sucked back into the engine and shredded. The engine had an uncontained failure.



The pilot aborted take-off and blew two tires. 217 passengers were safely deplaned and rerouted to other flights.

Date: 08 March 2001

Aircraft: Bell 206

Airport: Barnes-Jewish Hospital Helipad (MO)

Phase of Flight: Approach (500' AGL)

Effect on Flight: None Damage: Windshield Wildlife Species: Duck

Comments from Report: Aircraft was transporting a heart patient to Barnes-Jewish Hospital, when

a duck crashed through the windshield. The pilot was slightly injured and was partially

incapacitated. The duck ended up in the patient's lap.

Date: 02 April 2001

Aircraft: B-767-300

Airport: Charles de Gaule

Phase of Flight: Climb (14,000' AGL)
Effect on Flight: Precautionary landing

Damage: Nose, radome, wing, fuselage, tail

Wildlife Species: Northern shoveler

Comments from Report: A flock of shovelers was struck causing dents and 11 punctures to the aircraft. One bird entered the cockpit causing depressurization. The pilot had to use an oxygen mask. The aircraft returned safety to the airport. Cost of repairs estimated at over \$1 million.

Date: 26 April 2001

Aircraft: B-757-200

Airport: Detroit Metropolitan (MI) Phase of Flight: Climb (300' AGL)

Effect on Flight: Precautionary landing, engine shut down

Damage: Engine

Wildlife Species: Snow geese

Comments from Report: After take off, flight crew saw several bird strikes to left engine. Engine made loud rumbling noise, EGT rose above 700 degrees and smoke entered the cabin. An emergency was declared and the engine was shut down. Landing was without incident.

Date: 08 June 2001

Aircraft: Airbus 300

Airport: Newark Intl. (NJ)

Phase of Flight: Approach (150' AGL)

Effect on Flight: None



Damage: Engine

Wildlife Species: Canada geese

Comments from Report: 2-10 birds were ingested which damaged several fan blades. The engine was removed and several sets of fan blades were replaced. Cost was \$2.8 million for repairs and

other costs.

Date: 09 June 2001

Aircraft: Airbus 300

Airport: Dayton Intl. (OH)

Phase of Flight: Climb (200' AGL) Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: Canada goose

Comments from Report: A Canada goose was ingested into the #2 engine shortly after lift off. The engine had an uncontained failure and a precautionary landing was made. The cost to repair (\$3.5 million) was not economical so the engine was scrapped.

Date: 31 July 2001

Aircraft: B-737-500

Airport: Washington Dulles Intl. (DC)
Phase of Flight: Approach (100' AGL)

Effect on Flight: None Damage: Engine

Wildlife Species: Canada goose

Comments from Report: A Canada goose was ingested during approach. The oil cooler was plugged with bird remains. A set of fan blades and the oil cooler were replaced. Time out of service was 4 days and cost was \$430,000. Bird ID by Smithsonian.

Date: 06 December 2001

Aircraft: B-737

Airport: Detroit Metropolitan (MI)

Phase of Flight: Climb

Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: Gulls

Comments from Report: Aircraft struck a flock of gulls, ingesting one after take off. Engine rolled back, and then started compressor stalls. Pilot pulled throttle back to idle and returned to airport. Emergency landing make due to engine flame out. The engine was replaced. Cost estimated at \$2.3 million.

Date: 26 January 2002

Aircraft: B-757

Airport: Denver Intl. (CO) Phase of Flight: Take off



Effect on Flight: Precautionary landing

Damage: Engine

Wildlife Species: Great horned owl

Comments from Report: Aircraft ingested a great horned owl which caused engine vibration. Aircraft returned to land at DEN with substantial fan blade damage. Engine was washed before remains were removed for ID. Maintenance thought there was fur and feathers in the engine. Smithsonian identified the feather remains. Time out of service was 3 days and cost of repairs was \$500,000.

Date: 21 February 2002

Aircraft: BE-1900

Airport: Phoenix Sky Harbor Intl. (AZ) Phase of Flight: Climb (400' AGL) Effect on Flight: Precautionary landing

Damage: Wing, fuel tank

Wildlife Species: Northern pintail

Comments from Report: Bird penetrated right wing and fuel was rapidly leaking out. Emergency

landing was made. Passengers safely deplaned. Smithsonian identified the bird.

Date: 24 February 2002

Aircraft: Fk-100

Airport: Dallas-Fort Worth (TX)
Phase of Flight: Climb (6000' AGL)
Effect on Flight: Precautionary landing

Damage: Engine, nose, wing

Wildlife Species: Greater white-fronted goose

Comments from Report: Aircraft struck a flock of geese and ingested one after takeoff. Engine vibration caused crew to reduce power to idle. Nose was damaged. Several blades were deformed. Engine was replaced. Bird ID by Smithsonian. Cost of repairs and lost revenue totaled \$654,000. Aircraft was out of service for 8 days.

Date: 09 March 2002

Aircraft: Canadair RJ 200 Airport: Dulles Intl. (DC) Phase of Flight: Take off

Effect on Flight: Aborted take off

Damage: Engine, windshield, fuselage

Wildlife Species: Wild turkeys

Comments from Report: Aircraft struck wild turkeys. One shattered the windshield spraying the cockpit with glass fragments and remains. Another hit the fuselage and was ingested. There was a 14 inch by 4 inch section of fuselage skin damaged below the windshield seal. Cost of repairs estimated at \$200,000. Aircraft was out of service for at least two weeks.



Date: 08 May 2002 Aircraft: Beechjet 400

Airport: Burke Lakefront (OH)
Phase of Flight: Take off

Effect on Flight: Aborted take off

Damage: Engines

Wildlife Species: Gulls (ring-billed and herring)

Comments from Report: Pilot revved engines to move gulls from runway. The gulls lifted off, but as the aircraft was taking off, the gulls returned to the runway and were struck. Both engines ingested gulls and were damaged. One had an uncontained failure, the aircraft was towed back to the hanger. 14 carcasses were recovered. Estimated cost was \$600,000.

### Letter from Queensland Conservation accompanying submission

Dear Sir/Madam,

Queensland Conservation (QCC) is the 'peak' environment organisation inQueensland. We write in support of the submission by Dr Andrew Jeremijenko. The QCC notes that the new parallel runway is likely to impact upon mangroves and salt marsh in the surrounding areas, with incremental impacts upon marine flora and fauna in Moreton Bay. We also note that the surrounding Boondall Wetlands and associated RAMSAR wetlands are of international significance. These provide habitat for a range of endangered and migratory birds, including the Lewin's Rail.

We urge that the EIS takes account of comments made by Dr Jeremijenko and takes all reasonable measures to ensure that no significant impacts are made to the surrounding wetlands, mangroves and species dependent upon these habitats.

Regards, Toby Hutcheon Coordinator



# **Mr Jeff Jones**

#### Formal Submission #159

Position Area Co-ordinator

Organisation Hawthorne Neighbourhood Watch Group

#### Submission full text

On behalf of the Hawthorne Neighbourhood Watch group I wish to submit our formal opposition to the proposed New Parallel Runway Project as follows;

As voted by the committee at our Community meeting held Saturday 3/2/07, we are opposed to the proposed form of the development and draft EIS for the following key reasons;

- Biased presentation within the Summary of Major Findings and therefore improper basis for decision making regarding impacts to the affected communities
- Lack of adequate sensitivity analysis regarding expected impacts to the affected communities eg: use of N70 contours as the main basis for presenting noise impacts for SEQ conditions
- The study highlights us (Hawthorne NHW area) as a key affected community (Volume D section 5.4) whilst we have not been given adequate opportunity as a community to fully appreciate and understand the potential affects from the proposal eg: no Community Information Sessions were held by BAC in our precinct despite being one of the key impacted areas. This equates to a lack of stakeholder consultation as required under defined EIS requirements.
- We find the data presented alarming, in terms of change to current noise level exposure (eg: Weekend Day N70 data) and the impact this would have to our current community amenity.

We request that the current timetable be extended to allow the draft EIS to be re-compiled addressing the above points with proper consideration to the potentially affected communities. The onus is on BAC, ultimately as part of pursuing a service charter to the Brisbane community, to ensure that acceptable development is achieved to ALL key stakeholders requirements and in particular the affected communities.

Jeff Jones

Area Co-ordinator



# **Mr Tim Joyce**

### Formal Submission #175

**Position** Community individual

Organisation n/a

#### Submission full text

Thank you for the chance to comment. The information provided is reasonably comprehensive and the outcomes well documented.

I admit to feeling that providing comment or influencing the outcomes any measurable way is an exercise in futility for the general populace. The new development will occur. The decision to proceed has already been made. All that is being done now is procedural crap!

This notwithstanding, I make the following generalised requests:

- 1. Every avenue should be explored to lessen the impact of plane noise over new areas of Brisbane.
- 2. A mechanism whereby the public can initiate outcomes against the airport and operations should be explored for flight path breaches.
- 3. Flight path traffic corridors should be narrowed and strictly enforced.
- 4. From the path, no plans should be allowed, under any circumstances to be on a flight path 1km north of the Brisbane River from Breakfast Creek to the intersection of Nudgee Road and Kingsford Smith Drive.
- 5. A system of continuous improvement should be adopted such that new technology, which minimises air traffic noise over urban areas should be implemented.

Regards,

Tim Joyce



# Mrs Carolyn Keane

Formal Submission #131

**Position** Community individual

Organisation n/a

# Submission full text

I object to the proposed flight path! Increased air traffic directly over our homes and local schools and the excess noise and pollution will significantly diminish our quality of life. When there are other options to have the flight path over the bay why put the health and safety of so many Brisbane residents at risk!



# Mr Steven Keane

### Formal Submission #224

**Position** Community individual

Organisation n/a

#### Submission full text

I oppose the parallel runway project as proposed. It will damage the quality of life with excessive noise pollution from jet aircraft over my suburb.

I object to the BAC imposing this noise burden upon me and other people in Balmoral to boost flight movements. We do not have this noise burden currently.

I oppose the runway configuration as proposed and seek either no new runway or a parallel runway that does not impose such a massive noise burden upon our suburbs.

I see no reason for my quality of life to be diminished in order for a private company to boost its profits. If there was no profit in this project then the BAC as a private company would not be proposing this project.

The noise burden will only get worse and worse, as the BAC ramp up the flight movements.

It is nonsense saying that it is OK as most movement will out to sea, as when the wind direction and strength is wrong there will be massive noisy flight movements over Balmoral.



# **Mr Dennis Kellett**

Formal Submission #132

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Balmoral I object to the Proposed New Parallel Runway for the following reasons:

This area is considered a 'character area', providing a comfortable life-style for people who want to be close to the city without the noise and hustle and bustle of city life.

Real Estate prices attest to this fact, and by introducing increase noise levels to that outlines in Flight Path and Noise Charts 2015 - Pages 34-45 shows an alarming numbers of flight paths over the Balmoral Suburb, which would disrupt and diminish the quality of life in this area.

Alternatives must be sources so that the majority of flights depart and arrive over the sea. Surely this will enhance the liability of Brisbane, which I believe is a major goal of the Brisbane City Council for the coming years. It's not a good start to downgrade the quality of life of the residents in one of the city's premier areas.

Please consider alternate options to the flight paths should the Parallel Runway Project go ahead.

I look forward to hearing further from you.



# **Mr Peter Kline**

Formal Submission #3

**Position** Community individual

Organisation n/a

## Submission full text

Dear Sir,

As by my reckoning my property is in between the two approach flight paths. I do think that it is a bit much to expect this area to take all this increase in noise and pollution. As this airport is a much needed thing for all the people, don't you thing you could put a bit more thought into the approach and departure paths so as to share it around when conditions allow it like they did in Sydney. Also there seems to be too much weight on saving airline companies money and not enough on helping locals deal with it.

Yours sincerely,

Peter Kline



# **Mr Peter Kline**

### Formal Submission #105

**Position** Community individual

Organisation n/a

### Submission full text

# Grounds

- Increase flights over my family
- Impact on my area
- The increased risk to my family's health and safety

### Submission

- That all flights utilise 19R, 19L, OIL, OIR at all times. Unless affected by extreme weather.
- By your own findings the NPR is for all so let's share the noise.
- It is infinitely safer for all to take off and land over the sea.
- The cost of making aircraft use 19R, 19L, OIL, OIR can be covered by a levy on passengers just like the fuel levy.
- Modern aircraft can handle landing and taking off with the wind in the wrong direction
- Lets use our brains and work out a better solution than what is in your impact statement. A two year old can draw straight lines too, you know.



# **Mrs Margaret Klucis**

### Formal Submission #219

**Position** Community individual

Organisation Boondall to Tinchi Tamba Wetland committee

#### Submission full text

I am concerned about the amount of damage to the ecology in the area, the destruction of mangroves and the impact on Moreton Bay by the works envisioned.

I am concerned about the bird strikes as the parallel runway is closer to the beach and the migratory birds roosts and flight paths.

I am concerned about the air quality as the emissions from jets create pollution in the wetland.

I want to know why is this parallel runway must go ahead why the recommended 1525 meters distance between runways cannot be implemented rather than the 2000 meters as in the plan. This would possibly save a considerable amount of buffer between the runways and the wetland.

I am concerned that the plan is not preserving the trees and natural areas, which are of value for the natural ecology and the prevention of greater global warming impacts.



# Ms E. A. Lanham

Formal Submission #77

**Position** Community individual

Organisation n/a

### Submission full text

Dear Sir/Madam,

I am making this formal submission in relation to the Draft Environmental Impact Statement and Major development Plan to oppose the construction of the New Parallel Runway on the grounds that it will significantly increase the air traffic into and out of Brisbane, thereby exacerbating the already high levels of global warming.

Yours sincerely,

E.A. Lanham



# **Mr Ray Lawrance**

Formal Submission #102

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Balmoral it seems like we will be right under the flight path with the new par. runway.

We have enough noise with the existing runway without further noise.

There are some late night flights that wake us now and I would not like it to get any worse, therefore I submit to you the following objections.

1 Page 123 of the N.P.R.D indicate flights right over my property (and we are already receiving noise from the existing runway)

2 When the westerlies blow most of the takeoffs are over this area and I would hate to see it get any worse, we tolerate it now, but more flights would impinge on our living conditions, the peacefulness of the area.

3 With the extra traffic generated there is sure to be more use of night arrivals and take offs, so I consider that a curfew may have to be investigated, or it might be impossible to live in the area.

Yours sincerely,

R.T. Lawrance



# **Mr Cameron Leckie**

#### Formal Submission #123

**Position** Community individual

Organisation n/a

#### Submission full text

#### **Peak Oil Quotable Quotes**

"The world is not running out of oil - at least not yet. What our society does face, and soon, is the end of the abundant and cheap oil."

Colin J. Campbell, founder of the Association for the Study of Peak Oil and Gas (ASPO), 1998

"Every generation has its taboo, and ours is this: that the resource upon which our lives have been built is running out. We don't talk about it because we cannot imagine it.

This is a civilization in denial."

George Monbiot, 2003

"The pessimists use the technical data, whereas the optimists use the political data." Jean H. Laherrere, renowned oil geologist, 2003

":All objective oil geologists agree that Peak Oil will occur - the real debate centres around exactly when it will happen."

William R Clark, author of PetroDollar Warfare, 2005

#### Introduction

This submission relates directly to Volume A, Chapter A2 of the Environmental Impact Statement (EIS), which details the need for the New Parallel Runway (NPR) project. The stated requirement driving the NPR is the expected growth in both passenger numbers and flights expected to arrive/depart from Brisbane out to the year 2035. Whilst the impact of fuel prices has been considered, the assessment that has resulted appears to be at best wildly optimistic. This submission will cover Peak Oil, its likely impacts, with particular regard to passenger and aircraft demand and an assessment of the need for the NPR.

# **Need for the Project**



The EIS states that "If fuel prices continue to rise or even stabilise at high levels they will generate twin impacts." 1 These impacts are increasing airline fares directly depressing demand and a slowing of consumer spending slowing world economic growth. From a risk management perspective, high fuel prices are the single greatest risk to the viability of the NPR.

Despite this, one of the major findings of the EIS is that:

Current fuel prices and uncertainties are considered unlikely to have a significant impact on medium to long term growth prospects2.

This statement is at best extremely optimistic and at worse irresponsible. The remainder of this submission will detail the reasons why this is the case.

#### Peak Oil - What is it?

Oil is a finite resource, which our economy is almost entirely dependent upon. Unfortunately, an increasing number of people, including an increasing number of long serving oil industry veterans, believe that we are about to reach a global peak in conventional oil production due to geological factors, after which there will be a gradual but terminal decline. The problem is that the global demand for oil continues to grow, meaning that the price of oil will be increasingly volatile and increase significantly. At some stage in the future we can expect to experience fuel shortages. Attached at annex A is a Peak Oil Primer.

### The EIS and Future Oil Prices

The EIS has made some questionable assumptions about the future oil prices. These include:

- a. Oil prices being \$46.90/b in 2014, \$54.08/b in 2025 and \$56.97/b in 2030. These prices are in 2004 dollars; 3
- b. Oil prices are expected to decline as new supplies enter the market.4
- c. It has been assumed that fuel prices are unlikely to stabilise at their recent high levels. 5
- d. It is likely that fuel prices will peak during 2006 and begin to fall into 2007 and 2008 as additional supply is provided.6
- e. The current fuel prices and uncertainties are considered unlikely to have a significant impact on medium to longer-term growth prospects.7



These assumptions do not stand up to a detailed analysis of the current and predicted oil production and fuel prices.

**Additional supply**. The EIS claims that additional oil supplies will mean a decline in oil prices. World Oil demand is expected to rise by 50% by 2025.8 Dr. Sadad al-Husseini, a retired senior Saudi Aramco oil exploration executive, has stated that "a whole new Saudi Arabia [will have to be found and developed] every couple of years" to satisfy current demand forecasts.'

IMAGEChart One World Oil Discovery and Demand

Unfortunately, both for the NPR and the broader community, this is unlikely to occur. Chart one details world oil discovery and production. Oil discovery peaked in the 1960s. Despite extensive drilling and improved technology, this trend has not been reversed. For example, a recent report by consultants, John. S. Herold and Harrison Lovergrove & Co, has found that whilst investment in exploration and production jumped 31 percent from 2004 to 2005, production volumes grew just I percent, and proven reserves in the ground remained essentially unchanged.11

These factors indicate that it is highly improbable that large, reserves, sufficient to considerably delay the onset of Peak Oil, will be found. Thus the assumptions made in the EIS with regard to oil prices declining as a result of increased supply are unlikely to occur and are not based on a thorough assessment of likely discoveries and production.

**Fuel prices**. The EIS assumes that oil prices will not stabilise at their recent high prices. This is an unrealistic expectation, which does not appear to be substantiated by even a brief examination of the available data.

The assumptions made on future fuel prices in the EIS, appear to derived using the "Flat-Earth Approach." This approach argues that a resource, such as oil, is deemed to be virtually limitless, with extraction being treated as if it were controlled only by economic, political and technological factors 12, Unfortunately Oil is a finite resource and the evidence indicates that we have already consumed around 50% of conventional oil.

In a market economy when the demand for a resource is greater than its supply, prices will increase. The world demand for oil is increasing. There is a high probability that the peak production will be reached within the next five to ten years (if it is not occurring now). As we approach and pass peak oil production there will be an increasing gap between demand and supply, causing significant and sustained prices increases and increased volatility. This is the assessment made by the Hirsch report (sponsored by the US Department of Energy) into the Peaking of World Oil Production13. Annex B details a number of oil industry veterans predictions for the timing of Peak Oil.



So how will this effect oil prices? Former US President, Bill Clinton, has stated, that "Everybody I know who knows anything about this business [oil] believes it'll be \$100 a barrel in five years or less." 14 This is more than double the price that the EIS predicts. Another estimate (made in 2005) sees the price of oil increasing to US\$175- 297/barrel or A\$2.21 - 3.33/L by 2010.15 The International Energy Agency's (IEA) '2006 World Energy Outlook' predicted that if demand continues to rise on its current path, the nominal price of oil will reach \$97.30 a barrel in 2030. 16 This is \$40.33 more per barrel than the figure used in the EIS, a 171% increase. An even more pessimistic outlook comes from a French investment bank Ixis-CIB which predicts that oil could reach \$380 a barrel by 2015. 17 This represents a whopping 800% increase on the price predicted in the EIS for 2014.

This review of the factors affecting future fuel prices indicate that the assumptions made in the EIS, with regard to fuel prices, do not take into account the geophysical realities of oil and its production.

## Peak Oil, Airtines and the NPR

The EIS states that oil prices have stayed higher, for longer, than expected, which has resulted in airlines instigating and then raising fuel surcharges over the past two years. The EIS also acknowledges that high fuel prices have slowed passenger demand.18 In these statements, the NPR Project acknowledges the airline industries vulnerability to higher oil prices. This section will examine how Peak Oil will impact airlines.

Modem commercial aviation is reliant upon Jet Fuels, which are of a higher quality than fuels used in less critical applications such as road transport. 19 The price of jet fuel is directly proportional to increases in the price of crude oil.20 This means that as fuel prices increase, airlines have no option but to pay higher prices for fuel. This will be passed on to passengers in the form of increased fuel surcharges.

Higher fuel prices impact upon other areas of the economy. The Reserve Bank of Australia (RBA) has determined that there is a relationship between the increasing price of petrol and interest rate rises21 and that petrol prices had 'contributed significantly' to annual inflation growth22. Obviously, increased fuel prices increase the pressure on household budgets. Market research conducted by Sensis in 2005 found that 40% of Australian consumers had cut expenditure due to increased petrol prices. The main expenditure reductions were on entertainment and 'going out' as well as travel, holidays and luxury foods. 23 Research conduct by Dodson and Sipe of Griffith University indicates that 84.5% of Brisbane's population has a medium or higher vulnerability to higher fuel prices and increased mortgage payments24.

The relatively moderate price increases that have occurred in 2005 and 2006 provide an indication of the future impacts of higher fuel prices. Higher fuel prices result in higher inflation, interest rates and fuel surcharges for airlines. At the same time, households have reduced disposable income and therefore spend less on items such as travel and holidays. A sobering warning for the future of



air travel comes from Dr Samsam Bakhtiari, formerly of the Iranian National Oil Company and a world renowned authority on Peak Oil, who has publicity stated to a senate inquiry that air travel will be the first casualty of Peak oil.25 There are others who share this concern, such as this:

The total reliance of the airline and tourism industry on oil means this industry will probably be the first to be affected. Already, high oil prices are causing fuel surcharges on air tickets and in the US a number of airlines are close to bankruptcy. Over time, international air travel and tourism will be restricted to the rich and powerful Mass tourism will decline into extinction. 26

Chart two provides a graphical representation of the probable future impact of fuel prices versus airline passenger numbers. Year zero is the year that peak oil production occurs. The numbers for fuel prices and passengers are arbitrary, the chart provides a graphic representation of how Peak Oil will impact upon passenger numbers. This is a simplistic linear model, which does not account for the volatility of oil prices as the peak is approached and passed. When price volatility is considered, passenger numbers could start reducing several years prior to the peak as supply and demand of oil narrows.

#### CHART 2

### Impact of Fuel Prices on Airline Passengers

Given that most predictions see Peak Oil occurring within the next decade, this will have a significant negative impact on passenger numbers expected to transit through Brisbane Airport, before, or shortly after, the completion of the NPR project.

### Greenhouse Gas Emissions

The current and future impacts of climate change also need to be considered. Whilst in the short term, it is unlikely that a carbon tax will be introduced, if and when there is a change of Government in Australia, it is likely that a carbon tax will be implemented. This will add further costs to the aviation industry, which will already be suffering from higher fuel prices, and further reduce passenger demand.

#### **Risk Assessment**

A risk assessment on the impact of Peak Oil on the NPR Project is attached at annex C. The result was a very high risk that Peak Oil will have severe consequences for the NPR. Prudent risk management on a project of this size would dictate that the impacts, and timing of Peak Oil be considered.

#### Why is the price of oil dropping?



If Peak Oil is such a concern, a logical question is: Why is the price of oil currently dropping? There are a number of factors, including:

- We have not reached Peak Oil production just yet.
- A warmer than usual northern hemisphere winter (possibly due to climate change) resulting in less demand for oil for heating purposes.
- At over US\$50 a barrel, the price of oil is already too expensive for many developing countries, resulting in demand destruction (meaning that their generators are not making electricity and their vehicles have no fuel).

Indeed the falling price of oil is very dangerous, because it sends a false signal that everything is perfectly okay on the oil scene. Despite the current lower oil price, the price will rebound at some point in the future due to the reasons that have been highlighted in this submission.

#### Conclusion

In a world with an endless supply of oil, the reasons justifying the NPR project seem plausible. However in a world where the production of oil will soon peak and then decline, resulting in substantially higher oil prices, the NPR will most probably be an expensive mistake. For this reason, prior to commencing work on the NPR, it is imperative that the project team undertake a detailed study of the likely timing of Peak Oil and its impacts on air travel. This will allow a more informed decision to be made on the need for the project.

### Recommendations

The following recommendations are made:

- a. A Peak Oil scenario be included in the EIS, in addition to the low growth and high growth scenarios. This should include the impact on passenger and flight numbers as a result of Peak Oil;
- b. An assumption on when Peak Oil will occur be clearly articulated in the EIS:
- c. How the costs of the NPR project will be affected if Peak Oil occurs during the life of the project or runway and the flow on effects to Brisbane Airport Corporation; and
- d. A new assessment on the need for the NPR be developed as a result of a detailed analysis of Peak Oil and its impact on air travel.

Annexes:



- A. Peak Oil Primer
- B. Peak Oil Predictions
- C. Risk Assessment
- 1) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, Section 2.7.4 Airline Costs and Fares.
- 2) Brisbane Airport Corporation (2006), New Parallel Runway Project Summary of Major Findings 2006, p. 16.
- 3) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68
- 4 Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68
- 5) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68
- 6) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68
- 7) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68
- 8) Hirsch, R.L., The Inevitable Peaking of World Oil Production, in the Atlantic Council of the United

States Bulletin, Vol XVI, No. 3, p. 3.

- 9) Hirsh, ibid., pp. 3-4.
- 10) http://www.aph.gov.au/senate/committee/rrat ctte/oil supply/submissions/sub135a.pdf
- 11) http://www.energybulletin.net/21987.html
- 12) Aleklett, K & Campbell, C.J. The Peak and Decline of World Oil and Gas Production. Uppsala University, Sweden.
- 13) Hirsch, R. (2005). Peaking of World Oil Production: Impacts, Mitigation, & Risk Management, SAIC, p. 61.
- 14) http://www.energybulletin.net/21959.html
- 15) http://populatin.org.au/affluence/oil20050315dh.htm
- 16) Lucas, C., Jones, A. & Hines, C., Fuelling a Food Crisis: The impact of Peak Oil on Food Security, p.

33.

- 17) Lucas, Jones, & Hines, et al. p. 33.
- 18) Brisbane Airport Corporation, (2006), New Parallel Runway Draft EIS, Chapter A2, p. 68.
- 19) http://en.wikipedia.org/wiki/Aviation fuel
- 20) http://www.aph.gov.au/hansard/senate/committee/S9515.pdf
- 21) Dodson, J. & Sipe, N. (2006) Shocking the Suburbs.- Urban Location, Housing Debt and Oil Vulnerability in the Australian City, Griffith University Urban Research Program: Brisbane, p. 11.
- 22) Ibid, p. 10.
- 23) Ibid, p. 12.
- 24) ibid, p.27.
- 25) http://www.aph.gov.au/hazard/senate/committee/S9515.pdf, p.21.
- 26) http://www.intnet.mu/iels/PO consequences.htm



# Mr & Mrs B & K Long

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**Position** Community individual

Organisation n/a

# Submission full text

Dear Councillor Flesser,

We strongly agree with you, and would like to see the new parallel runway as far away as possible from residential homes.

Thank you for your support, keep up the good work.

Yours sincerely,

Kerein & Barbara Long



# **Mr Christopher Love**

### Formal Submission #134

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Brisbane's Southside, I wish to object to the Brisbane Airport Corporation's 2003 Draft Master Plan. In particular I object to the BAC's proposal to build a second, western parallel runway at the Brisbane Airport.

I am opposed to the construction of a parallel runway for five central reasons:

- 1. A second runway will result in increased aircraft noise levels in my local community.
- 2. I am concerned about the impact of increased noise levels on the value of my property.
- 3. The Master Plan does not give any assurances about the precise proportion of total flight movements that will be directed over Moreton Bay.
- 4. The Master Plan does not contain draft flight path/flight track information despite the fact that the ANEF projections in the Master Plan must be based on certain flight path/track assumptions.
- 5. I am concerned about the possible health affects of increased aircraft volume over my local area.

Aircraft noise is already a key source of concern in my area, with the existing noise levels often preventing me from the peaceful enjoyment of my home. I am concerned that a second, western parallel runway will only add to the already excessive noise levels, and have a negative impact on both my property values and adversely affect my way of life.

There are at least 14 schools and 15 day care centres in my local area that are all affected by the current noise levels. I find this totally unacceptable to be within 6 km's of the city centre and have difficulty hearing because of the airport and aircraft noise. Having aircraft fly at certain heights and on certain paths does not stop the aircraft from being noisy.

Furthermore, I am frustrated that despite continuing community opposition, the BAC persists is pushing an unwanted parallel runway on local residents.



Southside residents have demonstrated their opposition time-and-time again to a second runway, with more than 10,000 of our local residents signing petitions to oppose the runway. Local residents have also attended rallies and protest marches to underline our opposition to the BAC's proposal.

I object to the BAC's proposal for a second runway, and demand you conduct a full, independent cost-benefit analysis of all runway directional alternatives that compares and quantifies the economic, social and environmental impact on local communities.

Yours sincerely,

**Christopher Love** 



# Mr Norman Love

### Formal Submission #135

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Brisbane's Southside, I wish to object to the Brisbane Airport Corporation's 2003 Draft Master Plan. In particular I object to the BAC's proposal to build a second, western parallel runway at the Brisbane Airport.

I am opposed to the construction of a parallel runway for five central reasons:

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- 5. I am concerned about the possible health affects of increased aircraft volume over my local area.

Aircraft noise is already a key source of concern in my area, with the existing noise levels often preventing me from the peaceful enjoyment of my home. I am concerned that a second, western parallel runway will only add to the already excessive noise levels, and have a negative impact on both my property values and adversely affect my way of life.

There are at least 14 schools and 15 day care centres in my local area that are all affected by the current noise levels. I find this totally unacceptable to be within 6 km's of the city centre and have difficulty hearing because of the airport and aircraft noise. Having aircraft fly at certain heights and on certain paths does not stop the aircraft from being noisy.

Furthermore, I am frustrated that despite continuing community opposition, the BAC persists is pushing an unwanted parallel runway on local residents.



Southside residents have demonstrated their opposition time-and-time again to a second runway, with more than 10,000 of our local residents signing petitions to oppose the runway. Local residents have also attended rallies and protest marches to underline our opposition to the BAC's proposal.

I object to the BAC's proposal for a second runway, and demand you conduct a full, independent cost-benefit analysis of all runway directional alternatives that compares and quantifies the economic, social and environmental impact on local communities.

Yours sincerely,

Nathan Love



# Ms Amanda Love

# Formal Submission #136

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident of Brisbane's Southside, I wish to object to the Brisbane Airport Corporation's 2003 Draft Master Plan. In particular I object to the BAC's proposal to build a second, western parallel runway at the Brisbane Airport.

I am opposed to the construction of a parallel runway for five central reasons:

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- 4. The Master Plan does not contain draft flight path/flight track information despite the fact that the ANEF projections in the Master Plan must be based on certain flight path/track assumptions.
- 5. I am concerned about the possible health affects of increased aircraft volume over my local area.

Aircraft noise is already a key source of concern in my area, with the existing noise levels often preventing me from the peaceful enjoyment of my home. I am concerned that a second, western parallel runway will only add to the already excessive noise levels, and have a negative impact on both my property values and adversely affect my way of life.

There are at least 14 schools and 15 day care centres in my local area that are all affected by the current noise levels. I find this totally unacceptable to be within 6 km's of the city centre and have difficulty hearing because of the airport and aircraft noise. Having aircraft fly at certain heights and on certain paths does not stop the aircraft from being noisy.

Furthermore, I am frustrated that despite continuing community opposition, the BAC persists is pushing an unwanted parallel runway on local residents.



Southside residents have demonstrated their opposition time-and-time again to a second runway, with more than 10,000 of our local residents signing petitions to oppose the runway. Local residents have also attended rallies and protest marches to underline our opposition to the BAC's proposal.

I object to the BAC's proposal for a second runway, and demand you conduct a full, independent cost-benefit analysis of all runway directional alternatives that compares and quantifies the economic, social and environmental impact on local communities.

Yours Sincerely, Amanda Love



# **Ms Rebecca Lumley**

Formal Submission #4

**Position** Environmental Scientist

Organisation n/a

# Submission full text

As a resident presently experiencing air traffic I was interested to see the projected noise contours for the region surrounding the airport. The quality of figures in the EIS is appalling! There is no scale bar, legend is missing items, images are blurry, difficult to read suburb names. This is not acceptable from a consultant.



# Mr Peter Lumsdale

Formal Submission #67

**Position** Community individual

Organisation n/a

#### Submission full text

I strongly object to the construction of the new parallel runway in the proposed location for the following reasons.

- 1. I believe that location will result in unacceptable standards of Aircraft noise for the residents of Northgate and other suburbs, particularly with the anticipated increased traffic and extended hours of operation.
- 2. The required destruction of mangrove area to accommodate the runway is also not acceptable on environmental grounds and is surely a breach of the Environmental Protection Act. The ecological value of mangroves on fish breeding and other environmental factors is now well established and as such there can be no justification for their destruction.

If it is essential that a new runway be built then locating it on the eastern side of the existing runway would reduce the noise factor and preserve the mangroves. It is my view that the decision to locate the new runway in the proposed location was made purely on a cost reduction basis that benefits the corporation and not the needs of the community, the environment or area ecology.



# Ms Karen Marrinan

Formal Submission #37

**Position** Community individual

Organisation n/a

#### Submission full text

I am writing to express my views on the parallel runway project that your Corporation is developing in Brisbane. I am extremely concerned and distressed by the prospect of noise levels and flights increasing over my suburb and thus reducing our quality of life. In the past when I have contacted the aircraft noise complaint department I have been met with a range of condescending and sceptical replies that leave me bewildered and angry. Ultimately whomever I have spoken to, does not believe me when I adamantly describe the noise, low level of planes, and number of flights that have distressed my family in these instances. This leaves me with little faith in the BAC!!!

I want a review of the Noise Management Plan for Brisbane. I believe we should have a night curfew like Sydney. I would like to see a commitment to reducing planes flying at low levels over suburbs and the frequency over these suburbs. It affects our children at schools as well, with learning being disrupted frequently. Please consider our mental and physical health when configuring your plans for progress. We love living in this area and so we are passionate about protecting it and the people who are our friends and neighbours.

Please listen and be compassionate and considerate.

Yours sincerely,

Karen Marrinan



# Mrs Elizabeth Marten

Formal Submission #95

**Position** Community individual

Organisation n/a

# Submission full text

This letter is being sent to you in response to Kevin Rudd's Report and my need to ensure a second parallel runway does not go ahead.

I have lived at my current address since early December of 1993.

While watching TV early in the morning, the planes fly directly over my house at about 1 minute intervals. How would you feel that you cannot hear what is being said on the TV news? The noise levels of the planes are so loud that I either have to turn up the TV (does not do my inner ears any good with two loud noises- TV and planes) or I can just leave it at the current loudness and not hear what is being said on the television. Which means I have intervals of hearing the television and not hearing the television. Do you consider this a relaxing episode of daily watching TV or not, I consider it to be stressful. Then again it happens late in the afternoon and then at night. I have had enough of the planes flying regularly over my house and not being able to come home and relax in peace and quiet that should occur at the end of each day and to have a good night sleep and be ready fresh and bright for each new day. This does not happen to me or for me.

If the number of planes flying over my house increases to 603 per day, I will practically have planes flying over my house about 1 per minute in the morning, which makes 60 per hour for 10.3 hours per day. I would never be able to hear the TV in the morning, during the day and at night when all a person wants to do is come home and relax (After all a person's home is their castle). So what is the use of a TV and relaxing (I will inherit is increased stress) when all I hear is planes, planes, planes, which leave behind them pollution, which can only fall in one direction, downwards and onto my house, garden and if I am outside onto myself.

Yours truly,

Elizabeth Marten



# Mrs Robyn Maslen

Formal Submission #133

**Position** Community individual

Organisation n/a

#### Submission full text

Over the last five years I have experienced over flight of my home at all hours of the day and night. No notice of change was ever given and now it appears increased traffic is to occur. Your EIS and TNIP appears to claim there will be no impact. Based on current experience this is an inaccurate and highly flawed statement. The current impact on my family and me is unacceptable as my family and me are woken at all hours of the night by aircraft noise, noise levels are at a level I must stop talking to be heard, my television signal is impacted upon and the local dogs react by barking at the over flight. Prior to purchasing this home over ten years ago I had checked with authorities and were advised that future changes to aircraft flights in the Brisbane area would not affect my home. I was obviously not told the truth.

I believe that state legislation states that any increase in noise level above 5dbA is unacceptable. While I do not have the expertise to be able to measure the exact noise levels the fact that the above stated impacts occur is testimony that accedence of this level is occurring. With the increase in traffic proposed I expect a further deterioration in my peace and quiet and quality of life.

Having been a user of air transport for many years I do not see why there is a need to increase the over flying of residential areas when this has only been a relatively new approach. Why cannot with another runway can flights over the bay not be increased which will not cause an increase in the areas impact and decrease the impacts on existing areas impacted. Is this because the mistake was made against recommendation years ago which located the existing runway at the wrong angle. Please reassess the proposed design and fix existing problems and not cause additional problems.

I object to the existing noise levels and frequency of flights and therefore object to anything but a removal of the existing over flights and an increase in such flights in the air space above Cleveland and Thornlands.



# Mr Peter Maslen

Formal Submission #160

**Position** Community individual

Organisation n/a

#### Submission full text

The proposal to add another runway to the Brisbane Airport is accepted as a need given the existing and future increase in air traffic. However the need to formally extend and increase the impacts on existing and new residential areas should be unnecessary and is unacceptable.

Over the last six years there has been an initiation and a steady increase in the number and hence the frequency of flights over Cleveland and Thornlands. Prior to purchasing my home investigations of current and future impacts due to air traffic was carried out. The advice given that there were no current impacts and these impacts would no change let alone increase in the future. A similar assessment was done of suburbs such as Bulimba, Hawthorne and Morningside. A prime reason for not purchasing a property for our home in these latter suburbs was aircraft noise. We have complained about this increase and have received the typical? Tough, this is progress and a resulting consequence? response. Obviously this is not a responsible reply but typical of current government and associated government controlled agencies in the 21st Century. Sadly a privatised government instrumentality is less likely to consider the community and undertake expansion of its operation without increasing impacts and decreasing the quality of life of that community.

On assessing the Environmental Impact Statement, the Transport Noise Information Package and associated information supplied with package for public comment there is no good news for myself, my family and the communities of Cleveland and Thornlands. The Transport Noise Information Package does not even acknowledge that there is more than one flight occasionally over this area. When there is existing over flying and unacceptable impacts it is obvious the criteria for assessment is flawed, inaccurate or a deliberate act of not being honest.

The concept of aircraft noise being unacceptable only above 70dB(A) is not acceptable even though Queensland's Environmental Protection (Noise) Policy 1997 states:

The planning levels for an airport are the following noise levels, assessed in front of the most exposed part of an affected noise sensitive place:

(a) the 20 ANEF;



(b) 70dB(A), assessed as the maximum sound pressure level, using the (S) time weighting, equalled or exceeded for more than 5 minutes over a 24 hour period.?

On some days the impacts appear to exceed even this unacceptable level. One does not appreciate being woken at 1:15AM, 5:10AM and 11:05PM as has occurred in recent times or any other time for that matter even if the event is only 30 seconds in one day. Similar having to stop conversation while an aeroplane passes over when normal noise in our area was limited to lorikeets and koalas (sadly the latter has not been heard for over two months due to other government environmental mismanagement).

Redland Shire Council's planning scheme while not mentioning aircraft noise has road and rail noise set as per the following extract, Table 1 and 2 of Division 10 of the scheme.

## Table 1 - Road Design Level Noise Criteria

Measurement Location Design Level Noise Criteria - See Notes

For - Aged Persons and Special Needs Housing, Apartment Building, Bed and Breakfast, Display Dwelling, Dual Occupancy, Dwelling House, Mobile Home Park, Multiple Dwelling or Small Lot House

1 metre in front of the building facade to a habitable room1 at a height corresponding to 1.5 metres above the finished floor level

These measures do not apply to upper levels. See Notes For a State-controlled road –

- (1) Comply with the external noise criteria specified in Section B6 of the Road Traffic Noise Management Code of Practice (Queensland Department of Main Roads) -
- (a) 63 dB(A) LA10(18hour) or less, where the LA90(8 hour) between 10pm and 6am is greater than 40 dB(A); or
- (b) 60 dB(A) LA10(18hour) or less, where the LA90(8 hour) between 10pm and 6am is less than or equal to 40 dB(A).

For all other roads -

- (1) Comply with Schedule 1 of the Environmental Protection (Noise) Policy 1997 -
- (a) 63 dB(A) assessed as the LA10(18 hour) level;
- (b) 60 dB(A) assessed as the highest 1 hour equivalent continuous A-weighted sound pressure level between 10.00pm and 6.00am;
- (c) 80 dB(A)assessed as a single event maximum sound pressure level.

Inside bedrooms of a proposed dwelling unit1

- (1) Average LAmax (10pm-6am) not greater than 50 dB(A);
- (2) LAeq(1hr)(10pm-6am) not greater than 35 dB(A)

Inside living rooms of a proposed dwelling unit1

(1) LAeg(1hr)(6am-10pm) - not greater than 40 dB(A)

At the private open space area of the dwelling unit1



- (1) LAeq(1hr)(6am-10pm) not greater than 55 dB(A)
- Balance of external site area, excluding private open space area and identified setback or buffer area
  - (1) 63 dB(A) assessed as the L10(18 hour) level

For - Community Facility, Education Facility, Child Care Centre, Commercial uses, Industrial uses, Institution or Place of Worship

Inside common areas of buildings associated with the use

(1) In accordance with the recommended design sound levels specified in Table 1 of the Australian Standard 2107 - 2000: Acoustics - Recommended Design Sound Level and Reverberation Time for Building Interiors.

Table 2 - Rail Design Level Noise Criteria

Measurement Location Design Level Noise Criteria - see Notes

For- Aged Persons and Special Needs Housing, Apartment Building, Bed and Breakfast, Display Dwelling, Dual Occupancy, Dwelling House, Mobile Home Park, Multiple Dwelling or Small Lot House

1 metre in front the building facade to a habitable room1 at a height corresponding to 1.5 metres above the finished floor level

These measures do not apply to upper levels. See Notes

- (1) In accordance with Schedule 1 Planning Levels, Section 3 Railways of the Environmental Protection (Noise) Policy 1997 -
- (a) 65 dB(A), assessed as the 24 hour average equivalent continuous A-weighted sound pressure level;
- (b) 87 dB(A) assessed as a single event maximum sound pressure level.

Inside bedrooms of a proposed dwelling unit1

(1) Average LAmax(10pm-6am) not greater than 50 dB(A)

Inside living rooms of a proposed dwelling unit1

(1) Average LAmax(10pm-6am) not greater than 55 dB(A)

At the private open space area of the dwelling unit1

(1) LAeg(1hr)(6am-10pm) not greater than 55 dB(A)

Balance of external site area, excluding private open space area and identified setback or buffer area

(1) 63 dB(A) assessed as the LA10(18 hour) level

For - Community Facility, Education Facility, Child Care Centre, Commercial uses, Industrial uses, Institution or Place of Worship

Inside common areas of buildings associated with the use

(1)Design sound levels as detailed in Table 3.

These levels generally will result in an almost acceptable level of inconvenience.



It is believed that with a different runway alignment as was once proposed for the present runway that lower impacts would have resulted. It appears that by maintaining that error the problem will not be rectified but exacerbated with the duplication. It is irresponsible for bad decisions to be repeated and a gun for hire report forced on the public whose submissions will to all intensive purposes be ignored with a further deterioration of quality of life which governments seem intent of infliction on the community.

The flight paths of over a decade ago as I recall did not pass over Cleveland or Thornlands but over the bay and down the less populated corridor in the east of Brisbane City Council, west of Redland Shire. With modern aircraft which have the capability of greater climb and decent rates than the aircraft of a earlier period it should be possible to determine flight paths that will not impact on a significant sector of the community.

It is requested that alternative paths be found that do not impact at the proposed levels and reduce the current impacts, which have been forced on my community without any consultation. As an engineer and scientist I believe the technical solution is available if the political will is made available. I look forward to a result, which will return the peace of Cleveland to the bird and koala sounds.



# Mr H McBryde

## Formal Submission #230

**Position** Community individual

Organisation n/a

## Submission full text

I wish to protest about the location of the proposed new runway.

- It will be to close to my home and the noise will be unbearable. At times the existing runway cause a noise problem.
- It is possible to move the proposed runway closer to the existing one. Why isn't this considered.
- Are you going to provide noise suppression materials to the affected houses.
- There needs to be a night curfew on the new runway.

Thanking you in anticipation of a change to your plans.

H. McBryde



# Mr & Mrs L R McCarthy

Formal Submission #104

**Position** Community individual

Organisation n/a

### Submission full text

Dear Sir/Madam

Re: New Parallel Runway Brisbane Airport

We write to express our concerns to the proposed new parallel runway at Brisbane Airport. We constructed our new home at the above address in 2005 and enjoy living in the area. We have noticed since residing in this house that on certain days (depending on the direction of the wind) and when it is overcast that we currently hear the roar/rumble of jet engines particularly when planes take off and when they land using the engines reverse thrust to slow the aircraft down.

The aircraft noise is somewhat much louder in the early hours of the morning and can easily wake you up from a deep sleep as it gives the impression of a loud thunderstorm rumble. This is very noticeable when aircraft are landing to the South. The thought of having a second runway some 2kms closer to us than what it is currently causes us grave concerns. Our home value will be adversely impacted by any additional noise arising from aircraft. This is a major concern given that we have recently built this home and are yet to realise the investment. If the property value in our area decreases as a result of this additional runway we are not likely to ever recoup our investment. Who is going to compensate us if the value of our property falls as a result of this second runway?

On a recent trip to Singapore and Hong Kong I noticed that when the particular aircraft that we were travelling landed in both cities the pilot did not appear to use any reverse thrust to slow the aircraft down. I would like to know if this is a policy of these International Airports to reduce noise population in those heavily populated cities. I appreciate that these runways were very long, however given that there is a significant distance between the Domestic and the International Terminals in Brisbane would this also provide an option to further reduce the amount of noise created from the jet engines when using reverse thrust?

Can the runway be located further to the east, so that it will not create an intolerable level of noise pollution?



What other options have been considered to help reduce the level of jet engine noise and vibrations? Will some type of barrier like those on the highways assist in this noise reduction?

Apart from the noise issue, what is going to happen to the many species of marine life that currently inhabit the locations surrounding Jackson Creek? The marine life in Moreton Bay immediately to the north of Brisbane Airport is not abundant at present and the potential change to Jackson's Creek will only promote further deterioration of the marine life in Moreton Bay. What counter measures have been developed to assist this part of Moreton Bay in re-establishing itself, should the runway proceed?

In summary we are very concerned residents of the area that are likely to suffer both financially and from a quality of life perspective from the inclusion of a second runway at Brisbane Airport.

Yours truly,

Liam and Donna McCarthy



# **Mr Stuart McCarthy**

## Formal Submission #152

**Position** Community individual

Organisation n/a

## Submission full text

Dear Sir/Madam,

# Re: Submission on New Parallel Runway Draft Environmental Impact Statement/Major Development Plan

Enclosed is my submission on the New Parallel Runway Draft Environmental Impact Statement/Major Development Plan.

I would be pleased to discuss the contents of my submission either in person or on the telephone. My address and contact details at home are shown above. Alternatively I can be contacted during working hours on (07) 3332 5094.

Yours Sincerely, (Original signed)

Stuart McCarthy

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- 1. The Growing Gap Oil Discovery and Production
- 2. ASPO Oil and Gas Production Profiles 2005 Base Case

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### List of Enclosures

- 1. Alex Kuhlman, "Peak Oil and the Collapse of Commercial Aviation?", *Airways Magazine*, July 2006, pp. 12-19.
- 2. Gal Luft, *The Oil Crisis and its Impact on the Air Cargo Industry*, Institute for the Analysis of Global Security, April 2006.
- 3. Simon Roberts, "Energy as a Driver of Change", The Arup Journal, 2/2006, pp. 22-28.
- 4. Simon Roberts, "Oil and Sustainability Friends or Foes?", Sustainable Development, pp. 49-51.

# **Executive Summary**

- The rationale that the NPR project is necessitated by growing aircraft and passenger demand is predicated on discredited forecasts of static world oil prices into the medium and long term.
- The EIS/MDP ignores the impending peak and subsequent decline of world oil production or 'peak oil'. Authoritative forecasts indicate that the production peak will occur in approximately 2010. Crude oil prices and therefore the price of liquid fuels including aviation fuel will increase dramatically from their present levels. The impact on the overall economy will be severe as alternative fuels are not viable and the necessary infrastructure is decades away. This problem is well known to the airline and related industries, governments and the public.
- With its viability already questionable, the airline industry is particularly vulnerable to oil depletion as there is simply no alternative to oil based jet fuel. Further increases in fuel prices will increase airline operating costs in the medium term to the extent many will collapse. Simultaneously, the effects of oil depletion in the broader economy will dramatically reduce passenger demand. Industry experts suggest that airlines should prepare for the orderly demise of commercial aviation. Proposals to develop airport infrastructure elsewhere in the world have been criticised on this basis.
- The specific oil price forecast cited in the EIS/MDP, providing the basis for assumptions regarding growing aircraft and passenger demand, has been widely discredited and proven inaccurate only six months after its release. More credible forecasts from within the airline



industry predict much higher oil prices and therefore invalidate the assumptions made in the EIS/MDP.

- Analysis of the direct and indirect impacts of higher oil prices predicted in more credible forecasts casts serious doubt on the financial viability of the NPR project, indeed it is likely to be redundant even before it is complete. The best case scenario is for air traffic to steadily decline from 2015, while the worst case is for it to decline sharply from as early as next year.
- Acknowledging the mitigation measures described in the EIS/MDP, the environmental impact of the project is unwarranted.
- Arup's 'SPeAR' sustainability assessment, including social, natural resources and economic factors, needs to be comprehensively revised to take into account the impact of oil depletion on the NPR project.
- The investment of \$1 billion in the NPR, representing a doubling in the value of BAC's infrastructure and a two-fifths increase in the corporation's total value, is financially unviable and therefore high risk. The lead consultants have thus far failed to inform their client of risks that are well known to the community in general and their own company in particular. BAC also has an obligation to disclose the risks to the project posed by oil depletion if it decides to proceed with the project, preferably via the final EIS/MDP.

# Introduction

This is a submission to the Brisbane Airport Corporation (BAC) on the New Parallel Runway (NPR) Draft Environmental Impact Statement/Major Development Plan (EIS/MDP).

The NPR project involves the construction of an additional runway and associated infrastructure including a seawall, approach lighting, tidal discharge channels and other temporary works at Brisbane Airport, at a cost of approximately \$1 billion. Construction is intended to commence in 2008 and conclude in 2015.

The EIS/MDP contends that the project is necessitated by growth in passenger and air traffic demand at Brisbane Airport, with demand predicted to exceed existing capacity by 2015. One of the assumptions supporting this growth forecast is that oil prices will remain relatively cheap into the medium to long term. This is seriously flawed in that it ignores the impact of world oil depletion, which will see prices remain volatile in the short term and increase dramatically in the medium to long term. Demand for Brisbane Airport may continue to grow in the short term, but will most likely decline from approximately 2010, i.e. before construction of the NPR is complete. This casts serious doubt over the rationale for the project and needs to be properly addressed in the final EIS/MDP assuming that BAC decides to continue with the project regardless.



Page references in the text below refer to the EIS/MDP. Other references are footnoted, and some are enclosed as appropriate.

# **Need for the Project**

The EIS/MDP states that the project is necessitated by increasing aircraft and passenger demand. The authors claim that growth in air travel will result in demand (aircraft movements) exceeding the capacity of the existing runways by around 2015. Furthermore, it is claimed that a failure to add additional runway capacity would result in a "loss of around 35 percent of regular airline movements by 2035" equating to "an annual loss of around 3.2 million international passengers and 8.8 million domestic passengers" (p. A2-43).

This rationale is based on optimistic forecasts of increasing passenger and aircraft movements that take no account of the effects of world oil depletion on airline operating costs and the affordability of air travel in the medium to long term. Before detailing the flaws in the specific oil price forecasts cited in the EIS/MDP, however, it is necessary to provide some background regarding the onset and seriousness of oil depletion.

# Oil Depletion

World oil discovery peaked in the late 1960s, the oil production rate has exceeded the discovery rate since the early 1980s, and in 2006 production rate was *four times* the discovery rate, as illustrated in Figure 1.

Figure 1 (source: ASPO Ireland)

Of the 65 largest oil producing countries in the world, up to 54 have past their peak of production and are now in decline, including the USA, the North Sea (UK and Norway) and Australia. Several comprehensive, independent studies by geologists and oil industry experts, most notably by Colin Campbell, founder of the Association for the Study of Peak Oil and Gas (ASPO), have reached similar conclusions regarding the production peak. ASPO predicts that the peak will occur in approximately 2010. The ASPO 2005 Base Case is shown at Figure 2, including 'regular' oil as well as heavy, deepwater and polar oil, natural gas liquids and gas.

Figure 2 (source: ASPO Ireland)

The ASPO projection is not the most pessimistic. Other researchers such as Kenneth Deffeyes, A. M. Samsam Bakhtiari and Matthew Simmons predict that the peak will occur before 2010 or indeed that production has already peaked. Conversely, many of the 'official' forecasts place the peak at 2030 or later, however these are invariably based upon secretive and/or discredited sources such as OPEC figures, oil company reports or politicised government agencies. The US Energy Information Administration, cited in the EIS/MDP, is one such agency.



The impact of declining oil production will likely be severe because there has been little or no preparation, indeed most of the world's leadership has been in collective denial. Unfortunately the world economy, particularly in developed countries such as Australia, has become almost totally reliant on the availability of cheap oil, not only in transport but in most sectors of economic activity. The disparity between declining production and rapidly increasing global demand will therefore cause unprecedented increases in the price of oil and other flow-on economic effects. Despite the claims of numerous businessmen, economists and politicians, alternative fuels such as ethanol and hydrogen will have at best only a marginal effect on addressing this problem as the necessary infrastructure is prohibitively expensive, would take decades to complete if ever the will existed to proceed, and the fuels themselves do not yield sufficient net energy to make them viable.

The oil depletion phenomenon is well known in the oil, energy, transport and aviation industries. It has recently been brought to the public's attention by various articles in newspapers such as *The Courier Mail*, *The Australian*, *The Sydney Morning Herald* and *The Age*, and television programs such as *Four Corners* and *Sixty Minutes*. Both the Queensland Government and the Brisbane City Council are undertaking inquiries into the impact of oil depletion. The Federal Government's Senate Rural and Regional Affairs and Transport References Committee recently completed its *Inquiry into Australia's Future Oil Supply and Alternative Transport Fuels*.

Despite this level of public and industry awareness, the impact of oil depletion on the aviation industry has been completely omitted from the Draft EIS/MDP, indeed the authors appear to have wilfully ignored the problem by selecting positive, yet discredited, forecasts of world oil prices.

## **General Implications for the Airline Industry**

Even before oil depletion is considered, the economic viability of the airline industry is questionable. In 2006 the industry almost recovered to break-even point following cumulative losses of US\$41 billion since 2001. Last year's spike in oil prices caused many airlines to increase fares, suspend flights and discontinue services, with some carriers declaring bankruptcy, including United Airlines, Delta and Northwest.

The airline industry is particularly vulnerable to oil depletion. Although incremental improvements in fuel efficiency and air traffic management continue to be made, the fact remains that there are no viable alternatives for oil-based jet fuel. Based on a crude oil price of \$61 per barrel the International Air Transport Association (IATA) expects fuel costs, already comprising the biggest operating cost for most airlines, to remain at an average of 26% of operating costs in 2007. Future oil price increases will have an even greater impact on the already struggling airline industry, to the extent that some analysts describe it as the 'canary' that will signify the onset of a 'peak oil' triggered economic downturn.

Airline pilot and economist Alex Kuhlman describes the likely impact of oil depletion on the industry in a recent article in *Airways* magazine. He argues that in the medium term a collapse in confidence will occur once financial analysts recognise the predicament, causing widespread panic



in the market and prices to soar above US\$100 per barrel. High prices will decrease consumers' disposable income and reduce demand. Many airlines will become unprofitable or collapse. Higher fuel costs will reduce the competitive advantage of low-cost carriers and demand for long-haul trips will diminish. Over the long term, the world economy will be faced with a major shock in which there will be social unrest, food shortages, rising unemployment and a strong reduction in business and government activity. Air travel will once again "become the preserve of the wealthy and government business, and the world will become a large place again." Kuhlman concludes his article recommending that:

... the more sensible airlines should be setting their own agendas for an orderly and profitable demise of the great aviation adventure.

Given the situation faced by the airline industry and the impact of rising oil prices, analysts around the world have been questioning the viability of proposed airport expansions for some years. In relation to the proposed expansion of Heathrow and Stansted Airports in the UK, Dr Colin Campbell of ASPO writes:

The building of additional runways in order to satisfy a perceived rise in passenger air travel, raises expectations that cannot be fulfilled. The runways at Stansted and Heathrow, if they are ever built, will serve as parking lots for redundant aircraft. The demise of the aircraft industry will be signalled by the progressive grounding of the aircraft fleets, as a reduction in the supply of jet fuel will be the first indicator of the end of the oil era.

The contents of the Draft EIS/MDP indicate that BAC's proposal for the NPR is also intended to 'raise expectations that cannot be fulfilled'.

## Specific Implications for the Brisbane Airport NPR Project

The justification for the new parallel runway (NPR) project rests upon forecast steady increases in passenger demand and aircraft movements from 2005-2035 (pp. A2-46 to A2-56). The 'key assumption' supporting these forecasts (p. A2-70) is that:

Airfares will fall modestly in real terms in the longer term and the higher airfares associated with the high fuel prices will abate before impacting significantly upon passenger numbers.

This is in turn based on the following optimistic projection of world oil prices (p. A2-68):

The US Energy Information Administration (EIA) Annual Energy Outlook (AEO) 2006 reference case includes much higher world oil prices than were projected in AEO2005. In the AEO2006 reference case, world crude oil prices ... are projected to continue to increase from \$40.49 per barrel (2004 dollars) in 2004 through to 2006, then decline to \$46.90 per barrel in 2014 (2004 dollars) as new supplies enter the market. Prices then rise slowly to \$54.08 per barrel in 2025 and to \$56.97 per barrel in 2030.



The IEA and its projections, including AEO2006, have been widely discredited by oil industry experts for starting with a 'politically acceptable' demand projection then 'tweaking' the supply assumptions to match it. In AEO2006, this 'tweaking' included claims that "the UK sector is expected to produce about 2.2 million barrels per day in 2010" despite having already declined below this figure in 2006; that "production from Norway ... is expected to peak at about 3.6 million barrels per day in 2006 and then decline gradually to about 2.5 million barrels per day in 2030" despite being expected by oil industry experts to decline much more quickly; and that "production in Mexico exceeds 4.0 million barrels per day by the end of the decade and continues increasing to 5.0 million barrels per day by 2030" despite the fact that production in Cantarell, Mexico's largest oil field and one of the largest oil fields in the world, has already peaked and begun to decline. Researcher Stuart Staniford describes these assumptions as 'ludicrous', while journalist Tom Whipple writes:

The core judgment of the Annual Energy Outlook 2006 reference case is so absurd that publishing it is a major disservice to the American people. The supplies of oil and natural gas available to the American people are simply not going to continue growing merrily along as they have for the last century. A break point emanating from geology, geopolitics, or simply economic growth and demand is clearly in the offing.

Clearly, EIA oil price projections such as those provided in AEO2006 are lacking in credibility and render the assumptions supporting the viability of the NPR project questionable to say the least. Notably, IATA economists forecast oil prices to remain at US\$61 per barrel in 2007. *This figure, from airline industry's peak body, is 50% higher than the EIA figure above, and only one month into 2007 has already proven much more accurate.* 

Another more realistic forecast of oil prices in relation to the airline industry is provided by Gal Luft of the Institute for the Analysis of Global Security. In his report *The Oil Crisis and its Impact on the Air Cargo Industry*, Luft provides three scenarios for oil prices over the next decade. The 'best case' scenario forecasts the price at US\$40-US\$55 per barrel, the 'business as usual' scenario at US\$55-US\$75, and the 'worst case' scenario at over US\$100. The EIA's AEO2006 reference case figures, cited in the EIS/MDP, lie at the cheapest end of this 'best case' scenario and have already been disproven by actual events. A better approach would be to use Luft's 'business as usual' scenario as a baseline in economic modelling for the NPR project, and conduct realistic risk analysis for the 'worst case' scenario. Continuing to refer to discredited forecasts would be irresponsible at best.

Oil prices are difficult if not impossible to predict accurately in the medium to long term even before oil depletion is considered, however recent price spikes do provide an indication of the susceptibility of oil prices to disruption, speculation and uncertainty. Significantly, the 2006 price spike was not caused by the impending production peak as most traders either reject or are ignorant of 'peak oil', believe that oil production is not constrained by geology but instead responds only to 'market forces' and speculate on the price based only on short-term considerations. Despite



this, relatively minor disruptions to crude oil production in various parts of the world, constraints on refining capacity and OPEC production cutbacks caused the prices to reach almost US\$80 per barrel and remain over US\$70 per barrel for months. As production peaks and markets begin to accept the reality of oil depletion, therefore, it is likely that prices will quickly exceed US\$100 per barrel and remain there indefinitely. Furthermore, given worldwide demand, Australia's remoteness, and our increasing reliance on imports, it is likely that physical shortages of crude oil and refined fuels may occur, as was the case during the 1970s oil shocks.

Both the direct and indirect impacts of oil price increases and shortages on the airline industry need to be considered together in order to appreciate the overall effect on the future demand for Brisbane Airport. These are summarised as follows:

- **Direct Impact Increasing Fuel Prices and Airfares**. Airfares will not "fall modestly in real terms in the longer term" as is claimed in the EIS/MDP. On the contrary, fuel prices and hence airfares will remain static or increase. The only question is the precise timing and magnitude of increases. The result of this for Brisbane Airport will be *declining passenger numbers and aircraft movements* in the medium to long term, and possibly the short term.
- Indirect Impact Downturn in Southeast Queensland Economy. The EIS/MDP uncritically repeats official forecasts of growth in the Southeast Queensland economy in much the same way as it does oil price forecasts (pp. A2-66 to A2-68 and pp. A2-70 to A2-74). Unfortunately these also ignore the impact of oil depletion, which will have a serious effect much more widely throughout the economy than just the transport sector. The agricultural, energy, mining, construction, manufacturing, retail and finance sectors all rely heavily, either directly or indirectly, on the availability of cheap oil, and will be affected by oil depletion. This will be compounded by existing threats to the economy such as the drought, climate change, poor housing affordability, record debt levels, the trade deficit and inadequate energy and surface transport infrastructure. A downturn in business activity, rising unemployment and declining 'disposable income' will see serious reductions in 'discretionary travel' as traditional customers focus on necessities rather than luxuries. Ironically, the EIS/MDP claims that Brisbane Airport will constrain the Southeast Queensland economy without the NPR (pp. A2-79, A2-80 and A2-84) when the opposite will probably be true, i.e. a downturn in the region's economy will most likely see the demise of Brisbane Airport. Alex Kuhlman makes the same point in the article cited above, in which he writes "without continued economic prosperity and stability, people may no longer have the cash to travel, shaking the very foundations of the airlines' raison d'être."

The result of this is that demand for Brisbane Airport will decline, not grow, once oil depletion begins to take effect some time in the next several years.

The following scenarios describe how BAC may be affected by oil depletion should it proceed with the NPR project:



- **Best Case**. Oil prices remain steady at approximately US\$50 per barrel, without major interruptions caused by natural disasters, war or terrorism. Production continues to increase steadily until approximately 2015 then begins to decline. An as yet unforeseen international effort to prevent a sudden 'oil shock' precedes an orderly 'power-down' of the economy, including the airline industry. Air traffic at Brisbane Airport grows steadily as predicted in the EIS/MDP *until* 2015, then steadily declines. The NPR becomes redundant several years after it is opened. BAC makes a large loss on its investment, unable to make sufficient revenue from a declining customer base.
- Most Likely Case. Oil prices remain volatile at US\$55-US\$75 per barrel in the short term, with occasional 'spikes' towards US\$100 as natural disasters, terrorist attacks and other geopolitical events cause supply disruptions. Production peaks in 2010, triggering a series of shocks during the years to 2015 that see prices frequently spike over US\$100 and return to US\$75-US\$100 levels in response to 'demand destruction'. Most of the world's airlines are the early victims of this demand destruction as air travel can be afforded only by the genuinely wealthy. Air traffic at Brisbane Airport grows steadily as predicted in the EIS/MDP until 2010, then steadily declines. Construction on the NPR is halted in 2010 as BAC realises that it will be redundant by the time it is completed. BAC loses \$700 million in 'sunk costs', goes into receivership, and is sold at a loss to a new consortium that manages the airport through its gradual demise.
- Worst Case. Oil production peaks in 2008, two years earlier than predicted by ASPO. Announcements that the giant Ghawar oil field in Saudi Arabia and Cantarell field in Mexico have peaked and are in rapid decline see oil prices spike well above US\$100 per barrel and remain there indefinitely. Stock markets collapse and the world enters a second great depression. The airline industry collapses entirely by the end of 2009, with private owners, air forces and a handful of 'niche' charter companies remaining as the only long-distance air transport operators. One year into its construction the NPR project is abandoned, by 2010 BAC has collapsed and the airport becomes derelict. Members of the board are sued by former investors and investigated by ASIC. Administrators in turn sue the lead consultants of the NPR project.

Given that the 'best case' scenario above envisages growth in air traffic for only one or two years after completion of the proposed NPR, the project is not considered to be viable. BAC would be better served by planning for a decline in demand for its services from the airline industry.

## **Environmental Impact**

Volumes B, C and D of the EIS/MDP provide extensive information as to the anticipated impact of the project on the environment, and proposed mitigation measures. Impacts include:

- Disruption of fish spawning and migratory bird habitats.
- Deteriorating water quality through increasing nutrients and suspended solids during construction and operation of the NPR.



- Removal of 15 Mm3 of sand from Middle Banks to be used as fill for the NPR.
- Social disruption due to construction and traffic noise and emissions and changes to flight paths, aircraft noise and emissions.

Although the mitigation measures identified in the EIS/MDP appear reasonable in and of themselves, given that the NPR will most likely be redundant by the time it is completed the environmental impact on the airport surrounds. Middle Banks and Moreton Bay cannot be justified.

# **Sustainability Assessment**

Section 7 of the Draft EIS/MDP provides an assessment of the sustainability of the NPR project using Arup's 'SPeAR' (Sustainable Project Appraisal Routine) tool. Omitting oil depletion from consideration elsewhere in the document casts doubt over the validity of this assessment. Specific elements of the assessment that require re-consideration include:

- **Social Social Responsibility** (pp. A7-293 to 94): Contrary to the indication in the report, proceeding with the project despite the onset of oil depletion to build a redundant runway would be highly *irresponsible*.
- **Social -** *Amenity* (pp. A7-294 to 95): The report concedes that there will be some loss of amenity resulting from the construction of the NPR. This is yet to take account of the opportunity cost(s) in time, effort and resources being spent on redundant infrastructure. \$1 billion, labour and skills would be much better directed towards more energy efficient and enduring forms of transport infrastructure (such as rail, ports and public transport) that would assist Southeast Queensland to make the transition to a post-fossil fuel future.
- **Social** *Stakeholder Satisfaction* (pp. A7-295 to 96): Contrary to the indication in the report, proceeding with the construction of a redundant runway, at huge expense, is likely to result in most stakeholders being *dissatisfied*.
- **Natural Resources Energy** (pp. A7-298 to 99): This factor is already indicated as being below best practice in the report, in that alternative energy sources will not be used during construction. It should, however, receive an even lower rating in that construction of the NPR will require large quantities of oil-based fuels which, if used to construct a redundant piece of infrastructure, will be particularly wasteful during a period when such fuels will need to be put to better uses such as public transport and rail transport.
- **Economic Viability** (p. A7-300): The report rates this aspect of the project highly. This is ludicrous given that risk management, innovation and research processes have already systematically failed to give *any* consideration to the oil depletion phenomenon despite it being well known to the public, governments and relevant industry bodies. Key assumptions stated in the



EIS/MDP that underpin the viability of the project, namely static fuel prices and steady growth in passenger numbers into the long term, are seriously flawed. The project is clearly *unviable*.

# **Business and Investment Implications**

BAC's 2006 Financial Report indicates that the corporation possesses total assets of \$2.6 billion, including property, plant and equipment to the value of \$1.1 billion. The cost of the NPR project is equivalent to 90% of the value of the airport's current infrastructure, or 38% of the entire value of the corporation. The EIS/MDP provides no information regarding the manner in which BAC intends to raise the necessary capital, however the viability of the project can be deduced by comparing the project costs to existing revenues extrapolated by forecast demand growth figures provided in the EIS/MDP.

In 2005-06 BAC received \$76.8 million in aeronautical revenue and \$109.2 million in security, retail and landside transport revenues. Assuming that existing infrastructure will meet demand until 2015 (consistent with the EIS/MDP), that aeronautical revenue will increase by the EIS/MDP forecast aircraft movements growth rate of 3.5% until 2015 and 2.8% from 2015 to 2035 (p. A2-51), that the other revenues will increase by the EIS/MDP forecast passenger demand growth rate of 4.9% until 2015 and 3.5% from 2015 to 2035 (p. A2-48), and that these revenues are directed entirely towards financing this project, the NPR investment will not be profitable until the year 2035, even without taking oil depletion into consideration. This is 25 years after the ASPO-predicted oil production peak. Should the peak occur by 2015 (up to five years after the ASPO forecast), causing a decline in demand from that time, the NPR will be redundant even before it is complete. The viability of the project must be seriously questioned by BAC.

The fact that the well known oil depletion, or 'peak oil', phenomenon has been completely omitted from consideration thus far casts serious doubt over the credibility of the project's proponents. Peak oil and its implications are well understood by Arup, the lead consultant for the NPR project. In a recent article in the company's journal, Arup Associate and Senior Scientist Simon Roberts writes:

... the abundance and excellent (net energy) of fossil fuels has underpinned the astonishing growth in industry and general economic activity around the world over the last century. As fossil fuels decline, we are due for a radical shake-up. Energy efficiency will have to get a lot better while we curtail many uses of energy to which we have become accustomed. A very apt description of this peak in energy use is "the party's over", after the book by Richard Heinberg.

In a separate article, Roberts describes the compounding effects of increasing oil prices, volatility caused by 'demand destruction' and a general economic downturn following the oil production peak:



The price of oil goes up but, unlike other traded goods such as butter and margarine say, we can't substitute for oil in transport; using less oil hits all. We may hope that high prices will unlock greater production but looking in detail at the decline of the US-48 output shows an extraordinarily insensitivity to price given a rise from \$3 in 1970 to \$75 in 1980. The first 'casualty' of high oil prices will be the poor, both those sectors within societies and poor countries, who will lose out not being able to afford oil products. After all, the market mechanism means that price brings about the necessary reduction of amount demanded where high price means not only that people buy less but also that only those that can afford it can buy.

The next development will result when money in the economy directed to oil is thus taken out of other activities, and the economy 'feels' this. Profits for goods and services decline so leading to a recession. Oil demand will then drop to a degree and the free market will mean that oil price falls a little, so triggering a reprieve from the recession but only temporarily. Economies will likely bump from recession to recession with the finger of blame likely to be pointed at OPEC or other geopolitical targets.

The Arup Futures Committee in Australia has also been actively considering peak oil in recent years, as has the peak industry body Engineers Australia. Arup has thus far demonstrably failed its duty to its client, BAC, for not giving due consideration to the impact of oil depletion on this project.

Equally, BAC has a duty to its current and prospective investors to disclose the risks inherent in spending \$1 billion on a piece of infrastructure that is likely to prove redundant. Should the project proceed BAC would become at best a high risk investment. To continue to omit oil depletion considerations from the EIS/MDP would be a failure of this duty, indeed it would be deliberately misleading, exposing the corporation to the risk of prosecution under security and investment laws and/or civil action from investors.

#### Conclusion

Volume A of the EIS/MDP needs to be completely revised to include the impact of oil depletion on the NPR project, which has somehow been omitted despite being well known to the airline and related industries, governments, the public and most notably Arup, the lead consultant for the project. Key assumptions underpinning the project relating to forecasts of static fuel prices and steady growth in passenger demand and aircraft movements into the medium and long term are seriously flawed. The impact of oil depletion on the local economy and the flow-on effects on the airline industry in general and Brisbane Airport in particular have also been overlooked. Financial models referred to in the EIS/MDP that allude to the viability of the project are therefore also flawed, indeed the NPR is demonstrably unviable. BAC needs to seriously re-consider whether it proceeds with the project and, if it does so, at the very least must disclose these risks to their investors.



# **Mr Troy McDonald**

Formal Submission #101

**Position** Community individual

Organisation n/a

#### Submission full text

As part of the public comment period I wish to lodge my formal objection to the new parallel runway project as currently selected for development consideration by the Brisbane Airport Corporation. Whilst I do not object to the project conceptually I do object to the runway separation distance chosen for the current proposal. There exists clear aviation evidence that a runway separation of 2000m is not required to operate a parallel runway configuration safely and efficiently. I can therefore only assume that commercial benefit to the BAC exists in continuing with the proposal in its current form rather than reduce the runway separation in the interests of minimising noise to neighbouring residents.

I would also like to raise my concern with the noise modelling data as currently prepared by the BAC. Documentation produced by the BAC is clearly in conflict in the area of what credit has been taken for the noise reduction expected through the operation of a modernised air fleet. On page 58 of the "New Parallel Runway Project - Flight Path and Noise Information Booklet" the BAC quotes under the "Fleet Mix" paragraph; "The use of these new aircraft, which are expected to deliver positive benefits to the community, has been taken into account in the modelling?". This is in direct conflict with information contained within fact sheet #17, page 2 under the "Addressing the issues" paragraph which quotes; "Because of this uncertainty all noise modelling for the new parallel runway has been undertaken using todays aircraft. Therefore, all noise information provided to the community is based on a "worst case" scenario?. I would appreciate clarification in this area as I see this of critical importance in accurately assessing the noise levels expected to be experienced by residents come 2015/2035.

To this end I would like to formally lodge my objection to the project. I would expect a more thorough review of the runway separation distance be conducted as part of the decision making process with more consideration given to noise minimisation at the expense of commercial and/or operational benefit.

Yours Sincerely Troy McDonald



# Mrs Helen McDonald

<b>Formal</b>	Submi	ssion	#146
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**Position** Community individual

Organisation n/a

## Submission full text

Dear Sir/Madam,

As part of the public comment period for the new parallel runway project, I wish to lodge my formal objection to the new parallel runway project. I believe that the 2000m runway separation currently selected as the preferred option for development progression is not fully considerate of noise minimisation for residential areas neighbouring the airport. The current proposal is clearly preferred by the BAC for commercial reasons only.

Hence, please formally lodge my objection to the project as currently proposed.

Yours sincerely,

Helen McDonald



# Ms Elizabeth McKenna

Formal Submission #51

**Position** Community individual

Organisation n/a

# Submission full text

To whom it may concern:

I live near Brisbane Airport at the above address. I am very concerned about the location of the proposed second runway, which will be 2 kilometres closer to my home. I am worried about air pollution and noise pollution. I think that this new runway will be much too close to homes in Northgate.

Many people in this area have spoken about their worries in this regard. I believe that the new runway, if it must be built at all, should be closer to the present runway.

Mrs E. McKenna



# Mr Scott McMillan

<b>Forma</b>	l Sub	missic	n #24
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**Position** Managing Director

Organisation Alliance Airlines Pty Ltd

### Submission full text

Thank you for the detailed information and briefings you have provided us in respect of the proposed parallel runway.

The economic and social benefits this project will provide to the State of Queensland and the wider Australian economy are clear.

The operational and growth capabilities this project will provide the aeronautical users of Brisbane Airport are significant and therefore we are delighted to provide our support to the project.

This support is based upon the premise that existing users will not in any way be forced to cross subsidise the cost of the project.

We wish you well with the project.

Yours Sincerely,

Scott McMillan



# Mr John Meredith

## Formal Submission #103

**Position** Community individual

Organisation n/a

#### Submission full text

I'd like to comment on two aspects of the proposal.

- (1) I'm a little disappointed that the option of recovering sand from a navigable channel cut through the south end of Moreton Is. was not considered. This could supply ample sand, reduce the pilotage for the Port of Brisbane to 10 or 12km and possibly supply a large quantity of 'mineral sand' (rutile etc), which could pay for the project. I realise of course, that common sense is anathema to the Greens and the project could be unacceptably delayed.
- (2) The political problem of noise
- (A) A possible Labour Prime Minister (Kevin Rudd) is already offside due to previous litigation.
- (B) Most importantly the line of the proposed New Runway cuts through Doomben racecourse
- (C) The residence of the Liberal member for Clayfield is under the flight path.

The most difficult problem is, of course, (b) above. The State government is welded to the idea of combining the two race clubs at Eagle Farm and selling the Doomben Race course to developers for fairly high density housing.

I think therefore you may be forced to consider moving the runway at least one kilometre into the bay, possibly more.

This could also mute the objections of the Ascot-Clayfield-Hamilton to the noise problem. I would like to point out that many like myself, remember the vicious noise problem from the old airport location. The old Boeing 727s have left an unfortunate legacy.

I suggest therefore that you prepare to negotiate. You may get away with a 1km shift if you are lucky.

John Meredith



# **Mr Terry Miller**

Formal Submission #195

**Position** General Manager Network

**Organisation** Power Link

### Submission full text

Dear Sir,

## **Brisbane Airport Corporation**

**Draft Environmental Impact Statement: New Parallel Runway Project** 

Powerlink is the State Government-owned Corporation responsible for Queensland's high voltage electricity transmission network that stretches from Cairns to the NSW boarder. This network transports electricity at high voltages from the power stations where it is generated, to Queensland's electricity distributors such as ENERGEX Limited and to major bulk electricity consumers.

Powerlink requests that the Brisbane Airport Corporation's Draft Environmental Impact Statement (EIS) and associated Major Development Plan (MDP) be amended to accommodate the future construction of a replacement transmission line to provide electricity to among others, the airport and its precinct. Specifically we request that the Obstacle Limitation Surface (OLS) next to the eastern most corner of the Nudgee Golf Course be relaxed to accommodate a future 32.3 m AHD structure in lieu of the present and acceptable 31.8m AHD structure, a difference of .5m

The basis for this request is:

- 1. Section 8,7,3 Hazards posed to Infrastructure and Surrounding Areas, pD8-350 notes of the potential for crash incidents into lower level powerlines in the nearby Nudgee area. Item 4 of this section advises that an assessment of the powerline using the ICAO published guidelines found that the presence of the existing ENERGEX Limited supply network structures to be an acceptable risk.
- 2. As noted above, the existing ENERGEX Limited tower next to the eastern most corner of the Nudgee Golf Course impacts the Obtacle Limitation Surface for the proposed future runway. A photograph of the base of this special right angle bend tower is provided on page B13-606 of the EIS. This tower has a total height of 31.8m AHD and penetrates the OLS by approximately 2.8m. A height and associated penetration that is considered an acceptable risk.



- 3. Powerlink will replace and upgrade the existing ENERGEC limited's 110kV sub transmission line to the Nudgee substation, which provided electricity to the airport and its precinct. Reference to this project in noted in the Queensland State South East Queensland Infrastructure Plan 200602026, p54. Reference to this aspect of the Queensland State South East Queensland Infrastructure Plan 20006-2026 appears to have been omitted from the EIS.
- 4. Powerlinks' most economical design for a structure to replace the ENERGEX Limited special right angle tower next to the eastern most corner of the Nudgee Golf Course requires a minimum structure height of 32.2 m AHD being .5m taller than the existing structure, which is considered an acceptable risk.
- 5. Provided the Brisbane Airport Corporation's Draft EIS, MDP and any other associated or relevant documentation can be amended to accommodate this request, Powerlink would be able to accommodate the OLA requirements in the remainder of the future transmission line without further delay.

We trust that you are able to accommodate this request which is only a minor increase on the height of the existing structure which has been analysed using the ICAO published guidelines found to be an acceptable disk. Please contact our Project Manager, Mr Wayne Hickey on 3860 2372 should you require further information regarding this submission.

Yours Sincerely,

Terry Miler General Manager Network



# **Mr David Milton**

Formal Submission #237

Position QWSG Chairperson

Organisation QLD Wader Study Group

#### Submission full text

The New Parallel Runway Project, Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for Public Comment.

The QWSG has reviewed the above EIS with regard to shorebird habitat requirements.

There are two main ways that shorebird habitat will be impacted. This is to their roosting habitat and to their feeding habitat. The QWSG has identified important shorebird roosts in Moreton Bay; however these sites can change over time. Areas accrete and other areas may be developed or erode away and the shorebirds will move accordingly. The reclamation paddocks at the Port of Brisbane currently provide large areas of suitable shorebirds roosts. Once the reclamation paddocks are developed there could be a need for more shorebird roosts. Also the areas used by shorebirds on Moreton Island are constantly changing. The proposed dredging of Middle Banks could impact on potential shorebird habitat. Moreton Island is a very critical high tide roosting area. The beaches and off shore sand banks of the sand islands in the Bay have at times been used by many thousands of shorebirds.

The feeding areas in Moreton Bay need to be kept in a healthy condition. The seagrass areas when uncovered by the tide are very important feeding areas. These intertidal areas can be adversely affected by storm water run off which may be polluted or from sediment or dredged sand being disturbed and settling over seagrass. Already there are areas in Moreton Bay where the shorebirds no longer feed at low tide due to the lack of invertebrate fauna.

The monitoring of shorebirds and their habitat is conducted by the QWSG as part of volunteer activities of the group. This information is provided to government bodies and decision makers when development is being proposed. It is noted that as part of the management and development of the new parallel runway monitoring of shorebirds will be conducted. The use of the airport land and Moreton Island by shorebirds over time will be of interest to the OWSG. We encourage the Airport to maintain a monitoring program in co-operation with the QWSG over the next 10 years.



# **Ms Amanda Molomby**

Formal Submission #181

**Position** Community individual

Organisation n/a

#### Submission full text

My submission will focus on four issues:

- 1. Community Consultation
- 2. Environmental
- 3. Safety
- 4. Health

## 1. Community Consultation

Whilst the community consultation satisfied the legislative requirements under the Environment Protection and Biodiversity Conservation Act (Cth)1999 in respect to the length of time required (90days) for public comment, I would argue that it does not comply with the intention and spirit of the law. That is that people who will be affected by the changes to flight paths will have the ability and adequate time to view the proposals. The information booths were located in suburbs not affected by the prosed changes. On the north side of the city the suburbs which will be most affected are Nundah, Hendra, Ascot and Hamilton. The information booths were at the airport, Virginia and Bardon. Virginia and Bardon will not be affected. In addition, the EIS/MDP was released at the beginning of November and submissions must be in on 6 February 2007. Arguably, this time was selected because many families are gearing up for Christmas, celebrating Christmas, on annual Christmas holidays and preparing children for the return to school. Thus many submissions will not be lodged because people have other commitments. Mr Jim Carden in an advertisement in the Quest Northern Chronicle called it the "hectic Christmas holiday period". Therefore, the information and comment process is fundamentally flawed. This process needs to be repeated in an open and frank manner.

I do not trust the BAC's Brisbane Airport Project Director Cam Spencer to tell the truth. At a northside business forum I asked Mr Cam Spencer if Ascot/ Hamilton would be affected by the prosed changes to the airport. He responded that these suburbs would not be affected. That



response was untrue because Ascot will bear the brunt of the changes. In the local Quest Newspaper Mr Spence stated that the traffic problems were not caused by the direct factory out let yet on Background briefing on 9 July 2006 Mr Jim Carden said, "Now what happened was upon opening, it seemed everybody in Queensland wanted to go to see this new shopping centre, and yes, mea culpa we had major congestion that morning, and indeed one other day later on in that week. It was a huge, huge success, but unfortunately some people missed their planes and we were mortified". There are still traffic problems around the DFO and the impact is felt in the surrounding suburbs, particularly if the is an accident on one of the major arterial roads. This can only be expected when there has been an increase in the number of workers using the current roads leading to the airport including approximately 35,000 DFO workers, not to mention the shoppers.1

#### 2. Environmental

Under the South East Queensland Regional plan (SEQR plan) released in July 2005 outlined a vision for south east Queensland which will be compromised if the new parallel runway (NPR) proceeds as it is envisaged in the EIS/MDP.

The SEQR plan contains a number of goals, which have been developed by the Queensland Government which reflect the cornerstone for the future development of Queensland. These goals are outlined in section 9.6, Volume B9: Airport and Surrounds Social Impact Assessment and include:

A future for South East Queensland, which is sustainable, affordable, prosperous and liveable, Where:

- · Communities are safe, healthy, accessible and inclusive;
- There are diverse employment opportunities, and quality infrastructure and services, including education and health;
- Urban and rural areas are mutually supportive and collaborative in creating wealth for the community;
- Development is sustainable, well-designed and the subtropical character of the region is recognised and reinforced; and
- The community has access to a range of quality open space and recreational opportunities.

By implication the planned development at the airport will adopt these goals however this is not the case. The legislation, which protects the rights of the residents to use and enjoy the land, does not have to be complied with. Thus this places the BAC about the law of the Queensland state and local council.



This must be addressed urgently but the Federal Government.

# 3. Safety

The liveability in the suburbs of Nundah, Hendra, Ascot and Hamilton will be significantly affected by the proposed NPR. Members of the community feel apprehensive about large aircrafts flying at low altitudes over the suburbs, particularly since September 11th when planes were high jacked and flown into buildings. There are a number of large residential buildings, such as Brett's Wharf and Portside which could be possible targets. There have been notable near misses, even at the Brisbane Airport which makes the proposed new flight paths unsuitable in a highly built up area.

#### 4. Health

Research demonstrates that there are significant impacts on the health and education of people living under flight paths. In particular, children are a high-risk group vulnerable to the effects of chronic aircraft noise exposure. The level of sound is an important indicator of environmental quality. Noise has been defined as unwanted sound in the environment. An English study examined the effects of aircraft noise exposure on children's health and cognition around London Heathrow airport. It found that exposure to high aircraft noise (16-h outdoor Leq >66 dB) affected the reading ability of children and that the children did not habituate or adapt to the noise. The EIS/MDP has down played the effects on children by combining communication and cognition (7.7.2).

Communication and cognition are separate things therefore should not be lumped together. According to Speech Pathology Australia cognition includes thinking, memory, problem solving, logical planning, and ability to understand subtle language. Communication on the other has 5 areas: Speech, Language, Pragmatics, Fluency and Voice. Communication includes being understood as well as understanding others, either in speaking and listening, or in reading and writing.

As a parent it is concerning that the Brisbane Airport Corporation is prepared to put the airport development and profits ahead of our children's futures.2 There are a number of educational facilities under the new flight paths, including the Hendra State School, Hamilton State School and Ascot Kindergarten. These children's communication abilities will be affected. It will also affect the elderly as their hearing deteriorates with ageing, coupled with additional noise will effect their communication and socialisation. The EIS/MDP avoids these issues.

The EIS/ MDP D7 304 defines a "vulnerable group". It is indicated in the EIS/ MDP that this "vulnerable group" will be more likely to suffer the effects of noise. This "vulnerable group" includes people with depression. According to BeyondBlue depression will be second only to heart disease as the major cause of death and disability in 20 years. Depression statistics in Australia are comparable to those of the USA and UK.3 The rate of depression among children is increasing at



a rate of 23% per annum.4 It remains unclear whether the incidence of depression in the community is increasing or whether there is an increase in the number of people seeking help for depression. The statistic suggests that the number of people in the vulnerable group is indeterminable but is likely to increase. There is no recognition in the BAC impact study that based on statistics the number of people in the vulnerable group is likely to increase and that therefore aircraft noise will affect an increasing percentage of the population. This has been shown in research conducted in Munich. Children in the noisy environments had a lower psychological well-being than children in quieter environments. After integration of the new airport, the newly noise-exposed communities showed a significant decline in self-reported quality of life after being exposed to the increased aircraft noise exposure for 18 months.

The BAC states that the newer aircraft will be quieter. Without exception all planes have a dBA over 70 and the new airbus will have a dBA of 74.6. The BAC makes no commitment to require operators to upgrade their fleets to these less noisy aircraft. Furthermore, there should be a night curfew between 8pm and 6 am.

#### Air Pollution and Health

Significant associations between daily PM10, NOx and/or CO levels and daily cardiorespiratory mortality have been found in Sydney and Brisbane.6 The National pollutant summary shows that aircraft emission of PM10 is 230,000 Kg a year this is significantly higher than in industrial areas. For example, the emissions from petroleum and coal production are 78,000 Kg/year or iron and steel manufacturing 72,000 Kg/year7. This means that people living in the suburbs of Nundah, Hendra, Ascot and Hamilton are exposed to approximately 3 times the exposure level from PM10 than a worker in the petroleum and coal production or a steel manufacturing plant. Unlike a worker, residents can not get away from the exposure or wear clothing to protect themselves. The EIS/MDP has down played the effect of PM10 at 7.13.3.2. PM10 is more than an irritant causing an inflammatory response to exposure of the chemical; it has been linked to causing lung cancer.

EIS/MDP has also downplayed PM 2.5. Concerns are being expressed that it is more toxic than PM10. Recent research shows that there is an association between fine particles and increased daily mortality and decreased life expectancy. The research also shows that there is no safe threshold level for particle exposure. This evidence comes from two recent studies in the USA. One followed over 8,000 adults living in 6 US cities for a period of 14 years, collecting information from each on factors such as smoking, occupation, etc. Once these had been taken into account, the study found that the difference in pollution levels between the most- and least-polluted city (-18.6 ug/m3 PM2.5) was associated with a 26% increase in mortality. Similar results were found in a second study, which involved more than half a million people in 151 US cities over a period of 7 years, and found that the difference in pollution between the least and most polluted city(in this case 24.5 ug/m3 PM2.5) was associated with a 17% increase in mortality. Both these studies found the increases in mortality to be largely attributable to circulatory and respiratory causes. There were also indications of links between particulate levels and deaths from lung cancer. This



has also been recognised that PM pollution causes heart and respiratory disease, lung cancer and premature deaths in Australia and it is estimated that more than 3,000 Australians die annually.

Subgroups of patients who appear to be more sensitive to the effects of air pollution include young children, the elderly and people with existing chronic cardiac and respiratory disease such as chronic obstructive pulmonary disease and asthma. The following is a list of affects people experience from air pollution:

- Increased mortality.
- Increased incidence of lung cancer.
- Increased frequency of symptomatic asthma attacks.
- Increased incidence of lower respiratory tract infections.
- Increased exacerbation of chronic cardiopulmonary or other diseases, reflected in various ways, including reduced ability to cope with daily activities, increased hospitalisation, increased physician visits and medication, and decreased pulmonary function.
- Reduction of FEV1 or FVC associated with clinical symptoms.
- Increased prevalence of wheezing unrelated to colds, or wheezing on most days or nights.
- Increased prevalence or incidence of chest tightness.
- Increased prevalence or incidence of cough/phlegm production requiring medical attention.
- Increased incidence of acute upper respiratory tract infections that interfere with normal activity.
- Acute upper respiratory tract infections that do not interfere with normal activity.
- Eye, nose and throat irritation that may interfere with normal activities (eg, driving a car), if severe.

These symptoms affect the most venerable, the elderly and young children. There are a significant number of both in Nundah, Hendra, Ascot and Hamilton. These suburbs have a significant number of units and there are future plans to increased high density living. If the planned sale of Doomben proceeds then there will be a further increase in the number high density homes and consequently an increase in the residents living under the flight paths. When the Northshore Hamilton development is finished more residents will be affected by air pollution. In the future will residents affected by air pollution sue for compensation from the Brisbane Airport Corporation? I hope so if the NPR goes ahead because the corporation will not be able to argue that they were unaware of the impact of air pollution on the health of the residents. The American tobacco companies learnt the hard way. This research shows that aircraft should not be taking off over highly populated areas. The BAC should reconsider its options so that the least harmful to the residents is adopted.

# • Urban (and rural areas) are mutually supportive and collaborative in creating wealth for the community.

The creation of an aerotropolis at the Brisbane airport will significantly impact on local business regardless of what Jim Carden say "I think the idea of an airport simply being a place where you catch a plane is very much redundant, for a number of reasons. The international economy, the global economy is now moved predominantly by air. The 21st century is very much the century of



aviation, but aviation is a lot more than simply getting on and off the plane. It's the cargo, it's the fresh food and vegetables, it's the importing, the exporting, it's the mail deliveries that go interstate, overnight while you sleep; all the ancillary and services that hang off what is a rapidly growing international industry in aviation. It's not going away; it's not going to revert back to simply a place where you catch a plane."

The creation of a aerotropolis will also have significant impact on local traffic, which the BAC does not care about as demonstrated through limited road infrastructure contributions.

# - Ecological and culturally significant landscapes are valued, celebrated and protected;

The BAC states that mangroves and other marine communities are of a high value however in its preferred option (Table 3.3 Runway options- assessment impacts) there would be a loss of mangroves in the remnant sections of the Serpentine Creek. The EIS/MDP minimises the removal of the mangroves because in option 4 it states that 'some of the mangroves in the remnant sections of the Serpentine Creek would be removed'. Thus, according to the options (3& 4) the one that removes more mangroves is the preferred option.

# - The community has access to a range of quality open space and recreational opportunities

The EIS/MDP in its own words says that noise will be increased over Nundah, Hendra, Ascot and Hamilton. This will mean that people will not have the full use and enjoyment of the properties. One of the new flight paths will go directly over the Eagle Farm race track. This flight path will interference with the enjoyment of racegoers. It will also go over Racecourse road a popular eating place for many Brisbane residents. Given the effects of air pollution discussed above it would be dangerous for people to dine outside and suffer possible health effects.

Further, the effect of aircraft noise also causes horses to become agitated. This could affect the safety of jockeys and handlers.

- 1) Advertisement, Edition 47 publication, date 08 July 2004.

  Airport which makes the proposed new flight paths unsuitable in a highly built up area.
- 2) Mary M Haines, Stephen A Stansfeld, RF Soames Job, Birgitta Berglund and Jenny Head, 'A follow-up study of effects of chronic aircraft noise exposure on child stress responses and cognition', International Journal of Epidemiology, 2001;30:839-845
- 3) Murray, B & Forinberry A (15 January 2005) Depression Facts and Stats http://www.upliftprogram.com/depression\_stats.html (accessed 06.02.2007).
- 4) Murray, B & Forinberry A (15 January 2005) Depression Facts and Stats http://www.upliftprogram.com/depression\_stats.html (accessed 06.02.2007).

(~18.6£gg/m3 PM2.5) was associated with a 26% increase in mortality. Similar results were found in the second study, which involved more than half a million people in



- 5) 'Environmental Considerations in Airspace Change", Airspace and Environment Regulatory Unit, Airservices Australia, Document number AERU CB1-40357 at 81
- 6) Morgan G, Corbett S, Wlodarczyk J, Lewis P. Air pollution and daily mortality in Sydney, Australia, 1989 through 1993. Am J Public Health 1998; 88: 759-764. Simpson RW, Williams G, Petroeschevsky A. 'Associations between outdoor air pollution and daily mortality in Brisbane, Australia'. Arch Environ Health 1997; 52: 442-422.
- 7) The National Pollutant Inventory: summary report, 'http://www.npi.gov.au/cgi-bin/npireport.pl?proc=substance;instance=public;year=2006;loc\_type=state;loc\_state=QLD;substance=69' accessed 5 February 2007.
- 8) Environment Protection and Heritage Council [home page on the Internet]. Adelaide (AUST): Environment Protection and heritage Council; 2003 June [cited 2005 July]. Ambient Air Quality NEPM. Downloads: Impact Statement for the

Draft Variation, Summary of Submissions received (plus NEPC's responses to those submissions) and Issues Paper – The need for a PM2.5 Standard in Australia.

Available from: http://www.ephc.gov.au/nepms/air/air\_variation\_dl.html

- 9) Tord E Kjellstrom, Anne Neller and Rod W Simpson, 'Air pollution and its health impacts: the changing panorama,' Medical Journal of Australia 2002 177 (11/12): 604-608.
- 151 US cities over a period of 7 years, and found that the difference in pollution between the least and most-polluted city (in this case 24.5£gg/m3 PM2.5) was associated with a 17% increase in mortality. Both these studies found the increases in mortality to be largely attributable to circulatory and respiratory causes. There were also indications of links between particulate levels and deaths from lung cancer. This has also been recognised that PM pollution causes heart and respiratory disease, lung cancer, and premature deaths in Australia and it is estimated that more than 3,000 Australians die annually.
- 10) Background Briefing, ABC ,http://www.abc.net.au background Briefing 9 July Growth of the Aerotropolis



# Mr Stephen Morgan

#### Formal Submission #180

**Position** Community individual

Organisation n/a

#### Submission full text

We strongly oppose any further development of the New Parallel Runway at Brisbane Airport.

Having read through the Summary of Major Findings 2006? we have many strong concerns, including but not limited to:

- Noise Pollution (directly over our home) and the major distress that will cause.
- Massive increase in the number of aircraft flying close over our home each day/night
- Drop in Property Value of our home.
- Loss of quality sleep from aircraft noise and its impact on our health, both physical and mental
- Toxic Emissions from the aircraft.
- An apparent lack of curfew for flights over our home.

We believe the Aircraft should be directed over Morton Bay and not over our homes. The quality of our lives will be adversely affected from aircraft overhead and we object in the strongest possible way to this potential invasion of our peace of mind and health.

It is important to note; had we known that aircraft would be flying directly over our home several times an hour, we NEVER would have purchased the house we live in.

We would have spent our hard earned money in another suburb free of noise pollution.

If the New Runway directs flights over our currently peaceful home, we fear we will have to sell our home and move in order to keep our current quality of life and sleep. No one should be forced to take such drastic and expensive action when there are other options available to the airport other than directing flights over our homes!

Morton Bay should be used as a flight path, not our suburbs!!!



# **Mr Terry Morgan**

Formal Submission #238

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir,

We have lived at Banyo for the last thirty five (35) years, during which time we have enjoyed a quite and peaceful amenity and it is now with some grave concern we are informed of the proposed construction of a parallel runway 1,500 metres away.

In the Brisbane Airport Corporation (BAC) plan they are looking for a separation of 2,000 metres between the runways while international standards allows 1,525 metres separation, if it is possible then why not move the runways further away form our house any reduction in noise level would surely be prudent.

The Airport Corporation while it is a private enterprise looking to maximize their profitability to investors have espoused they need the additional 475 metres for infrastructure their quest for profits should not be at the expense of our peace and quite environment.

The mangroves along Jackson's Creek should be preserve to add to the natural sound barrier and ensure there is an adequate flood way through the Kedron Brook area.

Any increase in ambient sound level will reduce the valuation of our and surrounding properties what compensation will be afforded to us if this happens, in effect this is private enterprise seeking to maximize their investment why should it be at our expense.

The runway should not come in to effect without a nighttime curfew and any operational noise should not adversely effect our sleep time, noise exposure forecasts should be produced and the Airport Corporation should be accountable if their operation exceed the levels during operation and residents should be compensated.

Yours faithfully Terry Morgan



# Mr John Morris

Formal Submission #22

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir,

I understand that this is one of many letters already received and of many more yet to be received regarding the second runway to be built at Brisbane Airport. Please review the contents and advise accordingly.

As a householder already impacted by the first runway, I would ask whether you have investigated the following options: -

- 1. Sharing the pain rather than running nearly all the flights over the same flight path, why not run the flights for one hour over one approach, then vary it for the next hour and so on so that no one particular suburb or flight paths cops the brunt of the flights. I am sure it is more cost effective to have the same landing approach and takeoff path, but by varying these you would, I am sure, have a lot more householders on side if they know that even at its worst, they would only have say, one hour of flights overhead per day.
- 2. Steeper takeoffs and landings again probably more costly for the airlines but given the built-up city environs they are flying into, this would be an option whereby less areas would be affected.
- 3. A curfew if Sydney can have a curfew, why not Brisbane? Yes it is not ideal for the airlines but it is a balance whereby the residents and the airlines needs are both taken into consideration.
- 4. Use the ocean take off/landing paths. It seems inconceivable, that one night after windless night, aircraft come thundering in and out of Brisbane over the suburbs when the ocean option is available. Warmer months (when people spend more time outside) seem to be a season more favoured by air traffic controllers to bring in all planes over the suburbs...?

Most Brisbane residents affected by the flights are realists - we accept the fact that a new runway is needed and coming, but need to ensure that this does not just get built and used without proper thought and planning for the possible outcomes.



A balanced perspective whereby some, or all of the above suggestions are used would be a help and ensure that, as a city, we can all support the new runway.

I look forward to your advice regarding the above proposals.

Regards

John Morris



# Mr Rick Morton

#### Formal Submission #183

Position General Manager Planning and Environment

Organisation Port of Brisbane Corporation

#### Submission full text

Dear Cam

# New Parallel Runway Draft Environmental Impact Statement and Major Development Plan

We refer to the new parallel runway Draft Environmental Impact Statement (EIS) and Major Development Plan (MDP). We appreciate the need for increased airport capacity to cater for population growth and recognise the airport as being critical to the economic growth of South East Queensland.

We would, however, like to raise a few matters, which we look forward to working through with you at the appropriate time. These comments relate to seaport operational issues and the Northshore Hamilton project.

#### **Seaport matters**

The majority of our issues relate to clarification of information presented in the EIS and ensuring monitoring is undertaken to confirm that the proposed dredging operations do not result in increased channel maintenance requirements for the Port of Brisbane Corporation. Detailed comments are provided in the attached Appendix. The majority of our issues relate to:

- The stability of the navigation channel immediately adjacent to the proposed dredge area;
- Potential for increased maintenance dredging requirements in the channel adjacent to the dredge area;
- Dredge movements impacting port shipping traffic;
- Bank stability adjacent to the proposed pump-out facility;



- Potential for increased sedimentation of navigation channels and the swing basin adjacent to the proposed pump-out facility as a result of propeller/bow thruster wash and sand lost during the discharge operation. Related to these issues are monitoring and remediation requirements;
- Effects to the submerged sewage line adjacent to the proposed pump-out facility;
- The need to ensure that the dredge does not import marine pests; and
- Impacts of the proposed runway operation on port development heights (e.g. in relation to future container cranes).

### **Hamilton Northshore matters**

As you are aware, Northshore Hamilton will be a significant redevelopment precinct accommodating Brisbane's growing population, including significant key workers and users of the Brisbane Airport, over the next 20 years. Ongoing planning and development of the precinct will need to take into account any future changes associated with airport operations.

Obviously, we would appreciate your immediate advice should there be any changes to the forecasts or operational aspects of the proposed runway from that outlined in your EIS/MDP.

We look forward to receiving further information about these important operational matters, please contact either myself or Brad Kitchen on 3258 4888.

Yours sincerely,

Rick Morton

**General Manager Planning and Environment** 

#### **Appendix**

#### **Detailed comments in relation to seaport matters**

- The documentation supplied is not clear as to the target dredging depth within the proposed extraction area. Cross sections should be provided the show current and proposed depths. These cross sections should include an indication of the current channel location, bathymetry and proposed changes.
- The documentation provided is not clear in the extent of the proposed dredge area in relation to the shipping channel. The figures (Nos. 2.2b, 3.14a, 3.14c, 3.14d) provided should show the shipping channel and existing navigational aids as site references.
- Section 3.14.3.2 indicates that the dredged area will result in a net increase of some 10% in wave height in the East Channel, and some 25%+ (text indicates up to 100%) increase in



sediment movement in the same area. What impacts will this have, both short and long term, on the stability of the existing shipping channel?

- Similarly, 3.14.3.1 indicates an increase in the current speed within the East Channel, north and south of the proposed extraction site. However, as a result of the dredging, tidal flows in the areas to the east and west will decrease. To what extent will this reduction impact on the accretion rates along Ridge Shoal, and could this see increased siltation within the adjacent sections of East Channel?
- The dredge area boundary is coincident with East Channel boundary. The indicated dredging depth is to 21.5m CD. Please confirm that chart datum is Lowest Astronomical Tide, and that this will not impact the current depths with the existing shipping channel
- Table 9.6.1.3 indicates that bow thrusters of the dredging vessel have the potential to cause scour of the batter within the adjacent bank. How will this be monitored, what triggers will there be for remedial action, and what protective measures may be required?
- What monitoring will be undertaken of the swing basin and berth areas adjacent to the proposed pump-out site, to ensure that material disturbed by the activities of the dredger does not migrate and cause depth decreases for shipping within the navigational channels and/or swing basin?
- What protection (if any) will be installed to protect adjacent areas (particularly the BP berth) from siltation and/or erosion as a result of vessel activities at the proposed pump-out location?
- The documentation indicates that the dredge will loose some material during the pump-out procedures (primarily hopper losses). What monitoring will be undertaken of the site to ensure that this material does not migrate to the adjacent swing basin?
- In relation to the above point, should losses occur which adversely impact the exiting dredged depths within the swing basin, what strategies will be employed to re-establish such depths? Commentary should also be provided on the ability of the preferred dredging plant to undertake such works.
- The document does not provide any details on measures to protect existing structures (eg. cross-river sewer line), which are located between the proposed berthing plies. The area adjacent to the line may be used in the future for additional cross-river services. Details of such measures, and the methods to be used in both the installation and removal of pile structures is required.
- The documentation indicates that the dredge will operate some 3 dredging cycles per day, with the associated 6 shipping movements per 24 hrs period. Can the proponent confirm



that these movements, including berthing at the pump-out within the swing basin, will not impact shipping efficiencies within the Port of Brisbane?

- Section 9.6.1.2 indicates that the vessel will meet AQIS requirements for marine pests. AQIS does not undertake below water line inspections. Recent experience of the Port has indicated that overseas dredges may pose a particular risk given that they operate for extended periods in areas known to contain marine pests. The Corporation requests that an inspection of the dredge is completed upon arrival by a suitably qualified person. This inspection should include high risk areas such as sea chests and associated pipework, as well as bottom engaging gear such as dragheads.
- While the document provides information about the changes to Controlled Airspace requirements for the New Parallel Runway, it does not clearly indicate what changes may be required to the Obstacle Limitation Surfaces (OLS) and/or the Procedures for Air Navigation Services Aircraft Operations (PANS-OPS) Surfaces. This has implications for the Port of Brisbane Corporation with respect to ongoing developments (eg. container crane heights) within the vicinity of the airport. The EIS should provide a figure of the current OLS/PANS-OPS and the proposed changes with the NPR project included.



# Ms Donna Muehlbauer

Formal Submission #70

**Position** Community individual

Organisation n/a

# Submission full text

I agree with Kim Flesser (Councillor for Northgate ward). Why place the new runway so close to the residence. The impact upon residence and nature is unmeasurable. We don't want Brissy airport to turn into Mascot airport.



# Mr Stephen Muller

Formal Submission #211

**Position** Community individual

Organisation n/a

#### Submission full text

- 1) Your plans for noise affection are fundamentally flawed. Local governments, state government authorities use excess noise figures in the 61-63db(a) your DOTARS value of 70 in well on excess of that. 70B(A) increase is more than double the allowable sound level for a roadway (for instance) at dwellings. This is the same disgraceful fraud that the ANEF contours were in the mid eighties. Why should you be able to use less stringent requirements. The contours need to be based on the areas and sound levels that generated complaints throughout the 1990's, not some "subjective" figures that DOTARS on anyone else for that matter decides will interrupt speech etc etc. This is a fundamental and obvious conflict of interest. DOTARS should not be setting the standards. It should be an independent body, consistent with other authorities and based heavily on areas of noise complaint.
- 2) The NPR does absolutely nothing to improve the situation for residents under path E. Path E as reported in newspapers regularly in the area of most complaint generation, or if not highest, close to it. And what has been done to improve the situation for these Queenslanders, these residents sweet stuff all! Billions of dollars and sweet stuff all! This is not improving our lifestyle it is destroying our amenity making vast areas uninhabitable. This is not an airport city. It is a city where Queenslanders live and work and we want to continue in peace. Current noise levels are a disaster.
- 3) The plans shown are of a scale ridiculously small and current statements are simply wrong! There are more overflights that shown and noise extends further. Every night a few aircraft of 90d B(A) fly (E) particularly around 10pm! It sounds like its flying through our living room, yet your contours fraudulently indicate none or very little of 70d B(A) at central Belmont.



# Ms Narelle Mullins

Formal Submission #41

**Position** Principal

**Organisation** Lourdes Hill College

#### Submission full text

# Response to Brisbane Airport Corporation

Re: Expansion of Brisbane Airport

Thank you for the documents regarding the proposed expansion of Brisbane Airport. In response, we wish to register our concerns.

It seems that our school will experience a notable increase in flights overhead. The increased will be 5 - 10 flights a day at 70 db.

We anticipate the possibility of classes coming to a standstill for several minutes every time a plane flies overhead. This could be a huge problem when students have to do performance based assessments, such as oral presentations. This could mean that students may have to redo assessment items because the plane noise is so bad at their scheduled time. Should this be the case, we foreshadow a number of equity issues amongst students, not to mention reporting issues for teachers.

The increased noise and heat created by the Brisbane Airport Corporation's new proposal would cause a dramatic effect on both teaching and learning in the music department at Lourdes Hill College. Windows would need to be closed to block out the increased levels of noise and heat, and the rise in temperature would cause our expensive musical instruments stored and used in these music rooms to deteriorate. All instruments (string, woodwind, brass and percussion) are affected by heat. To ensure students receive a sound musical education, these instruments need to be available for student use. Indeed, what is a music department without functioning musical instruments? We cannot afford to have these instruments out of action or unplayable due to increased levels of heat that our classrooms would be forced to function at due to this new proposal.

It seems as if the only way this college will be able to operate once the airport expansion is complete is by having the school fully air-conditioned. At this point in time, the college is not fully air-conditioned and has a plan for further air-conditioning but our capacity is limited, therefore we seek urgent talks with Brisbane Airport Corporation in regard to this matter.



I have also passed a copy of this response to local Federal Member Hon Kevin Rudd, local State Member Mr Pat Purcell and local Brisbane City Councillor Ms Shayne Sutton.

Sincerely,

Narelle Mullins

Principal



# Ms Jude Munro

Formal Submission #153

**Position** Chief Executive Officer

**Organisation** Brisbane City Council

#### Submission full text

## Brisbane City Council Submission - Draft New Parallel Runway EIS/MDP

This letter and accompanying information represents Brisbane City Council's formal submission to the Draft New Parallel Runway (NPR) Environmental Impact Statement and Major Development Plan (EIS/MDP).

May I firstly congratulate your team on reaching this important milestone of a project of regional importance and consequence. Council is appreciative of the opportunity to have early involvement in the preparation of at least some parts of the EIS/MDP, Given the necessary involvement of Council, as a result of the need for access across Council land and the reliance on Council land in delivering the biodiversity strategy, this ongoing partnership is of the upmost importance.

I would also like to emphasise that, while Council's submission raises many issues with respect to the project and associated development on Brisbane Airport land, it is clearly made with an understanding of the economic importance of the airport to the city and the South East Queensland Region and in the spirit of improving the overall outcome of the project and integrating the airport into the fabric of the city, As you are aware Council has views on the need to ensure that development on airport land is not carried out in isolation and we seek your cooperation in achieving this outcome, Having said this, let me assure you that there is no question of the need for the NPR project.

As Council has stated on many occasions there is a clear understanding of the synergy between a strong airport and a strong city. The continued success of both is contingent upon acknowledging this synergy and building on strengths. It is in this light that Council has prepared this submission with an aim to optimise the overall benefits. This, in some cases, will require compromise solutions.

I would also like to point out that the undertaking of an EIS/MDP is intended to contribute to both the design process and decision-making. While BAC may take issue with Council and other submissions, the objective view should be that this is a necessary part of the process. The size and significance of the project is such that submissions of a complex and varied nature are



unavoidable. The EIS/MDP is, in fact, a draft, intended to be improved upon by the public consultation process and the consideration of submissions. Generally, submissions by their very nature tend to take on a critical tone. Nonetheless Council submission is designed to add value to, rather than detract from the process. Please also be assured that the lack of comment on many matters should convey the message that Council is supportive of a good proportion of the findings in the Draft EIS/MDP.

Another key point I would like to raise is that, as part of our ongoing partnership, it is important that we work together to address the issues that have been raised. Within this context I am committed to ensuring that Council officers will be available to meet as frequently as required to work through all issues raised. It is likely that, in some cases additional explanation on both Council and BAC points of view can either rectify any misunderstanding or identify solutions for a way forward. In relation to this cooperation and understanding Civic Cabinet will shortly decide on ongoing Council's representation on the BAC Board.

As a case in point I understand that the Lord Mayor's recent letter to you concerning analysis of the noise assessment in the EIS/MDP has been met with criticism by project staff as being based on misunderstanding or misinterpretation of information. In BAC's own submission to the Senate Inquiry on the Airports Amendment Bill, it was identified that analysing and conveying information regarding noise impacts is a complex and difficult task. The letter was sent in the spirit of cooperation and providing advanced notice and the offer was made by Council officers to come together as soon as required to discuss content.

I again extend this invitation to work together. As you appreciate the impacts of aircraft noise will affect all of the City and, if there are queries concerning the assessment in the EIS/MDP, Council would be remiss in not raising them on behalf of the City residents. This sentiment applies to all other issues raised in the Council's submission.

I trust that this submission will be given due consideration and fully expect that your project team will wish to discuss matters raised, with Council officers. You have my commitment that Council officers will be giving this project a very high priority, In the meantime, should you have further queries or wish to arrange meetings to discuss aspects of Council's submission please contact Kerry Doss of Council's City Planning Branch.

I look forward to our ongoing cooperation on this important project.

Yours sincerely

Jude Munro
Chief Executive Officer

BRISBANE CITY COUNCIL'S SUBMISSION



### 1. Scope of Council's considerations

Brisbane City is in the heart of the fastest growing region in Australia. This is why the primary focus of the State Government, Brisbane City Council (Council) and the Council of Mayors is on ensuring there is a clear and highly effective framework for the planning and delivery of an appropriate urban structure in the South East Queensland Region closely integrated with an equally effective and timely process for the planning, financing and supplying urban infrastructure.

Brisbane Airport is located some 13 km from the Brisbane's Central Business District (CBD) and on one of Brisbane's key transport corridors, namely the Gateway Arterial. Essentially, Brisbane Airport is an integral and particularly important component of the Brisbane's metropolitan area.

The proposed New Parallel Runway (NPR) project is undoubtedly of great economic benefit for the City of Brisbane and for the whole of the South East Queensland region. Given the particular significance of the NPR to the further expansion of Brisbane Airport and the expected consequential high growth of commercial activities on the airport land, Council has concluded that that this project must be considered in the context of the overall development and management of the airport, rather than simply as a construction issue. It is now the appropriate time to examine the scope of the long-term development proposals on the Brisbane Airport land, to understand the likely future impacts of this development on the airport land and beyond and to seek an agreement on the approach to mitigating these impacts. Council, the State Government and the Brisbane's community are no longer prepared to accept the responsibility for reacting to individual development proposals on the airport land and continue financing and delivering the infrastructure for these developments without having a clear understanding of their cumulative impacts and costs.

Council thanks Brisbane Airport Corporation (BAC) for sharing with Council, ahead of the public release, at least some aspects of the investigations of the proposed NPR project. Council however is particularly disappointed that BAC has not been prepared to share with Council some critical information on the project or, in the case of investigations of airspace controls for the NPR, has simply excluded Council from the discussion table.

Notwithstanding these serious difficulties, Council, where possible, has proactively contributed to the project including a written statements of issues conveyed to BAC in the letters dated 13 and 28 July 2006.

Council is particularly disappointed that, despite a very clear invitation on the part of Council to continue a dialogue with BAC prior to the release of the Draft Environmental Impact Statement/Major Development Plan (Draft EIS/MDP) to the community, there has been almost no further attempt on the part of BAC to invest their time in further discussions with Council.

As a consequence, this submission includes a range of concerns and requirements that could have been already resolved.



Council takes this opportunity to publicly appeal to BAC to approach their future engagements with all key stakeholders involved in the planning, financing and delivering future development at Brisbane Airport in a spirit of partnership rather than confrontation. While there is a general community understanding and acceptance of the need for and benefit of the growing airport, a partnership approach to projects of such wide-reaching consequences as the NPR, is mandatory.

## 2. Biodiversity

The *Biodiversity Management Strategy* prepared by BAC in association with the Draft EIS/MDP proposes, amongst other things, ecological areas along the western portion of BAC land and the Council's Kedron Brook floodway. Council has concluded that this Strategy is not an adequate compensation for the loss of some 90 hectares of mangrove habitat as well as salt marsh and other habitats that will result from the construction of the runway and associated engineering works. Council's concerns in this regard have been raised with the NPR project team and clearly stated in the Council's letter to BAC dated 28 July 2006. Given the scale of the NPR project, its location adjacent to a Marine Park, the severity of the project's impact upon the existing ecological values of the site and BAC's reliance on Council's controlled land to deliver its *Biodiversity Management Strategy*, Council considers an appropriate **Mitigation Package** must focus on a suite of compensatory measures including:

i. acquisition of a suitable compensatory habitat(s) that will assist in consolidating and connecting the biodiversity network throughout the North-East Wetlands and complement Council's investments in this area. Council, through its Bushland Acquisition Program, has identified a number of priority properties for acquisition and has already offered to BAC a joint review of a list of these properties;

ii. restoration works on the existing Council Conservation Reserve estate. It is important to note that Council expects any rehabilitation outcomes to be secured through a maintenance program of at least 5-10 years;

iii. sponsorship of relevant research projects such as research into mangrove dieback around the Brisbane River mouth, investigation of appropriate management actions to prevent the loss of wetland systems due to changes to hydrological regime, and/or research and monitoring of habitat requirements of the Lewins Rail, Grass Owl and other significant species;

iv. a commitment to preparing, in partnership with the Council, a Pest Management Plan for the airport site and surrounding land and to an on-going financial contribution towards the implementation of this Plan; and

v. construction of a bridge across the proposed drain flowing to the Kedron Brook floodway to provide enduring access to Council owned land for emergency and prescribed burning purposes, pest management and general maintenance.



Council expects a best practice Mitigation Package that will result in net environmental improvement and be:

- enduring to offset impacts for the period the impacts occur;
- quantifiable to reliably estimate the impacts and benefits;
- targeted to offset "like for like or better";
- appropriately located to offset the impacts in the same area;
- supplementary to extend beyond existing requirements; and
- enforceable through acquisition, covenants, contracts or development conditions.

Council is particularly keen to work very closely with BAC to achieve exemplary results through both *Biodiversity Management Strategy* and Mitigation Package.

### 3. Climate Change

The New Parallel Runway is one of the most complex and significant infrastructure proposals for the City, South East Queensland Region and State. Undoubtedly, it will make a strong contribution to Queensland's economic growth into the future. It is therefore essential to ensure that this particularly important asset is protected, to the greatest extent possible, from the effects of climate change. In this regard Council notes that the proposed elevation of the NPR complies with the relevant current Australian standards guiding the protection of life and property from the effects of storm surge and similar events. Given that there is strong and widely held agreement that the effects of climate change will be far more extensive than previously predicted, it is highly unlikely that compliance alone with the current standards will provide an adequate level of protection for NPR. Hence Council believes it is essential to warn BAC and all levels of government that the runway, if constructed in accordance with the current proposal, will not escape the damaging effects of the rising sea level and the increasing frequency and ferocity of storm events and associated flooding. Council therefore urges, in the strongest possible terms, all key stakeholders responsible for the design, approval and operation of the NPR to take particular care in reviewing current elevation specifications for the runway.

#### 4. Integrated Water Cycle Planning

Council acknowledges that BAC has, to date, delivered a number of initiatives to effect a more efficient use of water on the airport land. Until recently, there has been a considerable interaction between BAC and the relevant parts of Council in addressing specific aspects of the overall water cycle. However, given the significance of the proposed parallel runway and the likely consequential increased demands its operation will place on this cycle, BAC must now take on the challenge of and provide the leadership for integrating the planning and management of all elements of the water cycle into one, responsible Integrated Water Cycle Plan for the ultimate development of Brisbane Airport. This approach is essential given the current, unprecedented focus of the whole



SEQ Region on investigating alternative and complementary water supply options, demand management solutions and water recycling opportunities.

Council is seriously concerned that, despite numerous discussions with the NPR project team and the inclusion of this concern in the Council's letter to BAC dated 28 July 2006, an integrated approach to water cycle planning has not been demonstrated in the Draft EIS/MDP.

Key issues relevant to the specific aspects of water cycle planning are listed below.

#### A. Flooding and stormwater drainage

Council notes a summary of the assessment of the impact of the proposed parallel runway on the drainage regime within the Kedron Brook floodway that has been completed by BAC. In particular, Council notes that the maximum flood level predicted for the parallel runway is lower than the maximum flood level documented in the Kedron Brook Flood Study (1995) for ultimate development conditions.

Council expects BAC to guarantee no further encroachment onto the waterway corridors and flood plains and to demonstrate that the design of the Kedron Brook floodway and of the proposed new drainage channel does not rely on regular and costly dredging by Council.

Finally, Council notes that, should BAC reinstate access to the Council land to be isolated by the proposed new drainage channel by way of a bridge, Council will require the flood levels to be recalculated to take this structure into account.

#### B. Waterway health

Council generally agrees with the water quality amelioration measures BAC proposes. Council notes that BAC are proposing everything possible to minimise the likely impacts of the construction and the operation of the parallel runway. However, Council still expects BAC to demonstrate that the relevant programs proposed in the Draft EIS/MDP are capable of delivering the desired outcomes on the ground.

#### C. Water supply and sewerage

Due to the increase in demand on the water and sewerage infrastructure that will result from the rise in the patronage of Brisbane Airport, BAC must demonstrate, as part of an Integrated Water Cycle Plan, an appropriate approach to water harvesting and reuse and sewage discharge. In this regard Council expects the increase in demand to be serviced through water recycling. In considering these issues, and as suggested in the Council's letter to BAC dated 28 July 2006, BAC should take into account an opportunity of locating infrastructure that will support these initiatives within the corridor of the proposed temporary sand pipeline.



### D. Use of recycled water for development works

Current level 4 water restrictions do not allow town water to be used for land development and subdivision activities including dust suppression, earthworks, road and service construction, landscaping, slope stabilisation and erosion control. In this regard Council expects BAC to provide leadership to the development industry in eliminating the use of town water for the purpose of all works associated with the delivery of the NPR, regardless of the level of water restrictions that will apply at that time.

### 5. Transport

Transport into and out of the Australia Trade Coast will be an important factor that will either constrain or promote the growth and vitality of this area.

Council is particularly concerned over the lack of preparedness on the part of BAC to partner with Council, leading to the publication of Draft EIS/MDP, to address road transport issues. Earlier access to transport related information would have enabled Council to contribute positively to the shaping of the impact statement and arising transport mitigation measures.

Council is concerned over the assessment of road transport impacts included in the Draft EIS/MDP. Council is of the view that this document is seriously deficient in the manner it estimates the number of vehicle trips on the road network in the vicinity of Brisbane Airport. Specifically:

- i. it overestimates the growth of traffic arising from the operation of the existing runway; and
- ii. it underestimates the impact of the NPR on the growth of road traffic.

Accordingly, Council expects a far greater impact of the NPR on the transport system than reported in the Draft EIS/MDP.

In the circumstances, Council has no option but to await the results of Australia Trade Coast (ATC) Transport Study that will, amongst other things, establish the proportion of vehicle trips that will be generated by the future development on the Brisbane Airport land. In this regard Council notes that it anticipates the ATC Transport Study to confirm the need for the road system on the airport land to be much better integrated with the surrounding road network.

Similarly, Council awaits the recommendations of the ATC Transport Study with regard to the public transport needs in the broader ATC area. Council is gravely concerned that this issue has received almost no attention in the Draft EIS/MDP.

Council expects the findings of the ATC Transport Study to underpin Council's Transport Infrastructure Agreement with BAC. This Agreement will also address the needs of pedestrians



and cyclists that are expected to form a sizable proportion of the future workforce at the airport of some 40,000 workers.

# 6. Community facilities and services

The Draft EIS/MDP does not attempt to address the need for community facilities and services of the future workforce and passengers at and visitors to Brisbane Airport. This is even more concerning to the Council given the BAC's particular interest in pursuing the concept of installing gambling facilities at the Brisbane Airport terminals.

Council requests BAC to carry out a thorough assessment of community needs and expects the agreed results of this assessment to underpin Council's Infrastructure Agreement with BAC on these matters.

Council also reiterates its earlier requests for BAC to explore the following:

- i. opportunities for increasing the airport's worker population drawn from people who are traditionally on the fringe of the labour market such as migrants and refugees; and
- ii. opportunities for worker training and skill development through the runway construction project.

#### 7. Brisbane Airport – the gateway to the City, Region and the State

Undoubtedly, the parallel runway will generate an additional and particularly significant impetus for further, airport related and commercial development on the BAC land. Council anticipates that, by 2020, Brisbane Airport will become the most modern airport gateway to Australia, providing ready access to the fastest growing State in the country.

This unique opportunity must be matched by a very thoughtful and exemplary approach to urban design issues at the City and airport-wide scales, combined with an equal attention being paid to detail design.

For these reasons, Council invites BAC to a partnership through Council's Independent Design Advisory Panel. A joint focus on finding the most appropriate means of communicating Brisbane's identity and values on the approaches to the airport, on individual development sites and through the design of buildings and public spaces around them, is bound to attract the best design talent and deliver results of world class status.

### 8. Recognising the Brisbane's Central Business District



Council clearly recognises that, in the interest of safety, the Australian airspace agencies and the airport operators prefer to maximise their control of the airspace. Council is also cognisant that airport operational safety cannot be unreasonably compromised. On the other hand, Council is responsible for ensuring there is an appropriate planning framework in place for the Brisbane's Central Business District (CBD) to maintain its role as the heart of the fastest growing Australian capital city and of the economic engine for the whole State.

Within this context Council notes that an artificial limitation of building height has real impacts on real estate, business and transport efficiencies, tourism and the CBD's iconic status.

From the Council's point of view it is therefore essential for the Brisbane's CBD and Brisbane Airport to exist in a mutually beneficial relationship and for the City leaders and the airport operators not to lose sight of this primary objective.

Within this context, Council feels obliged to express its strongest concern over the Draft EIS/MDP not recognising the Brisbane's CBD as a unique area that requires particular attention in the design of airspace controls. The reasons for Council's concern are essentially twofold:

i. Brisbane's CBD presents a very significant risk profile given the large number of tall buildings within its boundaries, the vast population numbers at any time of day or night and the high level of concentration of invaluable City infrastructure in a relatively small area that is strategically positioned relative to the proposed approaches to and departures from the western end of the NPR. In presenting the preferred airspace design and aviation operations for the NPR the Draft EIS/MDP fails to take into account the risk profile of the CBD and to report on the economic impact of the proposed airspace controls on this area; and

ii. there are well known limitations to the CBD growth through the expansion of its boundaries. It is therefore of utmost importance to ensure, as much as practicable and within the real constraints of the airspace safety, that opportunities for very tall buildings within the CBD are maximised.

Accordingly, this submission proposes that Council and BAC formally agree on the following:

- i. Brisbane's CBD is recognised as a special area or a "tall buildings obstacle zone" for the purpose of designing airspace controls; and
- ii. arising from the above, aircraft should, as much as possible, avoid the airspace over and in the close proximity to the CBD.

Council notes and is appreciative of BAC's commitment to a partnership with Council in pursuing, as a matter of high priority, real opportunities to modify flight paths near the CBD to maximise the scope for tall buildings within its boundaries. Council is aware that such investigations, and their results, would also require an endorsement by other, key airspace agencies. For this reason,



Council is also keen to establish, through the partnership with BAC, close working relationships with these organisations.

Council also notes that, arising from its obligations under the South East Queensland Regional Plan 2005-2026, there is likely to be a need to progressively change the land use or increase building height in other parts of the City. There will also be a challenge of assisting key economic development areas, such as the Port of Brisbane, in minimising barriers to their unimpeded growth. Again, Council will seek, as much as possible and in partnership with BAC to optimise the outcomes in this area by balancing the needs for the growth of the City and for the future operations of Brisbane Airport.

Council also takes the opportunity of this submission to make the following two detailed comments on certain information presented in *Volume D: Airspace* of the Draft EIS/MDP:

i. Figure 8.3 - *Prescribed Airspace for the Brisbane Airport Region* (page D8-335) is sourced from the BAC 1993 Master Plan, not the latest, BAC 2003 Master Plan. Further, this Figure can easily be misleading given that it artificially cuts-off the PANS-OPS Surfaces without any clear explanation. It also does not include essential Obstacle Limitation Surfaces such as the Outer Horizontal Surface. Overall, this Figure can very easily mislead the reader by implying that all localities outside the shaded areas (such as the CBD) are not subject to prescribed airspace regulations; and

ii. the same Figure 8.3 shows the circling heights that are inconsistent with those in the BAC 2003 Master Plan (refer *Prescribed Airspace Plan*), with the BAC's plan titled *Prescribed Airspace for Existing Runways* – dwg no FBP 93.0078 Sheet 2, Am No 4, Am Date 25/5/05, and with the currently published approach minima (refer *Departures and Approach Procedures* published by Airservices Australia).

#### 9. Noise

Council is particularly concerned and disappointed that it has not been invited to the discussions of key stakeholders that have led to the definition of the airspace requirements for the parallel runway included in the Draft EIS/MDP. Council notes that its officers were actively discouraged by the NPR project team from any participation in and input to this important topic area. The first opportunity for Council to review the proposed NPR airspace requirements and consider their implications was on the commencement of the public exhibition of the Draft EIS/MDP.

Brisbane Airport is located within the fastest growing region in Australia and only 13 km from the Brisbane's CBD. This unique situation calls for a particular sensitivity in designing the prescribed airspace to avoid, as much as possible, the noise impacts on the growing population of the City as a whole and of the inner city areas in particular. Council's participation in the airspace design process leading to the publication of the Draft EIS/MDP would have been particularly beneficial for all key airspace agencies given the concurrent work by Council on the *Local Growth Management* 



*Strategy* that is expected, by the Queensland's State Government, to accommodate the significant forecast population growth for Brisbane to the year 2026.

In the circumstances, Council is forced to respond to the information included in the Draft EIS/MDP rather than assist in shaping the best possible outcome for both the airport operators and for the Brisbane's residents.

Below is a list of Council's serious concerns over the evaluation of noise impacts arising from the operation of the parallel runway that has been included in the Draft EIS/MDP. Council notes that, in the interest of providing BAC with advice as early as possible, these concerns were personally expressed by Campbell Newman, Brisbane's Lord Mayor in the letter to BAC dated 16 January 2007. In this regard Council also notes that the NPR project team has already voiced serious criticism of Council's assessment of the noise impacts of the NPR. At a recent meeting with the senior BAC staff Council officers have confirmed Council's desire to resolve with the NPR project team and at the earliest opportunity, any issues relevant to the likely noise impacts of the NPR.

#### A. Choice of noise metric

The Draft EIS/MDP focuses on a single noise metric, namely the N70 contour, in its assessment of predicted noise impact on residential suburbs.

There are a number of limitations in regard to the sole use of the N70 contour. They include:

i. the N70 contour does not communicate how high the noise levels will be within the N70 contour, i.e. what is the maximum noise level that residential dwellings and other sensitive receptors will be exposed to within the N70 contour? - is it 80dBA, 85dBA, 90dBA, etc;

ii. N70 overestimates the noise insulation of Brisbane dwellings. The adoption of the N70 metric is based on the assumption that there is a 10dBA reduction in noise from outside to inside a dwelling (i.e. if it is 70dBA outside then it assumes it will be 60dBA inside). This degree of noise reduction may be achieved in dwellings in Sydney and Melbourne, but is unlikely to be relevant to Brisbane (particularly in summer) where noise reduction from outside to inside is expected to be between 5dBA and 10dBA;

iii. the choice of the N70 metric has been based on the now superseded 1994 version of *Australian Standard 2021: Acoustics – Aircraft Noise, Building Sitting and Construction* which recommends living room criteria of 60dBA. The latest version, *AS 2012-2000*, recommends a noise level limit of 55dBA for living spaces (refer *AS 2021-2000 Table 3.3*);

iv. therefore a N60 (preferably) or N65 noise contour is needed to identify the areas that will exceed the *AS2021-2000* criteria for living spaces by daytime and evening flights (assuming a 5-10dBA reduction from outside to inside a dwelling);



v. while this limit would be appropriate to achieve compliance with the noise level limits for day and evening operations, it would not adequately address sleep disturbance caused by night time flights and the use of reverse thrust at night. *AS2021-2000* recommends a limit of 50dBA for bedrooms and "dedicated lounges" exposed to aircraft noise. Therefore a N55 (preferably) or N60 noise contour is needed to identify the areas that will exceed the *AS2021-2000* criteria for bedrooms by night time flights (assuming a 5-10dBA reduction outside to inside a dwelling); and

vi. the N70 contour also under-represents the broader impact of the aircraft noise. Because the N70 contour cuts off at 70dBA, it gives no information about the number of overflights generating noise levels slightly lower than 70dBA, eg in the range 65-70dBA or 60-65dBA. For example, using the noise level data presented in Tables 3.4-3.24 of *AS 2021-2000*, if there were 5 to 9 overflights at 70dBA at a residential location, it is quite likely that there would be 20-49 overflights at 65dBA at the same location.

Council understands that plotting the N60 and N55 contours will add further complexity to the analysis presented in the Draft EIS/MDP, but without this information, Council feels, the integrity of the evaluation is seriously compromised.

Council also understands that accuracy is an issue in regard to plotting the N60 and N55 contours and that there will need to be qualifications made as to the precision of the predictions. Council doesn't see this as an impediment and notes that N60 contours have been plotted for Sydney's Bankstown Airport.

To quantify the change in maximum noise levels, the future N75, N80, N85 and N90 contours should have been prepared and compared against the current noise situation to identify the magnitude of the change. In this way, the true extent of the impact of the parallel runway could be identified.

Again, Council understands that preparing the additional contours will add further complexity to the analysis. It may not be necessary or appropriate to present all the plots, as a summary of the results may be sufficient to allow the community to gauge the spread of noise levels expected at their residences.

Council believes the full impact of aircraft noise can and should be quantified to ensure transparency.

#### B. Australian Noise Exposure Concept (ANEC)

The Draft EIS/MDP provides ANEC contours, but states that the ANEC is contained within the ultimate capacity ANEF as shown in BAC's 2003 Master Plan. Therefore there is no change to future land use planning over and above that required as a result of the 2003 Master Plan. This result is hardly surprising given that BAC's 2003 Master Plan assumed that the NPR would be built.



Any meaningful evaluation of the ANEC contours should be based on an assessment against the no NPR scenario.

#### C. Noise sensitive facilities

Movements from the NPR will significantly increase the aircraft noise exposure at several schools, i.e. Morningside Primary & Preschool, Lourdes Hill College, Bulimba Primary, Balmoral High, St Peter's and St Paul's Catholic Primary, Hamilton Primary and TAFE's Brisbane North Institute Gateway at Eagle Farm. These schools have little exposure at present, but will have significant exposure in the future.

In addition, the Draft EIS/MDP notes that the number of kindergartens and child care centres subjected to noise levels resulting in sleep disturbance will increased by 17.

The Draft EIS/MDP does not quantify the impact of the noise on these schools or make detailed recommendations for appropriate means of ameliorating the impact at these schools or child care centres. This matter should be addressed in the final EIS/MDP document. Council's suggestions on the appropriate means of doing so are listed in Section E below.

# D. Areas affected by reverse thrust noise

The Draft EIS/MDP states that areas of Nudgee are expected to be subjected to noise levels >70dBA for 40-45% of the time at night due to the use of reverse thrust.

The duration of exposure to noise levels >55dBA and >60dBA (i.e. the sleep disturbance limits) has not been quantified, but will be much higher. The Draft EIS/MDP must be expanded to quantify the number of events exceeding 55dBA and the duration of exposure to noise levels >55dBA and >60dBA.

E. Suggestions for improving the adequacy of the assessment of noise impacts
Arising from the concerns raised above Council strongly recommends that additional assessment
and/or documentation be prepared to assist all stakeholders in clearly identifying potential noise
impacts of the NPR project. This includes:

i. preparation of the N80, N85, N90, N95 contours to identify the areas that will be very significantly affected;

ii. preparation of the N55 and N60 contours to more accurately quantify the extent of the noise affected areas;

iii. where community areas are expected to be exposed to noise levels exceeding 55dBA and 60dBA due to overflights of aircraft using the NPR, quantifying the expected requirement for as well as the cost and extent of building and ventilation upgrades to fully remedy the effect



of aircraft noise intrusion;

iv. evaluation of the change to the ANEC contours by comparing the predicted ANEC contours with NPR to the ANEC contours for the *no NPR* base case;

v. for each school identified in Section C above and for the additional 17 kindergartens and child care centres subjected to noise levels exceeding the sleep disturbance limit, quantifying the likely number of aircraft overflights generating external maximum noise level in each of the relevant class intervals, eg 55-60dBA, 60-65dBA, 65-70dBA, 70-75dBA, 75-80dBA, 80-85dBA and >85dBA. BAC should also quantify the expected effect of this noise on learning and/or sleeping activities and evaluate the requirement for as well as the cost and extent of building and ventilation upgrades to fully remedy the effect of aircraft noise intrusion; and vi. for each of the nearby residential areas in Nudgee Beach, Nudgee, Northgate, Banyo and Nundah (as appropriate), quantifying the likely number of aircraft movement events generating external maximum noise level in each of the relevant class intervals, eg 55-60dBA, 60-65dBA, 65-70dBA, 70-75dBA, 75-80dBA, 80-85dBA and >85dBA. BAC should also quantify the expected effect of this noise on sleep and evaluate the requirement for as well as the cost and extent of building and ventilation upgrades to fully remedy the effect of aircraft noise intrusion.

### F. Communicating the results of noise analysis

It is essential for the Brisbane community to be made aware of the expected noise levels that will result from the operations of the NPR. Council therefore asks BAC to ensure the results of the refined noise impact analysis be publicised in the same manner as the Draft EIS/MDP. This will enable all stakeholders to have access to relevant and more comprehensive information.

# G. Separation between the parallel runways

On behalf of the residents of the suburbs to be most affected by noise arising from the introduction of the parallel runway Council asks BAC to seriously consider reducing the proposed distance between the parallel runways to a distance that would make a tangible difference for the residents and, at the same time, would not compromise the airport operational requirements and its further expansion. Council is aware that this adjustment may require an investment, by BAC, in the latest technology in radar and other relevant equipment but is of the view that it is an essential component of the expenditure on the parallel runway and associated airport operational improvements.

#### H. Night time flights

Council demands a serious consideration by BAC and by all other key airspace agencies of imposing a curfew for nighttime flights once the parallel runway is operational.



### I. Avoiding take offs and landings over the land

Council also requests BAC's commitment to maximising the take off and landing procedures over Moreton Bay.

J. Adopting operating modes that reduce noise levels

BAC must commit to a proactive adoption of technological improvements and operating modes that will result in lesser noise impacts.

#### K. Operational plan

All key operational commitments such as, for example, a curfew for night time flights and a commitment to maximising take off and landing procedures over Moreton Bay must be enshrined in a publicly available *Operational Plan* for Brisbane Airport.

### 10. Proposed temporary sand pipeline

To construct the parallel runway BAC propose to transport the sand dredged from Moreton Bay, via a temporary pipeline, from a site at the mouth of Brisbane River. The proposed pipeline alignment crosses Council land at Luggage Point. The pipeline will be one metre in diameter and could be in place for up to 70 weeks from late 2008.

In line with its requirements included in the letter to BAC dated 28 July 2006 Council confirms as follows:

#### A. Berthing facility

The following are Council's requirements:

- i. the contractor appointed by BAC for this work is to submit detailed drawings and design calculations for Council approval;
- ii. the piling works are to be clear of the sewer river crossing. It is also important to note that, it is likely, a pipeline associated with the Western Corridor Recycled Water Scheme will also need to cross the river. Should this crossing be in the vicinity of the proposed berthing and pumping area, Council will require the piling works to be clear of the Western Corridor Recycled Water Scheme river crossing;
- iii. the sewer river crossing is to be marked with a sign Sewer Crossing Do Not Anchor. The sign is to be of a size and in a location that can ensure it is readily visible by barge operators, twenty-four hours a day, seven days a week and in all weather conditions. Should the Western Recycling Scheme pipeline river crossing be in this vicinity, Council will also require BAC to mark this pipeline appropriately;



iv. the piling works are not to impact on any Council's operations at Luggage Point during the establishment, operation and removal periods;

v. vibrations from the piling may cause either subsidence of the ground around the outfall, leading to outfall movement or loss of rocks from around the outfall, leading to future erosion. Hence Council requires BAC to carry out a detailed survey of the existing conditions of the outfall, to prepare a detailed contingency plan in case of major subsidence of the outfall and to install vibration sensors to measure the effects of piling; and

vi. as a precautionary measure against piling works and potential impacts from barge wash, Council requires BAC to stabilise the river bank in this location prior to any work commencing. Use of gabions is the preferred bank treatment given the observed removal of dumped rock by members of the public.

#### B. Outfall crossing

Council requires BAC to provide:

i. a ramped road crossing where the proposed pipeline crosses the outfall area to ensure access for ordinary road vehicles; and

ii. an adequate security around the outfall area to deter fishermen from using the pipeline to cross the outfall.

### C. Temporary access road

Council:

i. agrees to the access road to the outfall to be temporarily realigned provided it can support heavy vehicles in case any remedial work is required on the outfall;

ii. requires BAC to maintain access to the lagoons; and

iii. requires BAC to coordinate the timing of the sand piping project with any proposed lagoon upgrading works.

#### D. Drying beds

Council cannot approve the proposed pipeline traversing the drying beds. This area is likely to be required for the Western Corridor Recycled Water Scheme and/or for other activities associated with the Waste Water Treatment Plant's operations. Council suggests the pipeline to be realigned between the drying beds and the lagoons as long as a vehicle wash facility is suitably relocated and constructed.



### E. Access to drying beds

It appears BAC are keen to keep the pipeline alignment as close to the drying beds as possible to avoid any of the soft ground near the tidal areas. This can only be achieved if BAC contributes to a project that would result in the removal of the filtrate channel in this location. Should these works also result in the elimination of the bitumen road along the drying beds, Council will require an alternative access for heavy vehicles to be reinstated in an acceptable location. Unless these requirements are achieved Council will require the pipeline to be moved further away from the drying beds.

### F. Centrifuge building

Whilst it is unlikely the pipeline would impact on the centrifuge area, Council will require an assessment of any potential impacts from the construction works to be carried out for this location.

### G. Old sludge disposal area

Council requires the pipeline to be raised where it will cross over the swales and be located so that it will not impact on the flow of stormwater.

### H. Water quality

Given the proposed location of the barge in close proximity to the outfall, the river water that will be used to slurry the sand to enable it to be pumped through the pipeline will have a substantial component of the treatment plant's non-disinfected effluent, especially on the ingoing tide. Hence Council requires BAC to prepare appropriate management plans for approval by relevant authorities.

I. Water reclamation plant Council notes that the dredge pump out is likely to be in close proximity to the outfall from the water reclamation plant to be constructed adjacent to the Luggage Point Waste Water Treatment Plant. Council officers in their recent discussions with the BAC team have identified their concern over the potential for high salinity water around this outfall to be drawn into the dredge for fluidisation purposes and the arising high salinity levels in the fill placed on the NPR site.

Given the highest priority assigned to the water related project in South East Queensland it is essential to ensure that, in the event of the filling works for the NPR coinciding with the commissioning of the water reclamation plant, Council would expect BAC to take all necessary steps to enable an uninterrupted operation of the reclamation plant. In this regard Council urges BAC to maintain close communication on this matter with Council and the relevant State Government departments.

#### J. Other issues

Council requires BAC to:



- i. appropriately modify Brisbane Water's stormwater management plans for the Luggage Point locality;
- ii. specify access requirements for its contractors;
- iii. ensure the temporary sand pipeline project does not impact, in any way, on the Council's ability to achieve compliance with the conditions issued by the Environmental Protection Agency for the Luggage Point Wastewater Treatment Plan operations;
- iv. investigate the potential for co-location of the temporary pipeline with another pipeline that would enable the use of recycled water from the Waste Water Treatment Plant during and post construction of the parallel runway;
- v. reinstate any roads damaged by heavy vehicles associated with the construction and operation of the temporary pipeline; and
- vi. reinstate the land used in associating with the operation of the temporary pipeline to its original or improved condition.

#### 11. Use of Council land

Should BAC proceed with the parallel runway proposal as currently proposed, it will require Council's formal approval of the following:

- i. the proposed drain where it crosses Council land at the Kedron Brook floodway; and
- ii. the proposed sand pipeline where it crosses Council land at Luggage Point.

Council understands that BAC is keen to obtain these approvals from Council by the end of 2007 to enable the delivery of the NPR project by 2015. Council assures BAC that it will make every effort possible to achieve all necessary agreements with BAC within this time frame.



# **Mr Cater Newell**

Formal Submission #240

**Position** Senior Partner

**Organisation** Carter Newell

#### Submission full text

Carter Newell has developed a close working relationship with the Brisbane Airport Corporation (BAC) over many years, significantly in respect to the conduct of its liability claims, risk management and related corporate services.

As Senior Partner at Carter Newell with over 17 years experience in aviation and liability law, I lead of team of dedicated lawyers who have been following the significant growth of BAC over many years, particularly in respect to major infrastructure developments such as No. 1 Airport Drive, and also of late, the new parallel runway. While this new runway has been in the design and development phase for some time, it has only been recently and following our initial review of the 2003 BAC Master Plan, that we have had the opportunity to read with interest, the Draft Environmental Impact Statement and Major Development Plan.

This new runway has been designed with strategic growth in mind to ensure the ever increasing demand placed not only on the need for more commercial flights, but also its related aviation facilities and industries, is met by the BAC. We have no doubt overall and particularly on the basis of passenger forecasts for the Brisbane airport over the next 30 years, that the proposed new runway will be fundamental to the ongoing expansion of Queensland's South East corner, both in terms of business and tourism.

We feel that with the use of extensive research and expert testing of the proposed new runway, the BAC has undertaken an exhaustive analysis of the impact of this new development. This has been not only with the obvious economic benefits in mind, (such as more short and longer term jobs and the increased capacity for aircraft and passengers through the airport), but also with a thorough consideration of the possible disadvantages in mind also.

The BAC has worked extensively to ensure the new parallel runway will have as minimal impact as possible on both the environment, and of course in respect to noise reduction issues for nearby home owners. This is no more evident in the former case than by the use of low impact dredging methods, drainage systems to prevent erosion. and habitat retention in coastal areas affected by civil works. In respect to the latter concern for airspace issues and noise reduction, the very location of the runway maximises the existing natural buffer zone, and it is also clear that the BAC



has worked in conjunction with the public to explore the best aircraft routes to prevent noise.

We therefore wish to provide our support for the new parallel runway Draft Environmental Impact Statement and Major Development Plan, and look forward with interest to the Supplementary Report and the response following its submission to the Australian Government.



# Mr Tim Nicholls MP

# Formal Submission #201

**Position** Member for Clayfield, Shadow Minister for Tourism, Fair Trading and Wine Industry Development

**Organisation** State Government

#### Submission full text

Dear Sir/Madam,

Re: Formal Submission "Public Comment"

I write to you as the State Member of Parliament on behalf of constituents in my electorate of Clayfield. Whilst I support the initiative to develop a New Parallel Runway for Brisbane and the economic benefits this will bring to our city, I strongly urge BAC to consider the following impacts on residents in the immediate area.

There are two issues in particular that are of concern:

#### Noise:

- I have already received a complaint concerning increased aircraft noise from a constituent in my electorate. Naturally residents are concerned about any increase in noise that will impact on the residential amenity. It is reasonable to expect that complaints are going to increase as figures contained in the Draft EIS/MDP Volume D Chapter 5, indicate Ascot, Hamilton and Hendra may all experience significant increases in air traffic noise. In particular I note:
  - Between 350 and 1,000 residences will experience an average increase of 10 or more over flights per day (D5-49),
  - Between 300 and 900 residences will experience an average increase of 5 or more over flights in the evening (D5-49).
  - In these areas, an increase of up to 17 childcare and kindergartens will be subject to potential noise awakenings (D7-289).
  - Whilst up to 9 schools, 27 places of worship will be subject to communication interference (D7-289).



- The impact of increased noise in Ascot, Hamilton and Hendra is already creating concern amongst residents and community organisations that must be addressed with development of alternative noise contours and further community consultation.
- The EISIMDP shows Ascot is expected to have significant growth in the period to 2035 due to potential future growth at Doomben Racecourse (D5-156). and at Hamilton at the North shore Hamilton Redevelopment Site (D5-156).
  - The imposition of increased noise pollution is unacceptable as it will negatively influence this expected growth and value of real estate in the area.
- Other suburbs that do not expect to have significant future growth and are mostly industrial such as Hemmant, Pinkenba and Murarrie are expected to experience a significant reduction in airport noise.
  - This seems absurd when the areas least affected by noise pollution due to non-residential zoning are areas receiving decreases in noise exposure.
  - I urge BAC to explore additional alternative noise contours to alleviate expected increases in noise pollution, by increasing the use of the Moreton Bay flight track wherever possible and considering alternative approaches to the NPR from the south.
  - I also urge BAC to consider alternative locations for the NPR that may alleviate unacceptable increases in noise exposure to residents of Ascot, Hamilton and Hendra.
  - More certainty is needed for the residents of these suburbs that the additional runway will not substantially increase noise.

#### **Traffic**

- I note and support the plans for the Northern Access Road, designed to join the Gateway Upgrade Project to improve access to the construction site.
- However, construction vehicles on main arterials during peak times will add to already heavy congestion.
- Major roads such as the Gateway Motorway and particular intersections such as Kingsford Smith Drive/Nudgee Road and East- West Arterial Road/Sandgate Road already operate above capacity during morning and evening peak times (BI 0-54).
  - To alleviate additional congestion caused by heavy vehicles, I suggest an exclusion period for traffic relating to Phase 1, 2 and 3 of construction during morning and evening peak times to minimise the impact of congestion.



The Impact of heavy construction vehicle movements must be managed and should not pass through residential areas outside normal operating times, i.e. between 7am and 5pm Monday to Saturday. A traffic management plan should be required to clearly state these objectives.

It is my pleasure to represent the constituents of the Clayfield electorate in this matter and I urge BAC to consider these pressing points with the diligence and attention to detail they require.

Yours sincerely Tim Nicholls MP

Member for Clayfield

Shadow Minister for Tourism,

Fair Trading and Wine Industry Development



# Mr John Nordahl

Formal Submission #84

**Position** Community individual

Organisation n/a

#### Submission full text

Let me first of all congratulate the company's responsible or this undertaking as is will no doubt be beneficial to a lot of people.

Having spoken to persons directly involved with the project assuring me and other people that an area for existing bird life has been given the appropriate consideration. I belong to a little group called the Neighbourhood Watch in Toorbul. They have shown a great deal on interest in this undertaking, as we will be directly in the flight paths of incoming flights.

I would like to believe that the existing facilities are able to cope with the additional influx of visitors. In the event of an overseas takeover will this undertaking remain in Queensland and Australian control

Apart from these few questions I have no negative thoughts and I wish the project all the success it deserves.

I remain sincerely John Nordahl



# Ms Krysia Norris

#### Formal Submission #162

**Position** Community individual

Organisation n/a

#### Submission full text

I am opposed to the construction of a parallel runway for the following reasons:

- A second runway would result in increased aircraft noise levels and traffic over my house. The increase is proposed to be significant for both departures and arrivals. This will prevent me from having the peaceful enjoyment of my home.
- I am concerned about the impact of increased noise levels on the value of my property. I have consulted a local real estate office manager who stated the increased noise levels would hinder the growth of the area Balmoral and therefore decrease the potential value of my property. This creates stress for me as I am now considering whether I should sell now.
- I am concerned about the possible health affects of increased aircraft volume over my local area. Aircraft emissions have the same as or similar pollutants to what is found in cigarettes which cause the largest number of deaths in Queensland including through passive smoking. People living under aircraft flight paths find a soot type substance on their houses and in their backyards.
- I am concerned that there has not been a proper cost benefit analysis done on all alternative runway options. For example, in Vol. A. Chap. A3 under "Airspace, noise" option 3 states there would not be much change yet there would be huge changes for some suburbs, eg. Balmoral. Then under option 5 it states which suburbs would be affected. There seems to be a subjective slant toward option 3. No assessment was made on number of fights, times, days, weather etc. Under the heading of "Capital Cost" the "tick" ratings seem far apart even though the dollar figures aren't quite so. I feel the ratings are questionable and suggest that to be able to make an informed analysis a more scientific approach should be made even a Likert type scale would be more credible. Further on the analysis of the alternative options there was no comprehensive assessment for noise, traffic, pollution, property values etc. This is a huge proposal for Brisbane and every avenue should be looked at to make an informed decision.
- I believe a full investigation into the feasibility of a curfew for Brisbane Airport should be part of a noise management plan.



- I am concerned that not enough consideration has been given to the long term planning eg. 50 to 100 years ahead. Perhaps option 6 would therefore become more feasible for our future. Alternatively, if under option 3 the runways extended into Moreton Bay, similar to Fisherman's Island port area, it may reduce impact on residential areas and also give consideration to longer term planning.
- Could the material from all the future Brisbane tunnels be used as landfill to extend the runways into Moreton Bay?

I am frustrated that despite continuing community opposition, the BAC persists in pushing an unwanted parallel runway on local residents.

Regards,

Krysia Norris



# Nudgee Banyo Northgate Citizens Action Group Inc.

#### Formal Submission #231

#### **Position**

Organisation Nudgee Banyo Northgate Citizens Action Group Inc.

#### Submission full text

#### INTRODUCTION

The residents of Nudgee Beach believe their quality of life will significantly change for the worse once the New Parallel Runway (NPR) becomes operational.

MN Citizens Action Group Inc rejects the assumptions of benefit that have been packaged with the NPR. We are extremely concerned about the potential impact of noise, air and light pollution on the amenity and health of the community of Nudgee Beach.

If the NPR is to be a certainty, we seek its placement another 475 metres towards the main runway to provide a small critical buffer for the community of Nudgee Beach.

Secondly, we seek a set of operational guidelines for the NPR that are responsibly managed by the BAC. These guidelines are to ensure that the residents of Nudgee Beach will receive adequate noise and air quality protection from the NPR.

The simple values of clean air, water and quiet open space defines Nudgee Beach. We seek every effort to preserve these qualities should the NPR become a reality.

# A. The BAC states the NPR will enable the airport to direct the majority of its flights over Moreton Bay (Ref. Vol D -Airspace).

NBN Citizens Action Group Inc disagrees.

The ODPROPS system is the favoured mode of operation by the BAC once the NPR becomes operational. It is marketed as the way to get most of the planes out of Brisbane Airport and over Moreton Bay.



However, both SODPROPS and DODROPS are only geared for low to medium capacity operations over Moreton Bay.

Bureau of Meteorology data over the last 50 years confirms that the chance of weather conditions being suitable for take offs and landings over Moreton Bay are well under 50%.

The BAC is promoting an operational system that requires specific prevailing wind direction and speed. The ODPROPS system cannot be used in poor weather or peak conditions. In effect, far more planes will be taking off and landing over residential areas than the Draft EIS would like us to believe.

# B. The BAC seeks a separation distance between the existing runway and the NPR of 2000 metres so it can make the airport "safer" and build a much needed new terminal

NBN Citizens Action Group Inc disagrees.

International standards maintain a safe distance between independent runways is 1525 metres and this is sufficient to accommodate terminal buildings and easily usable taxiways. The ODPROPS mode of operation does not function better as a result of an increased distance between the runways - ODPROPS depends on volume of aircraft and prevailing wind direction and speed for effective functioning.

# C. The BAC maintains there is no benefit in having the NPR 475 metres further away from Nudgee Beach.

NBN Citizens Action Group disagrees.

Once constructed, the NPR will be 1.8kms from the closest house at Nudgee Beach. With the NPR operating on SODROPS, it is anticipated that capacity will be 25 arrivals and 30 departures per hour (Vol. D pl35) i.e. 55 aircraft movements in an hour.

Common sense argues that there will be an onslaught of noise from ground-based operations from the NPR on Nudgee Beach. The lateral noise study conducted by the BAC had unreliably small samples and its conclusion was highly qualified and remote from the real experience of noise at Nudgee Beach. Furthermore, our organisation believes that values derived from the extensive modelling within this study may be misleading.

We strongly argue that the NPR be placed further away from Nudgee Beach, at 1525 metres from the main runway. This maximises the buffer zone between the NPR and the residents of Nudgee, Northgate and Nudgee Beach.

# D. The EIS maintains that property values are not affected by their close proximity to the airport (refer Vol. A).



The NBN Citizens Action Group disagrees.

Research around the world is well documented that close proximity to airports negatively affects property values. The high end of the market always suffers the most from close proximity to an airport. Between October 2002 and October 2004 the average price of properties in Nudgee Beach rose by 141.94% (refer Courier Mail 30/3/05). There are many properties in excess of \$1 million dollars amongst the hundred or so houses at Nudgee Beach. Our current land values are at substantial risk.

E. The EIS states that the proposed landing light structure will be visible from areas at Nudgee Beach (Refer Vol B: Airport and Surrounds).

Nudgee Beach is an area where one can actually view the night sky. NBN Citizens Action Group Inc objects to the potential light pollution from this landing structure. We argue for minimal visual intrusion within our open landscape by having a curfew after nightfall on light transmission from the NPR, with aircraft instead, being directed to use the original runway.

F. The boom-boom of the bird strike gun is a noise menace for residents of Nudgee Beach. It is incessant, irritating and pervasive. The closer the boundary of the new runway to Nudgee Beach, the closer the bird strike gun. Noise produced by this gun once the NPR becomes operational, is unacceptable to the residents of Nudgee Beach.

G. Nudgee Beach is forecast to experience the largest increase in ambient air pollutants as a result of the NPR (Refer Vol D: Airspace). The EIS maintains there is a negligible increase in health risk to the residents of Nudgee Beach.

NBN Citizens Action Group Inc is of the view that poor air quality will impact negatively on community health at Nudgee Beach.

No mention has been made that shoreline communities like Nudgee Beach have the capacity for very high air pollution characteristics by virtue of local wind patterns that trap and recirculate pollutants rather than allowing them to be carried away by uni-directional winds.

Nudgee Beach has a disproportionate number of elderly residents and a growing number of children within the suburb. Individuals susceptible to poor air quality are children and the elderly with chronic respiratory disorders (eg asthma).

NBN Citizens Action Group Inc is concerned about the typical smell of jet fuel in the air associated with aircraft taxiing or idling on the runway. Jet planes pollute much more on the ground than in the air. No mention has been made by the BAC of these nuisance odours that will certainly impact on the community due to the close proximity of the NPR to Nudgee Beach homes.



# H. The BAC proposes a Biodiversity Zone to offset the loss of mangroves along with the implementation of a Biodiversity Management Strategy (Ref. Vol B - Airport and Surrounds)

This proposed new zone will only highlight the conflict between conservation practices and bird strike hazard.

To compensate for natural resource damage NBN Citizens Action Group Inc recommends the development of off-site mitigation projects for example, the rehabilitation or restoration of ailing sections of the adjacent Boondall Wetlands.

Alternatively a compensation package may be offered to the residents of Nudgee Beach. The tranquil experience of visiting, living and working in Nudgee Beach is essential to its economic and social vitality. The NPR will forever change Nudgee Beach. No effort has been made by the BAC to research and quantify the financial and quality of life losses that the NPR will bring to the residents of Nudgee Beach. No effort has been made by the BAC to develop a compensation package in recognition of these losses.

I. The BAC maintains that suburbs to the west of the airport will have the potential for increased noise exposure on occasions due to aircraft on the runway" (Ref. Vol D - Airspace).

The NPR will be 1.8kms from the first house at Nudgee Beach. There is an expected capacity of 55 aircraft movements per hour (Vol D, p 13

Our most common winds are the easterly and north easterlies in combination with seasonal winds from the south - all these winds will blow ground noise from the NPR back into Nudgee Beach. There will be little relief from aircraft noise for the residents of Nudgee Beach as a consequence of all these factors.

An N60 contour has also been predicted for Nudgee Beach on the basis of BAC modelling. NBN Citizens Action Group Inc believe this level of noise will interfere with sleep, especially if the noise is of an intermittent nature.

NBN Citizens Action Group Inc recommends the BAC develop a set of operational guidelines to actively manage aircraft noise as it impacts on Nudgee Beach.

We strongly recommend:

- A night time curfew on the NPR, where night flights only use the main runway.
- 2. The BAC commits itself to imposing penalties on noisy aircraft above a certain level.



- 3. The BAC introduce staggered noise related landing charges as a disincentive to noisy fleets. These monies would finance insulation of homes and compensation packages.
- 4. Restriction on hours of NPR use for noisy aircraft.
- 5. The banning of procedures that govern aircraft engine testing on the NPR.
- 6. Ban reverse thrust in aircraft using the NPR unless required for the safety of the aircraft.
- 7. More passive approaches to aircraft noise management which include the financing of acoustic insulation in properties most effected by noise, or alternatively financially assisting those residents who can't live near the airport to relocate to other areas.



# Mrs Elizabeth Nunn

Formal Submission #172

**Position** Community individual

Organisation n/a

#### Submission full text

I wish to suggest that the name "Cribb Island", be commemorated in some way by the Brisbane Airport Corporation as a result of the New Parallel Runway Project.

The removal of the entire Cribb Island Community in the late 1970's, was a unique event, and should be remembered in some way.

Many of the former residents of Cribb Island, and their descendants, still live in the areas adjacent to their former community, and continue to conduct a series of community events to reminisce and celebrate Cribb Island.

I make this request in my role as the President of the Shire of Toombul History Group.



# Mrs Juliet O'Brien

Formal Submission #151

**Position** Community individual

Organisation n/a

#### Submission full text

To whom it may concern my submission follows. I have already posted this to you but it may not arrive by Tuesday 6 February so I am emailing it to you as well.

We live about 200 ft above sea level on a hill, which faces towards the West. Air traffic in this area has increased considerably over a period of a few years. We are bordered on the South and West by a rock wall rising to the rim of Toohey Forest. This wall is part of our problem as it captures the sound of incoming aircraft and throws it back at us.

Over the fifteen years that we have been here the noise from some aircraft has diminished but the number of flights has increased. We believe that a second parallel runway would further exacerbate the situation as planes would still be using the existing flight path to land.

Most of the two-engined aircraft are not a problem as they fly much higher on their track to the airport. It is mainly the 747 jets (with four engines), which frequently fly in (often early in the morning or late at night) low enough for us to sight the lettering on the tail (JAL would seem to be the worst offender). If these planes could fly in at a higher level much of our problem would be removed.

There is one plane, which flies directly over our house. The vibration from this plane rattles our ceiling fan in the kitchen, but because this is at the back of the house and we have a large tree at the front we have not been quick enough to discover the identity of the plane. There does not appear to be a pattern to its arrival day or time.

This area of Tarragindi bordering on Toohey Forest is disadvantaged by the rock wall, which captures and increases considerably the volume of aircraft noise. If the flight path could be moved slightly to the north west or even follow the freeway we suspect the problem for us and many of our neighbours would be reduced.

On attending one of your information functions I was advised that wind direction played a large part in chosen flight paths. We could agree with this except many of the flights come in early in the morning when frequently a southeaster or southwester is blowing. The noise is further exacerbated



by cloud cover forcing the sound to earth. When we did get rain we could predict that increased flights heralded rain. It is difficult to understand when we are told that incoming aircraft need to land into a northeaster when the wind appears to be coming from the opposite direction.

Advice that was given also stressed the need for the pilot to sight the runway. Hopefully this will be less essential when planes are fitted with GPS as we believe will be the case later this year.

Our concern is in coping with the increase in traffic brought about by the second runway and expansion of air travel in the future as the number of planes arriving early in the morning or late at night will rise making this part of Brisbane bordering on the forest uncomfortable for ALL the residents.



# Mr John O'Gorman

Formal Submission #221

Position Pro Vice Chancellor

**Organisation** Australian Catholic University

#### Submission full text

The University is glad of the opportunity to comment on the New Parallel Runway (NPR) project at Brisbane Airport.

It notes the need for the NPR, given projected growth in South East Queensland, the likely delay to flights without it and the environmental costs of having aircraft circling Brisbane. It expects some increase in noise on its Brisbane campus but has confidence in the assurances that management practice will seek to minimise the increases.

The university fully supports the no curfew policy that is currently in use at the Brisbane Airport. This provides Brisbane with an economic advantage that would be diminished if restrictions were paced on the airport between 10pm and 6am. With Queensland not adopting Eastern Summer Time, it becomes essential that early morning departures are available. Flights are needed well before 6am to provide ACU staff and other business people with the opportunity to arrive at their interstate destination for the start of the working day. If a curfew were to be put in place, it would force more of our staff and other Queenslanders to fly out the evening before, spending a night in a hotel at their intended destination. This would in turn add to the cost of business and further interfere with the balance between work and family life.

The University sees the advantage in expansion of the airport and its facilities and looks forward to continuing the cordial relationship it has with the Brisbane Airport Corporation.

Yours sincerely,

John O'Gorman



# Mr Jim O'Rourke

#### Formal Submission #50

**Position** Community individual

Organisation n/a

#### Submission full text

As a resident for more than 30 years to perhaps the closest location that will be impacted upon by the location proposed by the new runway, I make a few comments, which I feel are relevant.

It is obvious with the tremendous growth of Brisbane in particular an additional runway is certainly necessary.

Many legitimate objections have been brought to the notice of BAC and government entities.

These include in particular:

- 1. Environmental concerns particularly to Jackson's Creek, Kedron Brook, Cannery Creek and Moreton Bay.
- 2. Noise pollution increasing over residential and commercial areas that will certainly be affected.
- 3. Loss of property values in affected areas.
- 4. Litigations that will follow by residents and property owners against BAC federal and state governments and other parties concerned.

It is a forgone conclusion that the additional runway will go ahead irrespective of objections as BAC and government bodies involved cast the aura of total arrogance to the concerns of the residents and property owners concerned.

Why on earth don't they have the common sense to realise at least some display of compromise can be shown by publicly acknowledging and undertaking to move the runway 475 metres further east.

That would put it a bit closer to the existing runway and perhaps somewhat reduce some of the obvious objections. That way at least they would still get the additional runway and affected residents would perceive a degree of concern and care.



Once it is approved and built, it will be too late.

Surely the government and departments such as EPA and other authorities should be insisting that the proposed location is refused and/or if approval is "rubber stamped" move it as far away from proposed location as possible.

Yours faithfully,

Jim O'Rourke



# **Mr James Ottaway**

Formal Submission #242

Position A/Project Manager

Organisation State Development Co-ordinator General's Office

#### Submission full text

Dear Sir,

Thank you for the opportunity for the Queensland Government to comment on the draft Environmental Impact Statement/Major Development Plan (EIS/MDP) for the New Parallel Runway Project for Brisbane Airport. The enclosed submission includes comments from all relevant State Agencies in relation to the draft EIS/MDP. An Agency contact name and number is provided should you require clarification on any Agency specific enquiry in this submission.

Should you require to meet with an Agency in relation to its comments please contact Mr James Ottaway, A/Project Manager, Major Projects, on telephone (07) 3225 8892 who will make the appropriate arrangements.

Yours sincerely

Geoff Dickie

Assistant Coordinator-General

Major Projects



# Queensland Government Agency Comment on the Draft EIS/MDP for the New Parallel Runway Project - Brisbane Airport

## **Environmental Protection Agency**

(Contact: Glen Schulz - 3224 8149)

#### Issue 1: Chapter A1: Section 1.6 State Approvals and Local Planning

Some coastal policies under the State Coastal Management Plan 2001 and South East Queensland Regional Coastal Management Plan 2006 have been addressed in Table 9.6a of the Dredge Management Plan, and in Table 2.6 of Volume B2: Land Use Planning. However, there are a number of additional coastal policies under the State Coastal Management Plan 2001 and South East Queensland Regional Coastal Management Plan 2006 that should be also addressed.

**Recommendation:** The Supplementary EIS should address the following coastal policies in both the State Coastal Management Plan 2001 and the South East Queensland Regional Coastal Management Plan 2006:

- 2.1.3 Coastal-dependent land uses
- 2.2.1 Adaptation to climate change
- 2.2.5 Beach protection structures
- 2.3.2 Design of access
- 2.9.1 Regional coastal management plans
- 2.9.2 Coordinated management of jurisdictions
- 2.9.3 State land on the coast; and
- 2.9.5 Control districts.

#### Issue 2: Seawall reconstruction - Chapters A4, A5 and B4

General information about the existing seawall removal and new seawall construction has been provided in Chapter A4: Section 4.14.2, Chapter A5: Section 5.2.6, and Chapter B4: Section 4.8.2.3. However, no information has been provided regarding the detailed design and construction of the proposed replacement seawall between Cribb Island Jetty and the mouth of Serpentine Inlet, nor what part of the works will be within the airport boundary and what will be outside.

Those parts of the new seawall constructed outside the airport boundary will be operational works that are prescribed tidal works and the EPA would be a concurrence agency for assessing any application for them. The EPA will require a detailed final design of the new seawall when assessing an application for these works. In addition, the EPA requires additional information to be included in the EIS as detailed below.

Recommendation: The following information should be provided in the Supplementary EIS:



- Drawings of the seawall, including dimensions, location with regard to the property boundary and Mean High Water Springs, and materials, and sources of materials proposed to construct the seawall.
- Information regarding how the new seawall addresses the requirements of both the State Coastal Management Plan 2001 and the South East Queensland Regional Coastal Management Plan 2006.
- The procedure, including machinery to be used, to construct the seawall.
- Drawings of the original seawall relative to that proposed; and
- Information on proposed mitigation measures to minimise any negative effects on coastal processes during construction of the seawall.

# Issue 3: Chapter A5: Section 5.5.18 Approach Lighting Structure

Brief information about the design and construction of the approach lighting structure has been provided in Section 5.5.18 of the EIS. However, this information is inadequate to allow an assessment of the assertion there will be no impacts due to the proposed works.

The lighting structure will be operational works that are prescribed tidal works and the EPA would be a concurrence agency for assessing any application for these works. The EPA will require a detailed final design of the approach lighting structure when assessing an application for these works. In addition and of immediate relevance, the EPA requires additional information to be included in the EIS as detailed below.

Recommendation: The following information should be provided in the Supplementary EIS:

- More detailed drawings of the lighting structure, including dimensions, locations, how the structure will be piled, likely depth of pile, pile type, etc.
- Information addressing the relevant policies of both the State Coastal Management Plan 2001 and the South East Queensland Regional Coastal Management Plan 2006.
- A full assessment supporting the statement that the structure will not impact on coastal processes. The assessment should include local effects not just macro-processes.
- Details of mitigation measures to minimise the effects of construction and operation of the lighting structure on plant and animal species in the inter-tidal zone; and
- Additional information as would be required for an application for the lighting structure, including lighting alternatives, reasons for the preferred option, need for the lighting structure, etc.

#### Issue 4: Chapter B4: Section 4.8.2.5 Kedron Brook Mouth Design

Those parts of the drainage works in Kedron Brook proposed to be constructed outside the airport boundary will be operational works that are prescribed tidal works and the EPA would be a concurrence agency for assessing any application for these works. However, no information has been provided regarding what part of the works will be within the airport boundary and what will be outside.



The EPA will require a detailed final design when assessing an application for the drainage works proposed in Kedron Brook will be required. However, the following information is required immediately as part of the EIS:

**Recommendation:** The applicant will need to provide the following information as part of the Supplementary EIS:

- More detailed drawings showing the location of the drainage works in Kedron Brook, the location of Mean High Water Springs and Highest Astronomical Tide, the location of the property boundary, etc.
- Additional information addressing the relevant policies of both the State Coastal Management Plan 2001 and the South East Queensland Regional Coastal Management Plan 2006.

#### Issue 5: Suspended solids - Chapter B8: Section 8.7 Assessment of Impacts

The modelling suggests that there will be a significant increase in suspended solids concentrations and turbidity in Kedron Brook Floodway, and to a lesser extent in Serpentine Creek. Suspended solids may increase by more than 50 percent, while turbidity may increase five fold assuming ambient turbidity of 12 NTU in Kedron Brook Floodway. The exact extent of this change has not been presented, although significant changes would occur over more than a 1km length of waterway which is too large to be considered an appropriate mixing zone. These changes are likely to be visible to the public.

Furthermore, the sedimentation ponds have been designed to "achieve a discharge quality of the order of 50mg/L [for total suspended solids] defined as a median concentration" and the EIS states this is "consistent with other performance data for these types of measures". The EPA believes that justification has been taken out of context and is not consistent with acceptable performance standards. For example, the *Stormwater quality control guidelines for local government* (DNR & DE, 1998) recommend that the suspended sediment levels in the discharge from a sediment basin should be no greater than 50mg/L *in a two-year ARI storm*, not as a general discharge level. Furthermore, the 50mg/L value in the guidelines is a *maximum* permitted level and then only during a storm event-it is significantly more stringent than the 80mg/L (80th percentile) proposed in the EIS as a trigger for corrective action after two days.

The EPA believes the proposed suspended solids concentration and turbidity level are too high for such a large, frequent and long-standing discharge. As reflected in the Water EPP where the existing water quality is of a lower quality than the scheduled water quality objectives, an activity must be carried out in accordance with best practice environmental management.

The EIS has not demonstrated that the quality of supernatant discharged from the sediment ponds would be optimised. Instead the pond design has been based on an arbitrarily chosen, suboptimal discharge quality. A range of mitigation measures additional to the proposed design should be



addressed in the EIS. Measures such as (but not limited to) those proposed in the corrective actions of Table 8.7j should be considered as permanent features of the treatment train. Discharge predictions for different modelling scenarios based on better practices should be included to show how the solids concentration in the discharge can be reduced as much as is practicable.

**Recommendation:** BAC should propose additional management measures, considering best practice alternatives, to reduce the suspended solids concentrations and turbidity in the sedimentation pond discharge water. The Supplementary EIS should demonstrate the use of best management practices for the operation of the sedimentation ponds rather than aiming for a 50mg(TSS)/L median discharge concentration. Modelling scenarios should be undertaken using the anticipated discharge quality resulting from best management practices. This could provide evidence that the proposal is in accordance with the management intent for the receiving waters to show an improvement in water quality for the receiving environments of Kedron Brook and Serpentine Inlet discharges.

#### Issue 6: Sediment chemistry - Chapters B5 & B8

It is a significant failing of the EIS that it does not adequately address the potential impacts of the proposed activities on the quality of sediments in the waterways and near-shore marine areas. It was a requirement of the guidelines for the EIS that this matter be addressed, yet no sampling or analysis of sediments in Kedron Brook or Bramble Bay was undertaken, nor even a desk top review of previous studies. The EIS should have established baseline data against which the effects of the proposal on sediment quality could be measured. It should also have proposed continuing monitoring of the effects on sediment quality during and after construction of the runway.

In particular, the EIS should have fully addressed the nearly doubling or tripling (depending on whether you take the value for ambient concentration from Table 8.4e or Table 8.7c) of the concentration of total phosphorus in Kedron Brook. It is inadequate for the EIS to state (page B8-392) that because phosphorus will be taken from one input (Brisbane River) to another (Kedron Brook) there will be no net effect on Moreton Bay as a whole. It is the local scale that matters. Also, where some assessment of potential impacts at a local scale has been provided on page B5 265 it is cursory and speculative, and is not supported in the EIS by any scientific data.

Phosphorus tends to bind to fine sediment, and as both will be increased in Kedron Brook by discharge from the runway project there is the potential that a build-up of contaminated sediment will occur in the channel and also where sediment will settle due to decreased flow velocity off the mouth of the brook in Bramble Bay. Sediment with an elevated phosphorus level could then have an influence on the local environment long after the discharge from runway construction has ceased. The same could be said of any metals bound to fine sediment. Reducing the discharge sediment load would help mitigate these potential impacts.



#### **Recommendation:** The Supplementary EIS should fully address:

- the current physical and chemical characteristics of sediments within potentially affected waterways and the littoral and marine zone;
- the environmental values of the estuarine and marine benthos that could potentially be affected by changes to sediment quality;
- the potential impacts, in both the short and long terms, of increased pollutant loads (particularly phosphorus and metals) and sediment loads in Kedron Brook, Jacksons Creek and the local area of Bramble Bay;
- monitoring of the effects of the proposal on sediment characteristics and benthic ecology;
- mitigation measures to reduce impacts on sediment quality, including reducing sediment loads.

# Issue 7: Water quality monitoring - Chapter B8: Section 8.7 Assessment of Impacts

The water quality monitoring proposed in Table 8.7j, Water Quality Plan Summary, is inadequate given the potential impacts on Kedron Brook. There are a number of issues.

Firstly, the frequency of TSS monitoring would be insufficient to develop adequate control measures. Samples would be taken weekly and analysis usually takes a number of days. By the time consecutive results are obtained, the poor quality water may have been releasing for a considerable time. The use of turbidity as a performance criterion rather than TSS concentration would provide a more direct management tool as it can be measured continuously on-line and would allow early detection and management of the short term impacts of high TSS discharges. Acute impacts from spikes in solids concentrations in the discharge need to be managed to protect environmental values of the receiving waters (Kedron Brook Floodway, Serpentine Inlet and Bramble Bay). Furthermore, turbidity is a more relevant parameter to reflect water quality impacts on Bramble Bay due to the issues associated with visibility and light penetration.

Secondly, the limit of 80mg/L is based on the 80th percentile and may be insufficient to ensure water quality would be around the 47mg/L TSS used in the modelling, which in itself is considered too high (see Issue 5).

A third issue is that the significance criteria presented in Table 8.7a, particularly for major adverse impacts, are not appropriate given there is no Ecosystem Health Monitoring Program (EHMP) monitoring of Kedron Brook Floodway and Serpentine Inlet, and the current EHMP sites in Bramble Bay are some distance from the activity. Only monitoring at the mouth of Kedron Brook Floodway and Serpentine Inlet is proposed.

A greater focus on monitoring in Kedron Brook Floodway and Serpentine Inlet is required. Given the potential impacts of the discharge both locally and on Bramble Bay, the proposed monitoring program should be intensive and reflect the best available technology (including a rigorous monitoring program) to manage impacts. Also, an additional site in Bramble Bay is required more directly inline with flow from the mouth of the Kedron Brook Floodway.



#### Recommendation:

- Propose more frequent and suitable monitoring of turbidity at the outlet of the sediment ponds, such as continuous monitoring via an on-line turbidity meter.
- Provide performance criteria, monitoring frequencies and corrective actions in the Water Quality Monitoring Plan that will ensure and deviation from best practice environmental management can be dealt with promptly.
- Improve the monitoring program for Kedron Brook and Serpentine Inlet with monitoring locations close to the proposed discharges (rather than relying on the three EHMP monitoring locations) to determine the localised effects of the airport discharges and to allow a rapid response to any increases in solids concentration in the discharge. The monitoring program should demonstrate how any spikes in solids concentration will be managed to protect the environmental values of the receiving waters. Furthermore, the significance criteria for the more adverse impacts should be refined to make them more relevant to the activity and not just dependant on the report card rating.

#### Issue 8: Chapter B8: Section 8.7.4.8 Compliance Against Water Quality Objectives

The conclusions drawn in the EIS regarding the impacts of the proposal are not in accordance with current environmental policy. The EIS states that because water quality objectives are already exceeded "the construction phase water quality is not likely to be a major cause of non-compliance with WQOs". The fact that water quality prior to a proposed activity is already compromised should never be used as an excuse, implied or explicit, for allowing additional impacts. On the contrary, water quality should not measurably deteriorate as a result of the activity and the intent should be to improve the situation. Yet the EIS depicts modelling results that show discharges would produce major increases in pollutants, particularly turbidity and TSS, along a considerable length of Kedron Brook (both up and downstream of the discharge point), Serpentine Inlet and up to 1 km offshore from discharge in Bramble Bay.

Recent reports from The Healthy Waterways state that Bramble Bay (the receiving waterway) has poor ecosystem health and is susceptible to further inputs (particularly in terms of nutrients and solids). Bramble Bay has shown recent signs of improvement in ecosystem health (as per the Healthy Waterways Reporting System) and is the only Moreton Bay system to show an improvement.

As per the Environmental Protection Policy (EPP Water) Amendment 2006, the management intent for Level 2 Slightly to moderately disturbed aquatic ecosystems (such as Bramble Bay) where the existing water quality is of a lower quality than the scheduled water quality objectives, is to improve the water quality and prevent further degradation. In addition, as noted above, the EPP (Water) states that an activity must be carried out in accordance with best practice environmental management.



As reflected in the EIS report, the existing water quality in receiving waters (Kedron Brook Floodway, Serpentine Inlet and Bramble Bay) does not meet water quality objectives, hence the aim should be to improve the water quality and prevent further degradation. This is not supported by the airport proposal in that the EIS fails to demonstrate that further degradation (as a minimum) of water quality will not occur.

**Recommendation:** The statement in the EIS that because water quality objectives are already exceeded "the construction phase water quality is not likely to be a major cause of non-compliance with WQOs" should be removed or retracted. Furthermore, as noted in Recommendation 5 above, the Supplementary EIS should demonstrate how best practice will be used to achieve the best possible outcome for the receiving environment with the aim of meeting the WQOs.

#### Issue 9: Chapter C4: Table 4.6b Significance Criteria: Marine Water Quality

The significance criteria for marine water quality presented in Table 4.6b are not appropriate given the nature of the activity (i.e. it is more intermittent and likely to have most impact via direct physical damage to local seagrass etc.). These changes are not likely to affect the regional report card given their ambient focus and regional spatial scale. Mapping of seagrass is not done every year, nor does it cover all of these areas. Therefore, dependence on the report card result as the sole indicator of adverse impact is not appropriate.

**Recommendation:** Redefine the significance criteria to make them more relevant to the activity and not just dependent on the report card rating in the case of the high and major adverse impacts.

## Issue 10: Seagrass-Chapter C5: Marine Ecology: Section 5.5.3

A comment was made in the seagrass section (page 175) that there is no recent broad scale seagrass mapping data for Moreton Bay. Reference is therefore made to data collected prior to 2000. EHMP produced a map from 2004 sampling, which included seagrass meadows up through the HEV zone on the west coast of Moreton Island. Middle banks were not mapped but the information on the extent of the Moreton Island beds should be considered.

Furthermore, while Figure 5.5b shows the distribution of seagrasses on and around Middle Banks it does not show it in comparison to the propose dredge footprint. Direct damage to seagrass meadows from the dredging activity is likely to be the most destructive. Sufficient measures should be put in place to ensure that dredging does not occur anywhere in or immediately adjacent to seagrass meadows.

**Recommendation:** Provide additional assessment of likely impacts on seagrass incorporating the 2004 sampling data on seagrass meadows around Moreton Island and showing the relationship



between the dredge footprint, its area of influence (e.g. due to slumping) and seagrass distribution. Also, develop measures to ensure that dredging does directly impact on any seagrass beds. This may include defining the coordinates of the edges of the seagrass meadow on the Middle Banks and the HEV area to the east of the East Shipping Channel and developing protocols to ensure dredging and its direct effects do not encroach on these areas.

#### Issue 11: Nutrient levels - Chapter C5: Section 5.5.4 Microalgeae

The section on phytoplankton on page C5-176 contains errors of fact when it states that the "waters of north-eastern Moreton Bay are oligotrophic (have low nutrient levels) owing to a high degree of oceanic flushing from North and South Passage". It is also in error when it assumes the possibility that the "short residence time of waters in this area prevents the rapid utilisation of nutrients".

The low nutrient levels in the waters of eastern Moreton Bay are due to the lack of inputs not flushing. Several studies have shown the waters in the vicinity of Middle Banks do not experience a high degree of flushing with the ocean, rather they have a residence time of approximately 45 days. Furthermore, the net movement over all tidal cycles is southward, which was demonstrated in the dredge plume modelling presented in Chapter C4 of draft EIS.

On page 176-177 the report states that following the development of a bioassay technique by Jones et. al. (1998), eastern bay phytoplankton populations do not respond to *in vivo* nutrient additions and therefore do not respond to inorganic nutrients like populations studied elsewhere. Subsequent work on the bioassay method developed by Jones et.al. (1998) has shown that the nutrient spiking concentrations used were likely to be toxic to the populations present in the Eastern bay, hence the lack of response. Therefore, the Eastern bay phytoplankton populations would respond to nutrient additions like most sub-tropical or temperate clean water populations studied elsewhere.

**Recommendation:** Remove the statements and reference to Jones et al (1998) and reconsider the effects of nutrient additions on phytoplankton in the study area, particularly where modelling indicates the dredge plume will extend into the HEV area.

#### Issue 12: Chapter C5: Section 5.8.10 Impact Assessment

The modelling presented in Chapter C4 shows that plumes of suspended solids will extend into the HEV area, which incorporates a designated Ramsar area. The assessment of impacts presented in section 5.8.10 makes no mention of the HEV area, and its assessment of impacts on the Ramsar area is brief and speculative. There are data in other sections of the draft EIS, such as the predicted extent of dredge plumes and duration of elevated suspended solids levels presented in Chapter C4, that could be used to develop a reasoned assessment of the likely impacts on the HEV and Ramsar areas.



**Recommendation:** The Supplementary EIS should present a reasoned assessment, supported by scientific evidence, of the likely impacts of dredging and plume dispersal on areas with high ecological value.

#### Issue 13: Chapter C9: Dredge Management Plan

Concept designs of the temporary mooring facility and temporary dredge pipeline have been provided in Chapter C9: Sections 9.3.2 and 9.3.3 respectively.

The temporary mooring facility and any part of the dredge pipeline beyond the boundary of the airport land will be operational works that are prescribed tidal works and the EPA would be a concurrence agency for assessing any application for these works. When a prescribed tidal works application for these works is submitted the EPA will require a final detailed design of the temporary mooring facility and temporary dredge pipeline structure at Luggage Point.

The information outlined below should be included with the detailed construction plans for these facilities and included as supporting information with any prescribed tidal works application for these works.

**Recommendation:** The following information should be provided with any prescribed tidal works applications for the temporary mooring facility and temporary dredge pipeline:

- Engineering drawings signed by a RPEQ showing:
  - the location of the structure(s) (dimensioned with respect to real property boundaries);
  - o the dimensions of structure(s); and
  - the procedure, including machinery to be used, to construct the temporary mooring facility and temporary dredge pipeline; and
- Provide a date the temporary works will be completely removed.
- Describe how the works will be removed and the site rehabilitated, and assess any likely impacts on the environment due to removal activities.

#### Issue 14: Chapter C9: Dredge Management Plan

A draft Dredge Management Plan has been provided in Chapter C9 of the EIS/MDP. Approval for the final Dredge Management Plan will be required from the EPA. Any application for a Dredge Management Plan approval should include the information outlined in the following recommendation.

**Recommendation:** Application to the EPA for Dredge Management Plan approval should include the following information:



- a site plan of the dredge footprint showing:
  - o the location (dimensioned and set out with GPS points); and
  - a final cross-sectional of the footprint.
- letters of comment on the proposed Dredge Management Plan from:
  - Port of Brisbane;
  - Maritime Safety Queensland;
  - o Department of Primary Industries and Fisheries; and
  - Brisbane City Council.
- incorporation of all requirements from the above agencies into the Dredge Management Plan.
- the following general EPA conditions for dredging under the Coastal Act should be included in the plan:
  - o The works shall be in accordance with the approved plans;
  - o If any acid sulfate soils are disturbed the applicant must comply with the latest edition of the Queensland Environmental Protection Agency's Instructions For The Treatment And Management Of Acid Sulfate Soils produced by the Queensland Environmental Protection Agency in consultation with the Department of Natural Resources and Water and the Department of Primary Industries;
  - Before dredging commences, and during the whole of the dredging operations, each dredge and each item of equipment carrying out the actual removal of the material shall display a sign which is clearly legible from either side of the dredge or equipment. This sign shall display the name of the dredger and the number of this permit. The lettering on the above sign shall be at least three hundred millimetres high and formed of strokes each a minimum of fifty millimetres wide;
  - On completion of the dredging operation or when directed by the Chief Executive to do so, the dredger shall remove all dredge plant and equipment (including pipes, floats and other equipment used in or in connection with the dredging operations) from the site:
  - From the day the dredging activity commences, the allocation holder must within 20 business days after the end of each month, submit to the Chief Executive -
    - a) a monthly return of the quantity of dredging material removed, based on the measured volume of dredged material loose in stockpiles, even if no material has been dredged during that month; and
    - b) pay a fee of fifty cents (\$0.50) per cubic metre of dredged material removed, or such fee as prescribed in the Coastal Protection and Management Regulation 2003, as amended from time to time; or if any royalty waivers are subsequently granted, the amount stated in the royalty waiver. Failure to comply with this condition may result in cancellation of this permit.
  - The dredger shall ensure that a copy of the Dredge Management Plan is available at the dredging site at all times and that all dredging plant personnel are made aware of all the requirements.



 The dredger must, in the event that any Aboriginal, archaeological or historical sites, items, places or remains be identified, located or exposed during the removal of material from the authorised operating area, cease work and contact the Cultural Heritage Unit, Department of Natural Resources and Water.

#### Issue 15: Other

The Coastal component of the EPA Project Team may request additional detailed information in anticipation of the Coastal Act approval application.

Recommendation: To note.

# **Department of Health**

(Contact: Steven Begg - 3234 0850)

#### Issue 1: Chapter A7: Section 7.3.4.3 Natural Resource Quadrant

The use of recycled water for dust suppression and other similar activities is encouraged. However, comprehensive management strategies should be developed to ensure that the use and end-use of recycled water does not pose a potential risk to human health. The National Water Quality Management Strategy "Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) 2006" (http://www.ephc.gov.au/ephc/water\_recycling.html), the "Queensland Water Recycling Strategy"

(http://www.epa.qld.gov.au/environmental\_management/water/water\_recycling\_strategy/) and the "Queensland Water Recycling Guidelines"

(http://www.epa.qld.gov.au/environmental\_management/water/queensland\_water\_recycling\_guidel ines/) provide assistance in this regard.

**Recommendation:** Use of recycled water (incorporating comprehensive management strategies) for dust suppression and other activities during construction.

## Issue 2: Chapter D7: Key Findings - Effects of Aircraft Noise

The proponent has undertaken a comprehensive assessment of the health impacts from aircraft noise and air emissions. These assessments have been most helpful in assessing the potential project impacts. With regards to aircraft noise the proponent acknowledges that some locations will experience an increase in noise impacts. For example, there will be an increase of:

- 17 childcare and kindergartens subject to potential noise-induced awakenings;
- 5,000 shift workers potentially affected;
- 9 schools subject to communication interference; and
- 7 to 27 places of worship subject to communication interference.

There is limited description of the mitigation measures to reduce these predicted impacts.



**Recommendation:** Consideration should be given to mitigation strategies to address potential impacts of aircraft noise. The strategy should include an effective complaints handling process with clearly defined responsibilities for investigating and responding to complaints within reasonable timeframes.

## Issue 3: Chapter D8: Section 8.7.1 Aircraft Crash Incidents

Acknowledging that the EIS excludes the risk to aircraft passengers, a long standing issue at the airport is the inability to access an aircraft that may come down into Moreton Bay at low tide. The mud extends out to 500 metres. As far as we are aware, no services have the capacity to reach such an incident.

Recommendation: To note.

#### **Department of Natural Resources and Water**

(Contact: David Cameron - 3406 2565)

## Issue 1: Acid Sulfate Soils (ASS) Management Plan: Appendix A

## **KBF** Drain

The extensive excavations proposed for the KBF drain are considered a very high risk and therefore detailed and comprehensive investigations are expected consistent with the SPP 2/02 Guideline and associated technical documents. The number of samples submitted for laboratory testing is well below the SPP 2/02 Guidelines. It appears the criteria for selecting samples for laboratory testing relied heavily on field pH testing which does not take into account the variability of the site and the buffering capacity of some soils. This has resulted in many soil layers without any representative laboratory tests and the assumed absence of ASS unverified.

**Recommendation:** Submit further samples to laboratory testing to provide a better indication of ASS risk and accurate liming rates.

Retained acidity was prevalent in a number of samples and often accounted for the bulk of 'net acidity' present in these samples. Further testing should therefore target soils with lower field pH's.

**Recommendation:** Field testing results that exhibited a change in approximately 3 pH units or more should be submitted for laboratory testing.

Further lab testing that verifies the field testing results and confirms the absence or low levels of ASS is also highly recommended.

**Recommendation:** Clarify the construction method of the KBF drain.

It is stated that the drain will be excavated in 100m sections to mitigate groundwater level fluctuations. It is unclear how this will mitigate groundwater fluctuations unless each section is bunded on completion and allowed refill from Kedron Brook.



#### **Existing Pavement Runway Works**

During the ASS assessment of the 6ha pavement upgrade area, the screening method and selection method of representative lab samples should be consistent with the comments above and the SPP 2/02 Guideline and ASS Sampling Guidelines.

Recommendation: To note.

#### Reburial of PASS

Whilst strategic reburial of PASS is a lower risk strategy than full treatment, reburial of spoil containing actual acidity is generally not supported. Although high levels of titratable actual acidity (TAA) where not common, high levels of retained acidity was present in a number of samples and low field pH's were common. As retained acidity is a component of actual acidity (that is existing acidity, not TAA), laboratory results for both retained acidity and actual acidity should be consulted before spoil is proposed for reburial.

Recommendation: To note and action.

#### **Liming Rates**

Notwithstanding the comments above requesting further testing to determine accurate liming rates, the liming rates appear to have been transcribed without converting the liming rate in stated on the lab certificate in kg of CaCO3 per tonne to the Earthworks Quantities and Liming Rates table stated in kg/m3. A bulk density factor needs to be applied to these rates. Furthermore the proposed liming rate for KBF drain CH675-CH750 should be increased based on the results from BH118 which appears to be on the boundary of this section.

Recommendation: To note and action.

## Runway and FAFA Area

During the preparation of these areas for receiving sand fill (tree clearing, shaping etc) it is recommended that a layer a lime is incorporated into the surface of the soil to treat any existing acidity and provide a neutralising agent to treat groundwater- similar to Implementation Strategy #13 however implemented irrespective of soil disturbance. An increased application rate of 5kg/m2 may be more suitable.

Recommendation: To note and action.

#### Lime Trench

A trench depth of 1.2m-1.5m is arbitrary and dependent surface level not groundwater level and therefore may be too shallow to intercept groundwater. The lime trench depth should therefore be indicated as a reduced level (AHD). As ASS will be disturbed in the construction of the trench it is important to ensure the excavated material is adequately treated therefore liming rates should be provided.



**Recommendation:** To note and action.

#### Verification/Spatial Tracking

It is noted in the 'Implementation Strategy - Verification/Spatial Tracking' section under #3 dot point 2 that excavated spoil will be submitted to SPOCAS testing. It should be clarified if this is referring to pre treatment testing to refine liming rates or post treatment verification testing. If it refers to pre treatment testing a rate of testing or 'batch' size should be provided to guide this strategy. If it is referring to post treatment verification testing it should refer to the Monitoring Section - "Lime Treated PASS Spoil".

**Recommendation:** To clarify.

#### Water Quality Monitoring

Aside from pH no other quantified discharge water quality criteria has been provided. The Water Quality objectives mention in 'Performance Criteria #8' could not be found in the EMF.

**Recommendation:** To note.

In the second point of the 'Monitoring Section - Surface and Seepage Waters' dissolved oxygen should be included with the parameters monitored.

Recommendation: Include dissolved oxygen in parameters to be monitored.

#### Corrective Action

The ASS EMF does not provide corrective actions for failure to meet performance criteria. These should be provided for soil neutralisation, surface/discharge water and groundwater. Importantly measures to address groundwater deterioration should be included in the EMF.

**Recommendation:** To note and action.

#### Issue 2: Chapter B3 Geology, Soils and Groundwater

## **Introductory Comments**

The chapter and appendicis provided details of the results of the studies and risk assessment on the environs associated with the proposed parallel runway. This area is underlain by Holocene sediment, which has been divided into two discrete units, Upper Holocene alluvia, and Lower Holocene alluvia. The hydrogeology of these units is complex.

A variety of investigation techniques have been used to gain an understanding of the underling sediments. The main focus has been on the soil and upper sequences to depths to 4 to 5 metres below ground level. It is understood that over one hundred bores (including CPT test) have been



drilled to shallow depths. About 20(?) bores have been drilled to greater depth which intersects the entire Holocene sequence.

Since 2005 some 18 monitoring bores have been installed to depths between 1.9 and 4.5 metres below ground level. These bores are used for monitoring of groundwater levels and groundwater quality.

The information as presented provides an adequate description of the hydrogeology of the upper sequences of the Holocene sediments to depths up to 4.5 metres. There is little data presented on the hydrogeology of the remaining Holocene sediments, apart from their low permeability and strength. Additional drilling and installation of nested monitoring bores to different depths, adjacent to the existing monitoring bores is therefore recommended. This would allow the confirmation of the characterisation of the groundwater within the entire Holocene sediments.

It would appear from the data indicating low permeability, that there may be little horizontal groundwater flow at depth to 4 to 5 metres; and any groundwater flow would be dominated by the presence of the various tidal channels. In this deltaic/estuarine environment, it is highly likely that there may be several isolated groundwater flow systems, with generally a relatively flat groundwater flow gradients, except in the proximity of the tidal channels. In such situation one dimensional modelling is probably the most appropriate modally technique to represent natural conditions.

The approach used to model the affects of the surcharging is considered appropriate based on the compressible nature of the sediments and their low permeability.

While the basic hydrogeology has been considered, it is desirable that some assessment of the existing (and post runway construction) water balance be undertaken to allow some quantitative estimates of the potential for existing groundwater flow to the tidal channel be made. It is also highly likely that the observed decline in groundwater level may also be due to evapotranspiration.

Recommendation: To note.

It is also desirable that an assessment for the post runway construction be undertaken. This will help improve the estimates of groundwater flow to the tidal channels.

Recommendation: Undertake an assessment of the post runway construction.

**General Comments** 

3.2.2.3 Geological Setting

The reference to DNR&M (2002) is difficult to find.



**Recommendation:** Supplementary EIS to provide a comment stating that the sediments are mostly estuarine.

The text refers to the Holocene alluvia being underlain by Pleistocene soils. While this may apply generally throughout the area, basalt outcrops in the vicinity of the quarry void (3.2.2.2 mentions the quarry void). Its presence may affect drainage and shallow groundwater flow.

Recommendation: To note.

#### 3.2.3.3 ASS Field Investigations

In the last paragraph, it is mentioned that ground levels at the top of the bores holes were extrapolated from survey data provided by North Surveys Pty. Ltd.

**Recommendation:** Supplementary EIS to include a comment on the accuracy of the natural surface at the bore site.

## 3.2.4 Geotechnical Conditions

The heterogeneity of the upper and lower Holocene is not specifically mentioned.

**Recommendation:** Supplementary EIS to provide a comment on:

- the existence of "ribbon" or "shoe string" sand lens (aquifers?) based on the results of drilling; and
- the relationships between the published soil mapping and the geology mapping, and the results of the shallow drilling.

## Figure 3.2b

The text refers to a relatively broad channel. This figure infers that in the context of the width of the proposed runway, and the density of the bore holes, the width of the inferred Holocene channel (below 25m AD) is generally less than 100 metres wide. From what could gleaned from the document, only boreholes CPT44, CPT45, and CPT46 had depths in excess 30m below ground level.

**Recommendation:** Include basalt in Figure 3.2b.

#### 3.3 Existing Environment of Runway Site Groundwater

**Recommendation:** Supplementary EIS to include a map showing the location of the DNRW monitoring bores.

#### 3.3.1 Investigation Methodology



It is unclear if elevation of the water level monitoring bores reference point has been surveyed, the bores have been surveyed or have been extrapolated?

**Recommendation:** Clarify in the Supplementary EIS.

It was stated that "More detailed monitoring of pore pressure dissipation etc" was carried out, however this monitoring data could not be located in the EIS documents.

Recommendation: Clarify this matter with DNRW.

#### 3.3.2 Groundwater Levels

It is assumed the statement "Water level across the site..." refers to water level elevations (m AD).

The first reference to water level gradient being relatively flat is a little misleading, in the context of the following statement. While, the statement, "the groundwater levels generally reflect the topography", is correct, it is probably a consequence of the shallow depth (up to 4.5 m) of the monitoring bores.

These monitoring bores have slotted depth intervals ranging from 0.4m to 1.9m and from 1.5 to 4.5 m, below ground level. While the shallow bore construction is adequate and appropriate for acid sulphate soil investigations, the observed water levels can only represents the net water level in the slotted interval, and probably only represents the local water table in that immediate vicinity. It is yet to be proven that these water level measurements are indicative of the potentiometric surface of other "sand lenses" that may exist at greater depths in the Upper Holocene alluvia and or, Lower Holocene alluvia.

When the relative depth of the various tidal creeks is consider in relation to the depth of the monitoring bores, it is found that the depth of the creek is often deeper than the monitoring bore. It is reasonable to assume there will be a potential for localised drainage of the shallow groundwater towards the nearest tidal or remnant tidal creek. In close proximity to these creeks, the local groundwater gradient could be relatively steep.

Hence due to the punctuation of this study area by the various tidal creeks and or remnant tidal creeks, no inference can be made from the results of the shallow bores to regional groundwater flow directions or regional water table gradients.

Recommendation: To note.

Figure 3.3a to 3.3c show the spot water level elevation and inferred groundwater flow direction.

**Recommendation:** Include in Figure 3.3a contour lines showing the minimum drainage potential, i.e. mean sea level along the banks of the tidal creeks, and around the mine void etc.



For bores MW1 and MWJ the slotted interval is within the sand fill and these water levels reflect the local sand fill aquifer system, and should not be directly compared with the other water levels. It is probable that the potentiometric surface for the Upper Holocene alluvia could be higher than the water level in the sand fill.

Recommendation: To note.

Figure 3.3d

**Recommendation:** Supplementary EIS should include a comment about the groundwater level decline.

Apart from some groundwater drainage towards the tidal creek, evapotranspiration may also be contributing to the decline in groundwater levels after periods of recharge.

**Recommendation:** Supplementary EIS should include a brief description of the elements of the overall water balance (rainfall, surface runoff, recharge, evapotranspiration and shallow groundwater discharge).

In this context the shallow groundwater discharge, would be inferred from the other elements in order to achieve a water balance, rather than by application of Darcy Law.

#### 3.3.4 Groundwater Quality

#### Table 3.3c

It is noted that the electrical conductivity and other parameters for each bore varies. Although the depth of the slotted interval ranges from 1.5 to 3 metres, there is a strong possibility that the water chemistry may change with depth. The question arises, is the change due to natural process or as a result of sampling? Based on the results of the falling head permeability testing, the yield from these monitoring bores would be very small.

#### Recommendation: To note.

It is understood that the water samples were obtained by lowering a bailer just below the water table to obtain the sample. In order to better understand the conceptualisation of existing groundwater balance and the response (including any change to the groundwater chemistry), following rainfall, it may be desirable to conduct in-situ depth measurement of electrical conductivity at 0.1 m depth intervals in each of the monitoring bore. If a water sample is then collected by bailing, its electrical conductivity can then be compared with the in-situ results. If there is little variation in the electrical conductivity with depth it is reasonable to assume that the bailed sample is a representative sample for the slotted interval.



**Recommendation:** Discuss this matter with DNRW.

## 3.3.6 Conceptual Hydrogeological Model

The conceptual model as presented generally represents the characterisation and hydrogeological processes within the near surface sediments of the Upper Holocene alluvia, to depth of about 4.5m. There are little hydrological data available (apart from the CPT and 10 deep boreholes, page B3-87) for the remainder of the sediments.

Recommendation: To note.

Figure 3.3f

**Recommendation:** Figure 3.3f to include the boundary between the Upper and Lower Holocene. Show the inferred 'Holocene alluvial channel' to depth of RL -25 m AD, as shown on figure 3.2b.

This figure shows the inferred water table. In the vicinity of Kedron Brook and Serpentine creek, the inferred water table elevation appears higher than the observed groundwater levels. This could be the case after high rainfall events.

**Recommendation:** Figure 3.3f to include the highest and lowest recorded water levels.

#### 3.6.2.4 Groundwater impacts from Drain Construction

The average gradient used in the calculation is 0.02 and is based on the observations at WM6. This gradient would represent the "near steady state gradient or average long term gradient". Subject to concepts mentioned in Section 3.9.4 and 3.12.3, during the initial phase of drain construction and commissioning the gradient will largely depend on the height of the groundwater table in the vicinity of the proposed drain, which in turn will depend on seasonal conditions.

**Recommendation:** Supplementary EIS to include:

- an assessment of the likely watertable elevation and potential gradient along the axis of the proposed drains: and
- comment on the initial inflow to the proposed drain compared with the long term average inflow (subject to seasonal variation in water level).

#### 3.6.2.5 Long term changes to groundwater levels

Mention is made of qualitative responses that may occur.

**Recommendation:** Supplementary EIS should include a quantitative analysis of the likely change to the water balance as a direct consequence of the proposed construction. For example, potential change in:



- Immediate surface runoff as a result of change in pavement cover
- Evapotranspiration due to a change in forest grasslands area
- Net groundwater storage
- Groundwater drainage
- Other.

#### 3.11 Potential Impacts - Groundwater Levels and 3.12 Potential Impacts - Groundwater Quality

**Recommendation:** Supplementary EIS should include a quantitative analysis of the change in the groundwater flow component of the overall water balance.

The main impacts and associated risk are the lowering of the water table adjacent to the drains and potential for acidification and transport of nutrients and or metals to the drains (receiving waters). Here quantification of the potential flux is important to gain an understanding of the level of any associated impact.

#### Other Recommendations:

- Additional drilling and installation of nested monitoring bores to different depths adjacent the existing monitoring bores. This to confirm the characterisation of the groundwater within the entire Holocene sediments.
- Based on these results of additional monitoring bores, characterisation of the lower sediments is possible which will help confirm the estimates of permeability, potentiometric surface and regional groundwater flow direction.

#### **Department of Primary Industries and Fisheries**

(Contact: Dr John Beumer - 3224 2238)

#### Issue 1: Summary of Major Findings 2006 (Page 55)

Mangrove habitats are not considered 'unique' in the NRP area. However, this statement is erroneous as the mangrove habitats of Jackson Creek, etc are unique although similar habitats occur elsewhere in the greater Moreton Bay.

The inference that mangroves are grouped with 'weeds' continues to give the perception that these marine plant communities have little value.

**Recommendation:** Supplementary EIS should correct this statement.

#### Issue 2: Summary of Major Findings 2006 (Page 58)

The numbers of fish species and their abundances are again not considered 'unique'. Similar comments for mangrove habitats noted above.

**Recommendation:** Supplementary EIS should correct this statement.



The proposed program to relocate fish [and other estuarine species] should be developed to ensure optimal survival and prevent the release of stressed or poor condition fish to avoid later reports of localised fish kills.

**Recommendation:** BAC to develop fish relocation program which ensures optimal survival and prevent the release of stressed or poor condition fish.

## Issue 3: Summary of Major Findings 2006 (Page 62)

The proposed environmental management measures to offset the loss of estuarine fish habitats are noted.

Recommendation: To note.

# Issue 4: Chapter B5: Section 5.2.2.1 Mangroves and Saltmarsh (Page 201)

Mangrove communities are considered to have the 'highest conservation value of all vegetation communities'. This statement is in contrast to that on page 5B-283 where protection of saltmarsh is considered significant given the decline of this habitat 'across the Moreton Bay'.

**Recommendations:** Statements to be clarified in the Supplementary EIS.

# Issue 5: Chapter B5: Section 5.11 Approach to Mitigating Residual Impacts (Page 280)

As stated on page B5-282, the remnant areas - some 73 hectares in total - of mangroves and saltmarsh, post-construction, have already been afforded protection in the 2003 Master Plan and 2004 Strategy. To now incorporate these same areas as part of the offsetting package is not justified and akin to 'double accounting'. Alternate offsetting would be appropriate.

As part of the Mitigation Working Group, DPI&F submitted a list of potential mitigation (offset) measures. It would be appropriate to revisit this list to develop an acceptable offsets package, appropriate to the losses of fish habitats.

**Recommendation:** Matter to be discussed at proposed meeting on 21 February 2007.

#### Issue 6: Chapter B14: Section 14.2.2 State Legislation and Policies (Page 647)

This sub-section makes reference to the *Fisheries Act 1994* and its Regulations. However, given that Queensland legislation does not apply to the BAC lands, no marine plant approval would be triggered for works on airport lands.

Unless the works for the floodway drain extend outside of airport lands and involve removal of marine plants [Table 14.2a refers], no approval would be triggered. Where marine plants are involved outside of BAC lands, resource entitlement will be required prior to the lodgement of an approval application.

The preferred alignment for the sand transfer facility makes reference to the lack of mangroves. Unless this alignment has saltmarsh communities, again no approval would be triggered. In terms of Middle Banks, given that the proposed dredging is to be some distance away from known seagrass beds, no approval would be needed under the Queensland fisheries legislation.



**Recommendation:** Clarify this issue in the Supplementary EIS.

# Issue 7: Chapter B14: Section 14.3.6.2 Managing During Construction (Page 658)

Any proposal to relocate/release fish and other estuarine species from airport lands into State waters may require an approval under the *Fisheries Act 1994*.

**Recommendation:** To be noted in the Supplementary EIS.

The foreshadowed consultation of the Mangrove Establishment Program with DPI&F is noted. The provision for protected fish species to be documented as part of the relocation program is noted.

Recommendation: To note.

#### Issue 8: Summary of Major Findings 2006 (Page 99)

What contingency plans will be in place to respond to any plume impacting on seagrass beds?

**Recommendation:** Supplementary EIS to include details of how BAC intends to respond to plumes impacting on seagrass beds.

#### Issue 9: Chapter C5: Section 5.5.7.2 Spacial and Temporal Patterns (Page 205)

The general comparison made between Stephenson's (1982) data and the current WBM survey that more species occur on previously dredged areas is unlikely to pass detailed scrutiny when factors such as trawl gear, trawler operations and trawl shot times are factored into the assessment.

**Recommendation:** Clarify this issue in the Supplementary EIS.

#### Issue 10: Chapter C5: Section 5.5.11 Other Species of Conservation Significance (Page 217)

The grey nurse shark population estimate is 500 for the east coast of Australia. Further populations occur in south and western Australian waters.

Recommendation: To note.

#### Issue 11: Chapter C5: Section 5.6 Consultation (Page 218)

The consultation with commercial fishers is noted.

Recommendation: To note.

## Issue 12: Chapter C5: Section 5.7.2 Queensland (Page 219)

Queensland fisheries are subject to the provisions of the EPBC Act in terms of requiring accreditation of Management Plans for specific fisheries to enable export of product. Fisheries



accredited within Moreton Bay include the spanner fishery, east coast ofter trawl fishery, mud crab and blue swimmer crab fisheries, river and beam trawl fishery and several developmental fisheries.

Recommendation: To note.

#### Issue 13: Chapter C5: Section 5.8.9.1 Impacts to Habitats (Page 236)

The relevance of reference to saucer scallops is unclear in relation to habitat impacts from the sand extraction. No evidence is presented that this species is taken on or adjacent to the Middle Banks donor site.

Recommendation: To note.

## Issue 14: Chapter C9: Section 9.2.2 Sand Extraction at Middle Banks (Pages 313-314)

Figure 9.2a does not fully reflect the seagrass distribution shown in Figure 5.5b on page C5-174. *Recommendation:* Clarify this in the Supplementary EIS.

Page C9-313 makes reference to the footprint selection and the bases for this, including avoiding potential conflicts with other users of Moreton Bay. While a number of the bases have been developed further within Section 9.6.2, the specific one dealing with other users appears not to have been addressed in this way. For example what is BAC's proposed response if the trawl fishery operators determine that dredging operations are impacting on catches?

**Recommendation:** Include in the Supplementary EIS details of how BAC will deal with complaints from users of Middle Banks (such as trawl fishery operators).

#### **Department of Main Roads**

(Contact: Norm Stevens - 3337 8187)

#### Issue 1:

It must be noted that there appears to be no mention in Volume B Section 10.6 or elsewhere in Volumes A and B that the Main Roads' *Guidelines for Assessment of Road Impacts of Development 2006* (GARID) was used to assess road impacts. This document is available on the Main Roads website at www.mainroads.qld.gov.au > Inside Main Roads > Publications > Road Related. It should be used when completing assessment of road related impacts.

**Recommendation:** Include in the Supplementary EIS reference to the Department of Main Roads' "Guidelines for Assessment of Road Impacts of Development 2006" (GARID) and how it was used to assess road impacts.

#### Issue 2: Chapter A3: Section 3.4.4 Sourcing Pavement and Structural Materials

This project requires the haulage of about 0.6 million m3 of quarried material from land-based quarries plus large quantities of other construction materials and consumables. The actual source of the paving materials is currently unknown but there are only a few sites in operation from which



the required quantities and qualities could be procured. The volumes and transport of consumables could be significant considering a possible 25,000m3 of acid sulphate soil to be treated on site, the compaction required of the poor quality in-situ materials and the amount of concrete required for the project.

#### Recommendation:

Prior to commencement of haulage the proponent should:

- identify the haulage routes from quarry and other origins of large volume construction inputs sites to the airport;
- quantify the road impacts of transporting construction materials on the road network, for example, on pavements, traffic flows, road safety, traffic noise and generated dust from transport; and,
- propose any required mitigation strategies to address major road impacts.

With respect to other building materials and consumables, the Supplementary EIS should further quantify the volumes of materials required and provide other information on sources of supply, traffic generation rates and potential significant road impacts and identify any required mitigation strategies.

#### Issue 3: Chapter A3: Section 3.4.4.2 Selection of Suppliers

This section deals with factors taken into account when choosing suppliers, including cost of material. While the price of quarry material supply includes cost of haulage, it should also factor in the cost of impacts on pavements when choosing suppliers and routes. While the EIS concludes that pavement impacts will not be high given the background traffic and major roads it will be hauled over, consideration should be given to pavement condition of the haulage route in the selection of sources of quarry material. Minor roads used for haulage route will require a pavement condition assessment.

**Recommendation:** Consideration should be given to pavement condition of the haulage route in the selection of sources of quarry material. Minor roads used for haulage route will require a pavement condition assessment.

#### Issue 4: Chapter A3: Section 3.4.4.3 Transportation during Construction

The second paragraph states that "...materials will be delivered...from mid to late 2012". This appears inconsistent with Figure 3.4c.

**Recommendation:** Supplementary EIS should clarify this apparent inconsistency.

The Department of Main Roads (DMR) has already identified that existing heavy vehicle traffic using the Granard, Riawena, Kessels and Mt Gravatt - Capalaba Road haul route already generate significant adverse community impacts.



**Recommendation:** Although it is unlikely the proponent will haul materials from areas this far away, these specific routes should not be used for significant haulage of material.

In addition, the use of any State-controlled road for hauling material must be approved by DMR, including the times of hauling operation. Roads surrounding the Brisbane area are under considerable congestion pressure and it is important that any mass haulage activities be cognisant of this.

**Recommendation:** Supplementary EIS should make clear DMR's preference for haulage to be via the Logan Motorway.

#### Issue 5: Chapter B10: Section 10.8 Traffic Impact Assessment

DMR recognises that the State-controlled road network around the airport is congested, and that the Gateway Upgrade Project (GUP) will alleviate some of this congestion in the short to medium term. With reference to Table 10.9a, it is clear that the project would necessitate the need for the "bring forward" of the soon to be constructed Gateway Deviation by approximately 3-4 years.

DMR would normally apply the provisions in the GARID which require a developer to contribute to these bring forward costs. Alternatively, the proponent could contribute to the upgrade at the time of the upgrade project.

The traffic impact assessment relies on the delivery of a range of infrastructure project by others. It should be noted that while the State has agreed to fund the GUP, approximately \$1.6b, there is no funding commitment by the Federal Government nor the State for any other upgrades in the vicinity. (Examples include Gateway Motorway north of GUP, works between Airport link to Airport Drive and the upgrading of the existing section of the Gateway Motorway between the bridge and Nudgee.)

**Recommendation:** BAC to discuss developer contributions with DMR.

#### Issue 6: Chapter B10: Section 10.11 Residual Effects

Although actual incremental increases in traffic are nominally less than 5% in 2035, given the significant increase in the base volume (over which the % increase is measured) the absolute volumes of increases due to the development are significant. DMR disagrees with the statement that the residual impacts of traffic generation will be barely perceptible.

**Recommendation:** The Supplementary EIS should provide further justification for the conclusions drawn from the traffic input assessment regarding the significance of the impacts of the increased traffic from the NPR project on the State-controlled network.



DMR staff would be happy to meet with the proponents and their consultants to further discuss this matter.

Recommendation: To note.

#### **Queensland Transport**

(Contact: Bob Tatum - 3253 4919)

#### **Issue 1: Road Congestion Mitigation**

QT does not believe the EIS/MDP adequately details now BAC will actively work to mitigate road congestion and ensure public transport is promoted both for employees of the airport, as well as travellers.

**Recommendation:** Supplementary EIS to:

- Provide more details how BAC will actively work to mitigate road congestion;
- Acknowledge that BAC will continue to consult and work with DMR and QT to both enhance public transport capability (both road and rail based) and development road system solutions for the airport to achieve south east Queensland transport strategies and objectives.

#### **Issue 2: Dredging Operations**

QT understands that the Port of Brisbane (PBC) is expected to make a submission to BAC. However, QT also understands that PBC has no significant issues with the EIS/MDP requiring QT attention. Minor matters relating to potential impacts of the dredging operation on shipping movements in the port are being managed directly by QT's maritime Safety Queensland (MSQ). It is noted that MSQ, through the Regional Harbour Master (Brisbane Office), has been addressing issues pertaining to navigation, marine safety and dredging operations with BAC since late 2005, when preparation of the EIS/MDP commenced. Importantly, MSQ needs to continue to be consulted on all below high water mark issues.

Recommendation: To note.

#### **Department of Emergency Services**

(Contact: David Crouper – 3247 8794)

#### Issue 1: Proposed Tunnel on Dryandra Road

DES would appreciate early contact during the design phase of the tunnel to ensure the largest appliance belonging to the Queensland Fire and Rescue Service will be able to access the tunnel.

**Recommendation:** Contact DES prior to design phase to discuss DES tunnel requirements.



#### **Department of Communities**

(Contact: Chris Mahoney – 3109 0677)

Department of Communities considers that the EIS has addressed social impact assessment and community consultation components of the guidelines for the EIS appropriately.

Recommendation: To note.

#### **Department of Local Government, Planning, Sport and Recreation**

(Contact: Lyndy Rapson – 3237 1733)

#### Issue 1: Chapter B2: Section 2.8 Local Planning Framework

Table 2.8 requires updating as the planning scheme status for the Pine Rivers planning scheme and the Redland Shire planning scheme has changed from Transitional to an *Integrated Planning Act 1997* (IPA) compliant planning scheme. On 15 December 2006 the Transitional planning scheme for the Pine Rivers local government area was replaced by an IPA compliant planning scheme and similarly the Transitional planning scheme for the Redland Shire local government area was replaced by an IPA compliant planning scheme on 30 March 2006.

**Recommendation:** Supplementary EIS to include updated details on planning schemes.

#### **Other Comment**

# Chapter B5: Key Findings (Page 184) and Chapter B5: Section 5.11 Approach to Mitigating residual Impacts (Page 284)

It is noted that further discussions will be held with relevant State Agencies in relation to the mitigation measures for habitat loss. BAC has been provided with information by EPA and DPIF in relation to on-site and off-site mitigation. It is understood that a meeting has been planned for Wednesday 21 February 2007 to progress this matter.

**Recommendation:** Results of proposed meeting to be included in the Supplementary EIS.

#### Chapter B5: Section 5.7.2 Queensland Government Legislation (Page 246)

Based on BAC legal advice and State Government legal advice it would appear that paragraph one is incorrect. That is, State legislation does not apply to activities on the airport site if undertaken in accordance with an MDP.

**Recommendation:** Clarify this matter in the Supplementary EIS.



#### Chapter B5: Section 5.8.1.1 Impacts (Page 249)

Paragraph commencing "Table 5.8g shows that...." limited role of Fisheries Act 1994 (i.e. off-site marine plants) needs clarification as noted immediately above.

Recommendation: Clarify this matter in the Supplementary EIS.

Chapter B13: view 13 Gateway Bridge, northbound (Page 618)

Arrows in diagram do not appear to relate to the image.

Recommendation: To note.

Chapter B14: Section 14.2.2 State Legislation and Polices

Role of State legislation needs to be clarified as noted above.

Recommendation: To note.

Chapter C5: Figure 5.5g (Page 192)

Colours in legend do not coincide with colours on map (beige/yellow)

Recommendation: To note.

#### **END**



## **Ms Louise Parish**

#### Formal Submission #56

**Position** Community individual

Organisation n/a

#### Submission full text

- 1. Noise, noise, noise is a major concern.
- 2. I would like a complete embargo of all flights between 6pm 6am to the new parallel runway.
- 3. The increased number of aircraft movements by 2015. I already suffer considerably from aircraft noise and any further would be a burden.
- 4. I expect that it will affect property values and quality of life.
- 5. Television reception could also be a problem.



## Ms Thelma Parkin

Formal Submission #64

**Position** Community individual

Organisation n/a

#### Submission full text

I don't understand why there needs to be anything to stop it going ahead as there are always troublemakers and the airport needs to GO AHEAD without any more hassles otherwise tourists will go elsewhere... better these complainers are on the first flight on the new runway... Just get it done Please.



## **Ms Rosemary Parr**

Formal	Sub	miss	ion	#1	9	9
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**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir/ Madam,

I am writing to object to the New Parallel Runway at Brisbane Airport. My house at Cannon Hill is on one of the existing flight paths as are the schools my child attends at present and in the future.

With an additional runway I will be subjected to increased noise pollution, air pollution, and pollution on the walls of my house. This not only affects my quality of life but also the value of my property.

Include my name in the numbers that oppose the runway.

Yours sincerely,

Rosemary Parr



## **Mr Kevin Paton**

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**Position** Community individual

Organisation n/a

#### Submission full text

It is not a difficult decision. It's common sense.... The runway should be as far away as possible to residential homes!!!

Thanks,

K. Paton



## Mr George Paynter

Formal Submission #187

**Position** Community individual

Organisation n/a

#### Submission full text

My reason for making a submission is the fact that I am already being adversely affected by aircraft noise and being directly under the proposed flight paths for the NPR I will be even more adversely affected by aircraft noise when it becomes operational.

Before commenting on the NPR I believe that the Reference Flight Path and Noise Information Booklet contains some errors in its representation of existing aircraft noise

Page ten shows the number of overflights of my house of 70Db(A) and above from flight path J (the so called river track) as 5 to 9. I disagree, in some conditions it is far higher. I also believe that the actual number cannot be accurately assessed by the CAA because the CAA noise monitoring terminal (NMT 5) is too far away from the actual traffic on the river track. We also get excessive noise from northern departures on the existing runway 19, again overflights of Balmoral are not accurately monitored by the CAA because of the location of NMT1.

Page eleven show no overflies at all for the 6PM to 10pm summer weekday evening. This is even more inaccurate. Between 6pm and 8pm it is impossible to watch the news when the river track is being used because of the number of low flying aircraft, almost directly overhead, often very low and using a lot of power.

Re the NPR.

Why does the flight path H ref pages 36, 37, 38 extend all the way to the city while flight path E to the south turns away from the runway much sooner? It seems ridiculous and one wonders why the proposed NPR has been moved further from the city at all. It was my understanding when the BAC mooted the displacement as a panacea for aircraft noise that aircraft movements would move with it, that does not appear to be the case and the numbers of moments over Balmoral, including the Bulimba state school will increase far more than the general increase forecast for all movements.

Re Environmental Priorities Page 60 Flight Path and Noise Information



"Existing flight paths will be maintained wherever possible".

Why? With the continued development of GPS driven navigation aids such as Wide area augmentation systems (WAAS), Aircraft based augmentation systems (ABAS), Satellite based augmentation systems (SBAS) and Ground based augmentation systems (GBAS) plus the continuing improvements in airport radar systems, surely there is no safety need to maintain the existing fight paths or indeed the current way point STAKE and what is the point of moving the existing STAR further south west with the proposed way points BNPR45 and BNPR44 when the runway has been displaced further north east?

"Where it is not possible for the new flight paths to be over water flight paths to be concentrated over uninhabited areas wherever possible."

Did anyone read this before designing the flight paths directly over the city of Brisbane?

"Noise should be fairly shared whenever possible".

I have no problem with the concept but open the Flight Path and Noise information booklet at almost any page and one can see that Bulimba/Balmoral gets far more than its share and there are many areas of the north east suburbs that do not get any which is also contrary to the statement "No suburb group or individual can demand or expect to be exempt from aircraft noise".

Having made the above comments I can only hope that those responsible for air traffic control will use the radar vectoring available to them to provide an equitable distribution of aircraft movements to share the noise with as many residents of Brisbane as possible.

Assuming that the proposed STAR and SIDS are approved and an accurate Ultimate Capacity ANEF or a more accurate ANEC is produced based on fact, I would expect that it would be evident that the increase in excessive aircraft noise would require either:

A curfew on night operations, or;

A financial grant from BAC for double glazing and sound proofing of my home.

George Paynter



## **Mr Geoff Peck**

Formal Submission #115

**Position** Community individual

Organisation n/a

#### Submission full text

ADDITIONAL NOISE CONSIDERATIONS- reference Vol D section 4.4 p 70

Dear Sir/Madam,

I am writing on the subject of additional noise considerations for the New Parallel Runway Project.

Although there is a comprehensive assessment of noise for runway 19 (see Vol D section 4.4) there seems to be a 'gap' in the noise assessment for runway 01 arrivals, especially BEFORE the aircraft intercept the ILS glide slope.

I reside in Salisbury, which is situated on the 01 centreline, approximately 10nm from touchdown.

As a B777- 300 pilot with Cathay Pacific Airways, and having flown a Boeing aircraft, I am reasonably familiar with the operation of a wide-bodied aircraft.

The 'ideal' approach file is to descend in a 'clean' configuration with the idle thrust as long as possible, and 'configure' the aircraft as late as possible, commensurate with safety. In Cathay Pacific the procedure is to descend slightly below the 3 degree glide slope and decelerate at 15nm from touchdown, with thrust at idle. Correctly executed, this results in flap being extended, glide slope intercept at about 8-10nm from touchdown, still with idle thrust. Gear and final flap are then be selected at around 7-8nm; only then is thrust applied to maintain speed.

From my observations at home, many pilots clearly attempt to achieve this when approaching runway 01; these arrivals are virtually noise-less. However there are a large number of aircraft that descend well below the glide slope and are then flown LEVEL, at around 2500-3000 ft ASL, with gear and flap selected; these arrivals are extremely noise, especially in the 'quiet' of late nights/early mornings.

I have also spoken to several local residents, the majority of whom feel strongly that there is considerable noise from arriving aircraft in this area. Subjectively, it is often intrusive with comments such as 'we have to stop talking until the aircraft has passed' or 'we need to turn up the



volume on the TV'. Regrettably most people assume that there is nothing that can be done about this. Nor do they have the time or knowledge to respond to the proposals.

Unfortunately I do not have access to noise data to support my comments, nor is such data available in your excellent TNIP package. However I am able to supply some empirical information to support my subjective observations above:

Aircraft	Flap position	Gear Position	Altitude	Thrust (EPR)
B777-300	Intermediate	Down	level 3000 ft	1.10
B777-300	Final	Down	Glide slope	1.05
B747-200	Intermediate	Down	level 3000 ft	1.30
B747-200	Final	Down	Glide slope	1.18

These thrust settings (taken at typical landing height and environmental conditions) show that there is much MORE thrust required to maintain level flight with immediate flap then there is for a continuous final approach with full landing flap. As thrust is a major factor in noise production, this would tend to support my subjective observation that there is MORE noise BEFORE ILS glide slope intercept if arriving aircraft are allowed to maintain level flight and configure early.

Indeed, the situation is slightly worse than this as most arriving aircraft from the north or south east are required to make a final turn to intercept the ILS localiser. A 30 degree banked turn would require an additional thrust application, or say 0.02- 0.05 EPR and again more noise.

This is not unique to Brisbane airport, and other noise sensitive airports attempt to prevent level flight operation by a combination of approach profiles (such as the continuous descent arrival "CDA" at Hong Kong, or RNAV/GPS arrivals with suitable altitude restrictions), "intelligent" ATC, pilot education and penalties for aircraft infringing noise limits.

At present the ILS procedure for RWY01 (from Jeppesen) is to descend to an altitude of 2500ft ASL and intercept the glide slope at 10nm from BN VOR. Although this is a MINIMUM altitude, many pilots will interpret this as mandatory, and descend to this altitude as soon as possible to ensure compliance. Inexperienced pilots will certainly do this to 'play safe'. There is nothing in the procedure itself to deter or prevent level flight before the glide slope.

In addition ATC will often instruct pilots to 'descend to 2500 ft, clear for the ILS' which can be misinterpreted as 'descend NOW to 2500'. Intelligent ATC would instead add the words 'when ready, descend...' to emphasise that level flight is to be avoided.

Apart from the additional noise, there is also a considerable fuel penalty from level flight at low altitude. For this reason alone, airlines and pilots should be further educated to try to achieve a continuous descent approach profile with idle thrust for as long as possible.



At present there is no noise-monitoring terminal close to the ILS glide slope intercept point to measure the phenomenon. As this is becoming a dense residential area with schools, hospitals (QE2 hospital is very close to us) and there is high ground (most houses on the lower slopes of Mt Gravatt), there is considerable impact on this undocumented noise.

In conclusion, there is already a considerable noise problem in the Acacia Ridge, Moorooka, Salisbury, Rocklea, Cooper's Plains, Sunnybank suburbs caused by aircraft flying level and configuring early for ILS approaches to RWY01. This will only get worse with the increased traffic projected for the new parallel runway, although some of this noise will be 'shifted' slightly west.

I would therefore recommend the following:

- 1. A noise-monitoring terminal be positioned south of the typical ILS glide slope intercept point (there is an ideal location, with suitable mast at Lillian Avenue. Salisbury) to measure and quantify the extent of the problem. The exact location is in the small park between 299 and the Baptist Church on the south side or Lillian Avenue at S27 33 21, E 153 02 17)
- 2. Approach flight paths for RWY 01 should incorporate a 'continuous descent profile' in the procedure.
- 3. The current minimum ILS intercept altitude of 2500 ft ASL should be increased to 4000 ft ASL to cater for the high density residential area with schools, hospital etc.
- 4. The procedure should also incorporate a note that landing gear should NOT be selected down before glide slope intercept (as mandated in Tokyo, Narita airport)
- 5. ATC should attempt to instruct pilots to maintain a continuous idle flight path by suitable altitude constraints such as "not below 4000 ft, clear for ILS 01" etc
- 6. Airline operators should be reminded of the desire to maintain low thrust settings for as long as possible and the above NMT should be used to provide feedback to operators who fail to comply. With further advances in technology, fines could be imposed for frequent violators, as they do in Europe and USA airports.
- 7. Between the hours of 10pm and 6am, strict noise criteria should be enforced for approaches to RWY01. This should include mandatory engine/aircraft noise certification and mandatory compliance with procedures such as those recommended above. Operators who do not comply should not be permitted to operate during the 'quiet' night hours above.

Should you wish to discuss and aspects of the above submission, please do not hesitate to contact me at the above address or <a href="mailto:joffpeck@hotmail.com">joffpeck@hotmail.com</a>

Yours Sincerely Geoffrey Peck

Attachment: overview of Salisbury/Tarragindi with glidepath and centre line



## Mr John Pettit

Formal Submission #111

**Position** Executive Director

**Organisation** Brisbane Development Association

#### Submission full text

Re: New Parallel Runway Project - Draft EIS/MDP- Public Comment

Thank you for addressing the Brisbane Development Association (BDA) at our Business Luncheon on 28 November 2006 as part of your comprehensive public consultation program.

Our Association recognises that Brisbane Airport is a vital piece of social and economic infrastructure and the new Parallel Runway is vital to the continued growth of both the city of Brisbane and the State of Queensland.

The \$2.2 Billion in infrastructure spending by BAC over the next 10 years will provide a economic boost to both the city and the State through not only the provision of a large number of construction jobs on the project itself but from the longer term effects on employment, investment and tourism expenditure that will flow on into the future.

The BDA has participated in previous seminars, which have supported the planning of the proposed Parallel Runway and congratulate BAC on the most comprehensive information package which has been provided for evaluation.

We wish you every success with the Project.

Yours sincerely,

John A. Pettit
Executive Director



## Mr Arthur Pierce

#### Formal Submission #174

**Position** Community individual

Organisation n/a

#### Submission full text

New Parallel Runway Project

Due to the expected rise in numbers of flights departing and landing on the new parallel runway, it is essential well before the opening of this new parallel runway that all departure and arrival flight routes be published for all local residents so as they are fully aware of what to expect.

For the benefit of all residents it is also essential that aircraft noise be monitored by aircraft noise monitoring stations, which should be in position in close proximity to these flight paths.

In volume D Airspace

Balmoral- range of N70 flights with suburb Increase of 20 flights or more (% of suburb) 626 (40%) increase of 10 flights or more 1% of suburbs 1226 (79%)

Hawthorne- range of N70 within suburbs 4-21 increase of 10 flights or more (% of suburb) 1121 (56%)

As there will be about 20 to 30 extra flights along the Balmoral area is shown will be of the most affected area. Balmoral is on raised area on a series of Hills. Some properties have been sold in excess of \$2,000,000 and these could be devalued in the future.

The centre line of the new parallel runway runs over Balmoral, Bulimba Primary School, St Peter and Paul's Catholic School Morningside, Norman Park Primary School and Lourdes Hill College are positioned in close proximity to flight paths.

As noise levels on night flights for arriving and departing aircraft are more noise sensitive to daytime flights as noise levels on night flights for all arriving and departure are more noise sensitive.



Aircraft noise between 11pm and 6am (1300 GMT to 2000 GMT). Most be monitored and regulated and when found excessive and a curfew from 1300 GMT to 2000 GMT be imposed it is necessary that all concerned make for cordial relations between Brisbane Airport and the general public.

Yours Sincerely

**Arthur Pierce** 



## Ms Janice Pittam

#### Formal Submission #45

**Position** Community individual

Organisation n/a

#### Submission full text

Re: Flight Path and Noise Information Booklet page 2 Fig 1

"In practice, individual flight paths tend to vary from the published flight path by up to several kilometres" - This says to me that PLANES ARE GOING TO FLY WHEREVER THEY WANT TO.

Recently, "early December" planes started flying over my house every few minutes it seemed (only a slight deviation from the usual flight path). I began to feel stressed waiting for the next screech of an areoplane over my house and waited for the onslaught that started at 4:55am on day. I wrote to my federal Member of Parliament about the matter after only 1.5 days of this as it bothered me so much.

It seemed to me that planes were just cutting the corner of the flight path (p2 fig 1 above paths on the caption of the booklet referred to above).

I was told that house values in Murarrie went down \$40,000 from the beginning of December (a reaction to the planes flying overhead) and I do not think people should sustain loss of the use and enjoyment of their home plus a decrease in its values so as a corporation can make more money.

As a 60 year resident of Murarrie I can say that neither WEATHER CONDITIONS NOR OTHER VARIABLES HAVE CAUSED PLANES TO FLY OVER MURARRIE AS THEY DID IN DECEMBER THIS YEAR.

It is my opinion as stated earlier that these words about variable flight paths should be removed, as I do not think that in practice they are required.

I also think those in charge of flight paths should be required to live under one. If they did they might require the planes to fly a little higher than they do.

I short there is not one person I have spoken to who lives in Murarrie that has not noticed the planes now flying over their house and who has not mentioned how disturbing and stressful the noise is.



Sound carries at night.

I am also concerned about 24/7 planes. I have been disturbed by planes taking off over the bay at night.

J.A. Pittam



## Ms Katrine Powell

#### Formal Submission #182

**Position** Community individual

Organisation n/a

#### Submission full text

We strongly oppose any further development of the New Parallel Runway at Brisbane Airport.

Having read through the Summary of Major Findings 2006 we have many strong concerns, including but not limited to:

- Noise Pollution (directly over our home) and the major distress that will cause.
- Massive increase in the number of aircraft flying close over our home each day/night Drop in Property Value of our home
- Loss of quality sleep from aircraft noise and its impact on our health, both physical and mental
- Toxic Emissions from the aircraft
- An apparent lack of curfew for flights over our home

We believe the Aircraft should be directed over Morton Bay and not over our homes.

The quality of our lives will be adversely affected from aircraft overhead and we object in the strongest possible way to this potential invasion of our peace of mind and health.

It is important to note; had we known that aircraft would be flying directly over our home several times an hour, we NEVER would have purchased the house we live in.

We would have spent our hard earned money in another suburb free of noise pollution.

If the New Runway directs flights over our currently peaceful home, we fear we will have to sell our home and move in order to keep our current quality of life and sleep. No one should be forced to take such drastic and expensive action when there are other options available to the airport other than directing flights over our homes!

Morton Bay should be used as a flight path, not our suburbs!!!



## The Hon. Patrick Purcell MP

#### Formal Submission #188

Position Member for Bulimba, Minister for Emergency Services

**Organisation** Queensland Government

#### Submission full text

Brisbane Airport Corporation New Parallel Runway Proposal

I appreciate the opportunity to express my comments on the Brisbane Airport Corporation's new parallel runway proposal.

Aircraft traffic which approaches or departs from the Brisbane Airport from the south-east, south and south-west directions, impacts on residents and workers of the Bulimba Electorate. This is primarily a noise pollution issue, but also gives rise to a public health and safety issue with aircraft being directed over densely populated suburbs.

The proposed parallel runway will increase the number of residences to the south of the airport, which will be exposed to increased aircraft noise. The residents of Balmoral, Bulimba, Camp Hill, Cannon Hill, Carina, Hawthorne, Murarrie and Norman Park will bear the brunt of this increased noise.

Brisbane residents should not be disadvantaged by the actions of the Brisbane Airport Corporation. As the number of aircraft using the Brisbane Airport continues to grow, residents will be exposed to increased frequency of air traffic noise.

A curfew needs to be introduced as a matter of priority and before any further consideration is given to the construction of a new parallel runway bringing more aircraft over people's homes. The Environmental Impact Study has not dealt with this issue.

Four of Australia's major airports (Sydney, Essendon, Adelaide and Coolangatta) have implemented an aircraft curfew, preventing noisy aircraft from landing and taking off between 11 pm and 6am unless it is deemed essential. Residents of not only the Bulimba electorate, but the entire Brisbane metropolitan area are entitled receive a similar aircraft curfew.

Because of our climate, Brisbane's lifestyle is one that is predominately lived outdoors, for example outdoor dining in the restaurants along Oxford St Bulimba is increasingly popular. At present many outdoor activities are continually interrupted by the roar of overhead aircraft and with



the proposed new parallel runway the noise and interruptions will only increase. Peoplecannot lock themselves inside their homes during summer to escape aircraft noise.

The Brisbane Airport Corporation needs to put in place noise mitigation measures for community based halls, churches and schools, etc, The Environmental Impact Statement should address the issue of the Brisbane Airport Corporation funding air- conditioning and double glazing of residences and community facilities relative to the projected decibel impact, as has been done at no cost to residents/owners in Sydney.

An Environmental Impact Statement needs to be conducted addressing the affects of noise pollution along with a Health and Environmental Impact on people living or working under the flight path. It is not known what long term affect this will have on health.

The Environmental Impact Statement does not take into consideration any negative affect the proposed new parallel runway will have on house prices in the previously listed suburbs. The Brisbane Airport Corporation needs to accept responsibility for this fact.

In the interests of public health and safety, no aircraft should be permitted to fly over Brisbane without having the latest navigational systems installed and operational in their aircraft. The safety of Brisbane residents is a priority.

The current road network at the Brisbane Airport is in a word, chaotic. Before any expansion of Brisbane Airport is contemplated, this matter needs to be addressed. The Brisbane Airport Corporation shows a blatant disregard for their clients in not urgently addressing this issue and providing better facilities for their clients, particularly during peak hours and inclement weather.

I sincerely trust that you give due consideration to the matters I have raised and would be pleased to sit down and discuss these matters further with you.

Yours sincerely

Pat Purcell MP
Member for Bulimba



## Mr Peter Rawlinson

Formal Submission #185

**Position CEO** 

Organisation Pine Rivers Shire Council

#### Submission full text

Dear Sir,

Re: Formal Submission New Parallel Runway Draft EIS/MDP

Pine Rivers Shire Council (PRSC) has reviewed the draft EIS/MDP and at its meeting held on 30 January 2007 adopted the following resolutions:

- 1.Council note the conclusions reached in the report that the noise impacts of aircraft using airspace over Pine Rivers on the residents of the shire are low or relatively minor, and are not expected to create any significant health effects in the PRSC area i.e. Sleep disturbance.
- 2.Council make a submission to Brisbane Airport Corporation, advising that once the quarries supplying the material to the airport project are known, and if the choice of quarries results in any traffic movements in or through Pine Rivers Shire, other than along the Bruce Highway, Council requests that the impact on amenity, including noise, be fully assessed and the report submitted to and discussed with Council, and agreement reached on an enforceable traffic noise hazard management and amenity protection plan, before haulage commences.
- 3. Council provide a copy of council's submission to members of parliament and members of the house of representatives, and senators representing the Pine Rivers area.

The grounds of this submission and the facts relied upon in making this submission are:

Council commissioned ASK Consulting Engineers Pty Ltd to undertake a review of the Brisbane Airport Corporation New Parallel Runway Project Draft Environmental Impact Statement and Major Development Plan for Public Comment with respect to noise issues of relevance to Pine Rivers Shire Council (PRSC). The relevant noise issues identified are:

- (a) the operation of the runway; and
- (b) the haulage of quarry materials through the Shire.



As a result of its review of the EIS, ASK Consulting Engineers concludes that:

(a)the number of N70 noise events in PRSC with the advent of the New Parallel Runway (NPR) will remain very low or zero;

(b)the maximum number of overflights along flight path J (incoming flights directed over Strathpine, Brendale and Albany Creek) will increase by a factor of 2.5-3.0 from 2005 to 2035 during the day and evening;

(c)after 2015 there will be no flights along flight path J during the night;

(d)the noise impact along flight path J would be relatively minor, with aircraft being audible outside a residence, while they may not be readily noticeable inside a residence, depending on the activity undertaken at the time.

(e)aircraft noise from flight paths I and K would be minor due to the height of the aircraft above ground;

(f)the NPR would have no land use planning implications for the PRSC area;

(g)there would be no significant health effects in the PRSC area associated with the NPR, because after 2015 there will be no night-time flights along flight path J, thereby removing the major potential noise impact of aircraft, i.e. sleep disturbance;

The report also points out that in respect to quarries:

(a)Large volumes of materials (15,563 '000M3) are required for construction of the new runway. i.15,000,000m3 of sand for filling and surcharge purposes to be obtained from Moreton Bay; and ii.563,000m3 of sub-base, fine crushed rock, road and bund material, crushed rock/gravel for the seawall, protective rock, rip rap, concrete, and asphalt to be obtained from quarries.

(b) The EIS does not identify quarries, which would supply the required materials, but rather nominates all possible quarry sites within a 150 km radius of Brisbane Airport.

(c)The quarries to supply materials for the runway project will not be known until a selection process has been completed. This selection process will consider a number of factors, including:

i.the ability of the supplier to provide the specified materials;

ii.the ability to deliver the materials to the site in the required timeframe;

iii.the price to supply the specified materials; and

iv.environmental performance of suppliers and their ability to consistently meet the licence conditions applying to their various facilities (e.g. operating hours).



(d)35 percent of the material would be transported from the north (of Brisbane). This potentially could comprise or include trucks movements in the Pine Rivers Shire Council area, if the quarries to be used are located within the Shire or to the north of it. For the latter case the material would presumably be transported along the Bruce Highway.

(e)Material transported from the north would result in a maximum of 49 heavy vehicle trips per day. Along major roads such as the Bruce Highway this may be considered to be insignificant. However away from the major roads, such a number of additional vehicles could be significant in terms of noise impact, depending on a number of factors such as: time of day, existing noise levels in the area, existing traffic flow along the haul route.

Based on the above, the question of noise impact resulting from haul trucks associated with the project has not been considered in the draft EIS/MDP. On the basis that the impacts of hauling materials from quarries in or to the north of the Pine Rivers areas on the shire residents and roads have not been assessed in the draft EIS/MDP, Council requests that the impact on amenity, including noise, be fully assessed and the report submitted to and discussed with Council, and agreement reached on an enforceable traffic noise, hazard management and amenity protection plan, before haulage commences.

Yours faithfully,

Ray Burton
CHIEF EXECUTIVE OFFICER

ATTACHMENT:

PINE RIVERS SHIRE COUNCIL
REPORT OF THE STRATEGIC AND PLANNING COMMITTEE MEETING
HELD ON TUESDAY 30 JANUARY 2007

SP300 STRATEGIC & DEVELOPMENT DIVISION

SP315 BRISBANE AIRPORT CORPORATION NEW PARALLEL RUNWAY PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT AND MAJOR DEVELOPMENT PLAN

RESPONSIBLE OFFICER: PR (Ext. 6922)

FILE NO: 36-2140



#### **EXECUTIVE SUMMARY:**

ASK Consulting Engineers Pty Ltd was commissioned by Pine Rivers Shire Council (Division of Strategic & Development, Strategic Direction Department) to undertake a review of the Brisbane Airport Corporation New Parallel Runway Project Draft Environmental Impact Statement and Major Development Plan for Public Comment (referred to hereafter as "the EIS") with respect to noise issues of relevance to Pine Rivers Shire Council (PRSC). The relevant noise issues identified are:

- (i) the operation of the runway; and
- (ii) the haulage of quarry materials through the Shire.

The public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on Tuesday 6 February 2007.

#### **BACKGROUND:**

The EIS states that Brisbane Airport Corporation (BAC) proposes to build a new 3600m long runway located parallel to the existing main runway at a distance of approximately 2km to the northwest. There is a need for an additional runway, since the airport estimates that by the year 2014 the current runway will have reached maximum capacity.

An extensive Draft Environmental Impact Statement (EIS) was prepared as part of the application to the Federal Government outlining a large number of issues associated with the New Parallel Runway (NPR), including noise impacts on the surrounding community.

#### ITEM:

The EIS has been reviewed by ASK Consulting Engineers and a report titled "Review of the BAC EIS/MDP Noise Implication for Pine Rivers" dated 16 January 2007 has been received on 17 January 2007. The report reviews the new parallel runway proposal for its implications for Pine Rivers and provides summary comments on operation of the runway, noise modelling procedures, noise assessment, haulage of quarry materials, and health aspects. A copy of the report is included in the Appendix to this agenda item.

As a result of its review of the EIS ASK Consulting Engineers concludes that:

(i)the number of N70 noise events in PRSC with the advent of the New Parallel Runway (NPR) will remain very low or zero;



(ii)the maximum number of ovefflights along flight path J (incoming flights directed over Strathpine, Brendale and Albany Creek) will increase by a factor of 2.5-3.0 from 2005 to 2035 during the day and evening;

(iii)after 2015 there will be no flights along flight path J during the night;

(iv)the noise impact along flight path J would be relatively minor, with aircraft being audible outside a residence, while they may not be readily noticeable inside a residence, depending on the activity undertaken at the time.

(v)aircraft noise from flight paths I and K would be minor due to the height of the aircraft above ground;

(vi)the NPR would have no land use planning implications for the PRSC area;

(vii)there would be no significant health effects in the PRSC area associated with the NPR, because after 2015 there will be no night-time flights along flight path J, thereby removing the major potential noise impact of aircraft, i.e. sleep disturbance;

(viii) it is recommended that if quarries in or to the north of the PRSC area are selected to supply materials for the NPR project, Council request a noise impact assessment to be carried out.

THIS IS PAGE **07/0158** OF THE MINUTES OF COUNCIL AND CONTAINS RECOMMENDATIONS OF THE STRATEGIC AND PLANNING COMMITTEE HELD ON TUESDAY 30 JANUARY, 2007.

PINE RIVERS SHIRE COUNCIL

REPORT OF THE STRATEGIC AND PLANNING COMMITTEE MEETING

HELD ON TUESDAY 30 JANUARY 2007

#### SP300STRATEGIC & DEVELOPMENT DIVISION

SP315BRISBANE AIRPORT CORPORATION NEW PARALLEL RUNWAY PROJECT DRAFT
ENVIRONMENTAL IMPACT STATEMENT AND MAJOR DEVELOPMENT PLAN ... (Continued)

The report also points out that in respect to quarries:

- 1) Large volumes of materials (15,563,000m3) are required for construction of the new runway.
- -15,000,000m3 sand for filling and surcharge purposes to be obtained from Moreton Bay; and



- -563,000m3 of sub-base, fine crushed rock, road and bund material, crushed rock/gravel for the seawall, protective rock, rip rap, concrete, and asphalt to be obtained from quarries.
- 2) The EIS does not identify quarries, which would supply the required materials, but rather nominates all possible quarry sites within a 150 km radius of Brisbane Airport.
- 3) The quarries to supply materials for the runway project will not be known until a selection process has been completed. This selection process will consider a number of factors, including:
- the ability of the supplier to provide the specified materials;
- the ability to deliver the materials to the site in the required timeframe;
- the price to supply the specified materials; and
- environmental performance of suppliers and their ability to consistently meet the licence conditions applying to their various facilities (e.g. operating hours).
- 4) 35 percent of the material would be transported from the north (of Brisbane). This potentially could comprise or include trucks movements in the Pine Rivers Shire Council area, if the quarries to be used are located within the Shire or to the north of it. For the latter case the material would presumably be transported along the Bruce Highway.
- 5) Material transported from the north would result in a maximum of 49 heavy vehicle trips per day. Along major roads such as the Bruce Highway this may be considered to be insignificant. However away from the major roads, such a number of additional vehicles could be significant in terms of noise impact, depending on a number of factors such as: time of day, existing noise levels in the area, existing traffic flow along the haul route.
- 6) Based on the above, the question of noise impact resulting from haul trucks associated with the project has not been considered in detail.

#### STRATEGIC IMPACTS:

- LINK TO CORPORATE PLAN:
- 3.2.2 Corporate Governance and Leadership
- 3.2.2.1 Consider contemporary community issues and make balanced approaches to relevant agencies and take other necessary actions to represent Pine Rivers' interests.
  - LINK TO OPERATIONAL PLAN: 141 Strategic Direction: Regional Collaboration -Strategic. Address specific strategic issues with State, local and regional entities.



 CONSULTATION: The public comment period for the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project closes on Tuesday 6 February 2007.

THIS IS PAGE **07/0159**OF THE MINUTES OF COUNCIL AND CONTAINS
RECOMMENDATIONS OF THE STRATEGIC AND PLANNING COMMITTEE HELD ON
TUESDAY 30 JANUARY, 2007.

CHIEF EXECUTIVE OFFICER

# PINE RIVERS SHIRE COUNCIL REPORT OF THE STRATEGIC AND PLANNING COMMITTEE MEETING HELD ON TUESDAY 30 JANUARY 2007

#### SP300 STRATEGIC & DEVELOPMENT DIVISION

# SP315 BRISBANE AIRPORT CORPORATION NEW PARALLEL RUNWAY PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT AND MAJOR DEVELOPMENT PLAN ... (Continued)

- COMMUNICATION IMPACT: Council to make a submission to the BAC by the close of the public comment period.
- LEGAL IMPLICATIONS: Nil.
- POLICY IMPLICATIONS: Not yet determined.
- FINANCIAL AND RESOURCE IMPLICATIONS: Nil.

#### **REPORT RECOMMENDATION:**

The Director, Strategic and Development recommends:

- 1.Council note the receipt of the report by ASK Consulting Engineers titled "Review of the BAC EISIMDP Noise Implication for Pine Rivers" dated 16 January 2007.
- 2.Council note the conclusions reached in the report that the noise impacts of aircraft using airspace over Pine Rivers on the residents of the Shire are low or relatively minor, and are not expected to create any significant health effects in the PRSC area i.e. sleep disturbance.
- 3.Council make a submission to the BAC advising that once the quarries supplying the material to the airport project are known, and if the choice of quarries results in any traffic movements in or through Pine Rivers Shire Council other than along the Bruce Highway, Council requests that a noise impact assessment be conducted and the report submitted to and discussed with Council, and an agreement reached on an enforceable traffic noise and hazard management plan before haulage commences.
- 4. Council provide a copy of Council's submission to Members of Parliament and Members of the House of Representatives and Senators representing the Pine Rivers Area.



#### COMMITTEE RECOMMENDATION:

1.THE REPORT RECOMMENDATIONS 1, 2, AND 4 BE ADOPTED AND 3 BE SET ASIDE.

2.COUNCIL MAKE A SUBMISSION TO BRISBANE AIRPORT CORPORATION, ADVISING THAT ONCE THE QUARRIES SUPPLYING THE MATERIAL TO THE AIRPORT PROJECT ARE KNOWN, AND IF THE CHOICE OF QUARRIES RESULTS IN ANY TRAFFIC MOVEMENTS IN OR THROUGH PINE RIVERS SHIRE, OTHER

THAN ALONG BRUCE HIGHWAY, COUNCIL REQUESTS THAT THE IMPACT ON AMENITY, INCLUDING NOISE, BE FULLY ASSESSED AND THE REPORT SUBMITTED TO AND DISCUSSED WITH COUNCIL, AND AGREEMENT REACHED ON AN ENFORCEABLE TRAFFIC NOISE HAZARD MANAGEMENT AND AMENITY PROTECTION PLAN, BEFORE HAULAGE COMMENCES.

3.THAT ITEM 3 - NEW PARALLEL RUNWAY PROJECT AT BRISBANE AIRPORT, BE REMOVED FROM APPENDIX A.



## Mr Keith Reichmann

#### Formal Submission #191

#### **Position**

Organisation Department of Primary Industries Queensland Government

#### Submission full text

I have attended one of your information sessions and received the printed booklets regarding the New Parallel Runway Project. Both were professionally presented and provided a substantial amount of well-researched information.

As a resident impacted (sometime significantly) by a flight path to Brisbane airport (01 landing, in particular, I think), my main concern is aircraft noise. It is certainly intrusive, despite the fact that the Flight Path and Noise Information Booklet indicates that 70 decibels may disturb conversation, television viewing etc....not 'will'!

Since aircraft noise is not going to go away and is probably the community's major concern, I would have liked to have seen more information on potential strategies to alleviate noise issues in the future.

The section on Procedures for Defining Flight Paths indicates that noise should be fairly shared and the proposal for the parallel runway does suggest that this will happen. But are there other options in terms of shifting flight paths marginally to provide a degree of sharing? Obviously safety issues will be a factor but your patterns show that some flights join into the main flight paths into the airport much closer to the airport.

While we will all place some hope in the advent of newer and quieter planes, are there new technologies that allow planes to fly in at greater heights, or use less engine power at some stage of their descent, or allow for wheels to be lowered somewhat later? Are there options for using newer and less noisy planes at night? Do new planes have to meet mandatory noise level standards?

I would be interested in knowing whether such options exist.



## Mr Neil Roberts MP

#### Formal Submission #127

**Position** Parliamentary Secretary to the Deputy Premier, Treasurer and Minister for Infrastructure. Member for Nudgee

**Organisation** Queensland Government

#### Submission full text

Submission to the Brisbane Airport Parallel Runway Project Team

Environmental Impact Statement and Major Development Plan 2006

Following is my submission to the Environmental Impact Statement and Major Development Plan 2006 (EIS). It is based on concerns and issues raised with me in my capacity as the State Member for Nudgee. For the record, I advise that I own and reside in a property at Banyo, which will be situated approximately 1.5 kilometres from the BAC's preferred location of the parallel runway.

At the outset I state my support for the continued development of Brisbane Airport. The airport is critically important to sustaining Queensland's economy and as a job growth centre for South-East Queensland.

Key concerns raised with me (which I share) are as follows:

#### BAC's proposed location of the parallel runway:

BAC proposes to locate the parallel runway approximately 2 kilometres to the west of the existing runway. The runway however could be located approximately 1.5 kilometres to the west of the existing runway without significant impact on Opposite Direction Parallel Runway Operations (ODPROP). The International Civil Aviation Organisation (ICAO) standard for safe operation of parallel runways offering simultaneous arrivals and departures is 1525metres.

BAC's preferred location for the runway will place it as close as 1.4 kilometres to the nearest residential homes in Banyo. A separation of 1.5 kilometres will introduce an additional buffer of approximately 500 metres, which will assist in lessening noise impacts.

BAC has virtually conceded that this separation distance is achievable, indicating that should a 2,000 metres separation not be implemented, it would require the placement of terminals to the west of the new runway.



#### **Noise Amelioration**

The EIS does not appear to outline any comprehensive plan by BAC on how it intends to minimise noise impacts on neighbouring suburbs. Future development plans should include an analysis of how noise impacts can and will be lessened for neighbouring residential communities.

#### **Ground Water Harvesting**

The EIS does not appear to outline any plans for water storage on BAC property. Given the significant size of the catchment area, including roof space, BAC should be proposing practical means by which water can be stored on site. New technologies have dramatically increased the storage capacity of underground and above ground storage systems.

Thank you for the opportunity for providing a submission.

Yours sincerely,

Neil Roberts MP State Member for Nudgee



## Mr Royden Robinson

#### Formal Submission #26

**Position** Community individual

Organisation n/a

#### Submission full text

Although my address is virtually under the flight path of some take offs in flight path "H" which are more prevalent on weekends the incidence appears greater as there is considerably less background noise compared with Mon - Fri when normal city/commercial activity exists.

Under the plan for the new P.R, there will be a small increase in usage of F.P "H" but this is progress. We need an airport to keep up.

However I do not condone the ancillary development at the airport making travellers compete with shoppers etc for vehicular access.

Airport road access should be a dedicated roadway not held up by road users accessing ancillary activities - shops, offices, logistics operators etc.



## Mr Bill Rogers

Formal Submission #59

**Position** Community individual

Organisation n/a

#### Submission full text

There should be no new runways.

If there has to be one then there should be a curfew on all runways from 10pm - 6am.



# **Ms Mandy Rounsefell**

Formal Submission #148

**Position** Community individual

Organisation n/a

### Submission full text

Formal Submission: Curfews should be introduced; even though planes currently leave over the bay in the early hours, these still wake me up at 3-4am etc in Bulimba. Noise generally is already at levels in Bulimba where it is not possible to have a conversation or watch television when doors/windows are open in summer for natural ventilation and flight path is over or adjacent to the top end of Bulimba.



### Mr Kevin Rudd MP

### Formal Submission #184

Position Leader of the Opposition and Member for Griffith

**Organisation** Federal Government

#### Submission full text

Thank you for the opportunity to present a submission on the Draft Environmental Impact Statement that was required in order for the parallel runway proposal of the Brisbane Airport Corporation to progress.

The parallel runway proposal for Brisbane Airport has been the subject of great community controversy in Brisbane over the past five years. More than 4,000 objections were lodged to the Draft Guidelines by the community, after the first presentation of the Master Plan. The Government ignored these objections in its decision to endorse the Master Plan for a parallel runway.

This decision was in turn challenged in the courts by myself acting on behalf of the local community. This resulted in a legal battle over a two and a half year period in which the government joined forces with the BAC in the Administrative Appeals Tribunal and in the Federal Court in opposing my submission to have the Government's decision to endorse the parallel runway overturned. In the end, the BAC defeated my action on the basis of a legal technicality arguing that despite the fact that I was a local resident and the local Federal Member of Parliament, I have no "standing" to bring forth a case in the first place. Further:

- the BAC master plan recommending a parallel runway has been repeatedly endorsed by the Federal Government;
- the Airports Act says that an airport Major Development Plan must be compatible with the Airport's approved master plan and independent legal efforts to overturn the master plan's endorsement of the parallel runway;
- it is therefore clear that the BAC has the legal and contractual authority from the Federal Government to proceed with it despite community opposition.

The challenge that my community now faces is how to reduce the impact of this new runway on the community. A rigorous Environmental Impact Statement is critical to achieving this objective. This submission highlights a number of concerns that I continue to have with development and impact of the Brisbane Airport Corporation's parallel (western) runway. I have made a number of specific references to aspects of the draft Environmental Impact Statement that are inadequate.



My primary aim in preparing this submission is to ensure that the Southside community is provided with the most comprehensive information possible about the likely impacts of this development to ensure that they can evaluate the parallel runway proposal on this basis. My additional aim is to ensure that the Environmental Impact Statement is sufficiently rigorous to ensure that all the social, health and environmental costs to my community are appropriately incorporated into the cost-benefit analysis and that the impact on the local community is minimized. This includes aircraft noise as well as any impact on public health and public safety arising from the Government's termination to construction a new runway, which will direct new flight paths over intensely developed residential areas in the southern suburbs of Brisbane.

This submission has the support of the local State Member of Parliament Pat Purcell MP and the local Brisbane City Councillor Shayne Sutton.

Yours sincerely,

Kevin Rudd, MP

**Federal Member for Griffith** 

General comments on the Environmental Impact Statement (EIS) for the proposed parallel runway at Brisbane Airport.

The Brisbane Airport Corporation (BAC) released its Draft Airport Master Plan in 1998, which was the first major publication released by the Corporation detailing the proposal of an additional (western) parallel runway at Brisbane Airport.

Since the release of the Draft Master Plan in 1998, the BAC has complied with reporting requirements of the *Airports Act 1996* (Cth) and consequently produced an updated Airport Master Plan five years later in 2003. Both of these major development blueprints noted the significant increase in aircraft travel that, using projected figures, will see the Brisbane Airport reach full capacity around 2013. Both have been endorsed by the Federal government.

The decision to construct an additional runway at Brisbane Airport has been controversial. Brisbane is the only airport to face firm opposition to the development of an additional runway. Cities find it difficult to manage the competing tensions of airport expansion on the one hand, and the opportunity cost to residents living in areas surrounding major airports on the other.

The BAC's proposal to construct an additional (western) parallel runway has been the subject of significant debate within the Southside community. Whilst I recognise that the increased demand for air travel is creating greater need for an additional airport runway, it is vital to keep in mind the additional environmental and social costs that this development would bear on the community.

Therefore the challenge presented is to set the appropriate boundaries and stipulate minimum requirements to ensure that a major development project such as this complies with relevant



legislation and adheres to established protocols. There are fundamental problems with the EIS's methodology. In particular, the economic cost-benefit analysis is separate from the Social Impact Assessment (SIA) that is undertaken. This is primarily because the EIS fails to attempt to quantify the social costs and benefits of the planned parallel runway. A proper EIS is not an economic cost-benefit analysis with an SIA that is tacked on. A proper EIS involves quantifying the social costs and benefits (for example, assigning a dollar cost to increased noise) as well so that a rigorous assessment of the project's overall value is possible. The failure to do this is disappointing, undermines the usefulness of the draft EIS, and means that the draft EIS is likely to overstate the benefits of the parallel runway.

Given this failure, the Minister for Environment and Heritage should not approve the MDP until a more rigorous assessment is completed.

### **Specific Comments**

### **Section A1.9 - Option Testing**

The guidelines require that the EIS include an analysis of feasible alternatives to the runway construction. These include a no-change scenario, demand management, and the expanded use of other airports. Overall, this analysis is very weak as only the no-change scenario is compared to the MDP in a detailed manner and, as stated earlier, a quantification of the potential social benefits of the no-change scenario is not incorporated into the analysis.

The EIS is similarly required to undertake an analysis of alternative runway options to the west parallel runway including:

- An eastern parallel runway;
- the enhanced cross-runway; and
- the parallel cross-runway.

Overall, this analysis was very limited with no quantified cost-benefit comparisons (incorporating both the social and economic consequences) given. This is especially concerning in the context of noise increases. A quantification of the social costs of increased daytime noise could significantly affect the overall value of the project as this is the most prominent concern amongst residents.

I note also that the EIS did not make a serious attempt to evaluate a curfew option. Four major airports in Australia (Sydney, Adelaide, Essendon and Coolangatta) have curfews that prevent noisy aircraft from landing and taking off between 11pm and 6am unless it is deemed essential. The EIS appears to have simply dismissed this option although the social benefits may well be significant. It is important that there be a proper investigation of the need for a curfew at Brisbane airport.

### Section A1.11.4 - Approach to Assessing Impacts



The Guidelines state that the requirements for the EIS are that "quantitative descriptions of the likely impacts on environmental values of the area from all phases of the proposal need to be assessed". The uncertainty surrounding impacts should were also required to be quantified. As I have already stated, the quantitative description has been limited to description of indicators rather than assigning dollar amounts to the values.

#### Section A2.7.4 - Airline Costs and Fares

When assessing future demand for flights into Brisbane, the EIS had to make an assessment of factors affecting future flight prices, including fuel costs. The EIS's assumptions about oil prices are at this stage inconsistent with expectations of the future price of oil implied by futures contracts. While I recognize the uncertainty surrounding these factors, the EIS assumptions may overstate demand through this channel.

### Section A2.9.4 - General Equilibrium Modelling

The methodology used to assess the economic impact of the parallel runway is Computable General Equilibrium Modelling (CGM). The EIS states that this the most widely accepted methodology for assessing such projects. This neglects a vast literature demonstrating that forecasts based on CGM models tend to be inaccurate. Moreover, the numbers generated by such models are almost impossible to scrutinise by the public. The EIS should have incorporated the results from international studies using alternative methodologies.

### Section A2.13 - Effects on house prices

Analysis showing that house price growth among suburbs in the flight path did not grow more slowly than suburbs not in the flight path over the past 5 years is entirely spurious. House prices increase for a range of complicated reasons and consequently the effect of aircraft noise on prices can only be determined within a multivariate regression framework. This was not done by the EIS.

### Section A3.2 - Feasible Alternatives to Runway Construction

As stated earlier, the rigour of the analysis devoted to this aspect is inadequate.

### Section A3.3.3 - The Preferred Runway Option

The EIS identified 6 options for alternative runways. It dismissed three out of hand. Of the three options remaining - options 3, 4 and 5 - the EIS merely listed the ways in which option 3 (the western parallel runway) was superior to the others. No attempt was made at a rigorous quantitative comparison of the costs and benefits of each option. Consequently a legitimate comparison of the options is impossible.

### **Section D2.4 - Airport Operating Hours**



Brisbane Airport currently operates 24 hours a day, 7 days a week. The EIS simply states that these operating hours are critical for the commercial viability of the airport. No attempt is made to defend this proposition. No attempt is made to quantify the economic and social costs and benefits of a curfew operating from 11pm till 6am, like that at Sydney Airport. For example, residents in the flight path may be more amenable to the parallel runway if they were guaranteed that there would be no noise at night. The operation of a curfew at Sydney Airport does not appear to have significantly affected its commercial viability. There must be a proper investigation of the need for a curfew at Brisbane Airport.

### Section D2.6.4 - Noise Abatement Procedures

The preferred runways, as detailed in the Noise Abatement Procedures (NAP) for Brisbane, provide for landings and takeoffs to be over Moreton Bay as this minimises noise disruptions. The EIS states that these "nose to nose" operations are only sustainable in light traffic as long intervals are required for safety reasons. There is no statement on the precise percentage of flights that will not be over Moreton Bay and the EIS is inadequate without this information.

### Section D5 - Noise Assessment

The EIS offers the following conclusions about noise:

- Extreme noise (as defined by N70 contours) is expected to grow as the volume of aircraft traffic increases. However, this increase is expected to be less than proportionate as aircraft become quieter in the future.
- Opening of the parallel runway will result in an increase in the number of residences with both low and high exposure to aircraft noise. Residences to the south of the airport (particularly Bulimba, Balmoral and Hawthorne) are expected to experience particularly large increases in noise.
- Some residences will experience less noise.
- The introduction of the runway would reduce night noise exposure for many residents, but would expose some residents to new noise.
- In 2035, during the day and evening periods, and the winter night period, noise exposure will be lower without the new runway than with. During the summer night period noise exposure will AT TIMES be lower with the new runway.

The first point I would like to make on these conclusions is that they are different from the summary provided on the BAC website. In the EIS summary, many of the negative noise impacts are left out entirely, with a relatively rosy picture of noise effects portrayed. In particular, the EIS focuses on their modelling that suggested that there will be a net-reduction in the number of people losing sleep and experiencing general disruption (see below), rather than the full-range of effects on residents in various Brisbane suburbs (particularly the southern suburbs in my



electorate of Griffith). This is misleading as those that compiled the EIS would be well aware that residents are at most likely to read the summary.

Also, other than to document the increase in noise levels, the EIS has made little attempt to quantify the social costs of this increased noise within its overall cost-benefit analysis.

### **Section D7 - Health Impact Statement**

In its assessment of the health impact of the new runway, the EIS argues that the public health effects would be negligible. In particular, the EIS argues that if anything there will be a net-reduction in people's annoyance over aircraft noise and the number of people losing sleep. The EIS has modelled these effects in a non-transparent manner, raising serious questions over the findings. Its conclusion that there will be a net-benefit appears to rest on its earlier finding that for many residents noise exposure in the summer months will decline. Thus, increased noise through the day, evening and winter nights is deemed less significant than the possibility of noise reduction in the summer months. This is a non-obvious conclusion.

I also note here that the EIS makes scant reference to the exact monitoring and auditing programs it will put in place. Before the project is approved it is essential that the installation of comprehensive noise measurement, and aircraft emission measurement systems which are capable of monitoring the impact that the western parallel runway will have on surrounding suburbs over time, are mandated. There must be an absolute assurance of continuity, consistency and integrity of measurement systems over time so that there can be no future dispute about apples being compared with oranges. This becomes particularly critical in terms of undertakings, which the BAC will give concerning future noise and aircraft emissions standards to be adhered to by them over time.

### Section D9.4.3 - Consideration of Suburb Level Social Impacts

In my submission on the draft guidelines for the EIS I stated that the EIS must be required to list by suburb all community facilities that will be significantly affected by increased noise. The EIS must also be required to list the views of each of these facilities (as rendered by their appropriately constituted executives) in terms of the noise activity of the events conducted at those facilities. This has not been done.

The EIS also deals with the impact of aircraft noise on different structures and designs of buildings. This section did not stipulate that the that for much of the year, local Brisbane residents spend much of their time outside on their decks and verandahs. Consequently, calculations of noise impact did not assume that for substantial periods of the day, and in particular on weekends, residents are outside the structures of their homes, and not inside as is often the case in Sydney and Adelaide.

### **Community Consultation**



I asked that the EIS require the BAC to provide a copy of their EIS to each resident and community organisation which will experience any increase in aircraft noise as a result of the construction of the parallel runway, the use of its associated flight paths, and a consequential impact on the existing runway. This is a necessary contribution to transparency in the community's response to this proposal. The BAC did not provide such transparent information in its Draft Master Plan. This was not done.

### **Community Monitoring and Consultation Mechanisms**

The EIS does not stipulate what independent community forum will be established by the BAC in order to independently verify the BAC's future compliance with the standards it sets for itself in the EIS. At present, there is no such independent body. The BAC abolished it. The BAC must be required by the EIS to come forward with a fresh recommendation on how a new body will be established, both to represent the interests of the community independent of the interests of the BAC; as well as monitor the BAC compliance with the standards that are set for it in the EIS in to the future.

### **Enforceability of EIS standards**

The EIS does not stipulate the BAC's legal obligations to adhere to the standards that are agreed to in the EIS, in terms of runway use, flight path use as well as noise impacts over time. The EIS also does not stipulate what penalties will flow to the BAC if the EIS standards are breached by the EIS in the future. This is absolutely necessary if the community is to have any confidence in the EIS representing an agreed legal framework in which the BAC operates the western parallel runway in the future.

### Conclusion

As is clear from my detailed comments, the quality of the EIS prepared to examine the new parallel runway is inadequate on a number of levels. In its present form the EIS should be re-submitted.

Yours Sincerely,

Kevin Rudd, MP

**Federal Member for Griffith** 



## Ms Andrea Sandstorm

Formal Submission #129

**Position** Community individual

Organisation n/a

### Submission full text

I have recently bought property in Nudgee. I paid a premium price for my property and am concerned that, if noise levels (of the 120 or so planes which are predicted to be flying in airspace above my house) contribute to the fall in property values in the area, what, if any, mechanisms are in place to compensate homeowners for loss of property values? Surely if you can build the runway 475m further East, it makes more sense to do so.



### Ms Noelene Scaroni

Formal Submission #17

**Position** Community individual

Organisation n/a

### Submission full text

Public Objection - re BAC plan for New Parallel Runway Project

Living at Morningside - hearing and seeing planes on a regular basis- agreeing with Kevin Rudd and his fight in the courts - no success \* \$ later! But we are still going strong. Hopefully will come out best off. Maybe compromise. I support Mr Rudd totally with the new campaign for a new noise management plan for Brisbane Airport that will reduce the impact on our local community - our quality of life and our property values - Think of the children and their children to come! While writing this letter the third plane flew above our home - Do we really need so many around? Enough noise now!

Yours sincerely,

Noelene Scaroni

Concerned citizen who cares on the noise impact which can be minimised (hopefully)



# Ms Robyn Scorer

Formal Submission #15

**Position** Community individual

Organisation n/a

### Submission full text

I object to the parallel runway on the grounds of noise. Jetstar are the wort for noise. There are better long term alternatives. A parallel runway is a short term fix for a long term problem. It is short sighted. Once again Brisbane is cast back to its 'Hicks Ville' title.



### **Mrs Michelle Scott**

Formal Submission #91

**Position** Community individual

Organisation n/a

### Submission full text

As a resident of Morningside I am writing to express my concerns about the number, frequency and times that planes are going over our house. Last Wednesday, 24 January at around 9pm I counted 6 planes within 15 minutes go over our home. This is just one example of the high volume of planes in this flight path. In the past few months I have also noticed that there are more and more planes coming through either very late at night or in the early hours of the morning. So that one suburb doesn't suffer constant plane noise, pollution and therefore lowering house prices please spread the load of planes to other surrounding areas.

Thank you

Michelle Scott



# **Mr Inge Scott**

Formal Submission #147

**Position** Community individual

Organisation n/a

### Submission full text

Formal Submission: The Project Manager,

Dear Cam Spencer,

I WISH TO MAKE A SUBMISSION about the proposed changes to the flight paths. In particular I am concerned that the aircraft approaching from the south will be directed over Camp Hill (as shown in the proposed flight paths) instead of along the Gateway motorway and Minippi Park Lands. These suburbs are highly populated.

I have recently relocated from Lossock Ave Camp Hill (our residence from 1986 -2005) and aircraft have often caused severe disturbance to our sleep, telephone calls, enjoyment of our outdoor areas and TV viewing ever since the 1988 runway was opened. We have moved because the noise will continue to increase and become intolerable.

Could you ensure that the aircraft from the south, in particular, travel along the less populated route of the Minippi parklands and gateway Motorway.

It is difficult to find an area in the eastern suburbs not affected by the Draft EIS/MDP.

Thank you for your assistance in this matter.

Inge Scott



# **Mr Barry Seager**

Formal Submission #2

**Position** Community individual

Organisation n/a

### Submission full text

The parallel runway is vital to the future success of Brisbane. There will always be some losers in any new development. It is impossible to satisfy everyone, especially those suburbs who live by the "not in my backyard" philosophy. Remain focused on the 90% population of the SE corner of Qld that will benefit from this development (and get them to support the project).



# Ms Jennifer Singfield

Forma	l Su	bmiss	sion	#1	5	5
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**Position** President

**Organisation** Australian Marine Conservation Society (Moreton Bay Branch)

### Submission full text

I believe that not enough consideration has been taken about the future of our society. There are major changes on the way; both climatically (how high would the sea have to rise with a storm surge for the runways to be flooded?) and economically (how long can our unsustainable economic system continue before the piper has to be paid? Will ordinary people be able to afford to fly in twenty years' time?)

So in a nutshell, I do not believe that this second runway is necessary.

Regards

Jen



# Mrs Jennifer Singfield

Formal Submission #166

**Position** President

Organisation Tinchi Tamba WPSQ

#### Submission full text

The members of Boondall to Tinchi Tamba Wetlands Branch of WPSQ are very concerned about the expansion of the Brisbane Airport creating more impact upon the surrounding ecologically sensitive wetlands. Our Wetlands are feeling the full brunt of the South East Queensland's population increase.

The placing of the parallel runway so close to Boondall Wetlands will cause the following impacts:

- 1) Hydrology changes The change in hydrology must affect the local environment. Since Kedron Brook has been channelised and the building of the current airport, the effects of erosion on the mangroves and littoral zone at the mouth at Nudgee have been very noticeable to the long term residents of Nudge Beach. As it is, if the erosion on the north side of the banks of Kedron Brook continues at its current rate Nudgee Road will soon be affected.
- 2) Mangrove and salt marsh loss? The 94 hectares of Mangroves and 18 hectares of salt marsh that will be lost do not sound like much if you say the numbers quickly but when added to the rest of the mangrove loss that is incrementally happening in Moreton Bay this mangrove and salt marsh loss will have an impact. The mangroves are important fish and crustacean breeding grounds and the loss of biodiversity cannot be calculated.
- 3) Air Pollution? The extra amount of air pollution produced by the air traffic must also have a cumulative negative impact on the Boondall wetlands. I live at Shorncliffe and occasionally smell kerosene when outdoors at night. As I do not go outdoors much at night I often wonder just how much fuel is dumped in the Bay or how bad are things when I can smell this pollutant when I live kilometres from the airport. Air pollution is never taken as seriously as it should be? Especially in Queensland.
- 4) Effects on Ramsar areas? The number of migratory birds using the area has dropped significantly due to all the man made impacts on the local area. This airport expansion's effects on the local environment will lead to further reductions in the migratory birds.



- 5) Lewin Rail Buffer? We believe that the buffer zone for the Lewin Rail is not large enough to fully protect these birds.
- 6) Climate Change? Not enough is known about the effect that Climate Change will have on the Boondall Wetlands and the same can be said for the Airport land. What will be the impact on the wetlands if a tidal surge hits the area?
- 7) Cumulative Effects of development surrounding Boondall Wetlands?
  BAC Parallel runway
  Port of Brisbane Expansion
  Sand extraction for these two events
  Gateway Motorway duplication
  Catchment area housing developments

While BAC, POB & Qld Motorways all produce their own separate compact EIS's etc no account is taken of the cumulative effect that each of these projects will have on our precious wetlands. No doubt when worse comes to worse each can blame the others.

Jennifer Singfield
President
Boondall to Tinchi Tamba WPSQ



### Mr & Mrs Julie & Graham Smith

Formal Submission #30

**Position** Community individual

Organisation n/a

### Submission full text

I am writing to you as a resident of the south side suburb of Hawthorne. I have lived in this peaceful suburb for 15 years. My child currently attends Balmoral State High School. Both these areas are going to be significantly affected by the Runway Project.

My family are objecting to this runway, as we believe that it will have negative impacts on our quality of life and property values.

We have worked hard to build a family home in this area and will continue to live in this suburb throughout our life. As future retirees we do not want airport noise and pollution. I do not want my children and grand children's education to be negatively affected by aircraft noise and pollution.

I hope that you will take our objection seriously. The government needs to ensure that all efforts/mechanisms are in place to reduce the negative impacts this Runway will have on the local communities of Bulimba, Hawthorne and Balmoral.

Yours sincerely,

Julie & Graham Smith



### R.J. Smith

Formal Submission #192

**Position** Community individual

Organisation n/a

#### Submission full text

A Submission in relation to the New Parallel Runway Project Draft EISMDP.

I live in Morningside. I live very near to a major flight path (G, Flight Path and Noise Information Booklet (FP&NIB), page 10). Generally I am in favour of the construction of the parallel runway and will support this operation only if noise suppression procedures and rules are legislated for, put in place and enforced within the Management Plan of the new facility.

I have just returned to Morningside from a six-year absence. I was immediately struck by the higher number of aircraft movements and accompanying aircraft noise. I currently have to suffer unacceptable levels of noise (over 70dB where conservation and listening to radio or TV is impossible) and I believe that my rights to a quiet environment are above those of the aircraft travelling public (of which I am sometimes one and I am prepared to pay more to make my air travel less intrusive on others).

### My situation.

I live in Morningside where it meets Seven Hills. I am about 15degrees from directly under flight path G and I sit between the yellow and green contours with 10- 19 overflights in the time period 6am-6pm (FP&NIB, pg 10). 1 believe that these numbers are conservative and do not apply at all when visibility is poor and MOST aircraft use the instrument flight path approach. While I do not have a decibel meter I have a substantial number of flights that disrupt my normal way of life. At these flypast incidents when my house is open, I cannot hear my TV or Radio or people talking or my phone ringing. I basically have to put my life on hold for 20 seconds (takeoff)-30 seconds (landing) while aircraft pass.

I suffer stressful periods when:-

1.Older noisier aircraft pass overhead (Especially older type 747's). I believe the use of these older types should be discouraged by new airport operation rules. At present they should be required to approach and takeoff over the sea. Some of the newer large twins cause no problem at all as they



are inherently quieter especially when they are flown much more thoughtfully over residential areas. I believe the use of these types should be encouraged by new airport operation rules.

- 2.Early morning flights operate around 6am and 1am. They wake me with a start, like being in a nightmare. The screaming roar of the four 747 engines on approach and takeoff cannot be ignored and I always wake up stressed. I then find it hard to get back to sleep. These aircraft should not be operating over residential areas at this time of night when movements are less. They MUST operate over the sea. If this does not occur I will support the push for a curfew.
- 3.On some days, aircraft arrive in batches of one every 2-3 minutes. These concentrated arrival periods are very annoying. For example on Wednesday 3rd January aircraft overflew my place at (am) 6.35, 6.39, 6.42, 6.44, 6.47, 6.49, 6.54 and 6.59. That is eight overflights in 24 mins or once every 3 minutes. This is stress inducing.
- 4. Visibility is bad and all aircraft approach along the instrument assisted flighpath (G). It is noted that the maximum number of movements is 113 (FP&NIB, Pg 10) and ALL these overfly my place. THIS IS LIVING HELL! One very cloudy and dismal Wednesday I counted 30 flights from 6.30am to 8.00am or one every 3 minutes. Believe me this level of fly over causes maximum stress. I had to leave the house and go shopping. The flyovers continued all day but not always at this intensity. If you realise that my life stops for 30 seconds every 3 minutes you can appreciate the level of disruption to my life.

This is a totally unacceptable level of intrusion into resident's normal life. I am concerned that this represents the FUTURE and while the parallel runway alleviates the problem it again arises in 2035 (FP&NIB, pg 46) where maximum flights will increase to 133 along flight path G in the 6am-6pm period. I therefore believe that some noise reducing rules/legislation must also be introduced into the Management Plan to force aircraft operators to reduce noise levels over residential areas over the next 30 years. I believe that some manufacturers are slowly doing this but I believe extra incentives by financial penalties (higher landing fees for noisier aircraft) must be implemented so this process will speed up/ be taken seriously by operators and manufacturers. If this is not done I cannot support the project and will only support a new airport located somewhere else eg. on the way to the Gold Coast

### Suggested Areas in which to Tackle Noise and Create Disincentives.

1. People in a city do not HAVE to live with stressful levels of noise as the norm. I believe residents have the right to a quiet environment above the rights of the air travelling public. I believe this should be a stated principle on which the new airport will operate. I believe target aircraft noise levels should be set (noise of a passing car) and those operators reaching those levels should be rewarded (lower landing fees). Those who do not should incur a penalty (higher landing fees). These could be determined by the measurement of the noise footprint on landing. Some aircraft are, in my opinion, already achieving this level of noise reduction. They should be rewarded! Sensible noise requirements, legislated NOW, will force quieter aircraft operations and will save a



lot of stress now and in the future for residents, governments and airport management. Let's not miss this opportunity to shape the future.

- 2. Quieter operations required of pilots (no sprints by 737's to the runway edge).
- 3. Use of quieter aircraft.
- 4. Spreading the approach flight paths to spread the noise footprint over the residential areas so they don't become concentrated and annoying.
- 5. Make use of the parallel runway so all operations are over the sea. That is one runway used for landing and one for take-off over the sea.
- 6. Having these runways long enough so aircraft do not HAVE to take off and land into the wind (I believe this to be a furphy as today's aircraft are very powerful and are not affected by normal light wind conditions except that operators may be saving some money at the expense of noise intrusion on residents i.e. tyre wear at higher landing speeds).
- 7.Planes should approach over residential areas in a clean condition (no flaps down and no undercarriage down) even if this means a steeper approach path. I believe not enough is being done or examined in this area.
- 8. The need for setting an airport standard (Australian Standard) for overflight noise acceptance level (e.g. no more than 50dB) and frequency of occurrence (no more frequent than once every 10 minutes). I believe such a standard should be written into the new airports operation/management procedures. Any breaches should be investigated and punished by BAC (e.g. higher landing fee).

I believe Brisbane Airport needs the new parallel runway. I believe this project should only go ahead if it can show the residents that new rules are also being included to force operators using the airport to reduce noise in all future operations. I can see that, at first, the new physical set up will spread the increasing noise and allow more operations over the sea. This is commendable. My concern is that as traffic builds up over the next 30 years (FP&NIB, pg 46), I plus many more residents will again face unacceptable noise levels. I believe that some mechanism must be included NOW within regulations of the new airport for the forced reduction of noise over residential areas over the next 30 years. If this happens then the new project will gain my full support.

Yours truly

R. Smith



### Ms Elaine Smith

Formal Submission #232

**Position** Community individual

Organisation n/a

#### Submission full text

I fully support the submission by Mr Simon Baltais of the WPSQ Bayside Branch and submit a copy of it as part of my submission so that all issues & references in it become part of my submission (attachment 1).

In addition, I submit the submission of The Rivermouth Action Group Inc, and fully endorse the comments made therein (attachment 2)

I have previously made a detailed submission on the cross-runway / parallel runway matters last time BAC called for submissions for the Brisbane Airport Corporation Limited's Draft Master Plan March 1998. BAC pushed its agenda for a parallel runway, with no intent for a cross runway.

I spent a great deal of time, effort and research, for a submission. BAC and the Commonwealth Government (read Liberal Party) promptly ignored my objection and those of thousands of other residents affected by aircraft noise, and residents soon to be affected by aircraft noise.

Note the runway configuration for all other East coast airports - in line with prevailing wind conditions. The 1983 Master Plan ignored expert advice from pilots and air traffic controllers as to the best alignment and positioning of the runway layout. A 01 R/1 9L- runway configuration was chosen politically to save the Federal seat of Lilley, held by Kevin Cairns, the then Minister for Aviation (who was defeated at the next\*election a few weeks later). The 1998 Draft Master Plan was based on this flawed Master Plan.

It has always been clear that prevailing wind conditions would dictate takeoffs and landings, and all the spin doctoring and assurances by BAC will not change that.

I will not be wasting my efforts on a detailed submission this time. However,

I do thank BAC and AirServices Australia for the wake-up calls that I receive at 4am when a jet, usually a cargo jet, screams over my house. In case I do fall back to sleep, another usually follows 20 minutes later. I was going to get up in a couple of hours anyhow.



- I have given up hoping for a Curfew over residential areas. That would interfere with business.
- I now have an enormous supply of earplugs to cut the aircraft noise day and night.
- I have purchased a new remote control for the TV, to replace the original, on which the up volume and down volume buttons were out due to over use turning the volume up to hear the TV hear when the jets scream over, then down when peace regained, however briefly.
- I manually turn up the radio in order to hear it above the sound of the jets.
- I have a telephone with volume control, to hear conversations when the jets scream over.
- I have left my Will at one brothers home, well out the flight paths, should a jet crash on my house, and incinerate me and the house.
- I look at the upside of being incinerated should a jet come down over my house It will save my brothers the cost of a funeral.

It is pointless saying much more, as both BAC and the Liberal Party, sorry, Commonwealth Government will ignore this and all other objections, and the state will recognise economic need over residential amenity and environmental impacts.

Yours, not at all sincerely,

Elaine Smith



# **Mr Earl Sparkes**

Formal Submission #179

**Position** Community individual

Organisation n/a

### Submission full text

I disapprove of the positioning of the parallel runway as it will involve clearing and filling in vital marine nursery areas particularly in relation to Jackson's Creek, which currently has a two way flow into the Shultz canal. I also disapprove of the runway having a two kilometres gap between major runways as the standard in other major airports is 1.5 kilometres thus providing less noise to neighbouring suburbs. Filling in of major marine animal nurseries should not be allowed.



# Ms Denise Spinks

Formal Submission #203

**Position** Manager Airport Relations

**Organisation** Airservices Australia

#### Submission full text

# DRAFT ENVIRONMENTAL IMPACT STATEMENT AND MAJOR DEVELOPMENT PLAN BRISBANE NEW PARALLEL RUNWAY (NPR)

I write in response to the invitation to comment on the Draft Environmental Impact Statement and Major Development Plan (Draft EIS/MDP) for the New Parallel Runway project, with respect to the impact on Airservices facilities and operations.

### 1. AIR TRAFFIC CONTROL OPERATIONS

a) The closure of runway 14/32 and therefore reliance on one runway for up to 2 years from mid 2008 will have a significant impact on air traffic management and operations. In 2005, 15% of arriving traffic and 5% of departing traffic used runway 14/32. The shift to single runway operations will therefore result in increased holding times and airborne delays.

Airservices recommends the early establishment of a working group that includes airlines and Airservices, to develop strategies to manage this issue to mitigate the impact.

b) With respect to the "Active" and "Passive" Mode Selection discussion at section 10.4.2, Airservices would like to ensure our prerogative to manage air traffic safely and efficiently is maintained. We note SODPROPS is BAC's preferred mode of operation for noise mitigation when traffic movement numbers and weather conditions permit and that when the Active rule for mode selection applies, a change to the preferred mode must be implemented as soon as possible. We ask BAC to acknowledge that when applying the Active rule Airservices must also ensure that mode changes are appropriately managed to ensure operational safety and this could impact the timing for implementing a mode change.

### 2.TOWER

The MDP does not appear to have addressed the impact on the location of the Brisbane tower.

Prime facie, Airservices questions the suitability of the current tower (height and location) for regulatory compliance to service the new runway.



In particular, the north-eastern end of the new runway should be investigated for compliance with ICAO standards, CASR Part 172 MOS, Chapter 3,3.1.2 Control Towers and, Rules and Practices for Aerodromes, Chapter 7-Design Standards for Licensed Aerodromes.

Airservices requires that a tower siting survey for the new runway.

### 3.PROPOSED NPR FLIGHT PATHS

SUMMARY OF MAJOR FINDINGS 2006 PAGE 117 - PROPOSED NPR FLIGHT PATHS The reference to Airspace and Environment Regulatory Unit (AERU) under this section should be deleted as follows:

"The flight paths developed for the NPR, shown after the existing flight paths in this document, have been developed in accordance with regulations established by organisations including the International Civil Aviation Organization (ICAO) and the Airspace and Environment Regulatory Unit (AERU) which is part of Airservices Australia."

### 4. PROCEDURES DESIGN

The MDP/EIS is too broad in the context of aviation factors for a procedures design assessment to be pertinent at this point.

Prior to the new runway being commissioned, new approach and departure procedures will be needed. However, we are aware that the essence of these has already been captured in the conceptual arrivals and approaches that have already been developed by Brisbane Operations staff.

### 5. CABLING

### The Joint Airservices/BACL Fibre-optic Cable Ring (see BR-411-805 sheet 001A).

- The cable will be crossed by the dredge pipeline between ALER (N) and N av (N), and again adjacent to the Satellte Fire Station. (see Figures 4.3, 4.24 & 5.2c)
- The proposal envisages the re-routing of the section of the ring which now runs east of
  Taxiway E straight across the 14/32 Runway to join the route on the western side of the
  runway. In addition, topsoil stripping and consolidation of the area north of Runway 14/32
  will require the diversion of both legs of the cable well wide of the entire section to the north
  of 14 Threshold and Taxiway E7. (see Figure 5.2b & c)
- The discharge channel into the Serpentine Inlet drain will cut the cable north of ALER Cross.(see Figure 5.2c)
- The section of cable running east of 14/32 Runway will be vulnerable to damage in two areas from heavy vehicles creating the two topsoil stockpiles. (see Figure 5.2b)



 The Link Taxiways will cut the section of the cable between the GA area and the DTB. (see Figure 4.6 inter alia)

While this is a jointly owned cable on which so much of the communication for both parties depends and so will no doubt be looked after, we recommend the installation of a back-up radio link system between Nav(N), TAR and CTC. (we assumes that the Satellite Fire Station will be temporarily decommissioned and so need not be included).

### 6. NAV AIDS

The impact on the existing aircraft navigation aids must remain within acceptable siting criteria limits. Details of likely impacts on specific navigation aids are included in Attachment A and copies of Airservices siting criteria are also attached.

### 7. SATELLITES

There is no identifiable impact to satellite infrastructure and services. However there is potential impact to services by aircraft intercepting the uplink and downlink beams.

Brisbane currently has satellite services operating on the following satellites:

- Optus C1 at 156E;
- Optus D1 at 160E; and
- Palapa C2 at 113E

The look angles from the Control Tower Complex to the Optus satellites are almost parallel to the proposed runway in Azimuth so the potential for interruption of the beams is very low.

Look angles from Control Tower Complex to Palapa are almost perpendicular to the runway, crossing near the southern end. However because the beam elevation is 35.7 degrees, it is highly unlikely that the beam will be interrupted by normal approaches and departures.

Momentary interruption of the Palapa beam will cause loss of synchronisation in the receive modems and multiplexers, resulting in data errors or dropouts. Recovery would normally be very rapid (less than 1 second) after the beam has been cleared. Occasional events of this nature are unlikely to be problematic for the customer.

### 8. AVIATION RESCUE AND FIRE FIGHTING (ARFF)

We note the proposed site for the new fire station as identified in the MDP and seek further consultation on the details of this proposal



There are also a number of access issues to various parts of the airport, which require further consultation. These are listed in Attachment A.

### 9. **ENVIRONMENT**

A number of edits and corrections for Volume D: Airspace are included in Attachment A.

As discussed previously, the project will require extensive and effective consultation to manage the range of issues that have been identified and that may arise in the future. Airservices seeks confirmation that such forums will be established and that we will be invited to participate.

I am available to discuss these matters further if required.

Yours Sincerely,

Denise Spinks

Manager Airport Relations

Airservices Australia



### **ATTACHMENT A**

# DRAFT ENVIRONMENTAL IMPACT STATEMENT AND MAJOR DEVELOPMENT PLAN BRISBANE NEW PARALLEL RUNWAY (NPR)

### **NAV AIDS**

The impact on the existing aircraft navigation aids must remain within acceptable siting criteria limits. Copies of Airservices siting criteria are attached and some further details of likely impacts on specific navigation Aids.

### a) Impact upon Runway 19 ILS

Runway 19 Localizer: Nil impact on existing or proposed replacement Localizer.

### Runway 19 Glide Path:

The depicted alignment of the proposed sand dredge pipeline (NPR EIS/MDP Figure 4.21) is approximately 650m forward of the existing Glide Path and 635m forward of the proposed replacement Glide Path.

Once installed the pipeline is expected to have nil impact on the operation of either the existing or replacement runway 19 Glide Path. However construction, maintenance and removal of the pipeline will require the Glide Path (existing and replacement) to be removed from service when the works are within 172m of the extended runway 01/19 centreline.

This impact could be minimised by executing the works at night and returning the facility to service during the day following an inspection of the works site by an Airservices Radio Technician.

### b) Impact upon Runway 01 ILS:

### Runwav 01 Localizer:

The existing Localizer is sited 534m from the runway end. The proposed replacement Localizer is to be sited 560m from the runway end.

The depicted alignment of the proposed sand dredge pipeline (NPR EIS/MDP Figure 4.21) is 316. 7m from the runway end, approximately 200m forward of the existing Localizer.

A section of the proposed sand dredge pipeline, approximately 90m either side of the extended runway 01119 centreline, infringes the Critical Area of the (existing and replacement) 01 Localizer along it's depicted alignment (NPR EIS/MDP Figure 4.21 - Dredge Mooring Location and Pipeline Routes).

If this section of the pipeline is laid on top of the ground, the (existing and replacement) 01 ILS will be required to be turned off whilst the pipeline is installed as well as during its construction, removal and maintenance.

To minimise the impact of the pipeline upon the operation of runway 01 ILS and hence aircraft operations it is recommended that this section of pipeline be laid below ground at a depth such that the top surface of the pipeline is at least 200mm below ground level. This will enable the 01 ILS to remain in service once the pipeline is installed.



Construction and removal of this section of pipeline will require the 01 ILS to be turned off however the works could be managed such to minimise this impact by executing the works at night and returning the facilities' to service during the day.

Prior to returning the facility to service, at the end of each work period the works site would need to be inspected by an Airservices Australia Radio Technician to ensure that the site is free of all plant and equipment and the works area has been restored to an acceptable condition i.e. no open excavations, trenches or spoil stock piles, free of construction materials and waste.

Runway 01 Glide Path: Nil impact on existing or proposed replacement Glide Path.

### c) Impact upon Brisbane DVOR

The Brisbane DVOR is within an area, which has been proposed to be used as a surplus stock pile (Surplus Treated A.S.S. Stock pile depicted on Figure 5.2c of the NPR EIS/MDP).

Works in this area may require the DVOR to be removed from service.

To minimise the impact of the proposed stockpile and associated works in this area upon the DVOR, works are not to come within a radius of 150m from the centre of the DVOR.

This may be reassessed when more detailed information regarding the works, plant/equipment types, stockpile heights etc becomes available.

### d) New Parallel Runway Radio Navigation Aid Requirements

### Type of aircraft approaches to New Parallel Runway

The NPR EIS/MDP does not appear to propose or make allowance for any new Radio Navigation Aids to service the New Parallel Runway.

What type of aircraft approaches are proposed to be supported by the new runway? visual only, visual and instrument - non-precision, or visual/instrument non-precision and instrument precision?

### GBAS siting information:

GBAS (Ground Based Augmentation System) is an emerging technology for the guidance of aircraft during the landing phase of flight, which is likely to be available by the time the new parallel runway is commissioned.

With this in mind the following information regarding GBAS siting criteria is provided for consideration and information.

### GBAS Siting Criteria:

A GBAS installation typically consists of four satellite receiving antennas (RSMUs), a VHF data link antenna (VDB) and an equipment shelter. The RSMU antennas are typically sited no closer than 100m from each other in a square. The VDB antenna and shelter may be airspace installed within this area however this is dependent upon the specific conditions of the site chosen.



### RSMU Siting Restrictions:

**Critical Area** - No obstructions are allowed within a 60m radius of any RSMU antenna. Outside of the 60m radius, obstructions maybe tolerated provided they remain below 2° elevation from ground level at each RSMU.

**Multi-Path Critical Area** - Large obstructions greater than 6m in any dimension (hangers or other large metallic buildings) may not be built in this area. The multi-path critical area is the area beyond the 60m radius and below 2° elevation from the RSMU antenna out to a radius of 500m from the RSMU antenna.

### VDB Siting Restrictions:

**Critical Area** - No obstructions are allowed within a 200m radius from the VDB antenna. Outside of the 200m radius, obstructions maybe tolerated provided they remain below a 2° elevation from a point 2m below the VDB antenna phase centre. The exact height of the VDB antenna depends on the site however it is typically in the order of 12m.

**Multi-Path Critical Area** - Large obstructions greater than 6m in any dimension (hangers or other large metallic buildings) may not be built in this area. The multi-path critical area is the area beyond the 200m radius and below 2° elevation from a point 2m below the VDB antenna phase centre out to a radius of 500m from the VDB antenna.

### e) Assessment of Potential ILS for New Parallel Runway 01L/19R

Without detailed dimensioned and co-ordinated drawings of the proposed new parallel runway it is difficult to accurately assess the potential for installation of Instrument Landing Systems (ILS) to service the runway. However based on the figures contained within the NPR EIS/MDP the depicted alignment of the proposed new parallel runway, associated taxiways and service roads may have both siting and operational implications for ILS installed on this runway.

As such Airservices request that detailed drawings be provided to enable an accurate assessment to be made and subsequent advice provided.

### **AVIATION RESCUE AND FIRE FIGHTING (ARFF)**

Further consultation is required on the following access issues for ARFF:

- a) The temporary fence to be erected for closure of Runway 14/32 during its upgrade cuts the perimeter road, restricting access to ARFF training ground. ARFF require the use of training ground throughout phase 1 of construction.
- b) ARFF require a more immediate access to alpha and bravo taxiways from the ARFF training ground without needing to use the overshoot of runway 01 or the perimeter road back to Mike taxiway and then cross 01/19.
- c) There will be limited access to the TAR building and ARFF require access to the TAR site for automatic fire alarm (AF A) response.



- d) ARFF Access impacted by the sand pipeline crossing the perimeter road. The traffic ramp over the pipeline on the perimeter road will need to be sufficient for ARFF vehicles (32 tonnes).
- e) After phase 1 completion, ARFF require access to the General Aviation apron from the Satellite Fire Station, which is impacted by the above ground pipeline south of the Satellite Fire Station.
- f) 'Surplus Treated Stockpile' adjacent to the VOR/DME appears to block ARFF access to crash gate 2. ARFF require access to crash gate 2 at all times.
- g) ARFF access impacted by above ground pipeline north of the Satellite Fire Station. ARFF require access to 14/32 from the Satellite Fire Station.
- h) The Satellite Fire Station is contained within a bund wall. ARFF require access from the Satellite Fire Station to all areas of airport.
- i) ARFF-require emergency access to the new construction area for vehicles 3.5m wide and 32 tonnes.
- j) There appears to be limited access to Kedron Brook Floodway and ARFF require access to launch water rescue craft.
- k) Construction work may limit access to crash gate 1. ARFF require access to crash gate 1 at all times.
- 1) We note the proposed site for the new fire station as identified in the MDP and seek further consultation on the details of this proposal.

### **ENVIRONMENT**

The following edits and comments relate to Volume D: Airspace.

### a) Page D3-49 (second dot point)

The second sentence states "Areas below the initial departure track and the initial turn are currently overflown by jet aircraft on departure."

This is incorrect and should be amended to "Areas below the initial departure track and the initial turn are **not** currently overflown by jet aircraft on departure."

### b) Page D4-61 (Table 4.1)

We note that Integrated Noise Model (INM) Version 6.1 has been used to model aircraft noise impacts as it was the latest available at the time of performing the calculations. However, INM



Version 6.1 has an error in the approach profile for 777200 aircraft and produces incorrect (higher) predicted noise levels for this aircraft. Airservices recommends using 777300 aircraft to model all 777 aircraft operations when using INM Version 6.1. Therefore, reference to the 777200 aircraft in Table 4.1 should be changed to 777300 aircraft. The approach profile error has been corrected in INM Version 6.2.

### c) Page D4-63 (Table 4.2a)

Reference to 777200 under the "INM Type" column should be changed to 777300 as for b) above.

### d) Page D5-168 (second paragraph)

States that "CDA starts at an altitude of about 6000 ft (approximately) 1830m) ...." This is incorrect. Under standard Continuous Decent Approach (CDA) profiles used in Australia a typical CDA approach starts at top descent which is at or above 30,000 feet.

### e) **Page D5-169** (5.10.1.2 first paragraph)

The second last sentence states "This means that these aircraft can use visual arrival tracks in instrument conditions requiring only a two mile arrival clearance".

This claim is not supported by Airservices. Under current operating requirements normal radar separation is three nautical miles and separation for wake turbulence varies between aircraft type and can be as much as six nautical miles.

### Other attachments

- Figure 1.1 NDB siting requirements
- Figure 2.1 DME siting requirements
- Figure 3.1 CVOR siting requirements
- Figure 4.1 DVOR siting requirements
- Figure 5.1 ILS Glidepath siting requirements
- Figure 6.1 ILS localizer siting requirements



### Mr Lincoln Steele

Formal Submission #227

**Position** Community individual

Organisation n/a

### Submission full text

### **NEW PARALLEL RUNWAY - ITS AFFECT ON THE COMMUNITY**

As a long time resident of Northgate I understand that you are considering the location for the new parallel runway and this letter is to ask if you can consider moving the proposed location further to the east.

Five points for you to consider;

- 1. Current proposed position sees this project only 1,500 meters away from properties with families living within, the affect of which sees planes landing 475 meters within these homes;
- 2. What compensation is going to be given to families living within the area. If this proposal goes through the value of properties will drop;
- 3. Jackson's Creek habitat will lose fish and prawn breeding areas with the dumping of 15 million cubic meters of sand:
- 4. Storm water control;
- 5. ANEF research data on noise control

Concerned resident

Lincoln Steele



### Mr Jim Stevens

Formal Submission #63	
Position Community individual	
Organisation n/a	
Submission full text	

Greetings,

For your information, the following is the test of an email sent on Saturday to Kim Flesser in response to his recent letterbox drop.

Email addressed to Cr Kim Flesser and also sent to BAC - entered as a Formal Submission:

<u> </u>
Quote

I have read your latest posting on the new runway proposals and I can understand some of your concerns.

However, anyone who has been living in this area for the last 12 years that you mention has known about the runway proposals for that long and anyone moving into the area should have been aware of them also - both groups should have considered all option by now and taken whatever action they saw fit action before this - the 11th hour.

For my part, I consider that the BAC has done a fair job of keeping the community in touch with their plans and progress.

As a fairly regular traveller and used of many international airports, I commend them on their performance - although there are a few matters what I would like more explanation for, and attention to.

1. To me, living close to the runway is not as important as the position of residences in relation to flight paths and scheduling of arrivals and departures. We have just returned from a week of dog sitting from our daughter who lives on Kays Road at The Gap and experienced more aircraft noise from aircraft overhead than we do at Davenant Street - all because here we are at right angles to the exhaust emissions of landings and takings of. It was a far different story when Qantas erected their engine repair and test facility over on the Pinkenba side of the property and ran their test in



the middle of the night. And of course it is different for the residents of Bulimba and perhaps Sandgate.

As to the 475 metre extra space you are campaigning for - as a traveller in aircraft that are constantly being upgraded in size and weight capacity I am comforted with any increase in separations of parallel runways in regard to increase traffic frequency.

For me safety is a major issue and I consider the choice of airlines a key factor in deciding with whom and when we travel - whereas QANTAS used to be the first choice and they are now only one of many whose air craftsmanship ranks them worth of patronage and support. And at the same time there are others with whom we just don't consider at any price. Here in Davenant Street, we hear more noise from the Gateway Freeway and the Hotel patrons than from the airport - a problem that doesn't appear to affect the residents of Melifont Street and its by ways.

- 2. Two matters come to mind that haven't been (to my knowledge) adequately addressed are:
- a) The catering for independent passengers arrive and departing using their own vehicles, and
- b) The non-harvesting of waste and storm water from the massive catchment which is airport complex.
- 3. Although we live within 12 minutes of the domestic terminal it costs us at least \$7.00 to take family and friends to and from the airport the "Meet and Greet" brigade which makes welcome to our city more pleasant. The BAC makes no provision for independent vehicle traveller and is over zealous in moving on and fining anyone who even dares leave the drivers seat to take the baggage of older or folk unfamiliar with the local scene from the car to the departure counter.

It would not take rocket science technology to provide a nearby waiting area where private vehicles could wait and be informed (by repeater electronic notice boards showing arrival and departure status of current aircraft movements - thus informed private vehicles could synchronise their arrival at a designated pick up point in safety and with the consideration now only shown to hire car and taxi patrons.

The number of cars illegally waiting at the Kingsford Smith Memorial will one day arouse the curiosity of BAC staff and probably result in a new set of parking meters on that site. After all, it is the Brisbane Airport Corporation and Brisbane Residents should at least be afforded the same or better courtesy and convenience as their visitors.

4. Harvesting and utilising tonnes of water that are used only once on the Airport Complex Site. Admittedly the present spell of dry weather make folk more aware of our wasteful habits - and BCC and QG are to be congratulated on their efforts (even if QG finds it hard to provide staff to implement their promises of fats refunds). However, in all the back and forth chat that has gone on



about where and when to dump waste water into Moreton Bay, I have yet to hear anyone come up with the obvious question, "Why dump waste water into Moreton Bay at all?"

That state government is spending millions of dollars on pipelines to take "grey water" inland from Luggage Point to protect their power industry sales to the Southern States. Whilst the combined brains or lack of them has noted the various sites available around the perimeter of the airport to access dumping into Moreton Bay - so far publicity has been given to noting that suggests that the airports excess water could, and should, be diverted to the Luggage Point reservoirs for onward delivery to powerhouses, industry and agriculture, west of Brisbane city.

If this course of action was studied it would soon dawn on the planners that a similar contribution could be utilised from the Nudgee Beach and Sandgate Treatment plants by the provision of a below high tide pipeline along the short foreshore to Luggage Point - or does the air conditioning of the conference rooms clean the alleged odour of treatment works?

Anyway, enough for now, it is now time to avail my garden of the 30 minutes hosing time - at one of the worst times of day as far as the plants are concerned - but better that than nothing I suppose.

Jim Stevens	
	end quote



### **Cr Shayne Sutton**

Formal Submission #141

**Position** Councillor for Morningside

**Organisation** Brisbane City Council

#### Submission full text

SUBMISSION TO DRAFT EIS/MDP FOR THE NEW PARALLEL RUNWAY (NPR) AT BRISBANE AIRPORT

This letter represents a formal submission to the Brisbane Airport Corporation's Draft Environmental Impact Statement (EIS) and Major Development Plan (MDP) for the New Parallel Runway.

In making this submission I acknowledge the submission made by Ms Jude Munro,
Chief Executive Officer for Brisbane City Council, which is made on behalf of the
Council. Council's submission covers a range of issues including: Council's concerns about the
NPR's impact on biodiversity, flooding and storm water drainage, waterways, transport and traffic,
aircraft noise and Brisbane's Central Business District.

While I wholeheartedly support all of the issues raised in Council's submission, my own submission to the EIS/ MDP focuses on key issues affecting local residents and key stakeholders (in particular schools) within the Morningside Ward.

At the outset, I once again express my deep disappointment at Brisbane Airport Corporation's lack of meaningful engagement with those residents and stakeholders it knows will be most highly impacted by the NPR project.

The EIS/MDP is able to identify the specific number of homes per suburb to be most affected by the NPR and is also able to pinpoint key schools to be affected (Summary of Findings ppl32-133, 144) but has not made any direct representation to these stakeholders in order to communicate these known affects.

As per my letter of 3 November 2006 to Mr Cam Spencer, NPR Project Director, I am extremely disappointed the Brisbane Airport Corporation (BAC) chose not to host information sessions on the NPR Project in any of the suburbs to be most directly affected by the project, particularly the suburbs of Balmoral, Bulimba, Hawthorne, and Morningside.



I am also disappointed BAC chose to decline my request for an additional information session in these suburbs so the affects of the NPR could be more clearly communicated to residents.

With regard to the specifics of the EIS/MDP my primary concerns are set out below:

### 1) INADEQUATE AIRCRAFT NOISE EVALUATION (Section D5)

The EIS/MDP bases its aircraft noise evaluations on N70 noise contours. There are a number of limitations to this approach. These include, but are not limited to, the following-

- a) The N70 contour does not communicate how high the noise levels will be within the N70 contour. It gives no indication as to the maximum noise level houses and other sensitive receptors (such as schools) will be exposed to within the N70 contour. In reality, the maximum noise level could be as high as 80dBA, 85dBA or even 90dBA.
- b)The N70 contour overestimates the noise insulation of Brisbane dwellings. Using N70 as the standard noise-measuring tool, assumes there is a I0dBA noise reduction inside residential homes. While this degree of reduction of noise might be relevant in colder climates where homes are insulated, this is not generally the case in Brisbane. The maps produced by BAC showing noise contours, give the impression that the N70 line indicates the limit of expected intrusive noise. This will not be the case.
- c) -The use of the N70 as a standard measurement of a 'noise limit line' was superseded in 1994 in the Australian Standard 2021: Acoustics-Aircraft Noise, Building Sitting and Construction, which recommended a living room criteria of 60dBa. The latest Australian Standard, AS 2012-2000, recommends an acceptable noise level limit of only 55dBA for living spaces.

AS 2012-2000 recommends a limit of 5OdBA for bedrooms that might be exposed to aircraft noise. If the average noise attenuation of Brisbane's homes is 5dBA (not 10dBA as it might be in colder climates), maps with N55 noise contours would give a more appropriate indication as to noise affects on residents.

### 2) INADEQUATE CONSIDERATION OF IMPACT ON EDUCATION FACILITIES

The EIS/MDP acknowledges that children are particularly vulnerable to the effects of aircraft noise, It provides a cursory notation of educational facilities that will experience a notable increase in overhead flights once the NPR becomes operational. Within the Morningside Ward these educational facilities include Morningside State Primary and Pre-school, St Peter and St Pauls

Catholic Primary School, Lourdes Hill College, Balmoral State High School, and Bulimba Primary School. It also notes that up to 17 childcare and kindergarten facilities may also be affected by noise caused by the operation of the NPR.



The EIS/MDP also acknowledges international research, which concludes aircraft noise can impair the cognitive performance of children. Despite this acknowledgement the EIS/MDP provides no indication of suitable noise mitigation measures for the most affected educational and childcare facilities it identifies.

### 3) INADEQUATE CONSIDERATION OF IMPACT ON LIFESTYLE AND SLEEP PATTERNS

The EIS/MDP claims there will be a minor net reduction of people who are annoyed and highly annoyed by aircraft noise. It also claims a minor net reduction in the number of people who are sleep disturbed and highly sleep disturbed.

Without an adequate noise impact assessment based on a N55 noise contour as outlined above, it is impossible to effectively judge the real number of people likely to be sleep disturbed and/or highly sleep disturbed once the NPR is operational.

Section 7.6.4 of the EISIMDP acknowledges the large body of international research into the affects of aircraft noise on sleep patterns and general lifestyle. It acknowledges that there is sufficient evidence that night time exposure to aircraft noise can cause a change in cardiovascular activity, changes in sleep duration, insomnia and fragmentation of sleep, increased daytime drowsiness and tiredness and a higher usage of non- prescribed sleep medication for those living with the affects of aircraft noise. (for example Franssen et al, 2004, 405).

Despite this acknowledgement, the EIS/MDP did not make any serious attempt to evaluate a curfew option.

Such is the available evidence of the impact of aircraft noise on sleep patterns that the United Kingdom's Heathrow airport now operates under strict night-time noise controls which include restrictions on the total number of aircraft movements at night (11:30pm - 6am), the types of aircraft which can be used at night, and a quota for the total noise allowed at night over a whole season (summer and winter).

At present, four Australian airports - Sydney, Coolangatta, Essendon and Adelaide -have night-time curfews in operation between the hours of 11 pm and 6am.

### **RECOMMENDATIONS**;

Given the above information, it is critical for the following to be addressed before the BAC is granted construction approval for the NPR.

i. The BAC should be required to produce maps showing N55 noise contour lines, and these maps should be distributed to all residents and key stakeholders (including schools) within the N55 contour so that the community can properly assess the noise impacts of the NPR.



ii. The BAC should be required to develop an effective Noise Management Plan for the now runway to ensure the quality of life of all Brisbane residents.

The *Noise Management Plan* should be based on N55 noise contour lines, developed in consultation with the local community, and should include but not be limited to the following:

- A deeper analysis of the impact on individual schools acknowledged by the BAC as having a notable increase in overnights, once the NPR is constructed is required. This analysis should take into account the unique particulars of each school site and make recommendations about appropriate mitigation measures. The implementation of these mitigation measures should be funded, at least in part, by the BAC.
- A night-time curfew, or at the very least a comprehensive night-time noise management plan, which contains measures similar to those currently in place at other Australian and international airports,

I trust my submission will be given due consideration. I look forward to working with the BAC in addressing the issues I have raised in this submission,

The new parallel runway will clearly add to the economic development of the region.

But we need to ensure this economic benefit is not 'traded off through a lessening of our quality of life.

Yours Sincerely

Shayne Sutton
Councillor for Morningside



### Mr Wayne Swan MP

Formal Submission #137

**Position** Member for Lilley

**Organisation** Australian Government

#### Submission full text

Dear Mr Spencer,

Re: Release of the Draft Environmental Impact Statement and Major Development Plan for Brisbane Airport Corporation's Proposed Parallel Runway

Thank you for the opportunity to present my submission and formally comment on the Draft Environmental Impact Statement (EIS) and Major Development Plan (MDP) publicly released late last year.

The construction of a new parallel runway holds signification implications for our local community and as the federal representative I am adamant residents' concerns must be fully considered.

This submission outlines a number of concerns that my local community continues to have with the Brisbane Airport Corporation's (BAC) proposal to develop a second parallel runway offset 2,000 metres northwest of the existing runway.

I have a strong view that the BAC should build their new runway as far away from residential homes as possible and I continue to maintain that the separation distance between the runways should be 1,525 metres as recommended by the International Civil Aviation Organisation (ICAO), not 2,000 metres proposed by the BAC.

The BAC's proposed location will see the new runway constructed just 1,500 metres away from the closest homes at Banyo and noise from runway operations will also effect nearby residents in Nudgee Beach, Nudgee and Northgate.

I am also concerned for those residents who will experience increased aircraft noise with flight paths now travelling over their homes at a greater frequency.

Residents of the suburbs of Hamilton, Hendra, and Ascot will experience increased noise with a significant number of planes travelling over their homes and generating noise in excess of 70 decibels. This increased aircraft noise will, for some, affect their residential quality of life.



I trust that you will take full consideration of the concerns I outline in my submission and I look forward to working with the BAC to address the issues raised.

It is incumbent on the BAC to manage the, at times, competing tension of airport development against the opportunity cost to residents living in areas surrounding major airports.

I firmly believe it is paramount that the expansion of the airport is not at the expense of the urban amenity currently enjoyed by our local community.

Yours sincerely,

Wayne Swan MP Federal Member for Lilley



### **KEY POINTS**

- The BAC should construct the second parallel runway a <u>maximum distance of 1,525m</u> northwest of the existing 01/19 runway.
- The revised EIS/MDP should document the <u>full impact</u> of noise generated from overflights
- The BAC should make publicly available N55 and N60 noise contours.
- The revised EIS/MDP should propose <u>practical means by which take-off and landing</u> <u>noise will be controlled</u> to protect disturbance to residents from ground-based noise.
- From the information presented in the Draft EIS/MDP there is <u>no reason why the</u> <u>proposed parallel runway should not be located closer to the 1, 525 metres optimum distance</u>, and every reason why it should:
  - It would maximise the buffer zone between the runway and residents living in the surrounding suburbs of Banyo, Northgate, Nundah, Nudgee and Nudgee Beach.
  - It is also likely to be of benefit to the residents of Ascot, Hamilton, Hendra by moving "inner" flight paths closer to industrial and buffer areas.

### **OVERVIEW**

As the Federal Member for Lilley I am concerned to ensure that the quality of life and environmental and urban amenity currently enjoyed by residents on the north side is not detrimentally encumbered by the development of a second parallel runway.

This submission outlines my continued objections to the BAC's proposal, specifically:

- 1. The excessive separation distance between the current runway and the proposed parallel runway. The runway separation is 475 metres greater than the international standard and therefore closer to residential homes than necessary.
- 2. The increased flight paths over southern suburbs in Lilley and suburbs west of the runway.

The flight paths and patterns included in the document reveal many suburbs will experience increased noise with the potential to interrupt their daily activities inside their dwellings.



### 3. The impact of the increased noise generated by the second runway

The Draft EIS/MDP does not adequately cover noise amelioration measures or consider the significant impact aircraft noise will have on local residents.

According to advice from acoustical engineers the Draft EIS/MDP does not fully quantify the expected aircraft noise levels and uses sound levels, which do not reflect the reality of the noise levels residents can expect to experience.

### This submission argues:

### 1. The runway separation should be no greater than 1,525 metres

The location of the proposed parallel runway should be no further than 1,525 metres to west of the existing runway, thereby ensuring a greater buffer zone between residential homes and a new runway (see Appendix A).

525 metres is the ICAO recommended safe and efficient standard for safe separation of simultaneous arrival and departure modes and it is therefore unnecessary to have such an excessive separation distance.

# 2. The revised EIS/MDP should document the full impact of noise from overflights and include the preparation of N55 and N60 noise contours.

The noise level parameters used in the Draft EIS/MDP do not accurately represent the level of noise and underestimate the interruption overhead aircraft will have on residential homes. Additionally, the Draft EIS/MDP refuses to concede residents living nearby to the airport will be adversely effected by operational and ground noise, even though Table 5.8e of Volume D5 shows that night-time noise levels due to the use of reverse thrust will be well the levels that will disturb sleep. (1)

# 3. The revised EIS/MDP should document the effect noise from aircraft take-off and landing will have on residents sleep amenity.

The Draft EIS/MDP should be updated to fully asses the effect of noise, from landing and take-off on the new runway, will have on the sleep amenity of residents in Nudgee, Nudgee Beach and Banyo.

It should propose the practical means by which this impact will be controlled to ensure that affected residents may continue to get a good night's sleep without disturbance from ground operations.



### **Proposed location of the Second Runway**

### 1.1 The proposed separation of 2,000 metres between the runways is excessive

As the Federal representative for Lilley I have a strong view that the BAC should build a second runway that leaves an appropriate buffer zone between residential homes and the airport runway.

The BAC is proposing to build and operate a new parallel runway displaced 2,000 metres to the west and parallel to the existing 01/19 runway.

I believe that the BAC's proposal to build the second runway with a separation of 2,000 metres is manifestly excessive when compared to civil aviation standards and regulations.

Australian regulations and standards stipulate that the centrelines of two parallel runways conducting simultaneous opposite direction operations need only be a minimum of 860 metres apart to comply with the Civil Aviation Safety Authority Standards for the Provision of Air Traffic Services.

As part of the Civil Aviation Safety Regulations 1998 6.2.5.2 states that:

Where parallel instrument runways are intended for simultaneous use, the minimum distance between the runway centrelines must not be less than:

- (a) for independent parallel approaches 1,035 metres;
- (b) for dependent parallel approaches 915 metres;
- (c) for independent parallel departures 760 metres; and
- (d) for segregated parallel operations 760 metres

Considering these regulations, the distance of 2,000 metres proposed for the Brisbane Airport development appears, prima facie, to be unnecessary and would only serve to bring aircraft noise and pollution closer to residential areas.

Sydney is currently Australia's busiest airport and the distance between their parallel runway is only 1,076 metres apart, allowing them operation at all times except during extreme weather conditions (2)

Sydney airport handles roughly 28.5 million passengers each year and currently 286,484 aircraft movements with their parallel runways only distanced 1,076 metres apart.

### 1.2. Reduced Buffer between homes and the second runway



The BAC's proposal to build a second runway with a 2,000 metres separation would impose significantly on the buffer zone that the residents of Banyo, Nudgee, Northgate and Nundah currently have.

Decreasing the buffer zone will have effects both socially and economically on residents in these areas, by exposing residents to increased noise and possible economic affects from reduced land and property values.

Local residents are not opposed to the development of the Brisbane Airport, however, it is responsibility of the BAC to ensure that the proposed design is not excessive and in the best interest of residents who live proximate to the airport.

It is prudent on the BAC to consider the impact their development decisions will have on residents and act according within the paradigm of an airport community partnership.

# 1.3 The logical placement of the proposed parallel runway is on the Kedron Brook side of the existing runway.

The Civil Aviation Safety Authority's Manual of Operational Standards specifies the minimum distance for independent parallel runways is 1,035 metres, but that a distance of 1,525 metres is more desirable and consistent with safety measures under ICAO standards and recommended practices. Additionally Brisbane's radar system already complies with separation.

The Brisbane Airport Corporation seeks a separation distance of 2,000 metres between runways, claiming it:

"...is adopted to optimise the availability and acceptance of Opposite Direction Parallel Runway Operations as described in Section 7..."(3)

# No evidence is presented supporting the theory that an increase of the separation distance beyond the 1,525 metres optimum will deliver any beneficial changes to either of these variables.

The natural conclusion is there is no evidence to support the claim that an additional 475 metres of separation distance "optimises" the availability of ODPROPS.

In fact, it still appears that the real reason the BAC is seeking this extended separation distance of 2,000 metres is:

"for optimum use of the area between the runways to continue terminal and related development." (4)



1.3 The rationale of placing the proposed parallel runway an additional 475m further towards Kedron Brook on the basis of further property development in the "Northern Development Area" is dubious.

From the material presented in the Draft EIS/MDP there is no reason why the proposed parallel runway should not be located closer to the 1,525 metres optimum distance, and every reason why it should:

- It would maximise the buffer zone between the runway and residents living in the surrounding suburbs of Banyo, Northgate, Nundah, Nudgee and Nudgee Beach.
- It is also likely to be of benefit to residents and of Ascot, Hamilton, and Hendra by moving "inner" flight paths closer to industrial and buffer areas.
- There is no evidence that placing the runway any further than 1,525 metres towards Kedron Brook will optimise ODPROPS.

### Flight Paths and Aircraft Movements

### 2. Flight Paths over residents in the Southern suburbs of Lilley

Residents understand that with forecast future growth in aviation movements there will be some discernible changes to the pattern of aircraft noise over the suburbs surrounding the airport. However it is imperative that residents quality of life is not significantly reduce because of increased aircraft noise.

According to the Draft EIS/MDP residents living in the suburbs of Ascot, Hamilton and Hendra will be exposed to increased noise levels with a rise in aircraft movements expected over their homes after the construction of the proposed parallel runway.

I am particularly concerned about these projections and the pattern of aircraft movements over dwellings in the suburbs of Ascot, Hamilton and Hendra. The Draft EIS/MDP also identifies that Hamilton State School will be adversely affected by aircraft overflights.

According to the Draft EIS/MDP these residents will be affected by increased aircraft movements measured above 70 decibels dB(A). This noise level is described as:

"...sufficient to disturb conversation, in that a speaker would generally be forced to raise their voice to be understood, or some words may be missed in speech from a television or radio."5

According to the Draft EIS/MDP I calculate that on a summer weekday in 2015 more than half of the suburb of Ascot will be subjected to at least 5 overflights at noise levels above 70 decibels and



that about a quarter of Ascot will be subjected to more than 20 overflights at noise levels above 70dBA.

Similarly, at the same time in Hamilton and Hendra, about half of each suburb will be subjected to at least 5 overflights at noise levels about 70 decibels. About a quarter of Hamilton and the southeast portion of Hendra will be subjected to more than 20 overflights at noise levels about 70dDA.

Naturally, the proportions of each of these suburbs subjected to external noise levels above 60 decibels will be substantially greater.

#### Based on the Draft EIS/MDP:

• For the residents of Ascot with the development of the new parallel runway, the expected number of N70 overflights in 2015 between the months of November to March and the hours of 0600 to 1800 will be 0-55. Alternatively if the proposed runway was not built, the number of N70 overflights in Ascot would only be 0-2.

### It is calculated that:

- 21% of residents in Ascot will see an increase of 20 aircraft movements or more generating noise levels of at least 70 decibels during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 38% of the residents in Ascot will see an increase of 10 or more N70 overflights or more during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 17% of the residents in Ascot will see an increase of 10 or more N70 overflights during the evening on weekdays in summer.
- 35% of the suburb of Ascot will see an increase of 5 or more N70 overflights during the evening on weekdays in summer.

### This pattern is the same in Hamilton:

- 24% of residents in Hamilton will see an increase of 20 aircraft movements or more generating noise levels of at least 70 decibels during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 30% of the residents in Hamilton will see an increase in 10 or more N70 overflights during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 22% of the residents in Hamilton will see an increase of 10 or more N70 overflights during the evening on weekdays in summer.



• 31% of the suburbs of Hamilton will see an increase of 5 flights or more N70 overflights during the evening on weekdays in summer.

### And again, in Hendra, residents will be adversely affected by aircraft noise:

- 5% of residents in Hendra will see an increase of 20 aircraft movements or more generating noise levels of 70 decibels or more during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 19% of the residents in Hendra will see an increase of 10 or more N70 overflights during the hours of 0600 to 1800 Mondays to Friday in the months between November to March.
- 4% of residents in Hendra will see an increase of 10 or more N70 overflights during the evening on weekdays in summer.
- 16% of the suburbs of Hendra will see an increase of 5 or more N70 overflights during the evening on weekdays in summer.

Based on these projections I am very concerned that the urban and sleep amenity of residents in these suburbs - Ascot, Hamilton and Hendra – will be adversely impacted.

### 2.3 Flight Paths Over Suburbs West of the Proposed Parallel Runway

According to the EIS/MDP the number of aircraft movements over the suburbs of Banyo, Northgate, Nudgee, Nudgee Beach, Northgate and Nundah will also increase dramatically with the construction of the proposed parallel runway.

### During a summer weekday:

- The range of N70 overflights in Banyo will increase from 0 1 to 0 28
- The range of N70 overflights in Northgate will increase from 0 − 1 to 0− 18
- The range of N70 overflights in Nudgee will increase from 0 to 0 110.
- The range of N70 overflights in Nudgee Beach will increase from 0 –10 to 0 110.
- The range of N70 overflights in Nundah will increase from 0 1 to 0 –10.

### During a summer weekday evening:

- The range of N70 overflights in Nudgee will increase from 0 to 0 12.
- The range of N70 overflights in Nudgee will increase from 0 3 to 0 37.
- The range of N70 overflights in Nundah will increase from 0 to 0 − 5



### **During a summer weekday night:**

- The range of N70 overflights in Nudgee will increase from 0 3 to 0 –8.
- The range of N70 overflights in Nudgee Beach will increase from 0 − 3 to 0 − 8.

I am very concerned by these projections because they will inevitably impact detrimentally on the quality of life for residents in these suburbs.

### **Noise**

3.1. The proposed separation distance of 2,000 metres will unacceptably reduce the buffer zone between the airport and residential homes.

The single greatest act of noise amelioration the Brisbane Airport Corporation could undertake would be to move the proposed parallel runway 475 metres away from the surrounding suburbs of Nudgee Beach, Nudgee, Banyo and Northgate. This point has already been covered in this submission.

However, even if the 2,000 metres separation distance is retained a major omission in the Draft EIS/MDP is what measures the BAC plans to take in creating a noise buffer between the proposed parallel runway and the high-density residential suburbs to the west (i.e. Northgate, Banyo, Nudgee & Nudgee Beach).

Currently these suburbs have miles of plantation as a buffer between them and the current runway. It is obvious that if a parallel runway is going to be built less than two kilometres from the closest house in these suburbs some compensatory measure of noise amelioration will have to be identified, quantified and provided by BAC.

3.2. The Noise evaluation in the Draft EIS/MDP does not effectively evaluate the effects the proposed parallel runway will have on local residents.

The Draft EIS/MDP uses the N70 contour in its assessment of predicted noise impact on the suburbs.

I am concerned that there are a number of limitations using the N70 contour as a reliable assessment measure.

### Namely:

- The N70 contour fails to outline how high the noise levels will be within the N70 contour and what the maximum noise level that locals and households will be exposed to within the contour.
- The N70 is based on the assumption that there is a 10dBA reduction in noise from outside to inside a dwelling. Considering the construction of Brisbane dwellings this assumption is an



overestimation. According to experts it is more likely that noise reduction, outside to inside is expected to be between 5dBA and 10dBA.

• The latest version of the Australian Standard 2012-2000 – Acoustics – Aircraft Noise, Building Sitting and Construction recommends that there should be a noise level limit of 55dBA. Therefore a better assessment measure would be N60 contour to identify the areas that will exceed the

AS2021-2000 criteria for living spaces by daytime and evening flights (assuming a 5-10dBA reduction outside to inside a dwelling).

- This limit would be appropriate to comply with the noise level limits for day and evening operations, however it would not adequately address sleep disturbance caused by night time flights and the use of reverse thrust at night.
- In fact the *AS2021-2000* recommends a limit of 50dBA for bedrooms and "dedicated lounges" exposed to aircraft noise. Therefore a N55 or N60 noise contour is needed to identify the areas that will exceed the *AS2021-2000* criteria for bedrooms by nighttime flights (assuming a 5-10dBA reduction outside to inside a dwelling).
- The N70 also under-represents the broader impact of aircraft noise. Because the N70 contour cuts off at 70dBA, it gives no information about the number of overflights generating noise levels slightly lower than 7-dBA, e.g. in the range of 65-70 dBA or 60-65dBA.
- The Draft EIS/MDP should be revised to ensure that the full impact of noise from overflights is documented. This should include the preparation of N55 and N60 noise contours.
- Because the N70 contour cuts off at 70dBA, the Draft EIS/MDP should be expanded to show the maximum noise levels that residents will be exposed to within the contour. Consideration should be given to plotting the N80, N85 AND N90 contours as a result.

The new parallel runway will have an impact on the pattern of aircraft noise in our local suburbs. This is predominately due to the changes to aircraft flight paths. I am concerned that residents in the suburbs of Hamilton, Ascot and Hendra will experience increased noise that will adversely impact on their health and wellbeing.

Furthermore, I am disturbed that children at Hamilton State School may be subjected to noise levels that will have an adverse effect on their learning.

The Draft EIS/MDP should be revised to ensure that this issue is fully addressed and appropriate measurers put in place to ensure that disruption to teaching does not occur.



## 3.3. Reduce separation will weaken the noise barrier between the second parallel runway and residents.

Ground-based noise associated with landing and take-off activity, taxiing and "engine run ups" (engine activity during aircraft maintenance) will increase with the removal of the mangrove and wetland buffer zone.

The suburbs within Lilley of Nundah, Northgate, Virginia, Banyo, Nudgee and Nudgee Beach are currently effected by ground-based noise from the airport and no doubt they will be affected to a much greater degree after operations commence on the new parallel runway.

### 3.4 The new parallel runway will likely have an effect on property values.

Contrary to the major findings outlined in "Summary of Major Findings 2006"(6), numerous studies have concluded that increased noise generated from airport operation or increased flight movements does have a fiduciary impact on property values.

An American study titled "The Effect of Airport Noise on Housing Values: A Summary Report" found that the effect of noise on house prices was most significant in "moderately priced and expensive neighbourhoods (7)". This was evidenced in the comparison between two moderately priced 'paired' neighbourhoods north of Los Angeles' LAX airport. This comparison revealed an 18.6 percent higher property value in the quieter neighbourhood.

A 1999 study titled "A Comparison of Models Measuring the Implicit Price Effect of Aircraft Noise"8 examined the impact the expansion of the international terminal at Adelaide Airport would have on residential property values. The study found that the effect of significant aircraft noise would lead to reductions in property values of between 11.6 percent and 16.2 percent9.

- Brisbane Airport Corporation (2006) Draft Environmental Impact Statement and Major Development Plan for Public Comment D: Airspace pp. 165
- 2)Sydney Airport can operate with this separation distance because they upgraded their radar system
- 3) Brisbane Airport Corporation (2003) Master Plan Draft for Public Comment.pp112.
- 4) ibid pp112. Major Findings' pp131
- 5) Brisbane Airport Corporation (2006) Environmental Impact Statement and Major Development Plan 'Summary of
- 6) Brisbane Airport Corporation (2006) Draft Environmental Impact Statement and Major Development Plan for the New Parallel Runway at Brisbane Airport "Summary of Major Findings" Page20
- 7) www.eltoroairport.org
- 8) Rossini, Peter et al (2002) 'A Comparison of Models Measuring the Implicit Price Effect of Aircraft Noise' delivered to 8th Pacific Rim Real Estates Conference pp 2.
- 9) Ibid



### **SUMMARY:**

It is imperative that the Brisbane Airport Corporation appropriately balance community concerns with their plans to expand the Brisbane Airport.

As the federal representative for Lilley I am concerned to ensure that the environmental and urban amenity of our local area is not detrimentally effect by the development of a second parallel runway.

I strongly believe that there needs to be greater transparency regarding noise predication and evaluation for the new parallel runway and that the BAC should produce maps which illustrate the N55 and N60 contour lines. This would greatly assist the community to properly assess the potential noise impacts of the new parallel runway.

Noise concerns are a serious issue for residents and it is vital the BAC endeavours to take all the necessary steps to mitigate noise concerns.

Noise abatement and amelioration measurers are critical to ensure the community's quality of life is not disrupted by increased noise.

Increased aircraft movements over homes, schools and colleges should also be avoided. I trust the BAC will find this submission constructive and the comments will be taken into consideration when evaluating the Draft EIS/MDP.

### Attachment:

Photo showing – "Alternative parallel runway location with a reduced runway separation distance."



### Mr & Mrs Kevin & Colleen Tarrant

### Formal Submission #156

**Position** Community individual

Organisation n/a

### Submission full text

- 1) Brisbane needs the same curfew as Sydney has no planes flying over suburbs in the very early hours of the morning.
- 2) Planes must fly over the Bay in over 90% of cases, where housing is considerably less dense.
- 3) Gateway Bridge duplication must not be delayed and should be finished in conjunction with the new runway project.



### **Mr Matthew Taylor**

#### Formal Submission #226

**Position** Principal

Organisation Pinkenba State School

#### Submission full text

To Whom It Concern,

I discussed the environmental impact document with students of the school and these are the responses they made (unedited) to the probability of increased traffic and aircraft movements.

### Noise

- \* Sound-proof our classrooms
- \* Shoot the planes down
- \* Don't shoot the planes down, the explosions will be even noisier
- \* Earplugs and earmuffs
- \* Radio headsets to talk to each other
- \* Air condition the rooms we have to soundproof
- \* Keep the windows closed
- \* Put silencers on the plane engines

#### Traffic

- \* More pedestrian crossings over Eagle Farm Road
- \* Traffic lights on EF road and Serpentine Rd corner
- \* Build a bridge across the road
- \* More speed school zone signs
- \* Make a car park from Serpentine Road instead of EF Road
- \* Block EF Rd at Tingira
- \* Make the traffic go past the army base and down Lomandra Drive



### **Mr Roderick Taylor**

Formal Submission #210

**Position** Community individual

Organisation n/a

### Submission full text

Thank you for the copy of the draft EIS regarding the New Parallel Runway & Brisbane Airport. Currently, my house is beneath both the arriving and departing aircraft (flight paths J & I).

The residents of this particular area are subject to the negative impacts of these arriving and departing aircraft, noise jet engine pollution, occasional shaking windows etc in a double dose.

This can only become worse when the additional aircraft traffic uses Brisbane Airport in the future.

While I appreciate the limitations of the site, I think it appropriate that the pain of having arriving and departing aircraft shared with other parts of Brisbane.

Please consider the quality of life for residents under both arriving and departing aircraft. Please consider sharing the load. By varying the volume of aircraft using flight paths J & I.

Regards,

Rod Taylor



### **Mr Craig Templeman**

Formal Submission #78

**Position** Executive Officer

Organisation Air Freight Council of Queensland Ltd

#### Submission full text

The Airfreight Council is an independent industry based organisation established to enhance Queensland's export competitiveness by facilitating international air cargo logistics, particularly for the export of agricultural and seafood products.

Today's global trade demands fast, efficient and reliable distribution. Air Freight provides a unique transport system to Queensland Exporters and potential exporters. The distinguishing feature of air freight is speed which offers exporters significant benefits by providing improved customer service for time sensitive products or where market demands vary. The vast majority of freight is carried in the bellies of passenger aircraft; aircraft capacity varies with aircraft type, passenger load and sector length, etc. Generally however, a B747 operating from Brisbane or Cairns to Asia can carry approximately 20 tonnes (with full passenger load). A B767 carries approximately 16 tonnes under the same conditions.

The number of Queensland exporters choosing to use airfreight to take their goods within Australia and to the world is increasing exponentially. This is a result of individual business initiatives, but also the efforts of the Queensland Government to attract overseas interest in the State's expanding range of time sensitive products such as seafood, flowers and agricultural products. The ability to respond to this growing demand through airfreight capacity is essential.

While it is important to ensure that Brisbane Airport provides the infrastructure and services to be able to respond to growth in passenger numbers, it is equally as important for Brisbane Airport to be able to respond to the needs of our exporters, who will require additional aircraft space over coming years to satisfy the needs of buyers. The buying decision is based on who can provide the required goods on time, in good quality and at a competitive price.

The New Parallel Runway, which will provide the infrastructure capacity for the additional aircraft that will be needed to cater for growth in passenger demand, will in turn, provide Queensland's exporters with ready and regular access to valuable markets that they will continue to nurture in coming years. The delays envisaged for Brisbane Airport in the event the runway in not built and in fact the loss of flights to and from Brisbane that this lack of infrastructure would drive will have



detrimental impacts on Queensland industry and exporters, as well as the numerous associated businesses that would suffer. Similarly, employment opportunities would be negatively impacted.

It is also relevant to point out that Brisbane has an important and valuable advantage over other Australian airports in that it can offer buyers access to goods 24 hours a day, seven days a week. We believe this level of accessibility is essential and should be protected to the benefit of Queensland business and exporters.

As a supporter of the development of Queensland's export industries, the Airfreight Council fully supports Brisbane Airport Corporation's proposal for a New Parallel Runway. It is essential infrastructure around which the livelihoods of many Queenslander's is based.

Yours sincerely,

Craig Templeman



### **Mr Robert Teoh**

Formal Submission #35

**Position** Community individual

Organisation n/a

### Submission full text

Dear Sir,

To Whom It May Concern

I have read the content of the reports and reviewed the DVD and CD.

I must say, the new parallel runway for the existing airport is crucial to the growth of the tourism industry in Queensland. In fact it is an integral part of the state's infrastructure plan for the next ten years.

Local community may disagree to the new parallel runway due to the noise problem. A noise level of 75 decibels during the day is within the safety level. At night the noise has to be reduced to 40 decibels.

Robert Teoh



### Mr & Mrs Clem & Jan Thiele

Formal Submission #53

**Position** Community individual

Organisation n/a

### Submission full text

Dear Sir/Madam:

We support in total the criticisms, queries and suggestions in Councillor Kim Flesser's newsletter that arrived in our mailbox this morning - see photocopy attached.

If the changes that Cr Flesser propounds are believed to be unworkable, we consider the Brisbane Airport Corporation and its advisors have a duty to publish their reasons and to allow a reasonable period for public digestion, discussion and action prior to any Federal Government determination on the proposed new runway.

Yours faithfully,

Clem & Jan Thiele



### **Mr Rodney Thorburn**

#### Formal Submission #98

**Position** Community individual

Organisation n/a

#### Submission full text

I have examined the "Summary of Major Findings, 2006," of the New Parallel Runway Project and also the "Flight Path and Noise Information Booklet", both of which you forwarded to me at my request.

The reports are clear and thorough and still concise.

Volume A: I accept the rationale for the need for the project and the reasons given. The population growth and aircraft movement growth are clear.

I agree that Option 3 of the runway options that were shown is the best option.

The runway fill and source of the runway fill is reasonable as millions of cubic metres of material has already been taken from Moreton Bay. This will make no difference.

The phases of the runway construction and timetable appear as normal civil engineering requirements. The placement of runway fill and treatment are normal.

I note your work on public engagement and sustainability.

Volume B: The land use and planning with studies on geology, soils and groundwater are noted and appear to have the correct conclusions. The stable shoreline is noted. The land and marine ecology line is noted. I see nothing to be concerned about here and similarly with the cultural heritage studies. The work on surface hydrology and water is noted.

The Surface Transport is interesting with estimations on vehicle per day. However I have no doubt that if it is all coordinated with proposals for traffic flow through Brisbane both under construction and future that there can be catered.

Volume C: The area of Moreton where sand fill is to be obtained should have no problems considering your proposals for mitigating interference in the ecosystem.



Volume D: The introduction of the NPR will of course impact on noise around the city suburbs (both increase and decrease) and as a result of changed aircraft movements. Air emissions are a fact of life in the city, but any adverse impacts to health or society are manageable as they have been in the past. The Airport Architecture section was of interest and while your projected planning of aircraft movement appears quite reasonable, there is always the option of further fine-tuning. I note that work on the cross runway will cause some temporary difficulties also.

The noise information booklet was also of interest and the minor increases in aircraft movement over my suburb are of no concern.

This is a good project!



### **Mr G Thornton**

Formal Submission #27

**Position** Community individual

Organisation n/a

### Submission full text

I'm writing to object strongly to the new parallel runway. BAC consistently states that at the moment only a small percentage of aircraft land and take off over the eastern suburbs. I'll tell you what, they most certainly make up for lost time when they do. Particularly at peak hours, every couple of minutes. Just imagine what this will be like in 2015 with 2 runways going in the same direction, even though they will be a certain distance apart. Also a night curfew has to be introduced. One plane wakes people up and wrecks their sleep for the night. It is not to be tolerated.

Yours,

G. Thornton



### Mr Tim van Hooff

### Formal Submission #40

**Position** Community individual

Organisation n/a

#### Submission full text

\* WORK ON THE NEW PARALLEL RUNWAY PROJECT SHOULD NOT PROCEED UNTIL A PERMANENT NIGHT CURFEW IS IN PLACE \*

I object to the New Parallel Runway Project on the basis that it should not be allowed to proceed until a night curfew is permanently in place.

Opponents of a night curfews continually roll out the same old arguments; we are continually told:

- \* such a curfew would hold back economic development (jobs)
- \* a curfew would restrict flight operations because they have to fit in with IATA worldwide schedules
- \* there is no need to worry because aircraft are continually getting quieter.

Those arguments have been the standard tactics of airport operators for over 15 years, and are clearly not credible for the following reasons:

- \* Brisbane airport, to date, has had limited night time flights, yet it has continued to expand rapidly
- \* Generally, cities with airport curfews continue to grow at a similar pace as those without curfews
- \* The quieter aircraft claim has been around for over 20 years and despite any improvements, it is obvious to anyone who experiences current aircraft noise that they continue to be a major disturbance in even in day time hours, and can be unbearable during sleeping hours.
- \* I specifically request that the BAC outline its plans for future night time flights, including the type of aircraft and expected passengers/cargo.\*

Proponents of the new runway insist that there should not be a curfew, but they also tell us that they have no plans to increase night flights.



If they have no such plans, then they should agree to a curfew out of respect to those people affected by aircraft noise.

The economic benefit (jobs) argument has been very dominant, yet why should only one section of the community bear the brunt of the costs? (those that have to suffer through aircraft noise & sleepless nights). To not impose a curfew before the new runway is operational would be a very divisive policy, and could eventually lead to conflict if one section of the community was placed under extraordinary stress from aircraft noise in a open slather/curfew free environment.

Airport operators have said they have no plans to increase night time flights, so the economic cost of having a curfew would be minimal, and would be far outweighed by the economic cost of lost productivity, health & social costs associated with sleepless nights cause by aircraft noise.

One argument often raised by those opposed to any restrictions on airport operations, is that the airport was there before the residents, and if they did not want aircraft noise they should have moved elsewhere.

On the surface it sounds plausible, but that argument only holds weight if the airports' activities do not expand.

In this case the residents were there before the new runway, so it is the airport that has to make the concessions for the existing occupier.

Airports are now run as businesses and should face the same restrictions on nighttime activities as all other businesses in residential areas.

This is a civilized country where the rights of individuals to enjoy a peaceful night's sleep should not be sacrificed for a perceived, but in reality non-existent or marginal, economic benefit.

There is no need for even an enquiry into the feasibility of a curfew because the right to a peaceful sleep time in residential areas is already enshrined in our culture and laws. It would be a very dangerous precedent to allow a business consortium, in pursuit of its own profit, to override that right.



### Mr Jack Vandenberg

**Position** 

Organisation C.F.R.O

### Submission full text

Even if we have not made any submission before, we did study all the info that was sent to us, and we thank you for that. We did listened and looked to many different aircraft going over our area. Some close by, but very high and some in different directions.

We also know that the new parallel runway is going to be further away from us here in Wynnum, and so would have little impact on the Wynnum population.

We also do realise that the future development of Queensland will include more airport facilities.

We can only wish B.A.C the very best with its planning of all their new technology in the Brisbane Airport.

Yours sincerely,

For C.F.R.O.

Jack Vandenberg



### M.L & J Waldock

Formal Submission #62

**Position** Community individual

Organisation n/a

### Submission full text

A submission from ML Waldock and J Elliott

I am a home owner and resident of Nudgee and am extremely concerned for the quality of life for both the district and myself when the parallel runway is built two kilometres closer to our homes.

I am already disturbed by the airport ground noise, as well as take off and landing noise at all hours of the day, but particularly at night and in the early hours of the morning. How will this noise disturbance be better for me when they new runway will be two kilometres closer?

It is true that by installing double glazed windows and air conditioners may help to eliminate some of the noise; however this is a huge expense, which many residents cannot afford. As well as the cost factor, how is having a higher number of electrical appliances going to impact on our environment?

As far as the noise impact of the new runway is concerned, maybe implementing a nighttime curfew will minimise this problem, at least in the quality of life for the surrounding residents. As Sydney airport (which is a much busier airport) has managed to enforce a nighttime curfew it surely makes this a feasible compromise?

Also, who is going to compensate me when the value of my home decreases due to the increase in airport noise in my area? Or when my quality of life is impacted by this runway opening? I live beyond Nudgee Cemetery but I am disturbed at all hours of the day and night by aircraft and ground noise. I am concerned that any compensation that is paid will only be paid to those residents living closest to the runway?

I also have concerns about the destruction of 115 hectares of mangroves and waterway habitat along Jackson Creek, and the potential flooding of residential areas with storm water from the new runway flowing into Kedron Brook. Moving the runway 475m further east and running the storm water directly into Moreton Bay, thereby saving the important fish and prawn breeding area of Jackson Creek, will certainly help the environment.



Why hasn't the BAC produced a Noise Exposure Forecast map for the new runway? Is there something being hidden? Noise will not stop at any line on a map, but at least people would be able to have some indication as to how much they will be affected.

Please consider your neighbours, avoid their anger, frustration and abuse by at least implementing a nighttime curfew, moving the runway 475m east and compensate <u>all</u> of those affected. It would be a great exercise in public relations. You would gain the gratitude and respect of those in the surrounding suburbs, as well as those living under the flight path, and you will still be able to ensure huge profits for yourselves.

Yours sincerely,

M.L & J. Elliott



### Mr Mick Walker

Formal Submission #106

**Position** Community individual

Organisation n/a

### Submission full text

Dear Sir/Madam,

I strongly object to the placement of the new runway being so close to existing homes due to the 2,000 metres width between runways. I believe this proposal is purely based on economic greed with very little thought for the people of Brisbane especially those immediately affected by the same.

- The recognised world's best practice is 1500 metres (Sydney Airport can function at 1075 metres between runways)
- The extra 500 m between runways will have a catastrophic affect on the environment the loss of wetlands due to this is tragic and avoidable e.g. Jackson's Creek will be gone.
- The closeness of this runway to sensitive migratory bird roosting site at Nudgee Beach must be considered this is of international and environmental concern according to RAMSAR agreement.

If this runway is placed 2000 m separation from the other it will be a disgrace - there can only be one reason for this - economic greed.

Yours sincerely,

Michael Walker



### Ms Yvonne Webb

Formal Submission #113

**Position** 

Organisation Residents Association of Moorooka

#### Submission full text

Moorooka Residents Association.

- 1. <u>Limitation of the present airport.</u>
- The Airport is inappropriately sited. Being limited by factors including the Moreton Bay Marine Park and declared RAMSAR site attracting birds. (A,1.1.1) the airport is compromised when trying to choose the best site for an extra runway.

Consequences of this site:

- Orientation of the new runway in such a way as to minimize the noise is impossible with such physical barriers.
- Bird strikes (D,8) are a safety issue as well as a financial cost. Three criteria are stated for the development of flypaths, the most important being safety (D3.4.1). As the port of Brisbane further attracted more migratory birds to the area and as air traffic increases, maintaining a safe landing and takeoff environment will be more difficult.
- Adding an extra runway will exacerbate the problem.

Environmental Management (A 1.1.4.5) as stated in the report is written in terms of minimum standards being met. The benchmark of the international environment management system again which its own performance in measured is a curious one given that there are not many, if any, other international airports in the world bounded by a listed RAMSAR site and a Marine Park. The report states that 'the BAC has maintained an excellent environmental record and has never been found in branch of regulations.' (A1.1.4.5). Killing migratory birds the area is not listed as of environmental concern.

It is proposed to clear the planted Casuarina forest (B 12.7) to either use as a fuel at a power station or to sell for chip for the proposed Option 3. This is environmental vandalism considering that those trees would be mopping up CO2.

Consequences of this:



How the airport is behaving as a good environmental citizen is unknown

Comparison of Buffer Zones with other airports is misleading (A1.1c) Cairns and Coolangatta do not have anything like the equivalent of the long southern approach of Brisbane. Coolangatta is well placed to enlarge its operations without causing a proportionally increased problem on approach or takeoff. At Cairns, where they are restricted from flying over the central area of Cairns city, the planes turn back towards the sea on lift off. Sydney after much angst and threats of potentially lost political seats, sorted out its problems and now functions adequately.

### Consequence of this:

• Buffer zones are only relevant for noise close to the ground. Annoying aircraft noise has a much greater spread.

### 2. Limitations of Airport Master Plan and the Need for another Runway

\*There has been historically little innovation. The FAC prepared a 1991 Master Plan using the 1983 blueprint, adopting the same airport layout (A 1.1.5). The size of planes and people's expectations of air travel bear little resemblance in 2007-2015 and beyond to 1983 and before. Yet this has only been acknowledged in the report in a commercial sense.

### Consequences of this:

• There has been no research done by the BAC to ascertain changing values associated with airports and aircraft noise by the community. This airport has been historically conservative. Data is used throughout this submission, from other airports and other countries as an argument for a particular position, without handing validated the reliability of so doing.

\*The Master Plan approved by the Minister in May 2004, allows various parties to comment on the way the airport intends to grow.(A 1.1.4.3). There is no indication of what commitment or involvement is required to deal with various comments.

### Consequences of this:

 The community is sceptical that serious consideration and implementation will not occur of comments and complaints received in terms of the new proposal since there is no evidence provided of processes and mechanisms, which have successfully dealt with comments and complaints in the past or in the present.

<sup>\*</sup> The need for another runway based on history of growth trends has not been presented convincingly. (A, 1.3). The historical numbers have been presented averaged out over long time periods. There is no indication whether there might have been a sharp increase in growth in the



early years and then a gradual decline. A yearly graph over those time spans might have been more informative. As the presentation stands, the figures work against the idea that Brisbane Airport needs another runway.. Table A 1.3 summarises the existing and forecast passenger and aircraft movements. The figures demonstrate a decreasing compounded annual growth in the period 2005-2015 and 2015- 2035.

Aviation and tourism are volatile industries. At present Australia as a whole is experiencing decreased numbers of visiting tourists.

Aircraft are getting bigger so while frequency is important, getting more 'bums on seats' may decrease aircraft movements quite significantly in the future, further threatening the investment in another runway.

The energy debate and the call for a reduction in carbon emissions is likely to become a hot issue. Already, the EU has a lot to say about curbing aviation growth. It is likely to be the way of the future in intelligent communities.

Consequence of this:

A white elephant may be built resulting in a poor investment.

\*One of the objectives cited is to centralise 'Brisbane airport as a major contributor to the regional economy. (A1.4) It could be argued that it makes more sense for airports to develop where there are expanding movements of population in SE Queensland..

#### Consequence of this:

Brisbane Airport and arterial roads to the airport would become ever more congested while travellers would travel ever increasing distances to the airport

\*SE Queensland is fortunate in that there are already a number of small airports, which are able to grow with the concomitant developing population eg Coolangatta and Sunshine Coast. Like it or not, the Gold Coast is Australia's premium tourist destination so it is likely that with Coolangatta's lengthened runway they will be capable of handling jets directly from Asia. A 6.12% growth is predicted for Coolangatta (A 3.2.3. 1), unlike Brisbane.

#### The consequence of this:

- Airlines and travellers are likely to choose the smaller airports closer to relevant destinations. Table A 3.2a demonstrates the increasing traffic at the small Airports of SE Queensland up to 2006.
- Low cost carriers such as Jetstar are drawn to airports where they can lower their costs
  and leisure travellers do not strongly object to out of capital city airports. The European
  experience of Ryanair and Easyjet demonstrate this.



The use of Military facilities in the submission has been totally ignored and omitted. Yet it shouldn't be because there are precedents for their use at Townsville (Garville) and Newcastle (Williamtown). Amberley west of Ipswich is presently underutilized It can be argued that Ipswich has a population of about 140,000 and the population plans for SE Queensland show developments moving west. So there is some sense in having a second airport at Amberley.

### 3. Attitudes of the Community to the Present Airport and the Present Problems.

\* Aircraft Noise is an issue now. Table D 9.5 shows emphatically that of those surveyed from the Southside of Brisbane 61.7% were concerned with noise and a further 46% were interested in air space.. Very powerful figures now. The focus group came up with the same issues of noise and flight paths.

Yet there is no information on how this noise is being reduced in general, other than at night, and how the BAC intends to reduce it further during the day in the future as air traffic further increases. To date the solution suggested has been to give people more information. About what, pray? The obvious response is to direct more southern arrivals to a sea approach, with a long term plan, say 5 years, when this re routing would be complete.

There is sensitivity by the BAC to night noise (D 2.6.4) but that is not when the majority of the traffic occurs. However, even at night the troublesome southern approach over the southern suburbs is used. It has been contended that noise abatement at night 'has gone as far as possible'. Little if anything has been documented for noise abatement from early morning to late evening, especially at peak hour.

It is revealed that the frequency with which aircraft can arrive is every 2.5-3 minutes, the exception being in low visibility. With a capacity limit of 59 movements per hour (D2.7.2)

The consequences of this are:

- Planes arriving from the south on the narrow flypath over the southern suburbs every 2.5 -3 minutes over a couple of hours when one is waking and the family preparing for the day's activities is very stressful. The same stressful pattern is repeated in the evening when families need quiet time together.
- At Moorooka on occasions I have recorded over 60 planes in just over a 2 hour period. Just the act of recording such frenetic activity is stressful. This is unacceptable.

The statement is made (D 2.6.4) that at any point on descent the height of aircraft is fairly constant. For example at Moorooka the planes are said to be about 3000ft above sea level. Since Moorooka is quite high, this accounts for the reports of low flying noisy aircraft. The planes are not flying 3000 feet above ground level at elevated sites.

The consequence of this statement



• There appears to be a discrepancy between what is written and what is observed and experienced by residents under the southern flypath until it is realized that the planes are not 3000feet above the houses but considerably less because of the elevations. Some planes from the west, particularly near the 7am peak sweep in from the west, slow, loud and low overhead with a whistle and sometimes a reverse thrust as well! According to the documentation provided this doesn't happen. This explains what and why this is happening.

The N70 contours (D2.8.2), which are based on average values tend to flatten out peaks

The consequence of this:

The magnitude of the problem is minimized.

It is suggested (D7.9) that people get used to a steady noise. Is that what the BAC are hoping? Aircraft noise, such as that from planes which fly over the southern suburbs is variable in intensity and frequency and pitch and therefore this idea does not apply. It may apply to airport ground staff particularly if they are partially deaf.

The Public Engagement (Table 9.5) identified 5 distinct geographical groups with problems and concerns corresponding to flypath patterns, with 32.6% of total responses from the 'southern sector' of Brisbane (D..5) This was by far the largest group response.

#### Summary

Many people are concerned about aircraft noise in Brisbane but more people are concerned by more aircraft noise in the southern approach suburbs.

## 4 Attitudes to the Proposals and the Consequences

- There is no discussion in the report, other than as a literature review of the existing noise problem in the southern suburbs under the long straight flypath from Archerfield to runway 01. And there is no proposal on how that will be fixed in the future. SODPROPS (D, 3.3. 1. 1) which is claimed to be a noise abatement technique will not be available when traffic is heaviest. Yet the need for noise abatement is greatest when traffic is heaviest.

It is stated in (D 3.4.2,3)) that existing flypath corridors will be maintained where possible. Indeed several times in the report it is mentioned that traffic on the 01 route will increase. I also have a letter from Air Services Australia confirming this although Principles for Development of Flypath and Modes of Operation (D 3.4.2) item 6) state that residential areas overflown by aircraft, will be minimized to the extent practicable. To date, this has not been enough.

There is total denial of the real problem and D5 clearly states that noise levels are expected to increase until 2015.



### The consequence of this is:

- People have feelings of helplessness, which further elevates stress levels (D 5.7).
- The question needs to be asked why is money being wasted on this exercise if the main problem presently existing is not to be addressed and fixed before expanding.
- There is no transparent indication of how 'the extent practicable' would be arrived at. It should consider the volume and the frequency of the noise.
- There has been no research by the BAC to ascertain what level, if any, of noise would or could be tolerated by the community. The monitoring of noise levels of some planes is apparently being undertaken at present but is unlikely to result in noise abatement.
- There is also a general literature review in the report, which isn't relevant because of the samples chosen and the types of noise studied.

## The consequence is

- The BAC is either not interested and intending to do nothing about the communities' complaints about flypath noise or else have a preconceived judgement of the community's tolerance. Neither is acceptable
- The report further ignores the findings by only addressing vulnerable groups in regards to daytime flypath noise as defined by a textbook. Surely everyone under the descending flypath is vulnerable not only shift workers, the frail and the young and the elderly. Parents might like to have a nap during the day while children are away. Many people who work mainly at night as in the music and entertainment industry usually go to bed after midnight and try and sleep until midday. There are many other not considered (D 7.10.2.2)

#### The consequences are:

- Gross under-representation of the likely numbers of people affected by noise. Am extra runway will mean more flight movements and therefore more sleep disruption. The numbers become enormous.
- Expansion may prove a bad investment if the noise problem becomes a political issue.
- The spin presented to try to provide a more favourable report on noise beggar's belief. It tries to convince the reader that a few people might initially experience less noise with the opening of the new runway so on average the problem will be less. Rather like trying to prove statistically that a person who has his head in the fire and his feet in ice, that statistically he is comfortable! (D, 9.7.2.1)



#### The consequences are:

- The stress levels increase just reading this report
- On reading the report there is a feeling, that the writers are conscious of the results expected and direction that their proposal should take, i.e. to build a parallel runway at minimal cost. In many places poor or inappropriate research techniques have been used to dilute possible adverse results. For example, there is poor choice of scope of the Research of the Public Engagement Program (A 6.2.2

A random sample for the questionnaires and telephone survey should have been taken of those under the flypaths. Instead, the random sample was taken from people living and working in distances in concentric circles from the airport. There would be quite a number of areas where planes do not fly. This manipulation of the data, not necessarily on purpose, could and would lessen the percentage of the total who would complain about noise and increase those who would respond that they did not have a problem. Knowing that in places where planes don't fly people don't have a flypath noise problem does not add anything to the real solution of the problem.

#### The consequences are:

- The results will not be a true reflection of the magnitude of the problem. They will be diluted and distorted(A 6.2.2. 1)
- The random telephone survey assumed a prior level of knowledge (A 6.2.2. 1) No time for reflection of the possible effects were mentioned.
- No input from along the major roads leading to the airport eg feeder roads to the Gateway
   Bridge. Groups living and working along all strategic roads feeding into the airport roads.
- All the facts and arguments presented are weak or don't apply in this context.
- Money, time and resources were spent developing the ANEF contours. Pity they didn't include all of the southern suburbs under flypath 01 eg Moorooka and Tarragindi where complaints are coming from.

#### The consequence is:

- One needs to understand the limitations of the charts and therefore they are of limited value for many readers.
- Ignoring a problem doesn't make it go away.

#### 5 Other issues.

- Now that Brisbane residents are encouraged to have water tanks, residues from carcinogenic and trace element aircraft emissions (D Table 6.5c) need to be monitored in the water tanks under the flypath. Although the community is not encouraged to drink the tank water, it is most typically used for the garden. Many edible plants take up these molecules into the plant (well documented



elsewhere) and then humans ingest these polluted fruits and vegetables. What is deemed a safe concentration in the air may not be so when concentrated in water and then further concentrated in plants to be consumed. This topic is not raised in the report and is a serious omission.

There is no data presented I the report to suggest that emissions will decrease in the future. With bigger planes, they may increase. The Tarragindi Reservoir which is a source of Brisbane drinking water should be regularly analysed for the pollutants from the aircraft emissions, and this be financed by the BAC.

The consequence of this is:

 A possible increasing contribution to cancer incidence and various health problems of reproduction and metabolism is invisibly and silently occurring.

Financing of the proposed parallel runway has not been presented. The State government, i.e. the taxpayer, should not be expected to fund such a project. The airport is now in private hands and owners should seek to raise the appropriate capital and take the associated risks. The government should not be expected to be a fall back for failed private developments.

The consequences of this:

Taxpayers should not be expected to approve this weak proposal without some kind of financing detail. Advancing a proposal for another parallel runway on such weak data at this time elicits a level of arrogance.

#### Recommendations;

- 1. Brisbane Airport has limited expansion capabilities and therefore should not build a parallel runway as proposed.
- 2. Capacity limit of 59 movements per hour only be allowed if both arrivals and departures occur over the sea
- 3. That capacity on the existing runway not be allowed to increase until suitable noise abatement strategies are developed and implemented.
- 4. That the BAC install and own aircraft noise monitors exclusively for noise alleviation data. One of the sites to be Toohey Mountain
- 5. That a community subcommittee be formed to monitor the success of the noise abatement program



- 6. That BAC work with Air Services Australia to produce a useful result and changed flypaths rather than each blaming the other for intransigence.
- 7. That BAC establish procedures and monitor carcinogenic and trace element aircraft emissions contained in residential water tanks and edible vegetables under the flypaths
- 8. That the BAC embrace the Smart State philosophy and introduce innovation and funded research to be a good corporate citizen and to be seen as such.

## TAKE HOME MESSAGES:

- 1. Of those surveyed from the southside of Brisbane, 61.7% were concerned with noise and a further 46% were concerned with flypaths. Comments presented, based on data provided, demonstrate that, the results are a gross under representation of the present problem.
- 2. A need for the further expansion of Brisbane Airport has not been presented.



# Ms Jane West

Formal Submission #139

**Position** Community individual

Organisation n/a

#### Submission full text

We live under Flight path 01. Flights landing over us are noisy, especially large planes. At the moment, the numbers of flights are limited because during the day weather permitting, incoming flights fly over Carindale, Cannon Hill etc. The NPR proposal has all flights on this latter flight path diverted onto the new flightpath F, which means the amount of daytime noise from arriving flights will increase significantly for those suburbs on a direct line from flightpath 01. Eg P34 summer weekday day 2015 with the NPR: no of flights 62 (17% total jet flights on path), compared with p22 summer weekday day 2015 without the NPR: no of flights 28 (8% total jet flights on path).

I understood a stated aim was to leave existing flight paths intact where possible - whereas under this proposal aircraft noise for suburbs directly in line with flightpath 01 will get much worse because we are getting the additional traffic from a different flightpath.



# **Mr Greg White**

Formal Submission #83

**Position** Community individual

Organisation n/a

#### Submission full text

Dear Sir/Madam,

As a concerned resident, I wish to air and out on record some of my fears in relation to the proposed new airport runway.

- (1) LOCATION & PROXIMITY: If the project goes ahead, my property will only be two kilometres as the crow flies from the tarmac. I would like to see the runway pushed 500 metres further to the east, as I believe the international standard for parallel runways is for a separation of 1.525 metres. The farther away from residential homes the better for obvious reasons. Even now when the wind direction is from the east, the airport can be heard in the wee hours.
- (2) ENVIRONMENTAL: I'm told much of the mangrove and waterway habitat along Jackson's Creek will be destroyed with the proposal. If the runway was pushed 500 m further to the east, would this mean much more of this fish & crustacean breeding are be saved? This is a favourite local fishing and recreation haunt for locals.
- (3) NIGHT CURFEW: With more frequent flights over or near residential areas, a night-time curfew should be implemented for the peace of residents affected. Another reason for the runway to be pushed 500m further to the east.

I am not anti-progress but hope the Brisbane Airport Corporation takes into consideration local residential lifestyles and concerns on this matter.

Thank you & Regards,

Greg White



# **Mr Shane White**

#### Formal Submission #142

**Position** Community individual

Organisation n/a

#### Submission full text

Reference: Comments on Draft Report

My family and I are long-term residents of Lachlan Street, Nudgee (since 1990). We enjoy the area for many reasons and have value added to our home as our family has grown. We obviously would like the standard of living that we have experienced for the last 17 years to continue, as well as the property value to be maintained in relation to Brisbane standards.

We see the New Parallel Runway as a threat to our life style and property value, in particular as a result of the increased noise from aircraft landing, taking off and taxiing on a runway that will be only a few kilometres from our house.

As it is now, aircraft noise is significant when winds are blowing from the east and when cloud cover holds the noise in. We however, have been prepared to live with this relative inconvenience in favour of the benefits of the area.

We are not anti progress, but believe that progress, especially where business / profit purposes are concerned, must be constrained to allow mutual cohabitation with the community.

Assuming that there is no alternative to a new runway we would like to make the following points:

The runway be kept as far to the east as possible. This will minimise runway noise to the closest residential areas, being those in the easterly direction from the runway.

- We are also concerned with the effects that the new runway surrounds will have on Nudgee Beach, and in particular Jackson's Creek, to which we frequent in our boat for fishing and crabbing. Again I would imagine that movement of the runway further east would minimise the direct effects on Jackson Creek.
- There is no doubt that, from our present experiences, aircraft noise is heard more distinctly at night, when there is little other distracting noise. We would like to suggest that the New Parallel Runway have a nighttime curfew, beginning immediately after evening peak traffic periods and



lifted prior to the morning peak. From what I can determine of flight volumes there should not be a problem with the existing runway coping with non-peak hour flight traffic.

- Finally we would ask that the more noisier aircraft be restricted to using the existing runway at all times.

Yours Faithfully,

Shane White



# Mr Randall Whyte

Formal Submission #89

**Position** Community individual

Organisation n/a

#### Submission full text

I am opposed to the new parallel runway planned for BNE Airport. First, increases in traffic and aircraft movements are likely to plateau rather than the continuation of double-digit growth experienced over the past four years. Therefore, any increase in movements should be better manageable by airport management and air traffic control.

Secondly, the proposal has the look of a competitive strategy to combat the Gold Coast and Sunshine Coast airports. Once GC has its lengthened runway it becomes a competitor for direct flights from Asia and in many respects this would be preferable rather than increasing movements through BNE. The Sunshine Coast also has unused capacity and could increase its number of flights especially for leisure traffic.

Third, the development of Amberley should be considered as a second (secondary) airport. There are already precedents for using military airfields for commercial operations (Townsville and Newcastle). Given the population growth/shift moving south west of Brisbane would draw a sizeable catchment area. Low cost airlines such as Jetstar would be attracted to secondary airports. An improved direct rail link would make Amberley a feasible option.

Finally, BNE Apt has a responsibility to take measures to reduce carbon emissions. Although new generation aircraft will be reportedly quieter and more fuel efficient, there is widespread community concern over the increased number of aircraft movements. The flight path on lift off into the south is over residential areas and this is a major concern.



# R, S, M & J Wilkinson

#### Formal Submission #209

**Position** Community individual

Organisation n/a

#### Submission full text

We noticed the relative peace at Christmas. We waited until post silly season- including Australia Day weekend.

1) All addresses have increased airport traffic- especially Loganlea and Manly- less at Morningside due to less frequent occupancy by some of us.

3/19 Agnes Street Morningside3 Crestview St Loganlea16 Kamaring St Manly

- 2) Increased noise early morning < 0600 hrs & 0700 hrs > 0600 hrs
- 3) Increased Circuits. Especially over Manly.
- 4) Aircraft very much lower than before
- 5) ROI our overseas relations have expressed concern regarding 'Hikes' in airfares and of course our own trips have been curtailed due to costs. Actually we have no interest in raising the fees of the corporate managing bodies and in fact causes us to use aircraft a whole amount less.
- 6) The aircraft take off mostly across the land not too many use the bay or ocean as entry or exits. Why when you say and advertise use of over H20 enter and exits will be mostly used- ho! hum! You know the best of the rhyme.

NB I've done the homework- unfortunately my pain is too great to sit and write and has been this way for 5-6 weeks.

Some of the vital maps it is necessary to use a magnified glass- what a shame, says you!



# Ms Kellie Williams

Formal Submission #223

**Position** Chief Executive Officer

Organisation Moreton Bay Seafood Industry Association

#### Submission full text

Dear Sir/Madam,

Please find enclosed the Moreton Bay Seafood Industry Association's (MBSIA) assessment of impact that the proposed parallel runway expansion is likely to have on commercial fisheries of Moreton Bay. This submission includes a series of recommendations for your consideration. We are happy to discuss further,

Regards,

Kellie Williams



#### 1.0 Introduction

The runway and extraction area are known to support a variety of economic seafood species. The proposed development will have a significant negative impact on commercial fisheries and related industries, now and into the future. This will have a negative impact on the MBSIA's ability to deliver on a range of objectives set out in the Moreton Bay Environmental Management System (EMS). The estimated impacts on all fisheries are outlined below, in addition to suggested offsets.

#### 2.0 Commercial fisheries affected by development proposal

#### 2.1 Issues that will affect all fisheries

## 2.1.1 Mangroves

Mangroves provide habitat, food and coastal protection, trap silt and nutrients, and (as with seagrass) are very productive. The presence and health of mangroves directly affects fish stocks (both in health and capacity) and therefore the livelihoods of commercial fishermen of Moreton Bay. A variety of professional fisheries exist in Moreton Bay and all rely on the presence of mangroves and associated ecosystems for their existence. Our members consist not only of commercial fishermen and staff, but also seafood retailers and other supply chain businesses. Impacts on fisheries negatively impact not only commercial fishermen, but also a plethora of seafood-related businesses in South East Queensland (SEQ). As a result the MBSIA takes very seriously proposals to remove or reduce these valuable wetland areas.

The historical ecological footprint of the Brisbane Airport and associated impact on commercial fisheries has been significant. To date this impact on commercial fisheries has not been offset in any way. Past airport expansion was responsible for a loss of 850 ha of mangroves between 1977 and 1980, representing 12.5% of mangrove loss in SEQ (Coastal CRC 2003, BAD 1979). There appears to have been little if any mitigation undertaken to reduce the loss of mangroves. The proposed future expansion of the Brisbane Airport will result in a further 94 ha lost.

The United Nations Food and Agriculture Organisation (FAO) estimates that the average global fishery yield from mangrove waters is 9 tonnes of fish, crabs and prawns and 2 tonnes of snails and bivalves per square kilometre (Czuczor, 1998). Production of fishery resources in mangrove communities is affected by geographic and climatic conditions and community structure. Moreton Bay mangrove communities appear very productive. *Avicennia* mangrove communities in the Brisbane River were estimated to produce 2.3 – 3.5 g dry weight m\_ day \_\_ (DPI, 1998). We know there is high biomass and density of fishes using subtropical *Avicennia* forest, however, there is a possibility of diversity, density and biomass declining with distance inside such forests. This does not detract from their importance as small fishes do use inland mangroves to avoid large predatory fishes, subtropical mangroves being noted to support intermediate carnivorous fishes, which also make up a high percentage of commercial and recreational catch. For example, *Avicennia marina* 



(subtropical) forest in Moreton Bay support 42 species of fish at a density of  $0.27 \pm 0.14$  fish m<sup>-</sup>\_, 75% of economic value and  $25.3 \pm 20.4$  g m<sup>-</sup>\_, 94% of economic value.

### **Estimated impact on commercial fisheries**

Based on the FAO figures above, the historical impact of the Brisbane Airport on commercial fisheries in Moreton Bay is in the order of 76.5 tonnes (9 tonnes x 8.5km2 mangroves) of fish, crabs and prawns lost per year, on an infinitum basis, from loss of mangroves alone. That is, every year 76.5 tonnes of seafood has been lost to the system forever. This equates to \$2.29 million per year retail value for fish, crab and prawn, and \$918,000 per year GVP. These figures do not account for impact on other seafood related business.

The proposed airport expansion project will result in the loss of 94 ha of mangroves and 18 ha of equally important saltmarsh. The impact would mean at minimum 2.162 tonnes / day of valuable carbon would be lost to the environment forever. Further, using the FAO estimates, about 9 tonnes of economic fish product would be lost on an infinitum basis. That is, every year 9 tonnes would be lost to the system forever. The value of 9 tonnes of economic fish product would equate to \$270,000 retail value per annum (\$30,000 x 9).

Over 10 years this would be worth \$2,700,000 of lost opportunities and this loss would continue to grow each year forever. This equates to approximately \$108,000 GVP lost per year to commercial fisheries.

To clarify, these figures account for losses related to removal of mangroves only. Further direct impacts are expected on various commercial fisheries as a result of other actions proposed under the new parallel runway draft EIS/MDP. These impacts are defined in sections below.

## Recommendations to offset impact

As outlined above the removal of 94 ha of mangroves under this proposal will have serious immediate and long-term impacts on commercial fisheries of Moreton Bay and associated businesses (including tourism). The following is proposed to offset this impact:

- \$150,000 per year over 5 years be contributed towards implementation of the Moreton Bay Seafood Industry Association's (MBSIA) Environmental Management System (EMS).

#### How will this proposal offset impact?

An array of collaborative research and development projects are being undertaken by the MBSIA through the EMS. These include projects that will ensure the health of Moreton Bay fish stocks now and for future generations. The Moreton Bay EMS and many of the projects associated with it are supported by a range of groups, including the Queensland Conservation Council, the Wildlife Preservation Society of Queensland, the EPA, DPI&F, recreational fishing and boating clubs and



associations, the University of Queensland and importantly, seafood consumers who represent the broader public (through Seafood Lovers Queensland).

Examples of projects currently underway include:

- \* Trial and development of by catch reduction devices in the otter trawl and net fisheries;
- \* Trial and development of hoppers for otter trawlers to improve survival rates of by catch (non-target species);
- \* Development of a waste removal system to collect urban debris while trawling and dispose of it for auditing by Health Waterways Partnership, thus improving water quality; and
- \* Development and trial of devices that minimise impact of trawling on benthic communities (e.g. batwing otter boards and soft brush ground gear).

There are many more projects underway and planned for the future. All of these require funding and support and most of them are collaborative, with SEQ Catchments supporting all of them. Importantly, ALL of these projects will contribute towards ensuring fish stocks are available now and for future generations.

We note that a healthy fishery (and Moreton Bay marine resources in general) will also benefit the tourism industry. This is recognised through a strong relationship between MBSIA and Redlands Tourism. Moreton Bay continues to attract tourists (who often travel via flights at Brisbane Airport) based on our beautiful marine resources. Recreational fishing and boating and consumption of commercially caught seafood are major attractions. Any investment in projects that will deliver real on-ground outcomes in terms of minimising pressure of fish stocks and maximising the environmental health of the Bay will translate to value for Brisbane Airport Corporation. A beautiful marine environment and eco friendly seafood in shops and restaurants will result in more tourists visiting Brisbane which will positively impact the Airport's bottom line.

#### 2.2 Beam trawl fishery

In addition to the impact of removal of mangroves on the Brisbane River beam trawl fishery, other sections of the proposal will also negatively impact on these operators.

#### 2.2.1 Dredge vessel mooring point

The Brisbane River beam trawl fishery consists of approximately 25 operators. Each operator works in various sections of the River at different times of the year. Particular sections of the River provide important trawl grounds for these operators. Possibly the most economically important section of the Brisbane River is the Luggage Point area (including the proposed dredge vessel mooring site and surrounding areas).



Approximately 80% of all prawn caught and sold by beam trawlers in Moreton Bay rivers and creeks is caught from the Brisbane River (pers. Comm. 2007). Based on DPI&F logbook data (DPI&F 2007) this is valued at approximately \$960,000 per year GVP or \$2.8 million retail value.

Our members estimate that catch from this site represents (on average) approximately 60% of annual income for most operators. This means that this site alone is worth approximately \$576,000 GVP per year to beam trawl operators of the Brisbane River.

### Estimated impact on commercial fisheries

The proposal to moor the dredge vessel at the Luggage Point site will have significant economic impacts on beam trawl operators. While the vessel is moored at the site (daily for 12 – 18 months) our operators will not be able to fish in the area taken up by the vessel, in addition to the exclusion zone that will apply while it is moored.

To add to this, regardless of whether thrusters or tug vessels are employed to hold the dredge vessel in place while pumping spoil to the mainland, silt plooms are likely to be created in the surrounding area. This will have a significant impact on beam trawling operations.

Many factors (e.g. environment, weather etc) influence beam trawling operations, particularly the clarity of water. Water clarity directly influences where the prawns will be congregating and therefore where operators will be targeting prawns. Prawns are attracted to areas where there is a certain level of 'muddiness' in the water so that they cannot be seen by predatory fish. However conversely they are not found in deeper, or 'muddier' waters as there is not enough light for them to access food.

Subsequently, any silt plooms that result from the presence of the dredge vessel will likely cause prawns to migrate towards shallower waters, where there is still a suitable degree of light penetration. Beam trawlers cannot operate in very shallow depths of water and therefore would not be able to access prawns under these conditions. Naturally this would have a significant negative flow-on impact on their income as this area usually represents approximately 60% of their annual income (as stated above).

It is difficult to predict how much of a ploom will be created from the presence of the dredge vessel, however given that it will be operating for 12 – 18 months, the potential impacts outlined above must be considered.

Worst case scenario, for example, if the water clarity in the Luggage Point area is reduced during the period, one of our operator's income could be halved (reduced by \$30,000 per year) for that period.



#### Proposal to offset potential impact

In reducing the amount of area that beam trawlers can operate in (particularly in such an economically important area as Luggage Point), vessels are forced to congregate in smaller areas, thus increasing the environmental and economic pressure on other parts of the Brisbane River.

To alleviate this impact, it is proposed that five beam trawl endorsements (licenses) be 'bought out' by the Brisbane Airport Corporation. This will reduce pressure on remaining areas of the river (environmentally) and will also reduce the cumulative economic impact on operators. This arrangement is commonplace where development proposals for marinas or the like encroach on trawl grounds of the Brisbane River.

Although the dredge vessel would be moored at Luggage Point temporarily, rather than permanently, the economic importance of this area for all operators cannot be ignored.

**NB:** It must be noted that although the Luggage Point mooring will have impacts on beam trawl operators (which need to be acknowledged), this is still the MBSIA's preferred option for mooring. The other options presented for transferring spoil from the dredge vessel to the expansion site (i.e. Boggy Creek, Juno point and Koopa Channel) are environmentally unacceptable and will have far more impact on our operators than the preferred option.

#### 2.3 Inshore fin fish 'net' fishery

In addition to the impact of removal of 94 ha of mangroves, several sections of the New Parallel Runway draft EIS/MDP will negatively impact on inshore fin fish 'net' operators.

#### 2.3.1 Approach lighting structure

The proposal to construct a approach lighting structure south of Kedron Brook waterway and north of the mouth of the old Serpentine Creek will negatively impact inshore net operators.

The area where the approach lighting structure will be erected is an economically important area for catching several fish species, particularly tailor and shark. The main tailor season runs in that area from the start of March every year to the end of May. One operator alone has logbooks that show he catches approximately one tonne of tailor per week off that area during these months. This accounts for approximately one third of his annual income. He is not the only fishermen who operates in this area – there are at least five.

The impact of the lighting structure is that commercial nets will be difficult and nearly impossible to use in the area. Nets are generally not staked out (to minimize environmental impact) and therefore will wash into and tangle with the poles of the lighting structure, thus damaging nets and negating the chance of catching product from those particular shots.



#### Proposal to offset impact

Will be forwarded as an attachment to this submission to Greg Fisk.

(PLEASE NOTE – this attachment was not received)

### 2.3.2 Disposal of water from dredge at mouth of old Serpentine Creek

The water from the dredge spoil is supposed to be disposed of at the mouth of the old Serpentine Creek. This may have potentially significant impacts on inshore net operators in the area.

It is acknowledged that the sediment levels in this water will be controlled, the potential levels of dissolved nutrients and toxins from the dredge spoil could have a devastating impact on the water quality of the surrounding area.

Changes in dissolved nutrient levels can have significant impacts on flora and fauna, including seagrass, associated juvenile species and can result in algal blooms (e.g. Lyngbya which smothers seagrass beds). Anecdotal evidence, along with research conducted by John Page (MBSIA net operator) in conjunction with WBM Oceanics for the Brisbane Airport Corporation as part of preparation for the draft EIS/MDP shows that the area at the mouth of Serpentine Creek is commercially productive and has improved in health dramatically over the past five years. It is environmentally and economically undesirable for this improvement to be reverted.

#### Proposal to offset impact

It is strongly requested that a monitoring program be implemented to assess the dissolved nutrient level and toxin levels of the dredge water. It is proposed that this program run for the life of the dredge spoil water disposal process on a fine time scale (i.e. monitoring once a month would be unacceptable). Frequent monitoring is required to allow adaptive management and prevention of water pollution. It is requested that the results of regular testing and monitoring be made available to the public (and commercial fishing operators) after each test. It is expected that appropriate action to prevent unacceptably contaminated water from entering into Moreton Bay will be taken based on regular test results.

#### 2.4 Otter trawl fishery

The extraction of sediment from Middle Banks of Moreton Bay will have an impact on otter trawl operators. It is difficult to define how much impact.

It is estimated approximately 7.5 percent (%) of the value of the northern Moreton Bay trawl fishery was caught in Central and Middle Bank area of Moreton Bay (EPA, 2005).



## Proposed offset for impact

It is strongly requested that a dialogue be set up between airport staff and the MBSIA to monitor the impact of sediment extraction on relevant otter trawl operators. In addition it is suggested that catch rates for otter trawl operators in this area be monitored for several years before, during and after the extraction to assess impact and take appropriate steps to offset potential impact on commercial operators.

#### **References**

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Czuczor, Laszlo. 1998 Environmental Impacts of dredging Wetlands. General overview and the case of Pattani Bay. Wetlands International. Publication 6.

DPI&F. 2007. http://chrisweb.dpi.qld.gov.au/CHRIS/

Environmental Protection Agency. 2005 Moreton Bay Sand Extraction Study. Summary Findings.

Pers. Comm. 2007. Michael Fennessy – Brisbane River beam trawl operator for 35 years.



# J Williams

Formal Submission #57

**Position** Community individual

Organisation n/a

## Submission full text

To Whom It May Concern,

My opinion is that the new runway should be constructed as far away as possible from suburbia - further to the east as expressed by Councillor Kim Flesser.

J. Williams



# **H Williams**

Formal Submission #138

**Position** Community individual

Organisation n/a

#### Submission full text

I am writing to make three general comments relating to the New Parallel Runway project intended to increase aircraft activity.

Having read the Flight Path and Noise Information booklet, I note the twenty-four hours in each case is divided into three time slots. I am particularly concerned with the 10pm to 6am time slots when night flights occur and noise from aircraft affects proper sleep and consequently their health and lifestyle.

Apart from concerns about noise from aircraft affecting people near to flight paths. I am also concerned about green house emissions from aircraft flying at night, which affects us all in the same way. You may be aware of recent reports in Nature and Transport research, which shows that emissions from jet aircraft flying at night in certain conditions have a greater impact on the environment and on global warming than emissions from daytime flights due to the impact of contrails. We are all affected in some way by global warming and have responsibility to reduce greenhouse emissions as much as possible.

Insurance companies are having to make more large payouts as more and more extreme weather events occur due to increasing Co2 emissions to which aircraft emissions are a major contributor.

I suggest limiting the number of night flights for the sake of the health of people living near flight paths and to help in reducing global warming when aircraft fly at night in cold conditions or at high altitudes.

My other major concern is the impact of the project on the local environment and on wild life in the vicinity of the construction and subsequent operation of the new runway. This area covers the Boondall Wetlands, Nudgee Beach and nearby Kedron Brook and local creeks.

The Boondall wetland is listed under the RAMSAR Convention as a internationally significant wetland. Large numbers of international migratory shore birds on their flyway visit the wetlands between September and March each year. The wetlands are the home to a wide variety of native birds and is a refuge fro unique Australian wildlife.



Biodiversity is essential for all life on earth. Australia is already rapidly losing many unique species through loss of and human impact on habitat. This local area needs protection from the impact of human activity, which continues to change our fragile environment and leads to global warming. We are all dependant on each other for life on earth.

I oppose the project as a whole and in particular on any more night flights. I suggest a night curfew be introduced for Brisbane and the project be reconsidered in the light of growing worldwide evidence of global warming.

Yours Sincerely,

H. Williams



# **Ms Carol Wood**

Formal Submission #14

**Position** Community individual

Organisation n/a

# Submission full text

Curfew from 23:00 to 06:00 as per Sydney Airport.



# Mr Rex Wood

Formal Submission #233

**Position** Community individual

Organisation n/a

#### Submission full text

PUBLIC COMMENT OF NEW PARALLEL RUNWAY DRAFT EIS/MDP

Please find enclosed two copies of my comments on the Draft EIS/MDP, which I am posting on Sunday 4, February 2007.

Yours faithfully,

Rex F. Wood

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT / MDP ON THE PROPOSED NEW PARALLEL RUNWAY FOR BRISBANE AIRPORT, PREPARED BY THE BRISBANE AIRPORT CORPORATION

Submitted by:

Rex F. WOOD

- 5, Ridgelands, 22 Keera Street, Coorparoo Qld 4151
- 4 February 2007 (posted 4 February 2007)

#### **GROUNDS FOR SUBMISSION**

I am a Brisbane resident and ratepayer whose family has lived in the Coorparoo area for 47 years. My residence is an estimated 13.25km from the southern end of the current main runway and since that runway came into operation has been located directly beneath the flight path labelled "G" 'in the Flight Path and Noise Charts provided 'in the DEIS/MDP.

**COMMENTS - GENERAL** 



- 2. My comments relate principally to the issue of aircraft overflight noise. I agree entirely with the DEIS's social impact assessment that "the primary community concern regarding, the NPR is overflight noise" (D9-364)
- 3. From the perspective of a Brisbane resident whose home has been overlaid by a major flight path introduced with the entry into service of the main runway of the new airport post- 1988, and is now subjected at any hour of the night or day, 7 days a week, to aircraft noise 'in the range of 75-89dB(A) according to Airservices Australia written advice to me via the office of the Minister for Transport and Regional Services in October 2000 the principal and obvious comment to be made about this Draft EIS is that it is far too airport/BAC-centric.

It skates so lightly over the legitimate interests and concerns of the wider Brisbane community, which happens to inhabit the area around the airport, that the reader may only conclude that those interests and concerns must be of little or no real consequence, at least against the overarching, private business imperatives of the Brisbane Airport Corporation.

- 4. In this regard, I refer firstly to the concerns of so many Brisbane residents, as expressed for example in letters to newspapers over recent years, that a permanent curfew should be imposed on operations by large commercial aircraft over Brisbane between 10pm and 6am. Yet neither the word "curfew" nor any allusion to the topic appears anywhere in this DEIS. Indeed, the only relevant reference in the entire lengthy document is under D2-4 Airport Operating Hours, where the unsubstantiated, one-sentence assertion is made that 24-hour/7-day operation of the airport "is critical for the commercial viability of the Airport as well as the sustained growth of Brisbane and Southeast Queensland" (D2-15). The only evidence adduced to support this assertion about commercial viability is reference to the desirability of expeditious delivery of perishable export goods and to an alleged "commercial and tourism advantage ... over some interstate airports" for international operations. I submit that these statements fail to support the claim of criticality of 24/7 operation for commercial viability and sustained growth, and need hardly point out that both Sydney and Adelaide airports have operated for some years under such curfews without apparent damage to their viability, growth or commercial advantage. I submit also that the specious claim that 24-hour operation is important when daylight saving is in effect in other States cuts no ice whatsoever with a true-blue Queenslander, especially one who has managed over many years to cope satisfactorily with such southern idiosyncrasies.
- 5. That this DEIS skates lightly over the legitimate concerns and interests of the wider Brisbane community is exemplified par excellence by the final statement 'in the Flight Path and Noise Information Booklet, page 60: "No suburb, group or individual can demand or expect to be exempt from aircraft noise exposure". This statement has already been perceived and criticized as arrogant, provocative and offensive. Whether that be entirely fair or not, it is certainly remarkable to see such an absolutist and dismissive statement made in the presentation of a DEIS released for public comment. It is so extreme as to have set an unfortunate tone for the entire DEIS, reinforcing the impression that the overwhelming message of the DEIS is that what is good in the eyes of the BAC must ipso facto be good for Brisbane and its residents.



#### **COMMENTS - SPECIFIC**

### Feasible Alternatives (A3 Options and Alternatives)

6. I submit that the section on feasible alternatives to the proposed new runway should have included at least mention of the option of a new runway on a new airport site outside the city limits, as the first phase of relocation of the airport from its present eastern mid-city site to one better located to serve the long-term needs of the south-east region of the State. Such planning would be a matter for government, of course, and not for the BAC. Nevertheless it is a serious option which should be acknowledged in a DEIS such as this, especially as pressure for relocation is bound to develop within the next 20 years as increasing population and air traffic replicates the Sydney Airport experience.

#### Sustainability Assessment (A7)

7. The DEIS's forecast that (overall) "noise levels from aircraft overflights are expected to increase steadily to 2015" (A7-295) comes as no surprise. The forecast (D9-358) that with the NPR in 2015 "NO suburbs will experience a notable 'increase in overflights during- the night time (10pm-6am)" is clearly welcome, although the welcome will depend on the "notable", which the DEIS somewhat ambiguously suggests could be less than 2 flights for about 35 suburbs and apparently more (?) for about another 15 (see D9-3 5 8). The DEIS's reluctance to forecast detailed numbers for overflights post NPR in 2015 is understandable, given the 8-year gap, but this does of course leave a general air of uncertainty, with 'inevitable doubts about credibility. The point of even trying to forecast numbers another two decades ahead to 2035, given the range of unknowns and uncertainties at that distance in time, is lost on me altogether.

## **Noise Descriptors (D2.8)**

8. As explained in the DEIS section D2.8, the ANEC/ANEF system was devised to try to safeguard the viability of existing airports, civil and military, by enlisting State and local government planning regimes to prevent or control encroachment by inappropriate development around those airports. This is widely recognized to be sound public policy, if not always welcomed by some local authorities and certain property developers. What is of serious concern here, however, is the reverse situation: the protection of already established urban areas from the impacts of entirely new airports (like Brisbane in 1988), or from encroaching and intensifying aircraft operations associated with new airport facilities like additional runways (as in this particular instance). Unlike the on-going ANEF system for airports, the only protection mechanism for urban populations currently available is the one-off EIS process, which ends abruptly when the (federal) Government decision is made on the proposal. The subsequent "management" of the aircraft noise imposed on surrounding populations in consequence of the Government approval can never compensate for the destruction of the noise-free environment historically enjoyed.



9. The portrayal in the DEIS of noise exposure exclusively 'in terms of contours indicating levels of 70dB(A) and above is very disturbing. I fail to see how this can give even a reasonably accurate and meaningful representation of the impacts of aircraft noise associated with flight paths spread over such a large area. The problem is that the DEIS's noise assessment is benchmarked at the level said to disturb indoor speech communication (Australian Standard S2021: 60dB(A), arising from a max. external single overflight level of 70dB(A), DEIS page D7-307). No explanation is offered at all as to why the effect on speech communication should be the sole criterion. Surely the level said by the WHO Guidelines or Standards Australia to cause immediate sleep disturbance (respectively, indoor 45 or 50dB(A): DEIS page D7-303) is much more important than the level affecting merely conversation or telephone/television/radio use, given the significant public health issues involved? The DEIS itself postulates (D7-303) that an indication of the extent of immediate sleep effects caused by overflights can be identified approximately from the extent and frequency of flights whose max noise levels exceed 60dB(A), but leaves the issue at that. I submit that the use of N60 noise contours would be much more realistic for the representation of the impacts of aircraft noise, and that it should even be mandated in practice for relevant environmental impact studies in Australia. Some would argue, of course, that the level causing "annoyance" should be the appropriate level for representing meaningful aircraft noise exposure over large urban areas, but I believe that would be just too problematical and contentious.

## **Aircraft Noise Assessment (D5)**

10. As others have undoubtedly already pointed out, the fourth column in the table which accompanies the "2005 current runway" charts is headed Expected minimum and maximum numbers of jetflights on path. I for one have assumed the insertion of "expected" here to be a mistake, given that data from the previous calendar year is involved.

#### **Health Impact Assessment (D7)**

- 11. Any reasonable Australian would find it incredible and quite unacceptable that a very significant part of the country's third largest city can be subjected to aircraft noise above the 70dB(A) level at any hour of the night, let alone day. But that is now the situation 'in Brisbane, where aircraft noise is demonstrably the most widespread and intense form of noise pollution and probably the largest public health and quality of life issue.
- 12. The DEIS addresses at D7 the difficult subject of sleep "disturbance" immediate, chronic, etc.. It discusses the aggregation of acute effects of disturbance ("total night effects"), resulting in sleep fragmentation and changes to normal sleep cycles. I am surprised this discussion does not mention the term "sleep deprivation", which is an actual consequence of repeated or chronic sleep disturbance, although the writer does go on to state that a sleep disturbed individual may experience the next day fatigue, "short term" annoyance, impaired performance, etc. [known as the Zombie effect], and that "over a long period of time there is the potential for these effects to further aggregate and to have chronic effects on physical and mental health...."



- 13. As a person who is awakened by every single overflying aircraft at night, I have personal experience over the past 7 years when the maximum length of unbroken sleep I have obtained over a period as long as 4 or 5 nights in a row has been as little as three and a half hours. The reason is simply that it does not take a large number of aircraft thundering overhead in the still, night hours to disrupt a night's sleep completely. Such prolonged sleep deprivation has obvious health implications, and given the size of the population involved is the reason nighttime aircraft noise has become such a major public health issue and why a permanent curfew is the only acceptable outcome for Brisbane.
- 14. Over the past 6 years I have kept a nighttime aircraft overflight diary, which I believe to be 90-95 % accurate. It shows that at this point in Coorparoo, near the junction of Cavendish and Chatsworth Roads, over the 6 years 2001-06 the average number of nights per annum with overflights between 10pm and 6am was 93 (highest was 112 in 2005, lowest 79 in 200 1: the figure so far in 2007 is an impressive 17 nights out of 34). By comparison, the average number of nights per annum 2001-06 with overflights after 6pm was 231, i.e., 63% of the year. The highest number of overflights between 10pm and 6am for any one night was over 20 (8-9 September 2004) and the highest number between midnight and 6am was 10 (6 January 2004). I could go on.
- 15. Government and the BAC need to be reminded that this form of compulsory mass civil torture only began to be applied to this large swath of south side Brisbane 15 years or so ago, after the entry into service of the current airport with its realigned main runway. I can attest that exposure to aircraft noise from regular overflights was unknown in this Coorparoo area before 1990. Until then there were only occasional overflights by aircraft departing southwards from the old W-SW runway. These were so relatively rare as to provoke comment when they occurred. It is therefore hardly surprising that elderly people with 50 years and more of residence 'in this area are dumbfounded by the extreme levels of aircraft noise to which they are now subjected at any hour of night or day, especially in summer. Government authorities and the BAC should realize that the bulk of Brisbane south side residents objecting to unrelenting, 24-hour, 7-day aircraft noise are not pesky, professional protesters and "stirrers", but are more likely to be long-term residents who strongly object to this intolerable situation which has been imposed on them in recent times.

## **CONCLUSION**

- 16. I have no objection to construction of the new parallel runway as proposed, given current and anticipated circumstances.
- 17. However, I call for the earliest possible introduction of a permanent night time (10pm-6am) curfew on operations by large commercial aircraft over Brisbane, regardless of whether the additional runway is built or not. I have never seen any convincing justification for commercial overflights of urban areas during the period 10pm-6am, and believe that none exists.



# Mr Dave Wrafter

Formal Submission #79

**Position** Community individual

Organisation n/a

#### Submission full text

I have been living in Nudgee for 40 years and in the last Ten Years, the noise of planes testing their engines through the night is increasing and on many a times have woken us up. This area is a quiet area and noise travels. I have a major concern as the Testing is done on the existing runway or beyond. When the new runway is in operation and will be a few hundred metres away from the Kedron Brook Canal could you imagine the noise then. The airport is a new comer in this area (20 years) it should give its neighbours the respect that all neighbours deserve and have noise restrictions like us all. Our local Members & concern locals are trying to have the new runway 1500 metres away (proposed 2000 meters) from the existing runway, which will be 500 meters away from our neighbourhood surely that's more sensible and logical thinking to your neighbours. I am also concern of the marine life and the heritage of Jackson Creek this creek and it's life has been going for ever and i hear it will be soon no more, does the Government give approval of this, are they setting a precedent that precious eco systems can be demolished & the heritage of this area is to no concern. My Family has lived in this area since the late 1800's and have used the local creeks for recreation fishing etc. How would the airports CEOs /Managers etc. feel if this has happened in their immediate area where their families have grown up.

I say firstly no, to the proposed runway and especially so close to this area when it can go closer to the existing runway.

Secondly no to the runway if its going to destroy our beautiful waterways and Heritage.

Thanks,

**David Wrafter** 



# **Mrs Elaine Wright**

Formal Submission #71

**Position** Community individual

Organisation n/a

#### Submission full text

Five years ago we bought here at Holland Park West, and over this time we have noticed and increase in air traffic. We are travellers ourselves and understand planes have to go over people's houses. We have lodged many complaints to Airservices Aust about the constant bombardment, on Saturdays and Sundays over our house. Last Saturday 13th January, we logged 24 planes overhead from 5.15am (which woke us) to 8.30am. At other times we have logged 15 planes from 6pm-7.30pm. From 6.10pm -7.10pm a total of 18 planes. On 4th November 2006 6am-8am 30 movements were confirmed by Airservices Australia and I have a copy sent to be by a fellow called Jack of these movements.

We find that we are unable to hear our television, talk on our veranda or sleep in on weekends due to the bombardment of air traffic.

We suggested why not bring planes in over they bay, but was told due to the winds this is how it is and will only get worse when we get the second runway.

This is just great news, what are we expected to do, up and sell our house to get some peaceful enjoyment of our lifestyle back.

We would just like to register our formal complaint and look forward to hearing your response (I think).

Regards,

Elaine & Steve Wright



# Mr Herbert G. Yates

Formal Submission #25

**Position** Community individual

Organisation n/a

#### Submission full text

I am not concerned greatly with the expansion of the new runway development. My main concern is with the increased traffic of planes taking off and low flying and landing aircraft.

On days of cloud, fog etc. the planes appear to be quote low due to the weather etc.

The high volume of aero engine noise drowns out radio and TV programmes etc.

I have lived in this area for 10 years or more and complained of the noise before, to no avail.

At 85 years of age I will not be concerned with when the new runway is completed. My main concern is the reduction of the excessive noise. The 1939-45 services in an artillery regiment has claimed total hearing on my right side and 50% of my left ear. So I don't have much to look forward to.

My place of residence is the high point of Molloy Rd and the entrance to Erica Street.

Yours sincerely,

**Herbert Yates** 



# Mr Miguel Angel Zavaleta-Romero

Formal Submission #92

**Position** Community individual

Organisation n/a

#### Submission full text

I am living on 2 Lowndes Street, Salisbury since 1994 and I can say from my own experience that aircraft noise has increased as well as traffic noise. I only put double glassing in my windows facing Kessels Road because the quotation for my entire home was above \$30,000. Nevertheless, the last 18 months, I spent around \$20,000 by placing double glassing in some windows, insulation between the roof and ceiling and air conditioners near my entire home.

Now every week we have occasionally aircraft noise above truck noise inside of my house. Based on that experience, the inferred contour noise lines (N70 ? TNIP) for 2005 are too optimistic. Therefore, the noise prediction model shall be validated with noise monitoring before to predict any future potential impact.

Monitoring is acceptable practice for air dispersion models as well as water dispersion model before a prediction is prepared. You may say that there is an agreement of +- 10% in accuracy prediction however there is not evidence that support it moreover the government website confirmed that there has not been any validation for this kind of noise prediction models in Australia. Consequently, this approach is not good enough based on my own experience.

Based on the above, it is expected more frequent aircraft noise in this area.

Aircraft noise is in function of:

Type of aircraft (Type of jet engine because same times has been innovated)

Flight altitude

Weather conditions

Designed landing procedures

Designed fight pathway.

Considering:



A rough linear estimate, sound in decibels from a point source change about 6 dB for each doubling of distance.

A landing procedure (including approach procedure) shall be implemented to manage aircraft noise. Fines shall be issued to a pilot breaching altitude approach or fight pathway unless there is crosswind during the landing. Curfew shall be considered is a revised noise model prediction or noise monitoring indicates potential annoyance and/or sleep disturbance.

Regards,

Miguel Zavaleta



NEW PARALLEL RUNWAY DRAFT EIS/MDP | SUPPLEMENTARY REPORT – APRIL 2007 Brisbane Airport Corporation Pty Limited | ABN 54 076 870 650

Phone: (07) 3406 3000

