



# Business and Resident Attitudes towards the Proposed Wallarah 2 Coal Mine

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## Survey Report

**By:**

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**HVRF Ref No. 464/06**

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# Business and Resident Attitudes towards the Proposed Wallarah 2 Coal Mine

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Survey Report Prepared for

## Walarah 2 Coal Project

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# Executive Summary

## The study

Two telephone surveys, one of approximately 200 business managers/owners and one of approximately 400 residents, were undertaken by the Central Coast Research Foundation (CCRF) on behalf of the Wallarah 2 Coal Project in October-November 2006.

Both groups of respondents were randomly selected from across the Central Coast Region incorporating both the local government areas (LGAs) of Wyong and Gosford as well as the areas between Morisset and Wyee, and between Catherine Hill Bay and Doyalson (in the Lake Macquarie LGA).

In broad terms, the surveys sought to assess awareness of the Wallarah 2 Coal Project's proposed underground coal mine north-west of the Wyong Shire, determine sources of information about the proposed mine, assess perceptions about the impact of the proposed mine on the Central Coast economy, environment and community, and to gauge the level of support for the construction of the proposed mine.

The response rates for the Business Survey and the Resident Survey were 79.7 per cent and 73.9 per cent respectively. Results are analysed and presented separately for each survey. A summary of the most significant findings appears below.

## The results

### Perceptions of trading performance

- Just over half (52%) of business managers/owners described their trading performance over the past 12 months as *good* or *very good*.
- Business expectations of trading performance over the next 12 months were more positive, with 64 per cent describing their forecasted performance as *good* or *very good*.

### Perceptions of the performance of the Central Coast economy

- Business expectations for the performance of the economy over the next year was also high, with 72 per cent of business managers/owners predicting that the Central Coast economy would *be better* or remain *the same* in the next 12 months.

### Awareness of the Wallarah 2 Coal Project

- Awareness of the proposed coal mine amongst business managers/owners was low, with a mean awareness score of **2.2** out of a possible 5. Just over 40 per cent were *not at all aware*, 21 per cent were *slightly aware*, and a further 24 per cent were *moderately aware* of the proposed mine prior to their survey interview. Slightly more than 10 per cent were either *very* or *extremely aware*.

Lack of information and community consultation about the proposed mine were also raised as concerns by some respondents.

- A statistically significant association was found between the level of awareness about the mine and the level of support for its construction. Respondents who had not been aware of the proposed mine prior to the interview were significantly more likely to support its construction than those who had some knowledge of the proposed project.

Taken together with the finding of an overall lack of awareness and information about the mine, this seems to suggest that business managers/owners who were *moderately, very or extremely aware* of the proposed mine were likely to have received their information from sources other than the Wallarah 2 Coal Project. It is also highly likely that this information highlighted concerns and potentially negative impacts of the proposed mine, resulting in a lack of support amongst this group.

### Sources of information about the proposed mine

- The four most common sources of information about the proposed mine amongst business managers/owners who had some level of awareness of the proposed mine prior to their interview were:
  - *local newspapers* (77%)
  - *family and friends* (48%)
  - *local radio* (23%)
  - *Wyong Shire Council* (21%).

When it came to project-specific communication materials, the *Walarah 2 Project Newsletter* had the greatest reach compared with the website and community liaison meetings. However, it had significantly lower reach than the four sources noted above, having only been seen by 6 per cent of business managers/owners who indicated some awareness of the proposed mine.

### Perceived economic impacts

- Just over half of business managers/owners felt that the proposed mine would have a *positive* (48%) or *very positive* (8%) impact on the Central Coast economy. A further 25 per cent indicated that they believed the economic impact would be *neither negative nor positive*.
- Those respondents (55%) who indicated that the economic impacts would be *positive* or *very positive* were asked to indicate what they thought the most positive impact on the economy would be. The three most frequently cited positive economic impacts of the mine were:
  - increased employment opportunities
  - increased cash flow and investments
  - spin-offs for local businesses.
- Those respondents (14%) who indicated that the economic impacts would be *negative* or *very negative* were asked to indicate what they thought the most negative impact on the economy would be. The three most frequently cited negative economic impacts of the proposed mine were:
  - concern about water quality and availability
  - concern that new jobs at the mine would go to workers from outside the Region and any ancillary jobs would go to their partners
  - a decline in tourism and population.

### Possible impacts of the mine

- Respondents agreed that:
  - *Property values of the houses and land above the mine would be negatively affected* (mean agreement score of **4.1** out of 5)
  - *A new underground mine would have a significant negative impact on the Central Coast environment* (**4.0** out of 5)
  - *Mostly Central Coast people should be employed by a new mine* (**4.0** out of 5)
  - *A new mine would help to generate jobs in Central Coast businesses* (**3.7** out of 5)
  - *A new mine would help to generate income for Central Coast businesses* (**3.5** out of 5)
  - *The Central Coast community would benefit from a new mine* (**3.5** out of 5).
- Respondents were divided over whether:
  - *New businesses would be attracted to the Central Coast by a new mine* (**3.2** out of 5)
  - *A new mine would attract people to live on the Central Coast* (**3.0** out of 5).
- Respondents disagreed that:
  - *Your business would benefit directly from a new mine* (**2.3** out of 5).

### Level of support for the proposed mine

- Overall, business support for the mine was polarised: 34 per cent of business managers/owners supported its construction, 40 per cent opposed its construction, and 20 per cent held no strong opinion. The mean agreement score for the statement regarding support for the construction of the mine was **3.0** out of 5.
- Supporters of the proposed mine were significantly more likely to agree that:
  - *A new mine would help to generate income for Central Coast businesses;*
  - *The Central Coast community would benefit from a new mine;* and
  - *A new mine would attract people to live on the Central Coast;*

Supporters were also significantly less likely to agree that:

  - *A new underground mine would have a significant negative impact on the Central Coast environment;* than those who were neutral or opposed to it.
- Those who were neutral were also significantly more likely to agree that:
  - *A new underground mine would have a significant negative impact on the Central Coast environment* than those who disagreed with its construction.
- Compared with those who opposed the project, supporters of the mine were more likely to agree that:
  - *A new mine would help to generate jobs in Central Coast businesses*
  - *New businesses would be attracted to the Central Coast by a new mine*
  - *Your business would benefit directly from a new mine.*

## Resident Survey Results

### Perceptions of key issues on the Central Coast

- Respondents agreed that:
  - *The overall quality of the environment on the Central Coast is good* (mean agreement score of **3.8** out of 5)
  - *People on the Central Coast have good access to education services* (**3.8** out of 5)
  - *There is a good range of recreation facilities on the Central Coast* (**3.5** out of 5)
  - *People on the Central Coast have good access to health services* (**3.3** out of 5)
  - *Housing is generally affordable on the Central Coast* (**3.3** out of 5).
- Respondents disagreed that:
  - *The Central Coast has a good public transport system* (**2.7** out of 5)
  - *Crime levels are low on the Central Coast* (**2.5** out of 5)
  - *There are enough good jobs on the Central Coast* (**2.3** out of 5)
  - *The road network on the Central Coast is well maintained* (**2.2** out of 5)
  - *The Central Coast has a good availability of drinking water* (**2.2** out of 5).
- Female residents' views about these issues tended to be more negative than their male counterparts. Females were significantly less likely to agree that: *The overall quality of the environment on the Central Coast is good*.
- Despite differences in the ranking of issues between the sexes and age groups, on balance, the same four issues (i.e. availability of drinking water, maintenance of road networks, having enough good jobs and crime levels) were of most concern to all groups.
- Residents who had a positive opinion about the performance of the Central Coast based upon eight important issues (i.e. health services, public transport, the environment, road networks, housing, recreation facilities, education services and drinking water) were significantly more likely to either support the proposed mine or be undecided about it than those who held a more negative outlook on these issues.

### Awareness of the Wallarah 2 Coal Project

- Awareness of the proposed coal mine amongst residents was low, with a mean awareness score of **2.2** out of a possible 5, the same as for business managers/owners. Approximately 40 per cent of residents were *not at all aware*, 22 per cent were *slightly aware*, and a further 21 per cent were *moderately aware* of the proposed mine prior to their survey interview. Slightly more than 10 per cent were either *very* or *extremely aware*. Similarly, a lack of information and community consultation about the proposed mine were also raised as concerns by some residents.

Female residents were significantly less aware of the proposed mine than males but there were no significant differences in awareness by age group.



- A statistically significant association was found between the level of awareness about the mine and the level of resident support for its construction. Opponents of the mine were significantly more likely to have been aware of the mine prior to their interview (mean score of **2.4** out of 5), than those who supported it (**2.0**) or those without a strong opinion (**1.7**). This suggests that, unlike business managers/owners who were more likely to support construction of the proposed mine if they were unaware of it prior to their interview, residents appeared to start from a more guarded viewpoint. Those who were least aware of the mine appeared more likely to have a neutral opinion about the project.

### Sources of information about the proposed mine

- It appears that residents who were *moderately*, *very* or *extremely aware* of the proposed mine were likely to have received their information from sources other than the Wallarah 2 Coal Project. It is also highly likely that this information highlighted concerns and potentially negative impacts of the proposed mine, resulting in a lack of support amongst this group.
- The four most common sources of information for residents who had some level of awareness of the proposed mine prior to their interview were the same as those indicated by business managers/owners:
  - *local newspapers* (80%)
  - *family and friends* (53%)
  - *Wyong Shire Council* (13%)
  - *local radio* (12%).

Residents were also more likely to have obtained information from the *Walarah 2 Project Newsletter*, cited by 11 per cent of residents compared with 6 per cent of business managers/owners; and *Protest signs and posters*, cited by 12 per cent of residents compared with 4 per cent of business managers/owners.

### Concern about potential environmental impacts

- Respondents were *very concerned* about potential:
  - *Impacts on the groundwater supply in the local area* (mean concern score of **4.1** out of 5)
  - *Impacts on the surface water supply in the local area* (**4.1** out of 5)
  - *Mine subsidence impacts to houses and structures* (**3.7** out of 5).
- Respondents were *moderately concerned* about:
  - *Increasing the risk of flooding in some areas* (**3.4** out of 5)
  - *Noise produced by machinery at the mine's surface facilities* (**2.9** out of 5)
  - *Increased vehicle movements around the mine entrance* (**2.8** out of 5)
  - *More trains moving on local railway lines* (**2.6** out of 5).
- Respondents were *slightly concerned* about:
  - *The visual appearance of buildings at the mine's surface facilities* (**2.4** out of 5)
  - *Decreasing the risk of flooding in some areas* (**2.3** out of 5).

- On balance, female residents were more concerned than male residents, with significantly higher mean concern scores for eight of the nine potential environmental impacts. There were also significant differences by age group for four of the potential impacts (i.e. *visual appearance of buildings, more trains, increased vehicle movements and mine subsidence impacts*). In general, the level of concern increased with age and peaked in the 50-64 years age group before dipping again in the 65+ years age group.
- The more concerned residents were about eight potential environmental impacts of the mine, the more likely they were to oppose its construction. Specifically, opponents were more likely to be concerned about the following impacts than either those who agreed with its construction or those who did not have a strong opinion about the project:
  - *Mine subsidence impacts to houses and structures*
  - *Impacts on the groundwater supply in the local area*
  - *Increased vehicle movements around the mine entrance*
  - *The visual appearance of buildings at the mine's surface facilities*
  - *Impacts on the surface water supply in the local area*
  - *Increasing the risk of flooding in some areas*
  - *More trains moving on local railway lines*
  - *Noise produced by machinery at the mine's surface facilities.*

In addition, those who did not have a strong opinion were also significantly more likely to be concerned about mine subsidence, impacts on groundwater, increased vehicle movements and visual appearance of buildings than those who agreed with the construction of the mine.

### Possible impacts of the mine

- Respondents agreed that:
  - *Property values of the houses and land above the mine would be negatively affected* (mean agreement score of **4.1** out of 5)
  - *Mostly Central Coast people should be employed by a new mine* (**4.0** out of 5)
  - *Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions* (**4.0** out of 5)
  - *A new mine would help to generate jobs in Central Coast businesses* (**3.7** out of 5)
  - *A new underground mine would have a significant negative impact on the Central Coast environment* (**3.6** out of 5)
  - *A new mine would contribute significantly to the Central Coast economy* (**3.6** out of 5)
  - *A new mine would help to generate income for Central Coast businesses* (**3.6** out of 5).
- Respondents were divided over whether:
  - *The Central Coast community would benefit from a new mine* (**3.2** out of 5)
  - *New businesses would be attracted to the Central Coast by a new mine* (**3.1** out of 5)
  - *A new mine would attract people to live on the Central Coast* (**2.9** out of 5).
- Female residents were significantly more likely to agree that:
  - *Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions*
  - *A new underground mine would have a significant negative impact on the Central Coast's natural environment.*

Male residents were significantly more likely to agree that:

- *A new mine would help generate income for Central Coast businesses*
- *The Central Coast community would benefit from a new mine.*

Residents who were 65 years and over were significantly less likely to agree that:

- *Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions.*

- Residents who agreed with the construction of the mine were more likely to agree with these statements about potential (positive) social and economic impacts of the mine than those who disagreed with its construction or did not hold a strong opinion:
  - *The Central Coast community would benefit from a new mine*
  - *A new mine would help to generate income for Central Coast businesses*
  - *A new mine would help to generate jobs in Central Coast businesses*
  - *New businesses would be attracted to the Central Coast by a new mine*
  - *A new mine would contribute significantly to the Central Coast economy*
  - *Mostly Central Coast people should be employed by a new mine*
  - *A new mine would attract people to live on the Central Coast.*

In addition, those who did not hold a strong opinion were more likely to agree with the first four statements noted above than those who did not agree with the construction of the mine.

Conversely, those who agreed with the construction of the mine were more likely to **disagree** with these (negative) impact statements than those who disagreed with its construction or did not hold a strong opinion:

- *Property values of the houses and land above a new mine would be affected negatively*
- *A new underground mine would have a significant negative impact on the Central Coast environment.*

#### Level of support for the proposed mine

- Overall, residents' were less likely to support the proposed mine than their business counterparts (mean agreement score of **2.6** compared with 3.0 out of 5 for business managers/owners) with significantly more residents opposing its construction. Overall, 36 per cent agreed with its construction, 48 per cent did not agree with its construction, and 13 per cent held no strong opinion or were undecided.

Females were significantly less likely to support the construction of the proposed mine (mean agreement score of **2.5** out of a possible 5) than males (mean agreement score of **2.8**), but there were no significant differences in the level of support for the proposed mine by residents in the various age groups.



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# 1 Introduction and aims

## 1.1 Project background

The Wallarah 2 Coal Project is a proposed underground coal mine, planned for an area in the north-west of the Wyong Shire on the Central Coast, to the west of the F3 Freeway (see map in Appendix I). The Exploration Licence for the area was first granted by the NSW Government in 1995. Following on from the positive results of the exploration, an environmental impact assessment of the project is currently being completed. Part of that assessment process includes identifying and responding to issues raised through consultation with the community. This study forms part of the community consultation process. It comprises separate surveys of representatives from the Central Coast business community and local residents.

## 1.2 Business survey

The business telephone survey was conducted between 2 October and 20 October 2006, by the Central Coast Research Foundation (CCRF) on behalf of the Wallarah 2 Coal Project. The survey area included both the local government areas of Wyong and Gosford and also the areas between Morisset and Wyee, and between Catherine Hill Bay and Doyalson (both to the north of the Central Coast but in close proximity to the mine site). Businesses were randomly selected from the Electronic Yellow Pages. The broad aims of the business telephone survey were to:

- determine business awareness of the proposed mine
- determine their sources of information about the proposed mine
- identify business perceptions about the economic and environmental impact of the proposed mine
- assess business attitudes towards the proposed mine.

## 1.3 Resident survey

The resident telephone survey was conducted between 18 October and 2 November 2006. The survey area was identical to that used for the business survey. Households were randomly selected from the Electronic White Pages. The broad aims of the resident telephone survey were to:

- determine resident awareness of the proposed mine
- determine their sources of information about the proposed mine
- identify residents' perceptions about the economic and environmental impact of the proposed mine
- assess residents' attitudes towards the proposed mine.

Methods of data collection and analysis used for each survey are described, and the response rates indicated in Chapter 2. Results for the business survey are presented without any stratification in Chapter 3. Results of the resident survey are stratified by gender and age and are presented in Chapter 4. Key findings are discussed and where possible, comparisons between business and resident perceptions are summarised in Chapter 5.

Appendix I contains two location maps for the proposed mine, Appendix II presents a copy of the business survey questionnaire and Appendix III presents a copy of the resident survey questionnaire. The demographic characteristics of the businesses and residents surveyed are presented in Appendix IV and Appendix V respectively. Listings of final comments by business and resident survey respondents appear in Appendix VI and Appendix VII respectively and additional tables for both surveys appear in Appendix VIII.



## 2 Methods

### 2.1 Questionnaire development

Evan Steverson, Project Manager at the CCRF met with key staff of the Wallarah 2 Coal Project on 11 September 2006. The aim of the meeting was to prioritise items for inclusion in both the business and resident surveys. Following the meeting, the first draft of each survey questionnaire was developed by the CCRF. The business questionnaire is an abridged version of the resident questionnaire with several identical questions for which results can be compared between the two groups. The draft questionnaires underwent several revisions based on feedback from the client and other CCRF staff. The business questionnaire was finalised in late September and the resident questionnaire in mid-October 2006. Copies of the final questionnaires are provided as Appendix II (Business) and Appendix III (Resident).

### 2.2 Sample selection

After the client had defined the survey area, a random selection of business telephone numbers in the survey area was drawn by the CCRF from the Electronic Yellow Pages (EYP) directory. Similarly, a random selection of household telephone numbers was drawn by the CCRF from the Electronic White Pages (EWP) directory. Note: the latest version of both the Electronic White Pages and Electronic Yellow Pages is July 2004, which potentially reduces the contact rate (the proportion of numbers from these directories that results in a completed interview; the older the data source the higher the proportion of disconnected numbers). It also reduces coverage of the area since residents new to the area

### 2.3 Data collection

#### *i) Business survey*

Technique:	Computer assisted telephone interviews.
Interview period:	Monday, 2 October to Friday, 20 October 2006 inclusive.
Survey area:	LGAs of Gosford and Wyong as well as the areas between Morisset and Wyee, and between Catherine Hill Bay and Doyalson.

Respondent selection:	<p>The manager or owner of the business. When the required respondent was not available, an appointment to call back was made via the person answering the telephone and up to five calls back were made to secure an interview with the required person.</p> <p>If the selected business did not answer or the number was engaged, up to five calls back were made at different times and on different days. Where this procedure did not result in a successful interview a replacement telephone number was randomly selected.</p>
Final sample size:	<p>204 business managers/owners</p> <p>In respect of results for the whole of the survey area, a sample size of 200 business owners/managers yields a sample variation of <math>\pm 7.1</math> per cent at a confidence level of 95 per cent, given a response probability of 50 per cent.</p> <p>In practical terms, this means that if 50 per cent of the randomly selected respondents in the sample answered "yes" in a yes/no question (the result with the highest possible variation in statistical accuracy), the true proportion of the business owners/managers who would answer "yes" (if all were surveyed) would lie between 42.9 per cent and 57.1 per cent, 95 times out of 100.</p> <p>Characteristics of the businesses (industry, business type, number of staff, location and number of years in business) are provided in Appendix III.</p>
Average duration of interview:	<p>7.9 minutes. This timing includes time spent on the introductory stages of the interview with respondents who completed an interview. It does not include the time spent on all other calls that did not result in a completed interview. The range of interviewing times was between 4.9 minutes and 13.1 minutes.</p>
Response rate:	<p>79.7 per cent, calculated as the ratio of the number of completed interviews to the number of householders contacted who were eligible to participate in the study.</p>



Contact rate: 55.9 per cent, calculated as the ratio of eligible contacts to 'legitimate' contacts (total numbers called less numbers out of the area, as well as disconnected, household, and fax/data numbers).

Details of all telephone contacts to businesses are provided in Table 1.

**Table 1 Final call outcomes, response and contact rates for business survey**

<b>Final outcome</b>	<b>No.</b>	<b>No as % of total</b>	<b>No as % of eligible</b>
<b>Ineligible</b>			
Household	5	0.9%	
Disconnected	99	16.9%	
Fax/ data line	21	3.6%	
Call back - exhausted attempts	1	0.2%	
Unavailable during survey period	65	11.1%	
Unsuitable	95	16.2%	
No answer	24	4.1%	
Answering machine	14	2.4%	
Engaged	2	0.3%	
Non English Speaking (NES)	1	0.2%	
Not in study area	4	0.7%	
<b>Total Ineligible</b>	<b>331</b>	<b>56.6%</b>	
<b>Eligible</b>			
Completed interview	<b>204</b>	<b>34.8%</b>	<b>79.7%(*)</b>
Business refusal	5	0.9%	1.9%
Business manager/owner refusal	45	7.7%	17.6%
Incomplete interview	2	0.3%	0.8%
<b>Total Eligible</b>	<b>256</b>	<b>43.7%</b>	<b>100.0%</b>
<b>Total (eligible + ineligible)</b>	<b>587</b>	<b>100.0%</b>	
<b>Contact rate</b>		<b>55.9%</b>	

Note: See previous page for the definition of 'legitimate' contacts and the method of calculating the response and contact rates. (\*) Response rate

## *ii) Resident survey*

Technique:	Computer assisted telephone interviews.
Interview period:	Wednesday, 18 October to Thursday, 2 November 2006.
Survey area:	LGAs of Gosford and Wyong as well as the areas between Morisset and Wyee, and between Catherine Hill Bay and Doyalson.
Respondent selection:	<p>The nth oldest person residing in each randomly selected home in the survey area. The person answering the telephone was asked for the number of people aged 18 years and over in the household and the phone answerers position in the age range of the household. The respondent was then chosen from these eligible adults using a randomly generated number which specified his/her age position in the household. If the selected phone number did not answer, or if it was engaged, up to five calls back were made at different times and on different days. When the required respondent was not available, an appointment to call back was made via the person answering the telephone and up to five calls back were made to secure an interview with the required person. Where this procedure did not result in a successful interview a replacement telephone number was randomly selected.</p>
Final sample size:	<p>437 residents</p> <p>In respect of results for the whole of the survey area, a sample size of 400 yields a sample variation of <math>\pm 5.0</math> per cent at a confidence level of 95 per cent, given a response probability of 50 per cent.</p> <p>In practical terms, this means that if 50 per cent of the randomly selected respondents in the sample answered "yes" in a yes/no question (the result with the highest possible variation in statistical accuracy), the true proportion of the business owners/managers who would answer "yes" (if all were surveyed) would lie between 45 per cent and 55 per cent, 95 times out of 100.</p> <p>Characteristics of the residents (age, household size, suburb, years lived in area, and work status and industry) are provided in Appendix III.</p>

Average duration of interview: 10.3 minutes. This timing includes time spent on the introductory stages of the interview with respondents who chose to participate. The range of interviewing times was between 5.4 minutes and 18.9 minutes.

Contact rate: 43.1 per cent, calculated as the ratio of eligible contacts to 'legitimate' contacts (total numbers called less numbers out of the area, as well as disconnected, business, and fax/data numbers)

Response rate: Interviews were completed with residents from 76.36 per cent of the householders contacted who were eligible to participate in the survey.

Details of all telephone contacts to residents are provided in Table 2 below.

**Table 2 Final call outcomes, response and contact rates for resident survey**

Final outcome	No.	% of total	% of eligible
<b>Ineligible</b>			
Business	28	2.0%	
Disconnected	281	20.4%	
Fax/ data line	32	2.3%	
Call back - exhausted attempts	1	0.1%	
Unavailable during survey period	96	7.0%	
Unsuitable	93	6.7%	
No answer	95	6.9%	
Answering machine	147	10.6%	
Engaged	7	0.5%	
Non English Speaking (NES)	5	0.4%	
Not in study area	0	0%	
<b>Total Ineligible</b>	<b>785</b>	<b>56.9%</b>	
<b>Eligible</b>			
Completed interview	437	31.7%	<b>73.6% *</b>
Household refusal	92	6.7%	15.5%
Personal refusal	65	4.7%	16.5%
Incomplete interview	0	0%	0%
<b>Total eligible</b>	<b>594</b>	<b>43.1%</b>	<b>100%</b>
<b>Total (ineligible + eligible)</b>	<b>1,379</b>	<b>100.0%</b>	
<b>Contact rate</b>		<b>43.1%</b>	

Note: See previous page for the definition of 'legitimate' contacts and the method of calculating the response and contact rates. (\*) Response rate

## 2.4 Data analysis

### *i) Data weighting*

The resident survey data was weighted to reflect:

The number of people living in the household and eligible for interview. This procedure ensures that the opinions of people living in larger households are given the same weight as those living in smaller households.

The age and sex distribution of the population aged 18 and over living in the survey area, determined from the 2001 Census of Population and Housing. This procedure ensures that the weighted sample is representative of the age and sex distribution of the survey population.

After weighting, the number in the resident sample was also standardised to a total of 400. Weighting the sample down a little increases the theoretical variation in the sample results, but does not affect the response proportions. The larger variation implicit in the smaller sample means the results of tests of statistical significance will be more conservative, and will err on the side of caution. Because of this standardisation process, the total number of responses shown in the resident survey results will only ever total 400.

The survey data for the business survey was **not** weighted.

### *ii) Mean ratings*

For some survey questions respondents were asked to select a response from a specified five-point or three-point scale. Following are all of the scales that were included in the surveys:

#### **Trading Performance**

Very poor	(1)
Poor	(2)
Satisfactory	(3)
Good	(4)
Very good	(5)

#### **Performance of the economy**

Worse	(1)
Same	(2)
Better	(3)

#### **Awareness**

Not at all aware	(1)
Slightly aware	(2)
Moderately aware	(3)
Very aware	(4)
Extremely aware	(5)

**Concern**

Not at all concerned	(1)
Slightly concerned	(2)
Moderately concerned	(3)
Very concerned	(4)
Extremely concerned	(5)

**Impact**

Very negative impact	(1)
Negative impact	(2)
Neither negative nor positive impact	(3)
Positive impact	(4)
Very positive impact	(5)

**Agreement**

Strongly disagree	(1)
Somewhat disagree	(2)
Neither disagree nor agree	(3)
Somewhat agree	(4)
Strongly agree	(5)

There was also an option for responses such as *don't know*, *not applicable* or *refused*. Average (mean) ratings were calculated by assigning the value shown in parentheses next to each of the components within the scale, with all *don't know*, *not applicable* or *refused* responses excluded from the calculation.

Table 3 provides an example of the calculation of a mean rating.

**Table 3 Illustration of mean rating calculations**

Rating	No. points	No. responses	Calculation: no. points x no. responses	Mean rating
Strongly agree	5	30	5 x 30=150	The mean is calculated by dividing 800 by the number of responses using the 1 to 5 scale (in this case 300-40=260): 800/260
Somewhat agree	4	100	4 x 100=400	
Neither nor agree	3	30	3 x 30 = 90	
Somewhat disagree	2	60	2 x 60 =120	
Strongly disagree	1	40	1 x 40 = 40	
Don't know	Not included in calculation	40	Not included in calculation	
<b>Total</b>		<b>300</b>	<b>800</b>	<b>Mean = 3.1</b>

In this manner a mean rating of 1 would indicate that all respondents who provided a rating *strongly disagreed* with the specified statement; conversely, a mean of 5 would indicate that all respondents *strongly agreed*. Therefore, a higher rating represents a relatively more favourable response.

Note that when reviewing the detailed results it is important to consider:

- The distribution of ratings, since this may be masked in the mean score: for example, ratings which are evenly spread over the 1 to 5 scale may yield the same mean as those which are relatively polarised at either end of the scale
- The level of non-response (that is, *don't know* and *refusal* responses).

Agreement ratings were considered to be high where mean scores for the whole of the study area were above 3.5 out of 5. They were considered to be moderate for scores between 3.0 and 3.5, and low for scores below 3.0.

### **(iii) Statistical analysis**

Statistical analysis including chi-squares and analysis of variance (ANOVA) were conducted to examine factors that were associated with the level of support for the proposed mine. A Chi-square test determines significant differences in the frequency distribution of responses between groups while an ANOVA determines a significant difference in the mean ratings between groups. Factors were deemed to be statistically significant at the 95 per cent level of confidence ( $p \leq 0.05$ ), unless otherwise specified. In some cases where a statistically significant difference was found using a chi-square test, it was not found using an ANOVA or vice-versa; these instances are noted. In this report, reference to a 'significant differences' or a 'significant relationship' indicates that the association or difference is **statistically** significant.

In the business survey, factors for which an association with the level of support for the proposed mine were tested include:

- Level of awareness about the proposed mine
- Perceptions regarding business trading in the next 12 months
- Perceptions regarding the performance of the economy over the next 12 months
- Level of agreement with nine key statements about the proposed mine:
  - Property values of the houses and land above a new mine would be negatively affected
  - A new underground mine would have a significant negative impact on the Central Coast environment
  - Mostly Central Coast people should be employed by a new mine
  - A new mine would help to generate jobs in Central Coast businesses
  - A new mine would help to generate income for Central Coast businesses
  - The Central Coast community would benefit from a new mine
  - New businesses would be attracted to the Central Coast by a new mine
  - A new mine would attract people to live on the Central Coast
  - Your business would benefit directly from a new mine.

In the resident survey, factors for which an association with the level of support for the proposed mine were tested include:

- Level of agreement with 10 statements about key issues on the Central Coast:
  - There are enough good jobs on the Central Coast
  - People on the Central Coast have good access to health services
  - Crime levels are low on the Central Coast
  - The Central Coast has a good public transport system
  - The overall quality of the environment on the Central Coast is good
  - The road network on the Central Coast is well maintained

- Housing is generally affordable on the Central Coast
- There is a good range of recreation facilities on the Central Coast
- People on the Central Coast have good access to education services
- The Central Coast has a good availability of drinking water.
- Level of concern about nine potential environmental impacts of the proposed mine:
  - Mine subsidence impacts to houses and structures
  - Impacts on the groundwater supply in the local area
  - Impacts on the surface water supply in the local area
  - Increasing the risk of flooding in some areas
  - Decreasing the risk of flooding in some areas
  - More trains moving on local railway lines
  - Increased vehicle movements around the mine entrance
  - Noise produced by machinery at the mine's surface facilities
  - The visual appearance of buildings at the mine's surface facilities.
- Level of agreement with 10 key statements about the proposed mine
  - The Central Coast community would benefit from a new mine
  - Mostly Central Coast people should be employed by a new mine
  - A new mine would help to generate income for Central Coast businesses
  - A new mine would help to generate jobs in Central Coast businesses
  - New businesses would be attracted to the Central Coast by a new mine
  - A new mine would attract people to live on the Central Coast
  - Property values of the houses and land above a new mine would be affected negatively
  - A new mine would contribute significantly to the Central Coast economy
  - A new underground mine would have a significant negative impact on the Central Coast environment
  - Coal produced by the new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions.

## 2.5 Presentation of the results

In the tables in the following chapters responses are sorted, where relevant, in descending order of either frequency of response or the mean ratings. Note that:

- (i) Percentages calculated relate to the number of respondents who were asked the question; not the number of answers provided. Where more than one response to a question was given, the components will not add to the totals shown.
- (ii) A blank cell indicates that no-one responded in the manner indicated.
- (iii) All percentages and means are rounded to one decimal point, with the exception of mean scores in questions where ranking by mean scores has been undertaken. For these questions, mean scores are rounded to two decimal points.
- (iv) 0% in a table indicates rounded weighted responses totalling less than half a percentage point. This only occurs in the resident survey results.
- (v) Because of rounding after weighting, components shown in the tables may not sum to the totals shown. This only occurs in the resident survey results.
- (vi) All references to “the survey area” refer to the LGAs of Gosford and Wyong as well as the areas between Morisset and Wyee, and between Catherine Hill Bay and Doyalson. In contrast, all references to the Central Coast Region, Central Coast economy or Central Coast environment, refer specifically to the LGAs of Gosford and Wyong only.







## 3 Results: Business Survey

### 3.1 Business perceptions of trading performance

A majority (51.9%) of businesses surveyed described their trading performance over the past 12 months as either *good* or *very good*, 30.4 per cent described it as *satisfactory* and 14.7 per cent as either *poor* to *very poor*. The mean score on a scale from 1 to 5 was **3.7** indicating that on balance, business managers/owners described their trading performance as *good* over the past year. Detailed responses are presented in Table 4 below.

Business expectations for trading performance over the next 12 months were more positive than assessments of the previous 12 months. The proportion of businesses that anticipate *good* to *very good* trading performance over the next year was 63.7 per cent, 11.8 percentage points higher than the assessment of performance over last 12 months. The proportion that forecast *poor* to *very poor* performance was only 9.3 per cent, 5.4 percentage points less than the proportion that made the same assessment about trading performance over the past 12 months. The mean score for trading performance for the next 12 months was also higher, at **4.2** out of a possible 5 (as shown in Table 4).

On balance, this suggests that business managers and owners in the survey area predict improved trading performance for their businesses in the coming 12 months.

**Table 4 Business perceptions of business trading performance, frequencies and mean scores**

Excluding normal seasonal changes, would you describe your trading performance as....	Q1 Over the past 12 months?		Q2 Over the next 12 months?	
	No.	%	No.	%
Very poor	8	3.9%	2	1.0%
Poor	22	10.8%	17	8.3%
Satisfactory	62	30.4%	41	20.1%
Good	69	33.8%	67	32.8%
Very good	37	18.1%	63	30.9%
Don't know/ Not Applicable/ Refused	6	3.0%	14	6.9%
<b>Total</b>	<b>204</b>	<b>100.0%</b>	<b>204</b>	<b>100.0%</b>
<b>Mean score out of 5</b>	<b>3.7</b>		<b>4.2</b>	

### 3.2 Business perceptions of the performance of the Central Coast Economy

A majority of respondents (72.1%) thought the Central Coast economy would be *better off or the same* in 12 months time. This suggests that the positive outlook for business trading performance is also reflected for the Central Coast economy as a whole. However, despite overall business confidence in the Central Coast economy, there is a segment of the Central Coast business community (19.6 %) that believe the Region's economy will worsen in the next 12 months. Table 5 provides details.

**Table 5 Business perceptions about future performance of Central Coast economy, frequencies and mean score**

Q3 Do you think the Central Coast economy will be better, the same or worse in 12 months time?	No.	%
Worse	40	19.6%
The same	73	35.8%
Better	74	36.3%
Don't know/Refused	17	8.3%
<b>Total</b>	<b>204</b>	<b>100.0%</b>
<b>Mean score out of 5</b>	<b>2.7</b>	

### 3.3 Business awareness of Wallarah 2 Coal Project

Awareness of the proposed underground mine amongst the business community surveyed appears to be low. Over a third of respondents were *not at all aware* about the Wallarah 2 Coal Project prior to the interview. A further 44.6 per cent were *slightly* or *moderately aware* of the proposed mine. Detailed results are presented in Table 6. The mean awareness score was **2.2** out of 5.

**Table 6 Level of awareness amongst the business community about the proposed mine**

Q4 Prior to being contacted for this interview, how AWARE of the Wallarah 2 Coal Project were you? Would you say you were.....?	No.	%
Not at all aware	84	41.2%
Slightly aware	43	21.1%
Moderately aware	48	23.5%
Very aware	17	8.3%
Extremely aware	12	5.9%
<b>Total</b>	<b>204</b>	<b>100.0%</b>
<b>Mean score ot of 5</b>	<b>2.2</b>	

This finding regarding the low level of awareness about the proposed mine amongst the business community is reinforced in some of the final comments made by business managers/owners. Some of them indicated that they did not have sufficient information about the mine to be able to comment and that there had been a lack of communication and community consultation about the proposed mine. Some respondents specifically requested that the public be made more aware of the impact the proposed mine will have on the environment through the local newspapers and local television and that more meaningful information is made available, *not just snippets*.

### 3.4 Businesses' information sources about Wallarah 2 Coal Project

#### i) Suggested sources of information

The 120 business managers/owners who were at least *slightly aware* of the proposed mine prior to the interview were presented with a list of nine possible information sources and asked if he/she had seen or heard information regarding the proposed mine from each of them. The three most common sources were:

- **Local newspapers (76.7%)**
- **Family or friends (48.3%)**
- **Wyang Shire Council (20.8%)**

Of the communication methods designed specifically for disseminating information about the proposed mine, the *Walarah 2 Coal Project Newsletter* had the greatest reach amongst the business community, with 5.8 per cent of those who were asked reported having seen it. In contrast, the *Walarah 2 Coal Project Website* and the *Walarah 2 Community Liaison Committee Meetings* were each accessed or attended by less than 1 per cent of business managers/owners who were aware of the proposed mine. Table 7 provides details.

**Table 7 Business' sources of information about the Wallarah 2 Coal Project**

<i>[Asked of those respondents who were at least slightly aware of the proposed mine]</i>			
<b>Q5 From the following list could you please tell me where you may have seen, heard or noticed any information about the Wallarah 2 Coal Project?</b>	<b>No.</b>	<b>% of those who were aware (N=120)</b>	<b>% of total Sample (N=204)</b>
Local newspaper	92	76.7%	45.1%
Friends or family	58	48.3%	28.4%
Wyang Shire Council	25	20.8%	12.3%
Another type of function	9	7.5%	4.4%
Walarah 2 Coal Project Newsletters	7	5.8%	3.4%
Community meeting	7	5.8%	3.4%
Mine Subsidence Board	4	3.3%	2.0%
Walarah 2 Coal Project Website	1	0.8%	0.5%
Walarah 2 Community Liaison Committee Meetings	1	0.8%	0.5%
<b>Total</b>	<b>120</b>	<b>100.0%</b>	<b>100.0%</b>

NOTE: Given that each respondent could have selected more than one source of information, the number of responses and the corresponding proportions in each of the columns **do not** add up to the totals on the last row .

## ii) Other sources of information

Of the 120 business managers/owners who were at least slightly aware of the proposed mine, 68 reported having no other sources of information about the mine.

The three additional sources of information most frequently cited by the remaining 52 respondents included:

- **Radio (22.5%)**
- **Television (5.0%)**
- **Protest signs/posters (4.2%).**

Given that radio was selected by 22.5 per cent respondents as a source of information about the mine, it becomes the third most common source of information overall after *local newspapers* and *family and friends*. This means that the *Wyang Shire Council* becomes the fourth most common source of information overall. All other additional sources of information about the proposed mine are listed in Table 8.

**Table 8 Other sources of information about the proposed mine identified by the business community**

<i>[Asked of those respondents who were at least slightly aware of the proposed mine]</i>	No.	% of those who were aware (N=120)	% of total sample (N=240)
<b>Q5p10 Any other sources?</b>			
Radio	27	22.5%	13.2%
Television	6	5.0%	2.5%
Protest signs/posters	5	4.2%	2.5%
Other signage including road signs and advertising	4	3.3%	2.0%
Workplace/work	3	2.5%	1.5%
Application in mining magazine/publication	2	1.7%	1.0%
Member of GAS Alliance	2	1.7%	1.0%
Personal contact with Coal Australia	2	1.7%	1.0%
Rotary	1	0.8%	0.5%
Valley Progress Association	1	0.8%	0.5%
Coal Mining Society	1	0.8%	0.5%
General discourse in community	1	0.8%	0.5%
Prospectus	1	0.8%	0.5%
Other published material	1	0.8%	0.5%
No other source of information	68	56.7%	33.3%
<b>Total</b>	<b>120</b>	<b>100.0%</b>	<b>58.8%</b>

NOTE: Given that each respondent could provide more than one additional source of information, the number of responses and the corresponding proportions in each of the columns **do not** add up to the totals on the last row .

### 3.5 Business community's perceived impact of the Wallarah 2 Coal Project on the Central Coast economy

#### i) Overall impact

Over half (55.4%) of all business managers/owners felt that the Wallarah 2 Coal Project's proposed mine would have either a *positive impact* or *very positive impact* on the Central Coast economy. A mean score of **3.5** indicates that, on balance, the business community felt that the proposed coal mine would be beneficial to the Region's economy.

However, approximately 14 per cent of respondents felt that the proposed mine would have a *negative* or *very negative impact* on the Central Coast economy. Given that the business community's opinions about the economic impact of the mine are likely to carry significant weight amongst the general community, further investigation into reasons for their concerns about the proposed mine having a *negative impact* on the local economy may be useful. Detailed results for this question are presented in Table 9.

**Table 9 Business perceptions of the impact of the underground mine on the Central Coast economy**

Q6 What type of impact do you feel the Wallarah 2 Coal Project's underground mine would have on the Central Coast economy. Would it have a ....?	No.	%
Very negative impact	9	4.4%
Negative impact	19	9.3%
Neither negative nor positive impact	50	24.5%
Positive impact	97	47.6%
Very positive impact	16	7.8%
Don't know/ Not sure	13	6.4%
<b>Total</b>	<b>204</b>	<b>100.0%</b>
<b>Mean score out of 5</b>	<b>3.5</b>	

#### ii) Most negative impact

Twenty eight business managers/owners provided a response. Unfortunately, rather than focus on the *most negative impact the mine would have on the Central Coast economy*, many respondents provided what they thought to be the *most negative impact* the proposed mine would have **overall**. Consequently, the responses presented are not limited to purely economic impacts. Statements are listed in Table 10 (over).. The three most frequently cited *most negative impacts* were:

- **Concern over water quality and availability**
- **Loss of jobs**
- **Decline in tourism and residential populations.**

The *most negative impacts*, although interrelated, could broadly be categorised into:

- Economic impacts
- Environmental impacts
- Social impacts
- General opposition to mining

Each statement has been recorded verbatim. Where a statement contained two different impacts of the proposed mine, the first impact mentioned was used to allocate the statement to one of the four abovementioned categories and subsequent impacts, although listed, are not included in the tally. Within each of the four categories, similar statements have been further grouped together under sub-themes to assist in interpretation of the data.

**Table 10 Business perceptions about the MOST NEGATIVE impact of the proposed mine on the Central Coast economy**

<b>Q6a What do you think the MOST NEGATIVE impact on the Central Coast economy would be?</b>	<b>No. of mentions</b>
<b>Economic impacts</b>	
<ul style="list-style-type: none"> <li>Coming from a mining community, I think they will employ out of area workers and their partners will take away ancillary jobs from locals</li> <li>They won't employ local people but will bring in foreigners</li> <li>I see it as a disruption to the employment and economy of the region</li> </ul>	3
<ul style="list-style-type: none"> <li>The mine will take away from what the Central Coast is all about which is residential communities and tourism</li> <li>It will cause a decline in local tourism</li> <li>The mine may stop people coming here as residents</li> </ul>	3
<ul style="list-style-type: none"> <li>Since the mine it is not owned by an Australian company, there is no substantial benefit to the Australian community</li> <li>The mining company will take profits elsewhere/</li> </ul>	2
<ul style="list-style-type: none"> <li>The economic effects of a sinking water table and the cost of remedial actions to deal with it.</li> <li>The financial cost of cleaning up pollution</li> </ul>	2
<ul style="list-style-type: none"> <li>The value of homes will drop and mine subsidence is also an issue</li> <li>Cost of mine subsidence</li> </ul>	2
<b>Environmental impacts</b>	
<ul style="list-style-type: none"> <li>Effect on water table leading to additional problems in the catchment area</li> <li>A decline in local water quality also concerned about dust and air pollution</li> <li>Loss of water through ground aquifers being hit</li> <li>Subterranean water, springs and other sources of water will be affected</li> <li>Underground water sources: the mine could effect and contaminate the water supply and damage the river beds</li> <li>It will influence water and we have a water problem now</li> </ul>	6
<ul style="list-style-type: none"> <li>Increased traffic on roads</li> <li>Traffic issues</li> </ul>	2
<ul style="list-style-type: none"> <li>I am environmentally against any type of coal mining</li> <li>The resulting pollution</li> </ul>	2
<ul style="list-style-type: none"> <li>Decline in local air quality</li> </ul>	1
<b>Social</b>	
<ul style="list-style-type: none"> <li>It will upset many people and take their land</li> </ul>	1
<ul style="list-style-type: none"> <li>There is no broad community benefit</li> </ul>	1
<ul style="list-style-type: none"> <li>I am worried about the overall impact on people living above</li> </ul>	1
<b>General opposition to coal mining</b>	
<ul style="list-style-type: none"> <li>I am adamantly opposed to any coal mine</li> </ul>	1
<ul style="list-style-type: none"> <li>I wouldn't like to see more mines in the area</li> </ul>	1

It appears from these results that despite almost 80 per cent of business managers/owners perceiving that the proposed mine will have a positive impact on the local economy, approximately 10 per cent of respondents are concerned about economic issues such as the loss of existing local jobs to workers from outside the Region, a decline in tourism and population growth, a loss of profits overseas, the financial cost of cleaning up pollution and managing the water crisis, the drop in property values and the overall cost of mine subsidence.

### *iii) Most positive impact*

A total of 141 business managers/owners provided a response. The three most frequently cited *most positive impacts* were:

- **Increased employment and employment opportunities**
- **Increased cash flow and investment**
- **Spin-offs for local businesses.**

As with Table 10, all similar responses were grouped together under five categories and appear in Table 11. To avoid unnecessary repetition, where responses were identical or very similar in wording, they have not been repeated in the list of statements under each sub-heading but are represented by the number of respondents who cited that particular type of impact.

Where statements represented a slightly extended concept under the same sub-heading, they have been included so as not to lose the additional information. Where a respondent offered more than one impact, the impact that was mentioned first was taken as being their response and their statement was allocated to a category accordingly.

**Table 11 Business perceptions about the MOST POSITIVE impact of the proposed mine on the Central Coast economy.**

<b>Q6b What do you think the MOST POSITIVE impact on the Central Coast economy would be?</b>	<b>No. of mentions</b>
<b>Increased employment and employment opportunities</b>	
<ul style="list-style-type: none"> <li>• Increased employment opportunities</li> <li>• Creation of more employment</li> <li>• Employment for skilled local workers</li> <li>• Employment for 300 local residents</li> <li>• Ancillary work for construction of and maintenance of the mine</li> <li>• Increased employment although minimal for the amount of profit to be shifted overseas</li> <li>• Employment for local unemployed youth</li> <li>• Employment for school leavers and apprentices among local residents</li> </ul>	103
<b>Increased cash flow and investment</b>	
<ul style="list-style-type: none"> <li>• Increased money and a cash injection</li> <li>• It will bring more money to the town, region, and area</li> <li>• It will bring new money and investment to the area</li> <li>• It will help the economics of the area</li> <li>• It will increase average wages</li> <li>• Increased spending power</li> <li>• More people will have well paid jobs</li> <li>• Income generation</li> <li>• Increased exports</li> </ul>	23

*Table continued over*

Q6b What do you think the <b>MOST POSITIVE</b> impact on the Central Coast economy would be?	No. of mentions
<b>Spin-offs for local businesses</b>	
<ul style="list-style-type: none"> <li>• Flow-on to other businesses</li> <li>• Increase in all retail trade</li> <li>• Property development: it would encourage the building industry</li> </ul>	8
<b>Increased population</b>	
<ul style="list-style-type: none"> <li>• It would attract a greater population</li> <li>• Housing growth</li> </ul>	5
<b>Reduces commuting</b>	
<ul style="list-style-type: none"> <li>• No need to travel to work potential to reduce commuting</li> <li>• Central Coast residents can avoid working in Sydney</li> </ul>	2

In summary, the results on the *most negative* and *most positive* impacts of the proposed mine on the local economy appear to be conflicting. While **increased employment and employment opportunities** cited by over half of business managers/owners is perceived to be the *most positive impact* that the proposed mine would have on the Central Coast economy, a fear that new jobs will go to workers and their partners from outside the Region is the second most frequently cited *most negative impact* on the Central Coast economy and equates to **no increase in employment**. However, given that a significantly higher proportion of business managers/owners (103) cited an increase in employment opportunities compared with respondents who were concerned about jobs not going to locals (3), the qualitative findings confirm earlier results that, on balance, the business community felt that the proposed mine would benefit the local economy and increase employment opportunities in the Region.

### 3.6 Business agreement with key statements about possible impacts of the proposed mine

In order to get a more detailed understanding of business managers/owners' perceptions of the impact of the proposed mine, respondents were presented with a list of nine key statements about the mine. Six of the statements expressed positive impacts of the proposed mine, two identified possible negative impacts of the proposed mine and one was a prescriptive statement about employment practices at the proposed mine.

Business managers/owners level of agreement with each of these nine statements is shown in Table 12 (over) . The table provides summary results in the form of mean scores on a scale from 1 to 5, ranked in descending order. Detailed results indicating the proportion of respondents who provided each rating are provided in Table 13 (page 22-23). For the purposes of ranking, the means have been provided to two decimal places.

The three statements with the highest level of agreement ranked by mean score were:

- **Property values of the houses and land above a new mine would be negatively affected**
- **A new underground mine would have a significant negative impact on the Central Coast environment**
- **Mostly Central Coast people should be employed by a new mine.**



The two statements with the highest level of agreement are the two indicating negative impacts. This seems to suggest a higher level of agreement and greater consensus amongst the business community about potential adverse impacts than about the potential positive impacts of the proposed mine. Negative environmental impacts were also cited in the previous section by approximately 10 per cent of business managers/owners as the *most negative impact* of the proposed mine confirming this issue as a major concern, at least for a section of the business community.

**Table 12 Business managers' level of agreement with key statements about possible impacts of the proposed mine, mean scores**

<b>Q7 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed UNDERGROUND mine. After each one, I would like you to give me YOUR OPINION about whether you agree or disagree. ...</b>	<b>No.of responses</b>	<b>Mean agreement score</b>	<b>Rank</b>
Property values of the houses and land above a new mine would be negatively affected	197	4.05	1
A new underground mine would have a significant negative impact on the Central Coast environment	187	4.00	2
Mostly Central Coast people should be employed by a new mine	202	3.99	3
A new mine would help to generate jobs in Central Coast businesses	197	3.73	4
A new mine would help to generate income for Central Coast businesses	200	3.54	5
The Central Coast community would benefit from a new mine	191	3.46	6
New businesses would be attracted to the Central Coast by a new mine	193	3.18	7
A new mine would attract people to live on the Central Coast	196	3.01	8
Your business would benefit directly from a new mine	202	2.30	9

The environmental impact statement was also the one with the least number of responses (187 out of a possible 204). Given that some business managers/owners requested more information about the environmental impact of the proposed mine during their concluding interview statements, it is likely that their inability to provide a response to the environmental impact statement was the result of a lack of information about potential environmental impacts of the proposed mine. It is also likely that any information about possible negative environmental impacts of the proposed mine have been disseminated by parties other than the Wallarah 2 Coal Project and have highlighted the negative aspects of the development in an attempt to sway public opinion away from construction of the mine. This provides a plausible explanation for the high level of agreement about the negative impact statements in comparison to the positive impact statements.

There was also a fairly high level of consensus amongst business managers/owners that: *Mostly Central Coast people should be employed by a new mine*, reinforcing comments in the previous section about concerns that employment opportunities at the proposed mine might be taken up by workers from outside the Central Coast Region.

The statement with the highest level of disagreement was: *Your business would benefit directly from a new mine*, with a mean score of **2.30** out of a possible 5. This suggests that many business managers/owners are uncertain that the mine will directly benefit their businesses. There is also the possibility that the businesses surveyed were not closely associated with the

mining industry and consequently less able to predict *direct* benefits to their business arising from the proposed mine.

**Table 13 Business managers' level of agreement with key statements about possible impacts of the proposed mine, detailed results and mean scores**

Q7 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed UNDERGROUND mine. After each one, I would like you to give me YOUR OPINION about whether you agree or disagree. ...						
Property values of the houses and land above a new mine would be negatively affected				A new underground mine would have a significant negative impact on the Central Coast environment		
	No.	%			No.	%
Strongly disagree	7	3.4%		Strongly disagree	4	2.0%
Disagree	16	7.8%		Disagree	32	15.7%
Neither	10	4.9%		Neither	30	14.7%
Agree	115	56.4%		Agree	79	38.7%
Strongly agree	49	24.0%		Strongly agree	42	20.6%
Don't know	6	2.9%		Don't know	16	7.8%
Total	204	100.0%		Total	204	100.0%
Mean score out of 5	4.05			Mean score out of 5	4.00	
Mostly Central Coast people should be employed by a new mine				A new mine would help to generate jobs in Central Coast businesses		
	No.	%			No.	%
Strongly disagree	2	1.0%		Strongly disagree	6	2.9%
Disagree	26	12.7%		Disagree	30	14.7%
Neither	14	6.9%		Neither	23	11.3%
Agree	99	48.5%		Agree	121	59.3%
Strongly agree	61	29.9%		Strongly agree	17	8.3%
Don't know	2	1.0%		Don't know	7	3.4%
Total	204	100.0%		Total	204	100.0%
Mean score out of 5	3.99			Mean score out of 5	3.70	
A new mine would help to generate income for Central Coast businesses				The Central Coast community would benefit from a new mine		
	No.	%			No.	%
Strongly disagree	9	4.4%		Strongly disagree	11	5.4%
Disagree	36	17.6%		Disagree	49	24.0%
Neither	22	10.8%		Neither	40	19.6%
Agree	121	59.3%		Agree	81	39.7%
Strongly agree	12	5.9%		Strongly agree	9	4.4%
Don't know	4	2.0%		Don't know	13	6.4%
Total	204	100.0%		Total	204	100.0%
Mean score out of 5	3.54			Mean score out of 5	3.46	

New businesses would be attracted to the Central Coast by a new mine		
	No.	%
Strongly disagree	15	7.4%
Disagree	63	30.9%
Neither	38	18.6%
Agree	75	36.8%
Strongly agree	2	1.0%
Don't know	10	4.9%
Total	204	100.0%
Mean score out of 5	3.20	
Your business would benefit directly from a new mine		
	No.	%
Strongly disagree	47	23.0%
Disagree	97	47.5%
Neither	25	12.3%
Agree	27	13.2%
Strongly agree	6	2.9%
Don't know	2	1.0%
Total	204	100.0%
Mean score out of 5	2.30	

A new mine would attract people to live on the Central Coast		
	No.	%
Strongly disagree	22	10.8%
Disagree	71	34.8%
Neither	26	12.7%
Agree	71	34.8%
Strongly agree	6	2.9%
Don't know	8	4.0%
Total	204	100.0%
Mean score out of 5	3.00	

### 3.7 Business level of support for the proposed mine

Despite agreement regarding the economic benefits of the proposed mine, overall business community support for the mine was low according to responses to the statement: *Considering everything. I would support the construction of the proposed mine.* Detailed responses appear in Table 14 (over).

The largest proportion of respondents *agreed* with the statement (30.9%), followed by those who *strongly disagreed* (23.0%). This suggests that business support for the mine was polarised, with a slightly higher proportion of business manager/owners surveyed either *disagreeing* or *strongly disagreeing* (40.2 %) with the statement than those either *agreeing* or *strongly agreeing* (33.8%). The mean agreement score of **3.0** out of a possible 5 clearly masks the polarisation of ratings at either end of the scale.

Business managers/owners who *disagreed* or *strongly disagreed* with the construction of the proposed mine are referred to as **opponents**; those who *neither disagreed nor agreed* are referred to as **fence sitters**, and those who *agreed* or *strongly agreed* are referred to as **supporters**.

**Table 14 Level of business community support for the proposed mine**

<b>Q7p10 Considering everything, I would support the construction of the proposed mine.</b>				
	<b>No.</b>	<b>%</b>		<b>%</b>
Strongly disagree	47	23.0%	<b>Opponents</b>	40.2%
Disagree	35	17.2%		
Neither disagree or agree	41	20.1%	<b>Fence sitters</b>	20.1%
Agree	63	30.9%	<b>Supporters</b>	33.8%
Strongly agree	6	2.9%		
Don't know	12	5.9%		
<b>Total</b>	<b>204</b>	<b>100.0%</b>		<b>94.1%</b>
<b>Mean score</b>	<b>3.0</b>			

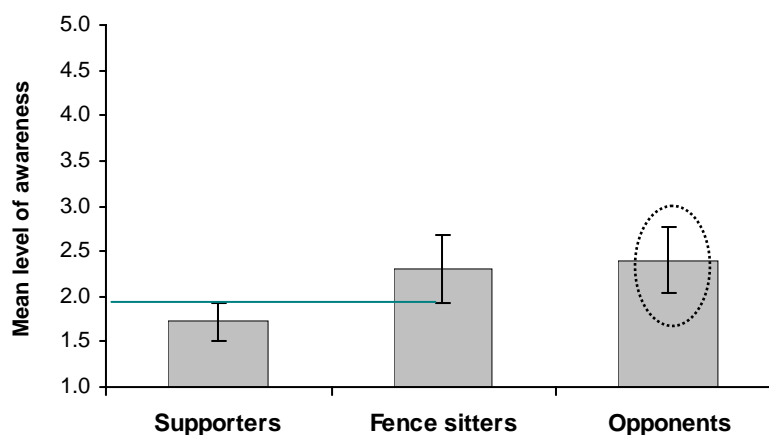
### 3.8 Impact of awareness and other opinions on level of business support

Comparative analysis between the three different groups (supporters, fence sitters and opponents) and their level of awareness about the mine revealed that there is a statistically significant difference between relative awareness of, and support for, the proposed mine.

As Figure 1 depicts, opponents and fence sitters were much more likely to have been aware of the mine prior to their interview (mean awareness scores of **2.8** and **2.5** respectively, out of a possible 5) compared with supporters (mean score of **1.9** out of a possible 5). There were no statistically significant differences between opponents and fence sitters in terms of their awareness of the proposed mine prior to the interview.

There were no statistical associations between trading performance forecasts for the next 12 months or forecasts about the performance of the Central Coast economy and level of support for the proposed mine. Business managers/owners surveyed were just as likely to support or oppose the proposed mine regardless of their confidence regarding the performance of their business or the Region's economy over the next 12 months.

**Figure 1 Level of awareness by level of support, comparison of mean awareness scores**



SOURCE: HVRF, 2006

**NOTES:**

Awareness score for all subsequent charts in this section: 1= not at all aware to 5 = very to extremely aware.

Confidence intervals (circled) are an indication of the statistical uncertainty of each value shown on the graph. Wider confidence intervals indicate greater uncertainty.

When comparing values, if the confidence intervals do not overlap (as shown here between the supporters and fence sitters), we can be 95 per cent certain that the observed difference is statistically significant and not due to chance.

Significant differences were also found between the level of support and business managers/owners' responses to seven of the nine impact statements about the mine reported Section 3.6. There were no statistically significant differences between the three groups (supporters, fence sitters and opponents) and their responses to two of the nine statements:

- *Mostly Central Coast people should be employed by a new mine*
- *Property values of the house and land above the new mine would be affected negatively.*

Statistically significant differences between the three groups in terms of their responses to the other seven impact statements appear in Figure 2 to Figure 8 below. Three trends are apparent:

- **Three-way difference:** difference between all three groups
- **Two-way difference:** difference between supporters and fence sitters and supporters and opponents but not between fence sitters and opponents.
- **One-way difference:** difference between supporters and opponents but not between fence sitters and the other two groups.

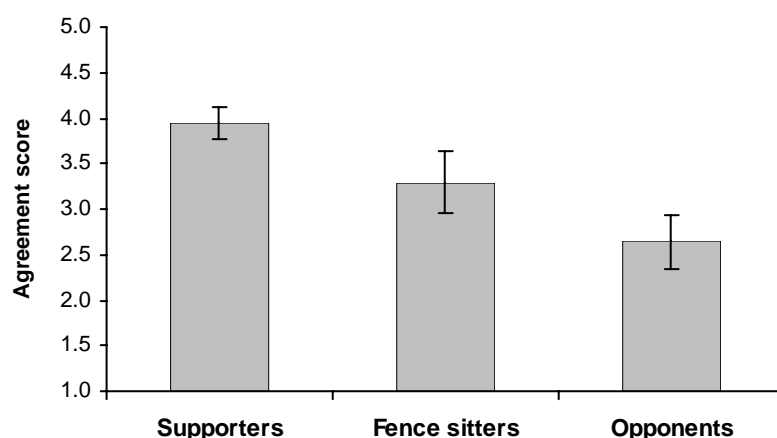
### **Three-way difference**

As Figure 2 indicates, there is a significant difference between all three groups in terms of their responses to the statement:

- *A new mine would help to generate income for Central Coast businesses.*

Business managers/owners who agree with the statement (mean score of **3.9** out of a possible 5) were more likely to support the mine. Conversely, those who disagreed with the statement (mean score of **2.6**), were more likely to oppose the mine. Fence sitters had a mean agreement score of **3.3** and their responses were also significantly different from the other two groups. This suggests that the ability to see a direct tangible benefit (*increased income*) to their business has a very strong influence on business managers/owners' support for the proposed mine.

**Figure 2 A new mine would help to generate income for Central Coast businesses, comparison of mean agreement scores**

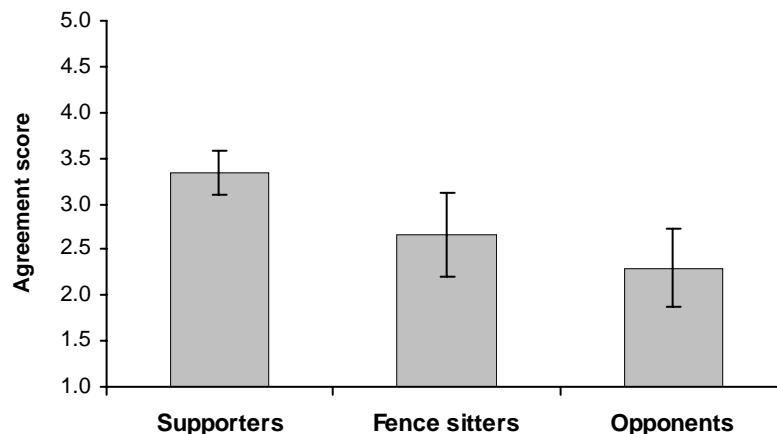


SOURCE: HVRF, 2006

### Two way difference

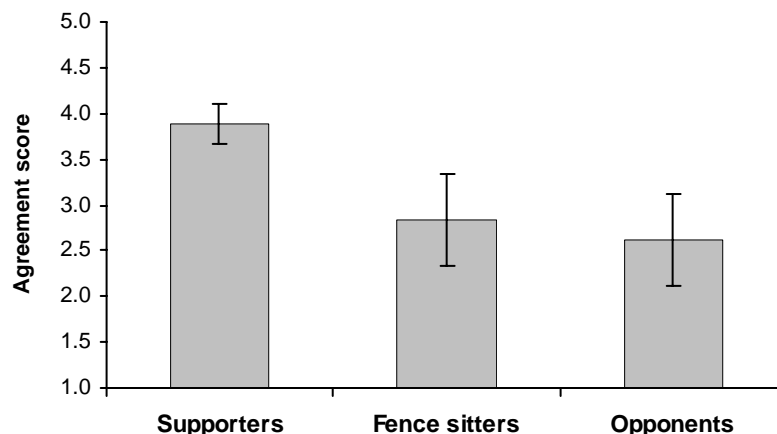
As illustrated in Figure 3, supporters were significantly more likely to agree that: *A new mine would attract people to live on the Central Coast* (mean agreement score of **3.3**) than fence sitters (mean score of **2.7**) or opponents (mean score of **2.3**). Similarly, as is indicated in Figure 4, supporters were much more likely to agree that: *The Central Coast community would benefit from the new mine* than either fence sitters or opponents. Conversely supporters were less likely to agree that: *The mine would have significant negative impact on the Central Coast environment* than either fence sitters or opponents. See Figure 5 (over).

**Figure 3 A new mine would attract people to live on the Central Coast, comparison of mean agreement scores**



SOURCE: HVRF, 2006

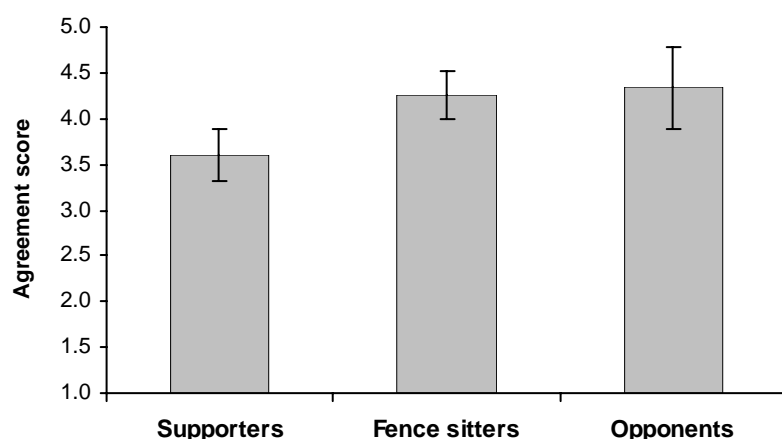
**Figure 4 The Central Coast community would benefit from a new mine, comparison of mean agreement scores**



SOURCE: HVRF, 2006

The results for the two-way differences suggest that impacts of the proposed mine on the broader Central Coast region, community and environment also have a strong influence on business managers/owners' support for the proposed mine but have a lesser ability to distinguish between those that are fence sitters and opponents.

**Figure 5 A new underground mine would have a significant negative impact on the Central Coast environment, comparison of mean agreement scores**

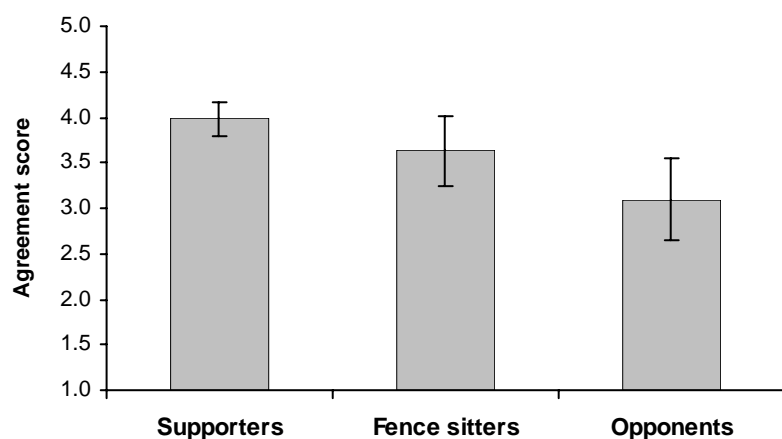


SOURCE: HVRF, 2006

### **One-way difference**

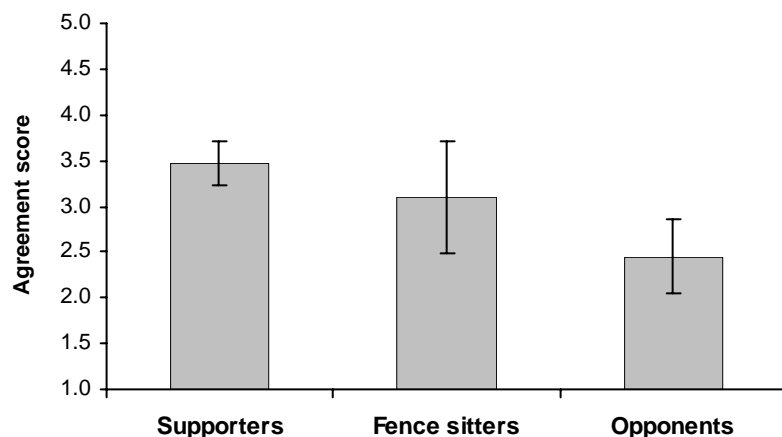
In Figure 6 it is apparent that supporters were more likely than opponents to agree that: *A new mine would help generate jobs in Central Coast businesses*

**Figure 6 A new mine would help generate jobs in Central Coast businesses, comparison of mean agreement scores**



SOURCE: HVRF, 2006

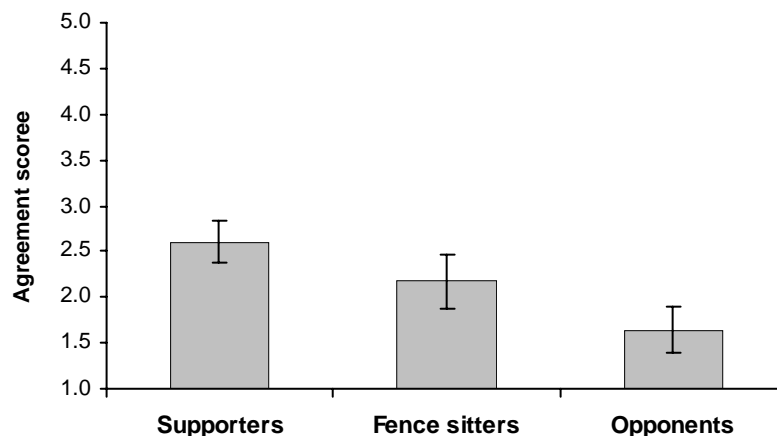
**Figure 7 New businesses would be attracted to the Central Coast by a new mine, comparison of mean agreement scores**



SOURCE: HVRF, 2006

In Figure 7 (before) it is evident that supporters were significantly more likely than opponents to agree that: *New businesses would be attracted to the Central Coast as a result of the mine.* Similarly as displayed in Figure 8 indicates that supporters were significantly more likely than opposers to agree with the statement: *Your business would benefit directly from a new mine.*

**Figure 8 Your business would benefit directly from a new mine, comparison of mean agreement scores**



SOURCE: HVRF, 2006

In summary, it appears that both prior awareness about the mine and opinions about some key impacts of the mine are statistically associated with business managers/ owners' overall support of the proposed mine. In particular, there seems to be greater support for the proposed mine by business managers/owners who agreed that the mine would *help generate income for local businesses*. Although not as significant, business managers/owners who agreed that the proposed mine would *attract new people to live on the Central Coast, benefit the Central Coast community* and disagreed that the proposed mine would *have a significant negative impact on the environment* were also more likely to support its construction. Ultimately, however, it is the relationship between awareness and support which is the most intriguing and will be explored further in Chapter 5 of this report.

### 3.8 Additional comments

Business managers/owners were also given the opportunity to make a final comment about the proposed mine. A complete listing of their responses, grouped into categories can be found in Appendix VI.

Comments were varied, with a range of positive, negative and neutral statements. It appears from the comments that the environmental impact of the mine featured strongly amongst business managers/owners and was of concern to the largest number of respondents, followed by economic issues and a lack of information and community consultation about the proposed mine.

In addition to those noted in earlier sections, the following factors were also of concern in relation to the proposed mine:



***Alternate fuel sources*** – a few respondents expressed concern about the specific impact of coal mining on climate change and stressed the importance of moving towards less environmentally-damaging and more renewable sources of fuel.

***Rail infrastructure*** – one respondent raised the issue of additional stress that the proposed mine would have on current rail infrastructure in the region, indicating concern that it has the potential to collapse the current system.





## 4 Results: Resident Survey

### 4.1 Residents' opinions about key issues on the Central Coast

#### i) All residents

Mean agreement scores for each statement ranked in descending order appear in Table 15 below. There were five statements with mean agreement scores under 3, indicating that they were areas of concern. These were

- The Central Coast has a good availability of drinking water
- The road network on the Central Coast is well maintained
- There are enough good jobs on the Central Coast
- Crime levels are low on the central Coast
- The Central Coast has a good public transport system

The statements with the highest mean agreement scores (both over 3.5) were:

- The overall quality of the environment on the Central Coast is good
- People on the Central Coast have good access to education services

**Table 15 Residents agreement with key issue statements, ranked by mean agreement score**

Q1 I am going to read out a list of statements about important issues on the Central Coast. After each one, I would like you to give me your opinion about whether you agree or disagree.	No. of responses	Mean agreement score	Rank
The overall quality of the environment on the Central Coast is good	396	3.82	1
People on the Central Coast have good access to education services	365	3.77	2
There is a good range of recreation facilities on the Central Coast	390	3.46	3
People on the Central Coast have good access to health services	395	3.32	4
Housing is generally affordable on the Central Coast	386	3.32	5
The Central Coast has a good public transport system	372	2.70	6
Crime levels are low on the Central Coast	371	2.47	7
There are enough good jobs on the Central Coast	358	2.32	8
The road network on the Central Coast is well maintained	399	2.22	9
The Central Coast has a good availability of drinking water	393	2.17	10

In summary, the results suggest that, overall, Central Coast residents disagree that the Region has *good availability of drinking water*, a *well maintained road network*, a *sufficient number of good jobs*, *low crime levels* or a *good public transport system*, while it appears that *access to education services* and the *quality of the environment* seem to be meeting residents' current expectations. Detailed responses to each of the statements are provided in Appendix VII.

### *i) Significant differences by gender*

Overall, females on the Central Coast had lower mean agreement scores than males for eight of the 10 statements but only one of these was significantly different as presented in Table 16. Females were significantly less likely to agree that *the overall quality of the environment on the Central Coast is good*.

Although their mean scores were not statistically different, the distribution of responses by males and females in response to the statement “*there is a good range of recreation facilities on the Central Coast*” were significantly different. Females were much more likely to strongly disagree with the statement than their male counterparts but males were more likely to strongly agree than females.

**Table 16 Residents’ agreement with key issues statements, comparison of mean scores by gender**

<b>Q1 I am going to read out a list of statements about important issues on the Central Coast. After each one, I would like you to give me your opinion about whether you agree or disagree.</b>	<b>Female Mean Score</b>	<b>Male Mean Score</b>	<b>Total Mean Score</b>
The overall quality of the environment on the Central Coast is good	3.71	3.95	3.82
People on the Central Coast have good access to education services	3.75	3.80	3.77
There is a good range of recreation facilities on the Central Coast	3.38	3.55	3.46
People on the Central Coast have good access to health services	3.24	3.41	3.32
Housing is generally affordable on the Central Coast	3.29	3.35	3.32
The Central Coast has a good public transport system	2.62	2.78	2.70
Crime levels are low on the Central Coast	2.53	2.41	2.47
There are enough good jobs on the Central Coast	2.23	2.41	2.33
The road network on the Central Coast is well maintained	2.27	2.17	2.22
The Central Coast has a good availability of drinking water	2.16	2.18	2.17

**NOTE:**

Shaded black row indicates a significant difference in mean agreements scores for males and females as indicated by an ANOVA.

Shaded grey row indicates a statistically significant difference in the distribution of agreement scores as determined by a chi-square test.

Overall, the three issues on the Central Coast that residents believe are of greatest concern were identical for males and females but were ordered differently between the sexes. The following are the statements with the lowest agreement scores by gender.

#### **Females**

**good availability of drinking water,  
having enough good jobs and  
having a well maintained road network.**

#### **Males**

**having a well maintained road network,  
good availability of drinking water and  
having enough good jobs.**

#### *ii) Significant differences by age group*

Analysis by age group was limited to a comparison of mean agreement scores between age groups using ANOVAs. The large number of cells generated by cross-tabulation of five age groups against five response options made it prohibitive to run chi-square tests. Table 17 provides the mean agreement scores by age group for each of the 10 statements.

**Table 17 Residents' agreement with key statements, comparison of mean agreement scores by age groups**

<b>Q1 I am going to read out a list of statements about important issues on the Central Coast. After each one, I would like you to give me your opinion about whether you agree or disagree.</b>	<b>18 – 24 Mean Score</b>	<b>25 – 34 Mean Score</b>	<b>35 – 49 Mean Score</b>	<b>50 – 64 Mean Score</b>	<b>65 and over Mean Score</b>	<b>Total Mean Score</b>
The overall quality of the environment on the Central Coast is good	3.88	3.94	3.90	3.72	3.72	3.82
People on the Central Coast have good access to education services	3.78	3.84	3.73	3.69	3.83	3.77
There is a good range of recreation facilities on the Central Coast	3.39	3.54	3.26	3.43	3.71	3.46
People on the Central Coast have good access to health services	3.81	3.41	3.17	2.96	3.57	3.32
Housing is generally affordable on the Central Coast	2.95	3.32	3.46	3.16	3.44	3.32
The Central Coast has a good public transport system	2.79	3.12	2.57	2.34	2.83	2.71
Crime levels are low on the Central Coast	2.88	2.37	2.75	2.17	2.28	2.47
There are enough good jobs on the Central Coast	2.37	2.44	2.38	2.08	2.35	2.32
The road network on the Central Coast is well maintained	2.58	2.07	2.23	2.04	2.34	2.22
The Central Coast has a good availability of drinking water	2.91	2.10	2.20	2.20	1.82	2.17

Shaded rows indicates a significant difference in mean agreements between males and females

For those under 25 years, the main issues were having enough good jobs, having a well maintained road network and having a good public transport system. For those between the ages of 25 and 64, the main issues were having a well maintained road network, having a good availability of drinking water and having low crime levels and having enough good jobs; and for those 65 years and over, having a good availability of drinking water, having low crime levels and having a well maintained road network were the main issues.

In summary, when designing communication materials about the proposed mine, important issues to address include how the mine may impact on the *availability of drinking water*, the *availability of good jobs*, *road maintenance* and *crime levels* on the Central Coast. Addressing how the construction of the mine may or may not impact on these four important issues would ensure that the information would have wide appeal to males, females and all the age groups covered in this survey.

## 4.2 Residents' awareness about the Wallarah 2 Project

### i) All residents

Awareness of the proposed underground mine amongst residents surveyed was low, as indicated by a mean score of **2.2** out of 5. This was the same mean awareness score obtained in the business managers/owners survey.

Over 40 per cent of respondents were *not at all aware* about the Wallarah 2 Coal Project prior to the interview. A further 43.4 per cent were *slightly* or *moderately aware* of the proposed mine. Detailed results indicating the number and proportion of residents by gender that selected each option are presented in Table 18.

**Table 18 Resident awareness of the Wallarah 2 Project prior to their interview, proportion and mean awareness score by gender**

Q2 Prior to being contacted for this interview, how AWARE of the Wallarah 2 Coal Project were you? Would you say you were.....?	Overall	Female		Male		Overall
	No	No.	%	No	%	%
Not at all aware	163	99	46.9%	64	33.9%	40.7%
Slightly aware	89	48	22.7%	41	21.7%	22.2%
Moderately aware	85	41	19.4%	44	23.3%	21.2%
Very aware	49	17	8.1%	32	17.0%	12.3%
Extremely aware	14	6	2.8%	8	4.2%	3.6%
<b>Total</b>	<b>400</b>	<b>211</b>	<b>100%</b>	<b>189</b>	<b>100%</b>	<b>100.0%</b>
<b>Mean score out of 5</b>	<b>2.2</b>	<b>2.0</b>		<b>2.4</b>		

### *ii) Significant differences by gender and age group*

Overall, females were significantly less aware of the Wallarah 2 Coal Project than males. Approximately 47 per cent of female respondents were *not at all aware* of the proposed mine compared with 40.7 per cent of males. The mean awareness score for females of 2.0 was significantly lower than the mean awareness score for males of 2.4 out of a possible 5.

There were no significant differences between age groups in terms of their level of awareness about the mine.

## **4.3 Residents' information sources about the Wallarah 2 Coal Project**

### *i) Suggested sources of information*

The 237 residents who reported that they were at least slightly aware of the proposed mine prior to their interview were asked about their sources of information about the mine. Each respondent was presented with a list of nine possible information sources and asked if he/she had seen or heard information regarding the proposed mine from each of them. The three most common sources were:

- **Local newspapers (79.9%)**
- **Friends or family (53.2%)**
- **Wyong Shire Council (13.2%).**

Of the communication methods designed specifically for disseminating information about the proposed mine, the *Walarah 2 Coal Project Newsletter* had the greatest reach amongst residents, with 11.3 per cent reported having seen it. In contrast, the *Walarah 2 Coal Project Website* was accessed by less than 3 per cent of residents who were aware of the proposed mine and the *Walarah 2 Community Liaison Committee Meetings* were attended by less than 1 per cent of residents. Detailed results are listed in Table 19).

**Table 19 Residents' sources of information about the Wallarah 2 Coal Project**

<b>Q3 From the following list could you please tell me where you may have seen, heard or noticed any information about the Wallarah 2 Coal Project?</b>	<b>No.</b>	<b>% of those who were aware (N=237)</b>	<b>% of total Sample (N=400)</b>
Local newspaper	189	79.9%	47.4%
Friends or family	126	53.2%	31.5%
Wyong Shire Council	31	13.2%	7.8%
Walarah 2 Coal Project Newsletters	27	11.3%	6.7%
Community meeting	20	8.3%	4.9%
Another type of function	13	5.6%	3.3%
Walarah 2 Coal Project Website	7	2.8%	1.6%
Mine Subsidence Board	6	2.4%	1.4%
Walarah 2 Community Liaison Committee Meetings	2	0.9%	0.5%
<b>Total</b>	<b>237</b>	<b>100.0%</b>	<b>100.0%</b>

NOTE: Given that each respondent could have selected more than one source of information, the number of responses and the corresponding proportions in each of the columns **do not** add up to the totals on the last row .

Given the small number of respondents who selected all but the two most common sources of information about the proposed mine (*local newspaper* and *friends or family*); no further analysis by age or gender was undertaken for this question.

## ii) Other sources of information

Of these 237 respondents who were at least slightly aware of the proposed mine, 152 reported having no other sources of information about the mine. Detailed results appear in Table 20.

The three additional sources most frequently cited by the remaining respondents included:

- **Radio**
- **Protest signs and poster**
- **Television.**

Given that both **radio** and **protest signs and posters** were identified by 11.3 per cent of residents as sources of information about the proposed mine, they join the *Wallarrah 2 Coal Project Newsletter* as one of the fourth most common sources of information for residents. The small number of respondents who identified each of the additional sources of information made further analysis by age or gender prohibitive.

**Table 20 Other sources of information about the proposed mine identified by residents**

Any other sources?	No.	% of those who were aware (N=236)	% of total sample (N=400)
Radio	27	11.6%	6.9%
Protest signs/posters	27	11.5%	6.8%
Television	9	3.9%	2.3%
Workplace/work	4	1.8%	1.1%
Direct contact with protestors	4	1.6%	1.0%
Internet	3	1.5%	0.9%
General discourse in community	3	1.1%	0.7%
Friends own land in area	2	0.8%	0.5%
Public forums	2	0.7%	0.4%
Member of Community Environment Network	1	0.6%	0.3%
Media - General	1	0.3%	0.2%
No other source	152	64.5%	38.1%
<b>Total</b>	<b>236</b>	<b>100.0%</b>	<b>100.0%</b>

NOTE: Given that each respondent could provide more than one additional source of information, the number of responses and the corresponding proportions in each of the columns **do not** add up to the totals on the last row .



## 4.4 Residents' level of concern about potential environmental impacts of the proposed mine

### *i) All residents*

Survey respondents were presented with nine potential environmental impacts of the proposed mine and asked to indicate their level of concern using a five-point scale: the higher the mean score, the higher the level of concern. As Table 21 indicates, overall the three potential environmental impacts of greatest concern to residents (all with mean scores above 3.5) were:

- **Impacts on the groundwater supply in the local area**
- **Impacts on the surface water supply in the local area**
- **Mine subsidence impacts to houses and structures.**

Concern about water supply in the local area seems to be a recurrent theme amongst residents and reflects current concerns in the broader community and significant media coverage about a *water crisis* on the Central Coast. Detailed responses for each statement appear in Appendix VII.

**Table 21 Residents' level of concern regarding potential environmental impacts of the proposed mine, mean concern score**

<b>Q4 I am now going to read out a list of potential environmental issues that have been raised in relation to the Wallarah 2 Coal Project's proposed underground mine.</b>  <b>After each one, I would like you to tell me how concerned you would be about each one.</b>	<b>No. of responses</b>	<b>Mean concern score</b>	<b>Rank</b>
Impacts on the groundwater supply in the local area	380	4.07	1
Impacts on the surface water supply in the local area	380	4.05	2
Mine subsidence impacts to houses and structures	389	3.67	3
Increasing the risk of flooding in some areas	367	3.42	4
Noise produced by machinery at the mine's surface facilities	388	2.89	5
Increased vehicle movements around the mine entrance	396	2.79	6
More trains moving on local railway lines	397	2.60	7
The visual appearance of buildings at the mine's surface facilities	392	2.41	8
Decreasing the risk of flooding in some areas	347	2.28	9

### *ii) Significant differences by gender*

There were significant differences between males and females in terms of their level of concern with eight of the nine potential environmental impacts of the proposed mine. For all of these eight potential environmental impacts, females had significantly higher mean concern scores indicating that they were significantly more concerned than males: see Table 22 (over). This suggests that females and may require more information about potential environmental impacts of the proposed mine and more opportunities to have their concerns addressed than their male counterparts.

**Table 22 Residents' level of concern about potential environmental impacts of the proposed mine, mean concern scores by gender**

<b>Q4 I am now going to read out a list of potential environmental issues that have been raised in relation to the Wallarah 2 Coal Project's proposed underground mine.</b>  <b>After each one, I would like you to tell me how concerned you would be about each one.</b>	<b>Female Mean concern score</b>	<b>Male Mean concern score</b>	<b>Overall Mean concern score</b>
Impacts on the groundwater supply in the local area	4.20	3.92	4.07
Impacts on the surface water supply in the local area	4.21	3.87	4.05
Mine subsidence impacts to houses and structures	3.84	3.49	3.67
Increasing the risk of flooding in some areas	3.64	3.18	3.42
Noise produced by machinery at the mine's surface facilities	3.12	2.63	2.89
Increased vehicle movements around the mine entrance	3.06	2.49	2.79
More trains moving on local railway lines	2.81	2.38	2.60
The visual appearance of buildings at the mine's surface facilities	2.74	2.05	2.41
Decreasing the risk of flooding in some areas	2.36	2.20	2.28

Note: Shading indicates that there is a statistical difference in mean concern scores between males and females

#### ***ii) Significant differences by age group***

Significant differences by age groups were also apparent with four of the nine potential environmental impacts as, presented in Table 23 (over)

In terms of *mine subsidence impacts to houses and structures*, there was a significant difference between residents in the 18-24 year age group and those in the 35-49, 50-64 and the 65+ age groups as illustrated in Figure 9 (over).

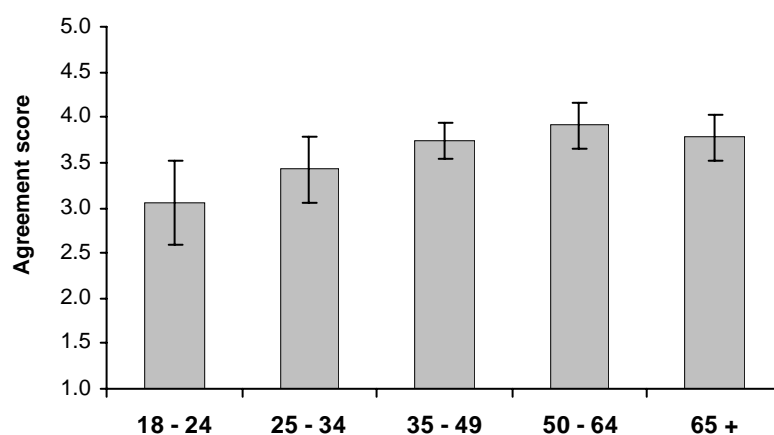
On average, residents under 25 years of age were significantly less likely to be concerned about *mine subsidence impacts* than respondents over 35 years. Given that home ownership rates are lowest in this younger age bracket, it would be expected that they would be less concerned about *mine subsidence impacts*.

**Table 23 Residents' level of concern about potential environmental impacts of the proposed mine, mean concern score by age groups**

Q4 I am now going to read out a list of potential environmental issues that have been raised in relation to the Wallarah 2 Coal Project's proposed underground mine.  After each one, I would like you to tell me how concerned you would be it	18 – 24 Mean score	25 – 34 Mean score	35 – 49 Mean score	50 – 64 Mean score	65 and over Mean score	Total Mean score
Impacts on the groundwater supply in the local area	3.65	4.10	4.09	4.22	4.07	4.07
Impacts on the surface water supply in the local area	3.62	4.01	4.13	4.13	4.11	4.05
Mine subsidence impacts to houses and structures	3.06	3.42	3.75	3.91	3.78	3.67
Increasing the risk of flooding in some areas	3.52	3.16	3.57	3.45	3.35	3.42
Noise produced by machinery at the mine's surface facilities	2.39	2.70	3.09	3.08	2.82	2.89
Increased vehicle movements around the mine entrance	2.06	2.35	2.92	3.13	2.93	2.79
More trains moving on local railway lines	1.97	2.34	2.64	2.97	2.68	2.60
The visual appearance of buildings at the mine's surface facilities	1.58	2.08	2.65	2.71	2.43	2.41
Decreasing the risk of flooding in some areas	2.04	2.24	2.27	2.41	2.34	2.28

Note: Shading indicates that there is a statistical difference in mean concern scores between age groups

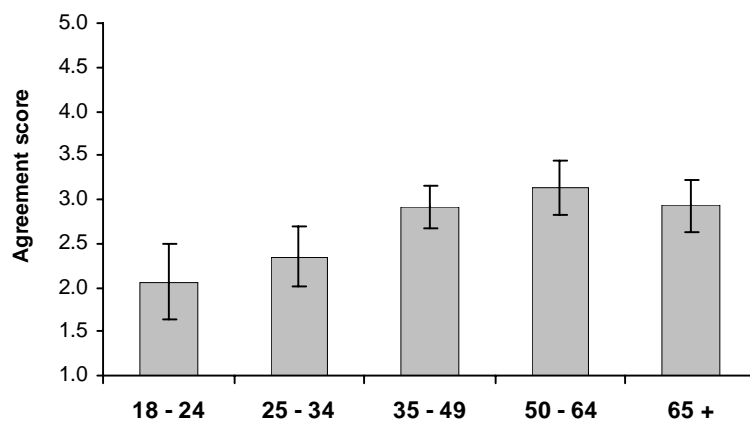
**Figure 9 Mine subsidence impacts on houses and structures, mean concern scores by age groups**



SOURCE: CCRF, 2006

A similar trend is apparent for: *Increased vehicle movements around the mine entrance*. Those in the 18-24 age group were significantly less concerned than those who were 35 years or over and 25-34 year olds were also significantly less concerned than 50-64 year olds as displayed in Figure 10.

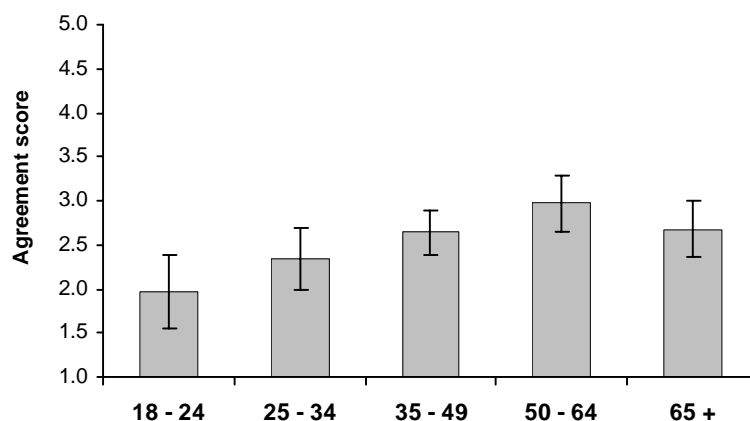
**Figure 10 Increased vehicle movements around the mine entrance, mean agreement scores by age group**



SOURCE: CCRF, 2006

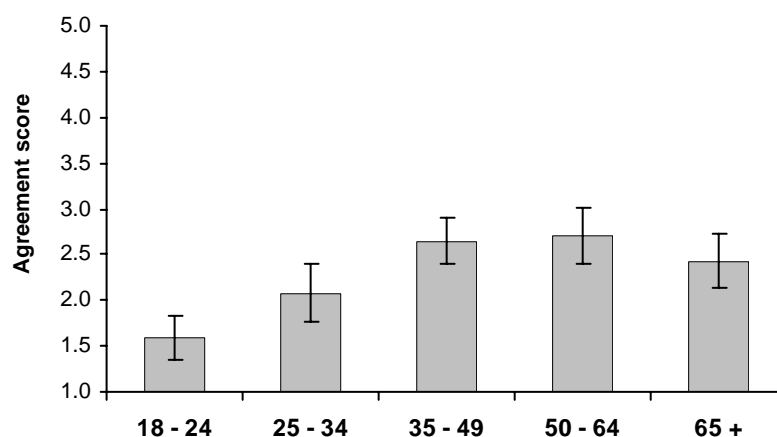
The results for the statements: *More trains moving on local railway lines* (see Figure 11) and *The visual appearance of buildings at the mine's surface facilities* (see Figure 12) follow a similar trend. It appears that the level of concern about these four potential environmental impacts of the proposed mine (where there is a significant difference by age group) increases with age and peaks in the 50-64 age group before declining amongst those who are 65 years and over.

**Figure 11 More trains moving on local railway lines, mean concern scores by age groups**



SOURCE: CCRF, 2006

**Figure 12 The visual appearance of buildings at the mine's surface facilities, mean concern scores by age groups**



SOURCE: CCRF, 2006

## 4.5 Residents' opinions about other issues relating to the Wallarah 2 Coal Project

### *i) All residents*

In addition to the potential environmental impacts of the mine, respondents were also presented with a list of 10 key statements about the mine, many of which had been presented in the business survey. Six of the statements expressed positive impacts of the proposed mine, two identified possible negative impacts and two were prescriptive statements about the running of the mine.

Residents' level of agreement with each of these nine statements is shown in Table 24. Detailed results indicating the proportion of respondents who provided each rating are provided in Appendix VIII. For the purposes of ranking, the means have been provided to 2 decimal places.

The three statements with the highest level of agreement ranked by mean score were:

- **Property values of the houses and land above a new mine would be affected negatively**
- **Mostly Central Coast people should be employed by a new mine**
- **Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions.**

**Table 24 Residents' level of agreement with key statements about the potential impacts of the mine, by mean agreement score**

<b>Q5 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed underground mine. After each one, I would like you to give me your opinion about whether you agree or disagree. ...</b>	<b>No.of responses</b>	<b>Mean agreement score</b>	<b>Rank</b>
Property values of the houses and land above a new mine would be affected negatively	390	4.11	1
Mostly Central Coast people should be employed by a new mine	396	4.03	2
Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions	387	3.96	3
A new mine would help to generate jobs in Central Coast businesses	394	3.70	4
A new underground mine would have a significant negative impact on the Central Coast's natural environment	377	3.62	5
A new mine would contribute significantly to the Central Coast economy	388	3.59	6
A new mine would help to generate income for Central Coast businesses	386	3.56	7
The Central Coast community would benefit from a new mine	381	3.17	8
New businesses would be attracted to the Central Coast by a new mine	372	3.09	9
A new mine would attract people to live on the Central Coast	379	2.86	10

The high level of agreement amongst residents that: *The proposed mine would negatively impact property values of houses and land above the mine* indicates that this is an issue of major concern for most residents, not just for those who live within close proximity to the mine.

The statements with the second and third highest mean agreement scores were both prescriptive statements about the operations of the mine. It appears that like their business counterparts, there is a high level of consensus amongst residents that: *A new mine should employ mostly local people*; over 80 per cent expected new jobs created by the proposed mine to be filled by locals. Similarly, over 75 per cent of residents agreed that: *Coal produced by the proposed mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions*. (see Appendix VIII) This reflects growing awareness and concern amongst many Australians about the impacts of coal burning on the global environment.

The three statements with the lowest mean agreement scores related to benefits to the Central Coast community and attraction of new businesses and people to the area as a result of the proposed mine. Detailed results in Appendix VII confirm that rather than reflect a moderate level of agreement, the three mid-range mean agreement scores actually reflect a polarisation of opinions about these potential impacts of the proposed mine. While a significant proportion of residents believe that the proposed mine will benefit the community and attract new businesses and people to the Region, a comparable proportion disagree that the proposed mine would have these positive impacts.

Like the business community, there tends to be a lower degree of consensus amongst residents about the potential positive economic benefits that the proposed mine may have on the Central Coast in comparison to the potential negative environmental impacts. This suggests that concern about the potential negative impacts of the proposed mine currently outweigh any perceived benefits of the mine.

## ***ii) Significant differences by gender***

Significant differences were found between male and female mean agreement scores for four of the 10 statements. Detailed comparison of means appear in Table 25 (over).

Females were more likely to agree that: *Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions* and that: *A new underground mine would have a significant negative impact on the Central Coast's natural environment*. On the other hand, males were more likely to agree that: *A new mine would help to generate income for Central Coast businesses* and that: *The Central Coast community would benefit from a new mine*.

This confirms earlier findings that females are more concerned than males about the potential environmental impacts of the proposed mine. It also appears that females are less convinced about potential benefits the proposed mine may have on businesses and the Central Coast community at large.

**Table 25 Residents' level of agreement with key statements about the potential impacts of the mine, mean agreement scores by gender**

<b>Q5 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed underground mine. After each one, I would like you to give me your opinion about whether you agree or disagree. ...</b>	<b>Female Mean score</b>	<b>Male Mean score</b>	<b>Total Mean score</b>
Property values of the houses and land above a new mine would be affected negatively	4.16	4.06	4.11
Mostly Central Coast people should be employed by a new mine	4.03	4.03	4.03
Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions	4.11	3.79	3.96
A new mine would help to generate jobs in Central Coast businesses	3.70	3.70	3.70
A new underground mine would have a significant negative impact on the Central Coast's natural environment	3.80	3.42	3.62
A new mine would contribute significantly to the Central Coast economy	3.55	3.62	3.59
A new mine would help to generate income for Central Coast businesses	3.42	3.70	3.56
The Central Coast community would benefit from a new mine	3.04	3.31	3.17
New businesses would be attracted to the Central Coast by a new mine	3.02	3.17	3.09
A new mine would attract people to live on the Central Coast	2.87	2.85	2.86

Note: Shaded rows indicate that there is a statistical difference in mean scores between males and females

## ii) Significant differences by age group

Details of mean agreement scores by age groups for each of the 10 statements are displayed in Table 26 (over).

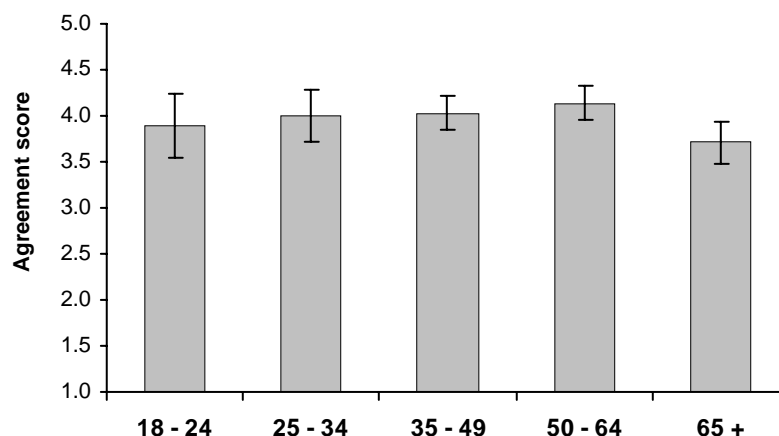
There was one significant difference in mean agreement scores between the age groups and that was for the statement: *Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions*. Figure 13 (over) confirms that people in the 65 and over age group are significantly less likely to agree with the statement than those in the 50-64 age group.

**Table 26 Residents' level of agreement with key statements about the potential impacts of the mine, mean agreement scores by age group**

<b>Q5 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed underground mine. After each one, tell me whether you agree or disagree. ...</b>	<b>18 – 24 Mean Score</b>	<b>25 – 34 Mean Score</b>	<b>35 – 49 Mean Score</b>	<b>50 – 64 Mean Score</b>	<b>65 and over Mean Score</b>	<b>Total Mean Score</b>
Property values of the houses and land above a new mine would be affected negatively	4.30	4.13	4.05	4.19	4.01	4.11
Mostly Central Coast people should be employed by a new mine	4.12	4.21	4.04	4.01	3.86	4.03
Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions	3.89	4.00	4.03	4.14	3.71	3.96
A new mine would help to generate jobs in Central Coast businesses	3.70	3.58	3.74	3.74	3.70	3.70
A new underground mine would have a significant negative impact on the Central Coast's natural environment	3.57	3.49	3.72	3.55	3.68	3.62
A new mine would contribute significantly to the Central Coast economy	3.66	3.77	3.62	3.49	3.48	3.59
A new mine would help to generate income for Central Coast businesses	3.40	3.70	3.65	3.58	3.40	3.56
The Central Coast community would benefit from a new mine	3.12	3.43	3.19	3.05	3.09	3.17
New businesses would be attracted to the Central Coast by a new mine	2.80	3.27	3.20	2.99	3.05	3.09
A new mine would attract people to live on the Central Coast	2.43	2.96	2.96	2.83	2.89	2.86

(Shaded rows indicate that there is a statistical difference in mean scores between age groups)

**Figure 13 Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions**



SOURCE: CCRF, 2006



## 4.6 Residents' level of support for the proposed mine

### i) All residents

Overall resident support for the mine was assessed according to their responses to the statement: *Considering everything, I would support the construction of the proposed mine.* Detailed responses appear in Table 27.

The detailed results reveal that support is polarised but overall, the mean agreement score of **2.6** out of a possible 5 indicates that resident support for the proposed mine is poor. The largest proportion of respondents *strongly disagreed* with the statement (31.0%), followed by those who *agreed* (28.8%). On the whole, a slightly higher proportion of residents surveyed either *strongly disagreed* or *disagreed* with the statement than those who either *agreed* or *strongly agreed*.

Residents who *disagreed* or *strongly disagreed* with the construction of the proposed mine are referred to as **opponents**; those who *neither disagreed nor agreed* are referred to as **fence sitters**; and those who *agreed* or *strongly agreed* are referred to as **supporters**.

**Table 27 Level of resident support for the mine**

<b>Q5p11 Considering everything, I would support the construction of the proposed mine.</b>				
	<b>No.</b>	<b>%</b>		<b>%</b>
Strongly disagree	124	31.0%	<b>Opponents</b>	47.8%
Disagree	67	16.8%		
Neither disagree or agree	52	13.0%	<b>Fence sitters</b>	13.0%
Agree	115	28.8%	<b>Supporters</b>	35.9%
Strongly agree	28	7.1%		
Don't know	13	3.3%		
<b>Total</b>	<b>400</b>	<b>100.0%</b>		<b>96.7%</b>
<b>Mean score</b>	<b>2.6</b>			

Both the lower mean agreement score and the higher proportion of **opponents** amongst residents in comparison with business managers/owners indicates that support for the mine was even lower amongst residents than it was for business managers/owners.

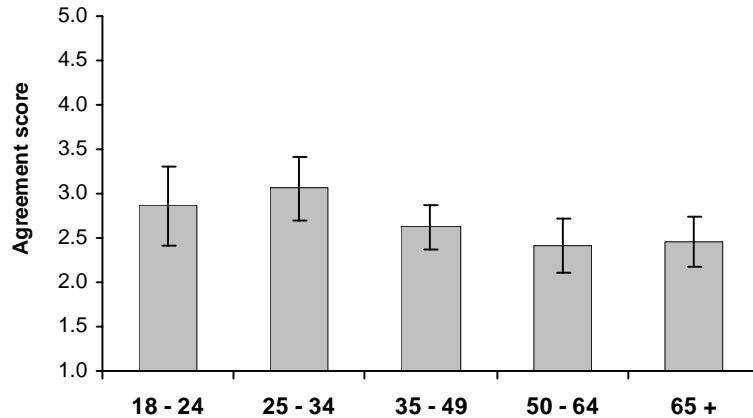
### ii) Significant differences by gender

There was a significant difference in mean agreement scores between males and females. Females were significantly less likely to support the construction of the proposed mine (mean agreement score of **2.5** out of a possible 5) compared to the male mean agreement score of **2.8**.

## ii) Significant differences by age group

There were no significant differences in the level of support for the proposed mine by age group. However, Figure 14 suggests that support tended to be higher in those under 35 years.

**Figure 14 Level of resident support for the proposed mine by age group**



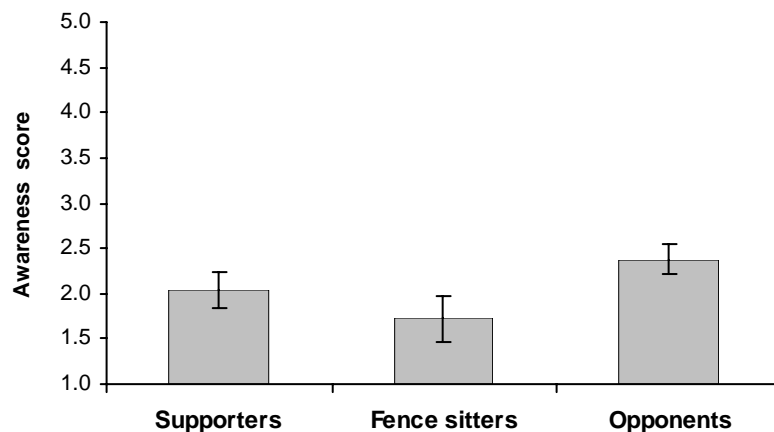
SOURCE: CCRF, 2006

## 4.7 Impact of awareness and other opinions on level of resident support

Given its significance, the analysis between level of support and level of awareness is presented first. As Figure 15 illustrates, opponents were much more likely to have been aware of the mine prior to their interview (mean awareness scores of **2.4** out of a possible 5) compared to supporters and fence sitters (mean awareness score of **2.0** and **1.7** respectively). There were no statistically significant difference between supporters and fence sitters in terms of their awareness of the proposed mine.

There was, however, an interesting difference between business managers/owners and residents in terms of the impact their level of awareness had on their level of support. Unlike business managers/owners who were more likely to support the mine the more unaware they were of it; residents tended to start from a more guarded perspective and were more likely to be undecided about the mine, the less they knew about it.

**Figure 15 Mean awareness score by level of support for residents**



SOURCE: CCRF, 2006

Many other factors were found to influence a resident's level of support for the mine. Statistically significant differences between the three groups in terms of their responses to survey questions appear in individual figures below. Three trends are apparent:

- **Three-way difference:** difference between all three groups
- **Two-way difference:** difference between supporters and fence sitters and supporters and opponents but not between fence sitters and opponents.
- **One-way difference:** difference between supporters and opponents but not between fence sitters and the other two groups.

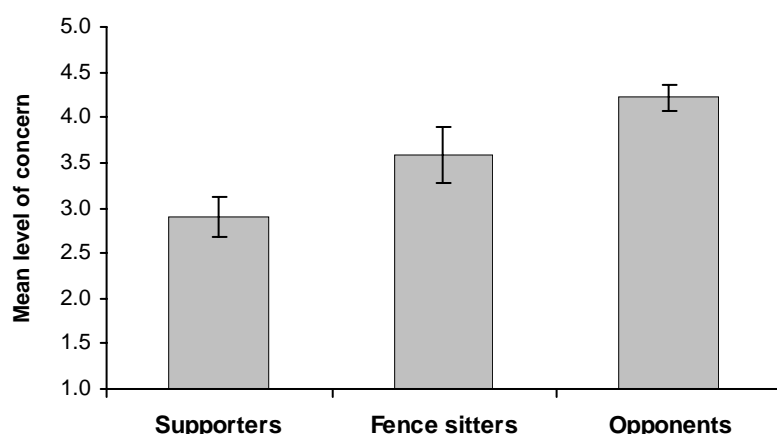
### Three-way differences

Statements that displayed significant differences between all three groups had the strongest influence on residents' level of support for the proposed mine. How residents responded to these statements gave a strong indication of their level of support for the proposed mine. These differences are illustrated in Figure 16 to Figure 24 (pages 47-49)

- *Mine subsidence impacts to houses and structures* (mean concern score)
- *Impacts on the groundwater supply in the local area* (mean concern score)
- *Increased vehicle movements around the mine entrance* (mean concern score)
- *The visual appearance of buildings at the mine's surface facilities* (mean concern score)
- *The Central Coast community would benefit from a new mine* (mean agreement score)
- *A new mine would help to generate income for Central Coast businesses* (mean agreement score)
- *A new mine would help to generate jobs in Central Coast businesses* (mean agreement score)
- *New businesses would be attracted to the Central Coast by a new mine* (mean agreement score)
- *A new mine would contribute significantly to the Central Coast economy* (mean agreement score)

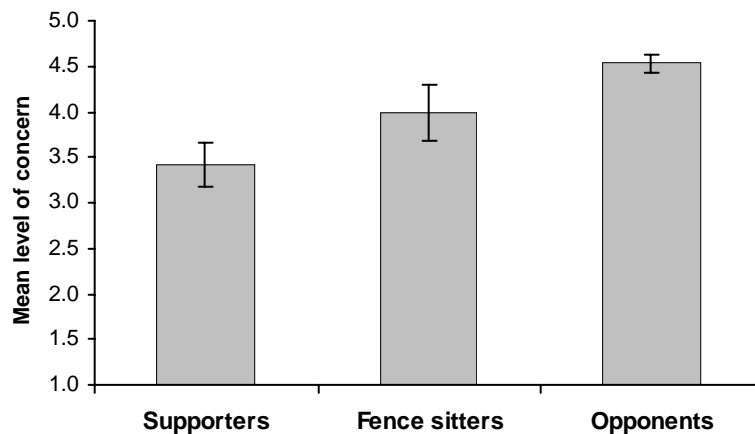
In summary, residents who had greater concern about *mine subsidence, impacts on groundwater supply, increased vehicle movement and visual appearance of buildings at the mine's entrance*, were more likely to be **opponents**. Conversely, those that agreed with positive socio-economic impacts of the mine such as *increased income and jobs for local businesses, contribution to the local economy, benefits to the local community* and attraction of *new businesses* were more likely to be **supporters**.

**Figure 16 Mine subsidence impacts to houses and structures, mean concern score by level of support**



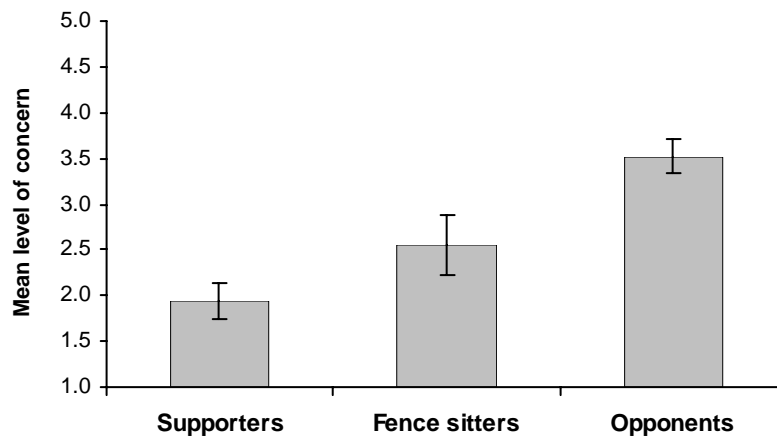
SOURCE: HVRF, 2006

**Figure 17 Impacts on the groundwater supply in the local area, mean concern score by level of support**



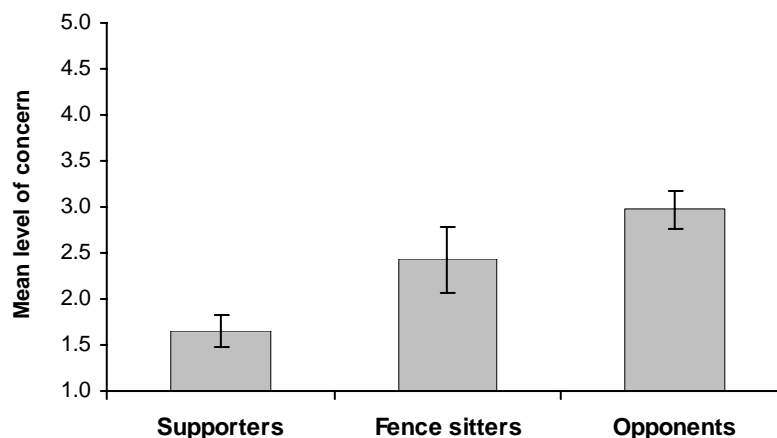
SOURCE: HVRF, 2006

**Figure 18 Increased vehicle movements around the mine entrance, mean concern score by level of support**



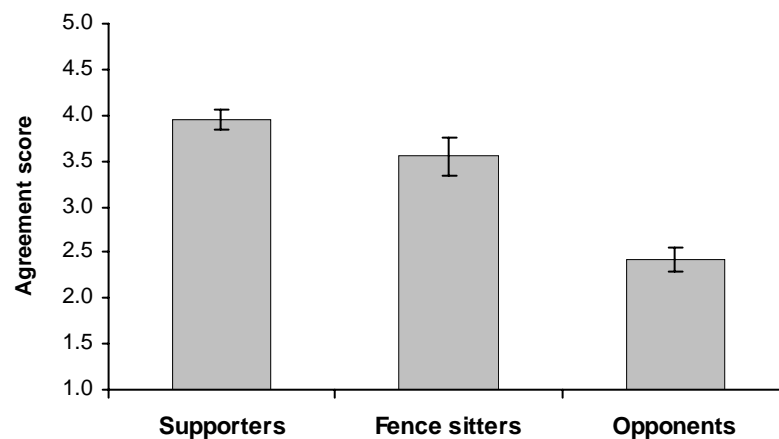
SOURCE: HVRF, 2006

**Figure 19 The visual appearance of buildings at the mine's surface facilities, mean concern score by level of support**



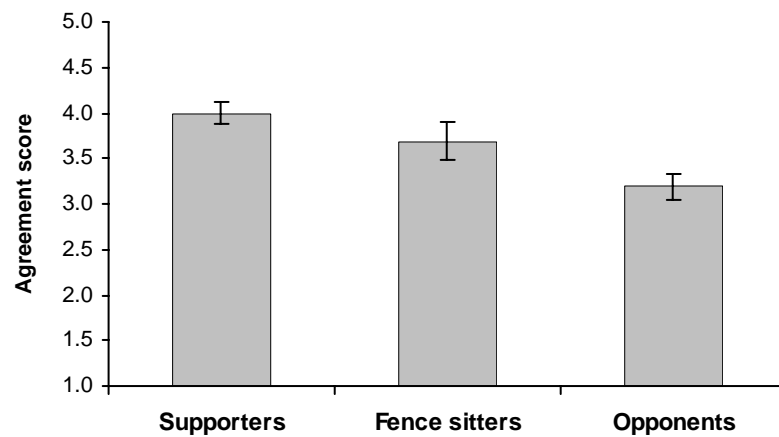
SOURCE: HVRF, 2006

**Figure 20 The Central Coast community would benefit from a new mine, mean agreement score by level of support**



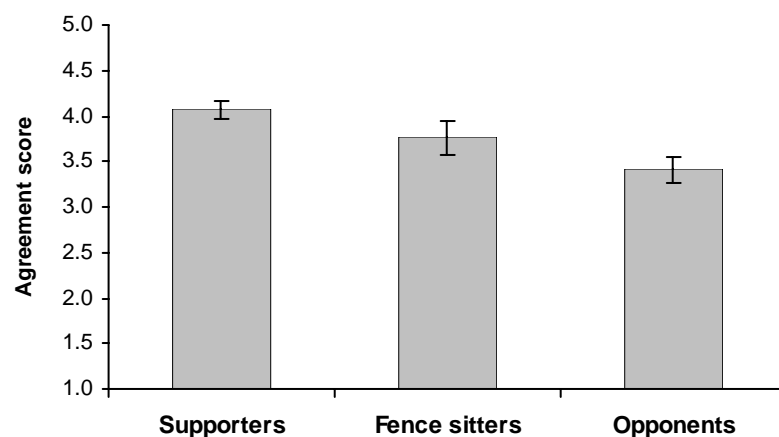
SOURCE: CCRF, 2006

**Figure 21 A new mine would help to generate income for Central Coast businesses, mean agreement score by level of support**



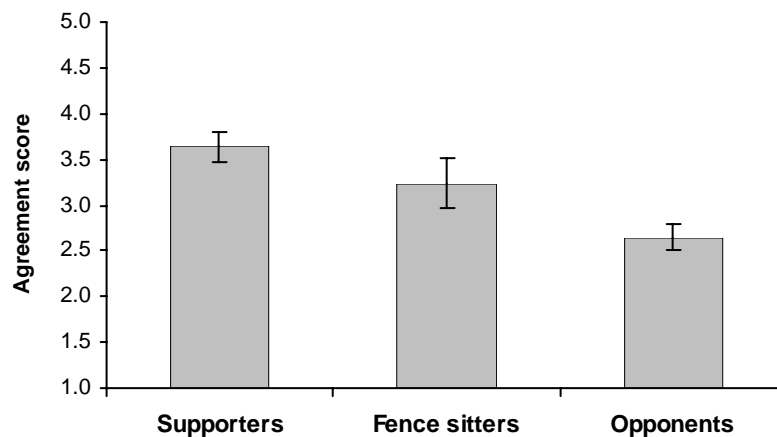
SOURCE: CCRF, 2006

**Figure 22 A new mine would help to generate jobs in Central Coast businesses, mean agreement score by level of support**



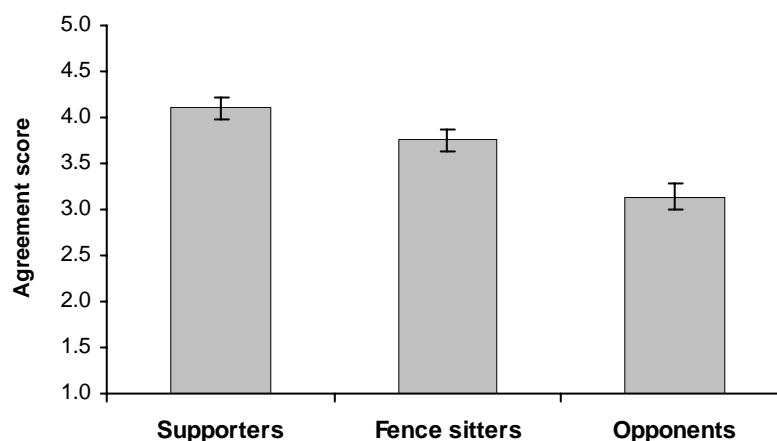
SOURCE: CCRF, 2006

**Figure 23 New businesses would be attracted to the Central Coast by a new mine, mean agreement score by level of support**



SOURCE: CCRF, 2006

**Figure 24 A new mine would contribute significantly to the Central Coast economy, mean agreement score by level of support**



SOURCE: CCRF, 2006

### Two-way differences

Statements that displayed two-way differences between supporters, fence sitters and opponents included:

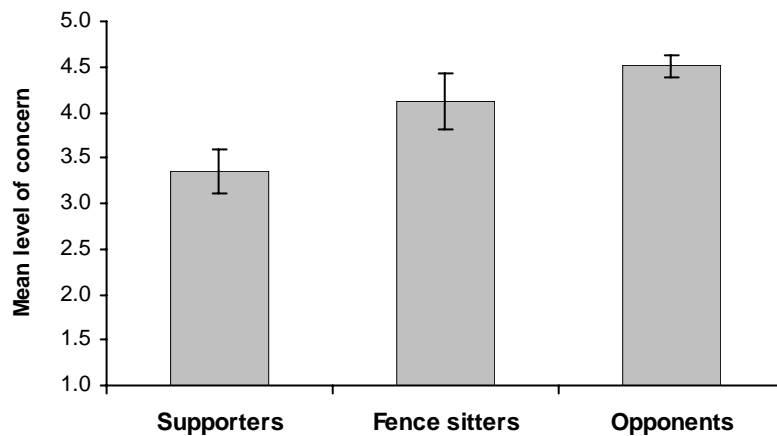
- *Impacts on the surface water supply in the local area* (mean concern score)
- *Increasing the risk of flooding in some areas* (mean concern score)
- *More trains moving on local railway lines* (mean concern score)
- *Noise produced by machinery at the mine's surface facilities* (mean concern score)
- *Mostly Central Coast people should be employed by a new mine* (mean agreement score)
- *A new mine would attract people to live on the Central Coast* (mean agreement score)
- *Property values of the houses and land above a new mine would be affected negatively* (mean agreement score)
- *A new underground mine would have a significant negative impact on the Central Coast environment* (mean agreement score).

### These differences are presented graphically in Figure 25 to

Figure 32 (pages 50-53). For some of these statements, supporters are significantly different from fence sitters and opponents and for other statements; opponents are significantly different from both fence sitters and supporters. Either way, fence sitters hold similar views to either opponents or supporters.

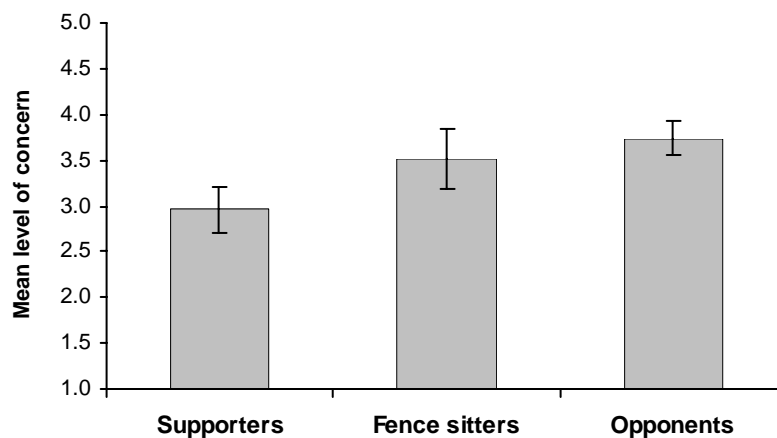
As would be expected, residents who were concerned about potential environmental impacts and who agreed that the mine would have negative impacts on house and land prices and the natural environment were more likely to be **opponents**. Conversely those that agreed that the mine would *attract new people to live on the Central Coast* and *employ locals* were more likely to be **supporters**.

**Figure 25 Impacts on the surface water supply in the local area, mean concern score by level of support**



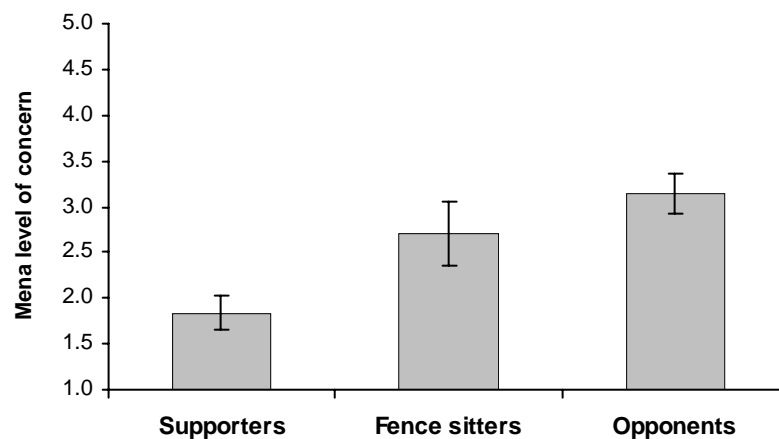
SOURCE: HVRF, 2006

**Figure 26 Increasing the risk of flooding in some areas, mean concern score by level of support**



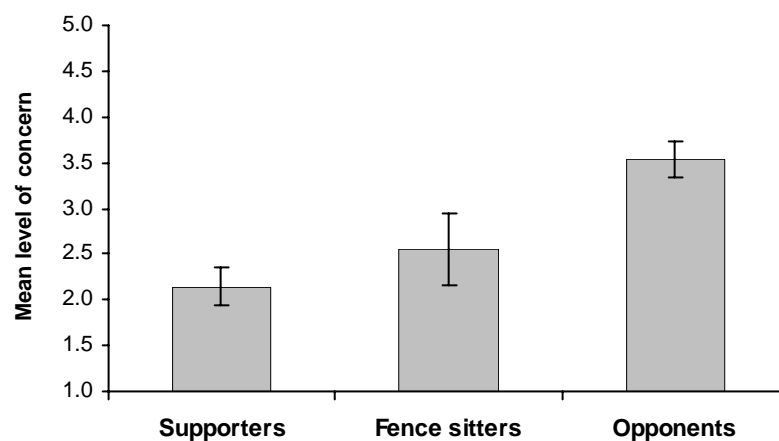
SOURCE: HVRF, 2006

**Figure 27 More trains moving on local railway lines, mean concern score by level of support**



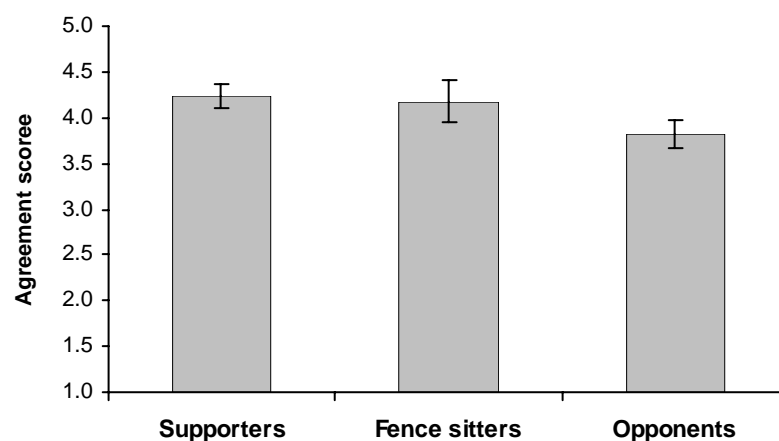
SOURCE: HVRF, 2006

**Figure 28 Noise produced by machinery at the mine's surface facilities, mean concern score by level of support**



SOURCE: HVRF, 2006

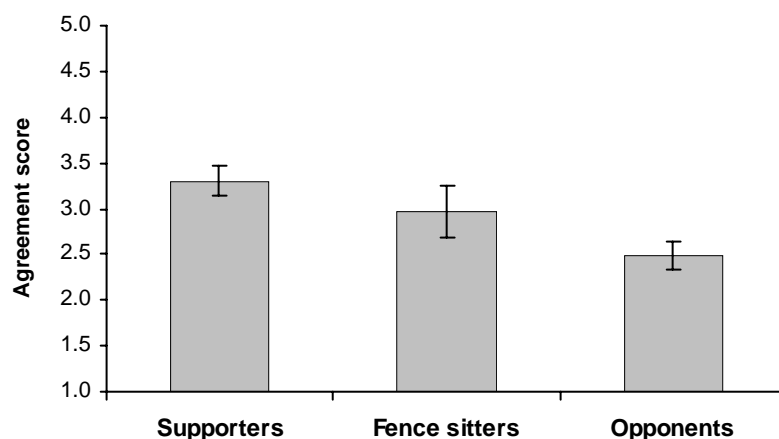
**Figure 29 Mostly Central Coast people should be employed by a new mine, mean agreement score by level of support**



SOURCE: CCRF, 2006

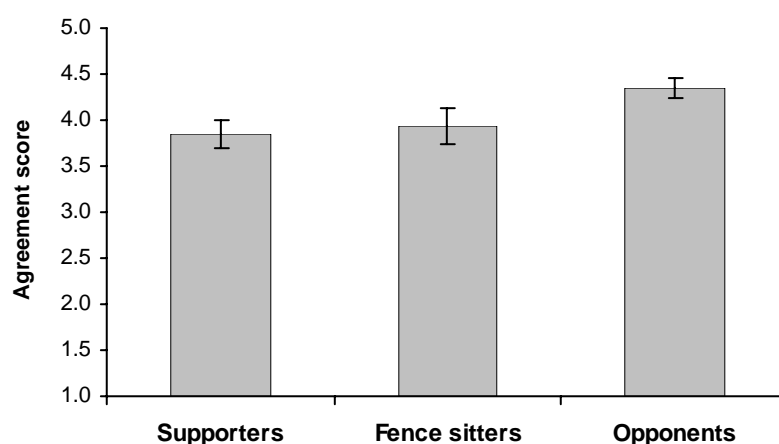


**Figure 30 A new mine would attract people to live on the Central Coast, mean agreement score by level of support**



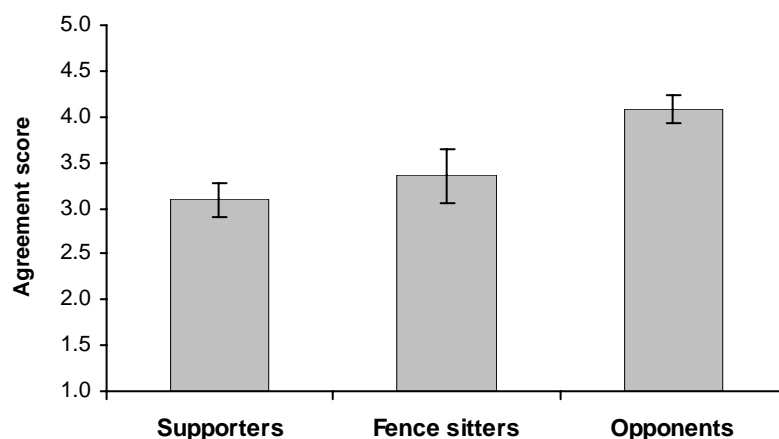
SOURCE: CCRF, 2006

**Figure 31 Property values of the houses and land above a new mine would be affected negatively, mean agreement score by level of support**



SOURCE: CCRF, 2006

**Figure 32 A new underground mine would have a significant negative impact on the Central Coast environment, mean agreement score by level of support**



SOURCE: CCRF, 2006

### One-way differences

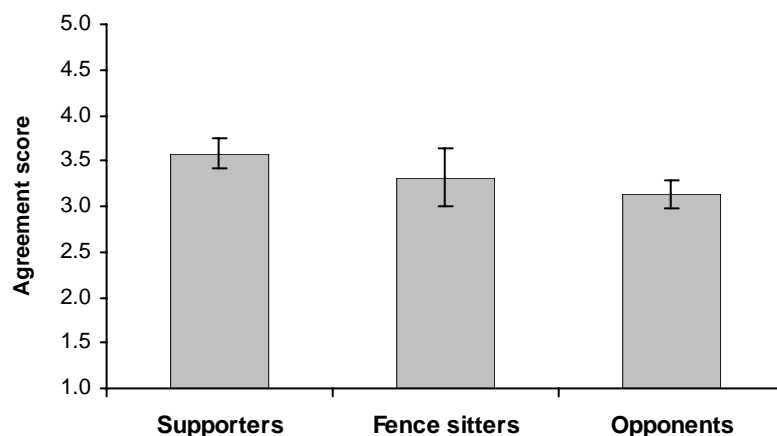
These were found with eight of the important issues statements about the Central Coast and one of the potential environmental impact statements. These are listed below:

- *People on the Central Coast have good access to health services (mean agreement score)*
- *The Central Coast has a good public transport system (mean agreement score)*
- *The overall quality of the environment on the Central Coast is good (mean agreement score)*
- *The road network on the Central Coast is well maintained (mean agreement score)*
- *Housing is generally affordable on the Central Coast (mean agreement score)*
- *There is a good range of recreation facilities on the Central Coast (mean agreement score)*
- *People on the Central Coast have good access to education services (mean agreement score)*
- *The Central Coast has a good availability of drinking water (mean agreement score)*
- *Decreasing the risk of flooding in some areas (mean concern score)*

These differences are illustrated graphically in Figure 33 to Figure 41.

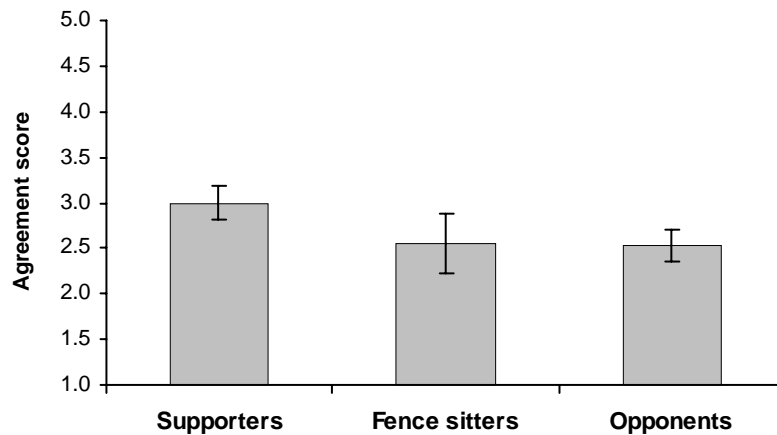
Probably the most interesting finding in relation to the one-way difference statements is that, on average, **supporters** of the mine are significantly more likely to have a better opinion about the performance of the Central Coast on most of the important issues (eg. health services, education, level of crime and water availability) than **opponents**. One probable explanation for this phenomenon is the possibility that residents who support the mine may hold a more positive outlook on life in general and were therefore more likely to focus on the positive impacts of the proposed mine, rather than the potential negative impacts.

**Figure 33 People on the central Coast have good access to health services, mean agreement scores by level of support**



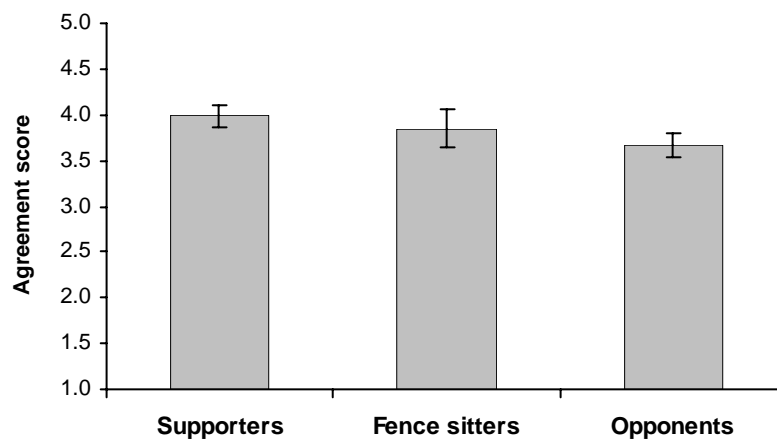
SOURCE: CCRF, 2006

**Figure 34 The Central Coast has a good public transport system, mean agreement scores by level of support**



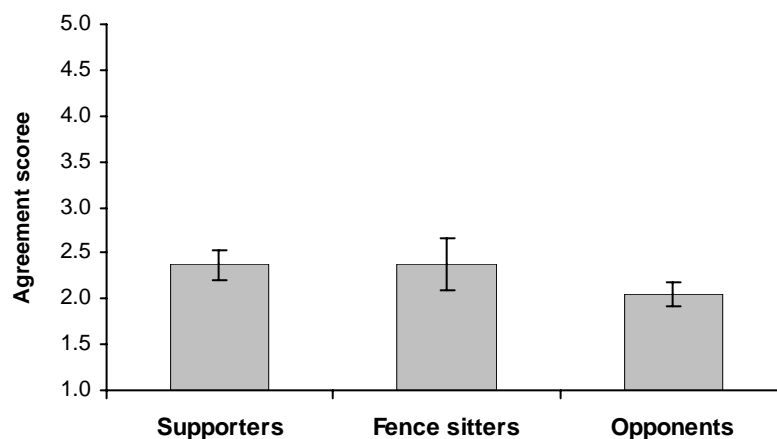
SOURCE: CCRF, 2006

**Figure 35 The overall quality of the environment on the Central Coast is good, mean agreement scores by level of support**



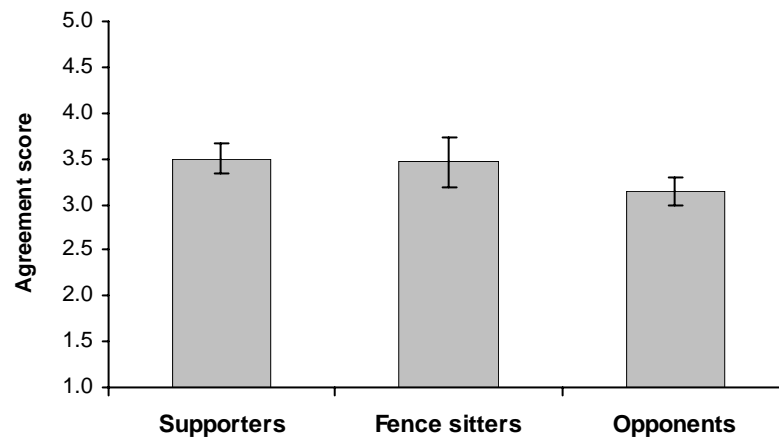
SOURCE: CCRF, 2006

**Figure 36 The road network on the Central Coast is well maintained, mean agreement scores by level of support**



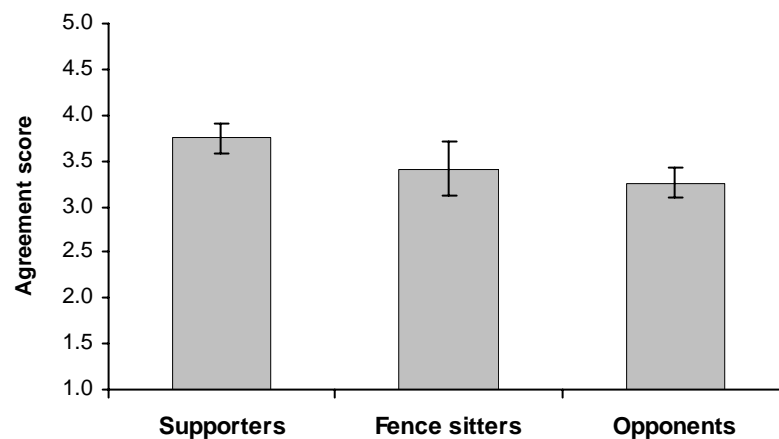
SOURCE: CCRF, 2006

**Figure 37 Housing is generally affordable on the Central Coast, mean agreement scores by level of support**



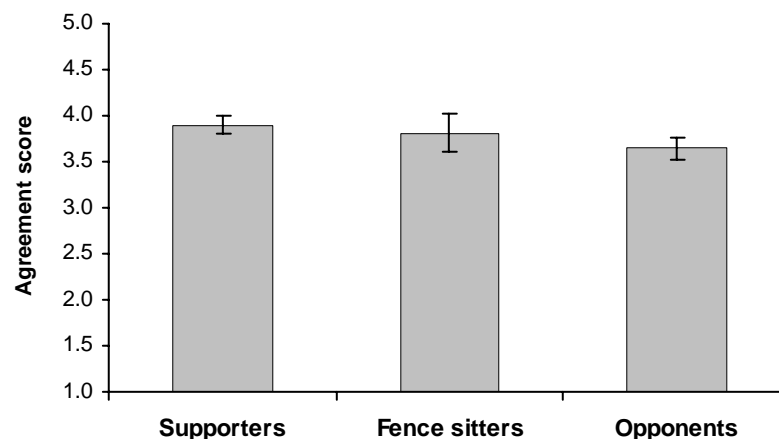
SOURCE: CCRF, 2006

**Figure 38 There is a good range of recreation facilities on the Central Coast, mean agreement scores by level of support**



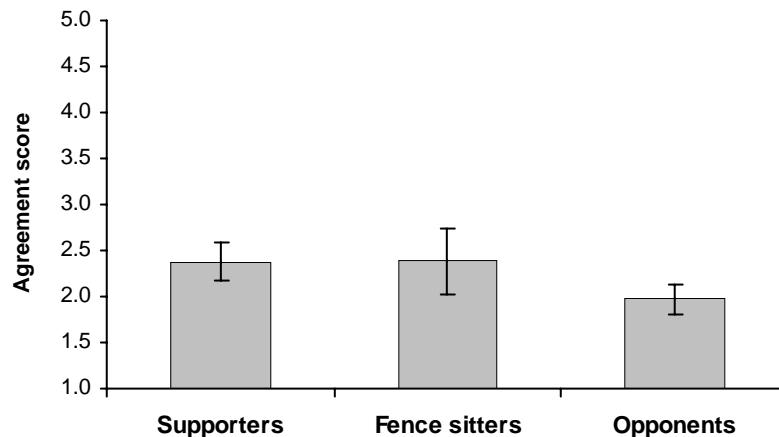
SOURCE: CCRF, 2006

**Figure 39 People on the Central Coast have good access to education services, mean agreement scores by level of support**



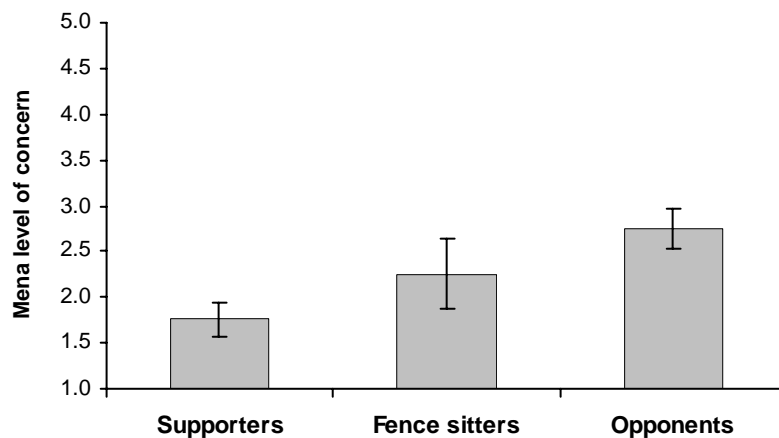
SOURCE: CCRF, 2006

**Figure 40 The Central Coast has a good availability of drinking water, mean agreement scores by level of support**



SOURCE: CCRF, 2006

**Figure 41 Decreasing the risk of flooding in some areas, mean concern score by level of support**



SOURCE: HVRF, 2006

## 4.8 Additional comments

At the conclusion of their interviews, residents were also given the opportunity to make a final comment about the proposed mine. A complete listing of their responses, grouped into categories can be found in Appendix VII.

Comments were varied, with a range of positive, negative and neutral statements. It appears that there were a lot more negative than positive comments from residents. The environmental impact of the mine also featured strongly amongst residents and was of concern to the largest number of respondents, followed by economic issues and a lack of information and community consultation about the proposed mine.

Residents also raised the issues of ***climate change, overloading current infrastructure such as railway lines and worker safety.***





## 5 Discussion and Recommendations

### 5.1 Lack of awareness and information about the proposed mine

The most significant finding from both the business and resident surveys was the lack of awareness amongst respondents about the proposed mine prior to their interview. A majority of people living and/or working in the survey area had little information about the proposed mine.

This lack of awareness was also reflected in the qualitative comments from both surveys with almost 50 respondents making specific comments about *“not knowing enough about the mine to make an informed decision”* and *“needing more information to be able to comment”*. Some respondents also commented that the project *“has been very poorly promoted”* and that there *“has not been enough local discussion about the project”*. In their concluding comments some respondents also suggested that *“the public should be more informed about what impact the mine will have on the environment”* and that there should be *“further local debate about the project”*.

Given that a lack of information about change often causes anxiety, providing more information about the proposed mine in a manner that is accessible and understandable to both the business and general community may help to alleviate any concerns caused by a lack of knowledge and information about the proposed mine.

### 5.2 What information do business managers/owners require?

On the whole, business managers/owners' concern about potential negative impacts of the mine appear to have overridden its perceived benefits and resulted in a polarization of business support for its construction. The concerns listed below are **not** in any particular order as they are derived from a combination of responses to different quantitative and qualitative questions asked during the business survey. It is recommended that future information and/or discussion about the proposed mine initiated by the Wallarah 2 Coal Project should attempt to address and clarify these concerns.

**Water quality and availability:** there appears to be concern that the proposed mine could affect water supply, *“contaminate underground sources”*, *“damage river beds”*, and *“affect the water table and cause a decline in local water quality”*. Given current media coverage on the water crisis and water restrictions that are currently in place, some business managers/owners are concerned that any development *“could affect the already fragile water supply”*.

**Competition for new jobs from outside the Region:** despite agreeing that the mine would bring new jobs to the Region, a portion of the business community is concerned that the new mine will *“employ out of area workers and that their partners will take away ancillary jobs from locals”* and that people will *“travel in from other regions”* and *“take the extra money generated back with them to other regions”*. This concern is also reflected in the high proportion of business managers/owners who agreed that *mostly locals should be employed in the new mine*.

**Mine subsidence impacts:** a majority of business managers/owners believed that *property values of the houses and land above the proposed mine would be negatively affected*. Some were

concerned that the mine may even “*take away their land*”. Many were worried about the “*impacts and cost of mine subsidence*”, which some respondents believe “*could be up to one metre*”.

**General environmental concerns:** there was a high level of consensus amongst the business community that the proposed mine “*would have a significant negative impact on the Central Coast environment*”. Many were concerned about the “*air pollution*”, “*dust pollution*”, and “*water pollution*” it may cause and any corresponding clean-up costs. Others did not want to see the Yarramalong and Dooralong Valleys adversely affected.

**Foreign ownership:** many business managers were concerned that foreign ownership of the mine means that profits will end up overseas and Australians (apart from those working at the mine) will not benefit from the operation.

**Impact on current infrastructure:** a few business managers were concerned that the proposed mine will further load both the rail and road transport systems and other infrastructure surrounding the mine area.

**Decline in tourism and residential growth:** some business managers/owners believe that mine’s impact on the environment may impede the Region’s ability to attract tourists and new residents.

**General opposition to coal mining:** several business managers also articulated a general opposition to coal mining. Some believed that Australia should be looking for “*alternate sources of renewable energy*”; others are concerned about its impact on “*global climate change*”; and a few are concerned about its impact on “*workers’ health and safety*”.

### 5.3 What information do residents require?

Similar to findings about the business community, residents were also concerned about **water availability and quality** and **mine subsidence impacts**. Their main concern about potential environmental impacts of the proposed mine was its: *Impacts on the groundwater supply in the local area*. They were also very concerned that: *Property values of the houses and land above the mine would be affected negatively*.

Many residents also expressed concern about all the others areas highlighted in the business section above. The following is one additional concern not previously expressed by business managers/owners:

**Mine location:** some residents were concerned that the mine is to be situated too close to residential areas, the freeway, and the coast; and that it should be situated further west.

In addition to the above areas of concern, it is also prudent to consider that female residents were significantly less aware than males about the proposed mine, significantly more concerned about eight potential negative impacts on the environment and significantly less supportive of its construction. This identifies them as key targets for more information about the proposed mine. Similarly, those in the 35-64 age group, although not significantly less aware or less supportive than younger or older residents, were significantly more concerned about some of the environmental impacts of the proposed mine. Potentially, information about the mine could be tailored with this age group in mind.



### 5.3 How should this information be disseminated?

When faced with a lack of information about change, people often seek information from any source they can find in order to manage their anxiety. In the case of the Wallarah 2 Coal Project, it is apparent that members of the Central Coast community are obtaining information from sources other than the Wallarah 2 Coal Project including the *Wyong Shire Council, friends and family, protest signs and posters and general contact with protesters.*

The main sources of information about the mine for both the business community and residents were *local newspapers, word-of-mouth from family and friends, the Wyong Shire Council and local radio.* Given that these have been the most common sources of information about the proposed mine in the past, it would be beneficial that the Wallarah 2 Coal Project look at opportunities to disseminate information through these local media and the *Wyong Shire Council.*

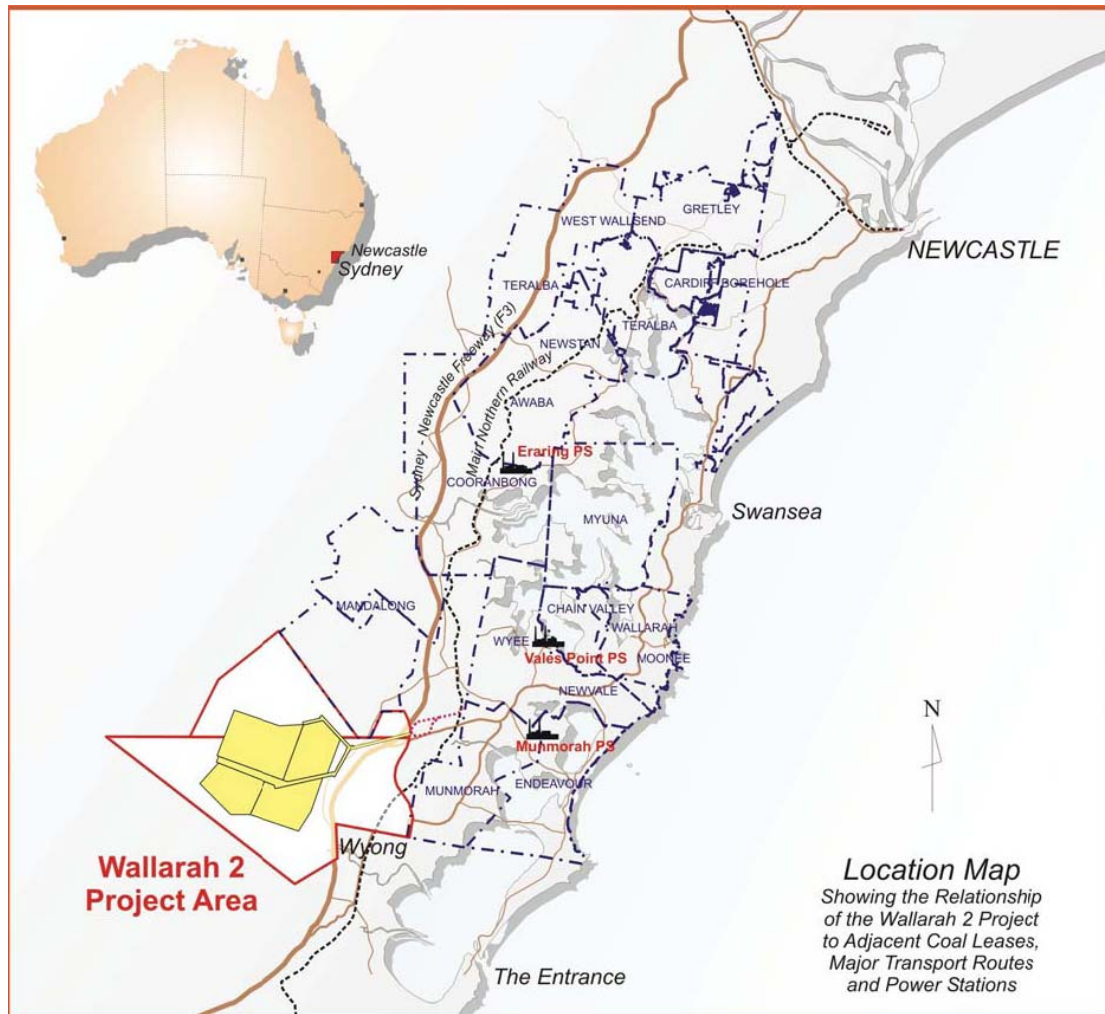
The *Walarah 2 Coal Project Newsletter* is also another initiative that should probably continue as it seems to have had better reach within the Central Coast community than either the *Walarah 2 Website* or *community liaison meetings.*

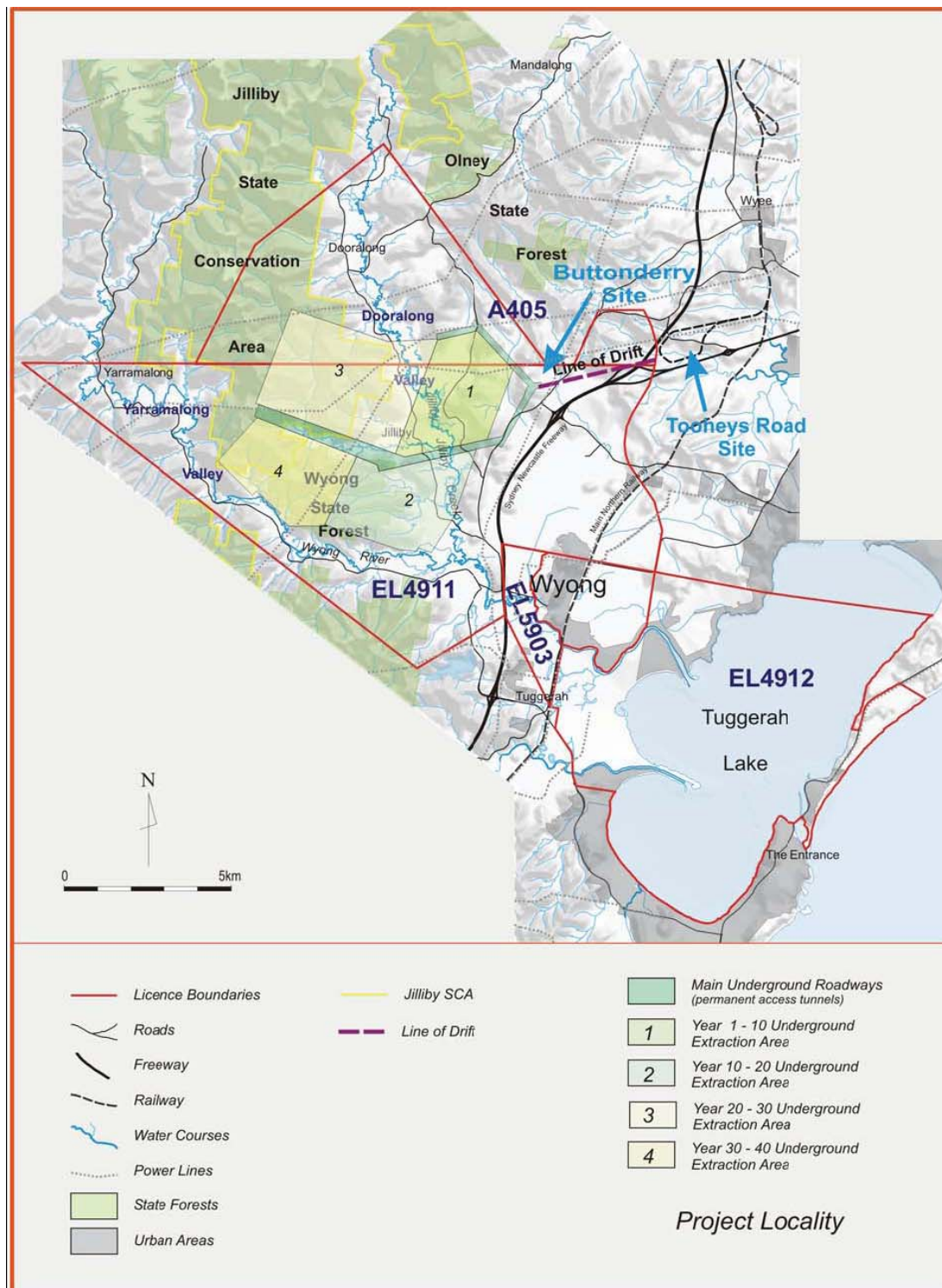
As suggested by one respondent “*I would like more information in the local newspapers and on the local television about the project, not just snippets that don’t really tell you anything, but more meaningful information.*” This suggests that the community is seeking more detailed information about the mine, particularly about its potential adverse impacts on the environment and economy and ways in which these concerns will be addressed.



# Appendices

## Appendix I : Project Maps





## Appendix II : Business Survey Questionnaire

Good morning/afternoon/evening my name is \_\_\_\_\_ from the Central Coast Research Foundation. We are conducting an important study about a major development proposal for the Central Coast region.

Could I please speak with the owner or manager of this business? We will NOT be asking for any of your business's financial figures. The interview will take about 10 minutes. Would you mind participating?

To start, I am going to ask some questions about your business and the Central Coast economy.

**Q1. Excluding normal seasonal changes, how would you describe your TRADING PERFORMANCE (e.g. turnover or gross earnings) over the LAST 12 months**

1. Very poor
2. Poor
3. Satisfactory
4. Good
5. Very good
  
7. NOT APPLICABLE
8. DON'T KNOW
9. REFUSED

**Q2. What do you expect it to be over the NEXT 12 months**

1. Very poor
2. Poor
3. Satisfactory
4. Good
5. Very good
  
7. NOT APPLICABLE
8. DON'T KNOW
9. REFUSED

**Q3. Do you think the Central Coast economy will be better, the same, or worse in 12 months time?**

1. Worse
2. The same
3. Better
  
7. NOT APPLICABLE
8. DON'T KNOW
9. REFUSED

I would now like to ask you some questions about a proposed underground coal mine in the north-west of the Wyong Shire. I will briefly describe the project and its location.

The Wallarah 2 Coal Project is an UNDERGROUND coal mine proposed for an area to the west of the F3 Freeway and more than 400 metres below the Dooralong Valley, the Yarramalong Valley, and the Wyong State Forest.

The mine entry, surface buildings and rail facilities, would be located halfway between Tuggerah and Wyee, on land owned by the company and adjacent to the F3 Freeway and the Freeway Link road. The mine entrance is more than 4 km away from the area to be mined.

The mine is expected to directly employ at least 300 people in full-time jobs and operate for about 42 years. All of the coal produced would be transported by rail north to the port of Newcastle.

**Q4. Prior to being contacted for this interview how AWARE of the Wallarah 2 Coal project were you? Would you say you were .?**

1. Not at all aware
2. Slightly aware
3. Moderately aware
4. Very aware
5. Extremely aware

9. REFUSED

**Q5. From the following list could you please tell me where you may have seen, heard or noticed any information about the Wallarah 2 Coal Project?**

1. Yes
2. No

8. DON'T KNOW/NOT SURE  
9. REFUSED

# Wallarah 2 Coal Project Newsletters

# Wallarah 2 Coal Project Website

# Attending the Wallarah 2 Community Liaison Committee

# Local newspaper

# Mine Subsidence Board

# Wyong Shire Council

# Attending a community meeting

# Word of mouth from friends or family

# Attending another type of function

**Q5p11. Any other source?**

#

**Q6. What type of impact do you feel the Wallarah 2 Coal Project's underground mine would have on the Central Coast economy? Would it have a....**

1. Very negative impact

2. Negative impact
3. Neither negative nor positive impact
4. Positive impact
5. Very positive impact

8. DON'T KNOW/NOT SURE
9. REFUSED

**Q6a. What do you think the MOST NEGATIVE impact on the Central Coast economy would be?**

#

8. DON'T KNOW/NOT SURE
9. REFUSED

**Q6b. What do you think the MOST POSITIVE impact on the Central Coast economy would be?**

#

8. DON'T KNOW/NOT SURE
9. REFUSED

**Q7. I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed UNDERGROUND mine.**

After each one, I would like you to give me YOUR OPINION about whether you agree or disagree

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree.

8. DON'T KNOW/NOT SURE
9. REFUSED

# The Central Coast community would benefit from a new mine

# Mostly Central Coast people should be employed by a new mine

# A new mine would help to generate income for Central Coast businesses

# A new mine would help to generate jobs in Central Coast businesses

# New businesses would be attracted to the Central Coast by a new mine

# A new mine would attract people to live on the Central Coast

# Property values of the houses and land above a new mine would be affected negatively

# Your business would benefit directly from a new mine

# A new underground mine would have a significant negative impact on the Central Coast environment

**Q7p10. Considering everything, I would support the construction of the proposed mine.**

1. Strongly disagree
  2. Disagree
  3. Neither disagree nor agree
  4. Agree
  5. Strongly agree.
- 
8. DON'T KNOW/NOT SURE
  9. REFUSED

**Q8. Is there any comment that you would like to make about the Wallarah 2 Coal Project?**

- #
22. NO COMMENT

Now some questions to ensure we have contacted a wide range of businesses.

**Q9. Which industry best describes your MAIN business?**

1. Accommodation, cafes & restaurants
  2. Agricultural, Fishing, Forestry
  3. Communication services
  4. Construction
  5. Cultural & recreational services
  6. Education
  7. Finance & insurance
  8. Government administration & defence
  9. Health & community services
  10. Manufacturing
  11. Mining
  12. Personal & other services
  13. Property & business services
  14. Retail trade
  15. Transport & storage
  16. Utilities
  17. Wholesale trade
- 
88. DON'T KNOW/NOT SURE
  99. REFUSED

**Q10. Which of the following best describes your business?**

1. It is an independent business operating from one location on the Central Coast
- Or it is a local office/branch/franchise of...
2. a Central Coast based company or organisation
  3. a state wide company or organisation
  4. a national company or organisation
  5. an international company or organisation

8. DON'T KNOW/NOT SURE
9. REFUSED



**Q11. Approximately how many people, including yourself and all full-time, part-time and casual staff does your organisation employ?**

- 1. 1-10
- 2. 11-50
- 3. 51-100
- 4. 101+

- 8. DON'T KNOW/NOT SURE
- 9. REFUSED

**Q12a. What is the name of the SUBURB where your business is located?**

#

- 8. DON'T KNOW/NOT SURE
- 9. REFUSED

**Q12b. What is the POSTCODE where your business is located?**

# RANGE 2250 to 2281

- 8. DON'T KNOW
- 9. REFUSED

**Q13. And finally, how long has this business operated in the area? [IN YEARS]**

# RANGE: 1 to 100

- 1. 1 year or less
- 888. DON'T KNOW
- 999. REFUSED

Thank you for participating in this survey. If you have any questions about your participation or would like to provide some feedback, please contact the Survey Supervisor on 1800 355 534. If you would like more information on the Wallarah 2 Coal Project then ring Peter Smith - Environment and Community Manager on (02) 4352 7546. Please leave a message if he is unavailable. Alternatively you can email [info@wallarah.com.au](mailto:info@wallarah.com.au) or visit the website at [www.wallarah.com.au](http://www.wallarah.com.au)



## Appendix III Resident Survey Questionnaire

Hello, my name is ... and I am conducting a study for the Central Coast Research Foundation. We are conducting an important study about a major development proposal for the Central Coast region. Your telephone number was randomly selected from the White Pages. The interview will take about 10 minutes. Your participation is voluntary, anonymous and confidential. Would you mind participating?

**Q1. I am going to read out a list of statements about important issues on the Central Coast. After each one, I would like you to give me YOUR OPINION about whether you agree or disagree.**

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree.
  
8. DON'T KNOW/NOT SURE
9. REFUSED

- # There are enough good jobs on the Central Coast
- # People on the Central Coast have good access to health services
- # Crime levels are low on the Central Coast
- # The Central Coast has a good public transport system
- # The overall quality of the environment on the Central Coast is good
- # The road network on the Central Coast is well maintained
- # Housing is generally affordable on the Central Coast
- # There is a good range of recreation facilities on the Central Coast
- # People on the Central Coast have good access to education services
- # The Central Coast has a good availability of drinking water

I would now like to ask you some questions about a proposed coal mine in the north-west of the Wyong Shire. I will read you a few sentences that describe the project and its location.

The Wallarah 2 Coal Project is an UNDERGROUND coal mine proposed for an area to the west of the F3 Freeway and more than 400 metres below the Dooralong Valley, the Yarramalong Valley, and the Wyong State Forest.

The mine entry, surface buildings and rail facilities, would be located halfway between Tuggerah and Wyee, on land owned by the company and adjacent to the F3 Freeway and the Freeway Link road. The surface facilities where coal will be brought to the surface, stockpiled and loaded onto rail are more than 4 km away from the area to be mined.

The mine is expected to directly employ at least 300 people in FULL TIME jobs and operate for about 42 years. All of the coal produced would be transported by RAIL north to the port of Newcastle.

**Q2. Prior to being contacted for this interview how AWARE of the Wallarah 2 Coal project were you? Would you say you were...**

1. Not at all aware
2. Slightly aware
3. Moderately aware
4. Very aware
5. Extremely aware

9. REFUSED

**Q3. From the following list could you please tell me where you may have seen, heard or noticed any information about the Wallarah 2 Coal Project?**

1. Yes
2. No

8. DON'T KNOW/NOT SURE  
9. REFUSED

# Wallarah 2 Coal Project Newsletters

# Wallarah 2 Coal Project Website

# Attending the Wallarah 2 Community Liaison Committee

# Local newspaper

# Mine Subsidence Board

# Wyong Shire Council

# Attending a community meeting

# Word of mouth from friends or family

# Attending another type of function

Q3p11. Any other source?

**Q4. I am now going to read out a list of POTENTIAL environmental issues that have been raised in relation to the Wallarah 2 Coal Project's proposed underground mine. After each one, I would like you to tell me how CONCERNED you would be about each one on a scale where:**

1. Not at all concerned
2. Slightly concerned
3. Moderately concerned
4. Very concerned
5. Extremely concerned

8. DON'T KNOW/NOT SURE  
9. REFUSED

# Mine subsidence impacts to houses and structures

# Impacts on the groundwater supply in the local area

# Impacts on the surface water supply in the local area

# Increasing the risk of flooding in some areas

- # Decreasing the risk of flooding in some areas
- # More trains moving on local railway lines
- # Increased vehicle movements around the mine entrance
- # Noise produced by machinery at the mine's surface facilities
- # The visual appearance of buildings at the mine's surface facilities

**Q5. I am now going to read out a list of statements about other issues relating to the Wallarah 2 Coal Project's proposed mine. After each one, I would like you to give me YOUR OPINION about whether you agree or disagree**

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree.

8. DON'T KNOW/NOT SURE
9. REFUSED

- # The Central Coast community would benefit from a new mine
- # Mostly Central Coast people should be employed by a new mine
- # A new mine would help to generate income for Central Coast businesses
- # A new mine would help to generate jobs in Central Coast businesses
- # New businesses would be attracted to the Central Coast by a new mine
- # A new mine would attract people to live on the Central Coast
- # Property values of the houses and land above a new mine would be affected negatively
- # A new mine would contribute significantly to the Central Coast economy
- # A new underground mine would have a significant negative impact on the Central Coast's natural environment
- # Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions

**Q5p11. Considering everything, I would support the construction of the proposed mine.**

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree.

8. DON'T KNOW/NOT SURE
9. REFUSED

**Q6. Is there any comment that you would like to make about the Wallarah 2 Coal Project?**

#

Finally, a few questions to make sure we have contacted a wide cross-section of the community

**Q7. [ASK ONLY IF IN DOUBT] Are you ...?**

1. Female
2. Male

**Q8. Could you please tell me how old you are? [IN YEARS]**

#

**Q8A. You have said that you prefer not to indicate your age. Could you indicate instead to which one of the following age groups you belong?**

1. 18 - 24
2. 25 - 29
3. 30 - 34
4. 35 - 39
5. 40 - 44
6. 45 - 49
7. 50 - 54
8. 55 - 59
9. 60 - 64
10. Over 65

99. REFUSED

**Q9. How many people, including yourself live in your household?**

#

88. DON'T KNOW  
99. REFUSED]

**Q9a. And how many of these people are aged 18 or over?**

#

88. DON'T KNOW  
99. REFUSED]

**Q10a. What is the name of your home suburb? [DO NOT READ - USE CODES]**

- |                              |                    |                           |
|------------------------------|--------------------|---------------------------|
| 1. Avoca Beach               | 20. Jilliby        | 39. Springfield           |
| 2. Bateau Bay                | 21. Kanwal         | 40. Summerland Point      |
| 3. Bensville                 | 22. Kariong        | 41. Terrigal              |
| 4. Berkeley Vale             | 23. Killarney Vale | 42. The Entrance / North  |
| 5. Blue Haven                | 24. Killcare       | 43. Toukley               |
| 6. Budgewoi                  | 25. Lake Munmorah  | 44. Tumby Umbi            |
| 7. Buff Point                | 26. Lisarow        | 45. Umina / Beach         |
| 8. Chain Valley Bay          | 27. Long Jetty     | 46. Wamberal              |
| 9. Chittaway Bay / Point     | 28. Mannering Park | 47. Warnervale            |
| 10. Copacabana               | 29. Mardi          | 48. Watanobbi             |
| 11. Davistown                | 30. Morisset       | 49. Woongarrah            |
| 12. Erina / Heights          | 31. Narara         | 50. Woy Woy / Bay         |
| 13. Ettalong / Beach         | 32. Niagara Park   | 51. Wyee / Point          |
| 14. Forresters Beach         | 33. Norah Head     | 52. Wyong / Creek / North |
| 15. Gorokan                  | 34. Norville       | 53. Wyongah               |
| 16. Gosford /East/North/West | 35. Ourimbah       | 54. Yarramalong           |
| 17. Green Point              | 36. Point Clare    | 55. Yattalunga            |
| 18. Gwandalan                | 37. San Remo       |                           |
| 19. Hamlyn Terrace           | 38. Saratoga       |                           |

**Q10b. What is your home POSTCODE?**

# [RANGE 2250 to 2281]

8. DON'T KNOW

9. REFUSED

**Q11. How long have you lived in the area? [IN YEARS]**

# [RANGE: 1 to 100]

1. 1 year or less

888. DON'T KNOW

999. REFUSED]

**Q12. What best describes YOUR work status?**

# 1. Paid full-time employment

2. Paid part-time employment

3. Paid casual employment

4. Looking for paid employment

5. Student

6. Home duties

7. On a pension other than the age pension

8. Retired [EITHER ON AGE PENSION OR SELF-FUNDED SUPER]

9. Other

88. DON'T KNOW [DO NOT READ]

99. REFUSED [DO NOT READ]

**Q12a. In your MAIN job, what industry are you employed in?**

1. Accommodation, cafes & restaurants

2. Agriculture, Fishing, Forestry

3. Communication services

4. Construction

5. Cultural & recreational services

6. Education

7. Finance & insurance

8. Government administration & defence

9. Health & community services

10. Manufacturing

11. Mining

12. Personal & other services

13. Property & business services

14. Retail trade

15. Transport & storage

16. Utilities

17. Wholesale trade

#

88. DON'T KNOW

99. REFUSED

Thank you for participating in this survey. If you have any questions about your participation or would like to provide some feedback, please contact the Survey Supervisor on 1800 355 534

If you would like more information on the Wallarah 2 Coal Project then ring Peter Smith - Environment and Community Manager on (02) 4352 7546. Please leave a message if he is unavailable. Alternatively you can email [info@wallarah.com.au](mailto:info@wallarah.com.au) or visit the website at [www.wallarah.com.au](http://www.wallarah.com.au)





## Appendix IV: Characteristics of businesses surveyed

### Industry type

<b>Q9 What industry type best describes your main business</b>	<b>No.</b>	<b>%</b>
Accommodation, cafes & restaurants		
Agriculture, Fishing, Forestry		
Communication services		
Construction		
Cultural & recreational services		
Education		
Finance & Insurance		
Government administration and defence		
Health & community services		
Manufacturing		
Mining		
Personal & other services		
Property & business services		
Retail trade		
Transport & storage		
Utilities		
Wholesale trade		
Don't know/Unsure/Refused		
<b>Total</b>		

### Operation type

<b>Q10 Which of the following best describes your business?</b>	<b>No.</b>	<b>%</b>
It is an independent business operating from one location on the Central Coast	150	73.5%
It is a local office/branch/franchise of Central Coast based company or organisation	17	8.3%
It is a local office/branch/franchise of a statewide company or organisation	9	4.4%
It is a local office/branch/franchise of a national company or organisation	19	9.3%
It is a local office/branch/franchise of an international company or organisation.	8	3.9%
Don't know/Unsure/ Refused	1	0.5%
<b>Total</b>	<b>204</b>	<b>100%</b>

### Number of staff

<b>Q11 Approximately how many people, including yourself and all full-time, part-time and casual staff does your organisation employ?</b>	<b>No.</b>	<b>%</b>
1-10	155	76.0%
11-50	37	18.1%
51-100	2	1.0%
101+	8	3.9%
Don't know / Unsure / Refused	2	1.0%
<b>Total</b>	<b>204</b>	<b>100.0%</b>

### Years in operation

<b>Q13 And finally, how long has this business operated in the area?</b>	<b>No.</b>	<b>%</b>
1-5 years	30	14.7%
6-10 years	50	24.5%
11-20 years	70	34.3%
20-100 years	53	26.0%
Don't know / Unsure / Refused	1	0.5%
<b>Total</b>	<b>204</b>	<b>100.0%</b>

### Postcode

<b>Q12b What is the POSTCODE where your business is located?</b>	<b>No.</b>	<b>%</b>
2250	60	29.4%
2251	16	7.8%
2256	8	3.9%
2257	10	4.9%
2258	5	2.5%
2259	42	20.6%
2260	9	4.4%
2261	24	11.8%
2262	3	1.5%
2263	19	9.3%
2264	4	2.0%
Don't know	4	2.0%
<b>Total</b>	<b>204</b>	<b>100.0%</b>

## Suburb

<b>Q12a. What is the name of the SUBURB where your business is located?</b>	<b>No.</b>	<b>%</b>
Avoca Beach	3	1.5%
Bateau Bay	5	2.5%
Berkeley Vale	4	2.0%
Booker Bay	1	.5%
Budgewoi	3	1.5%
Central Mangrove	1	.5%
Charmhaven	3	1.5%
Copacabana	4	2.0%
Davistown	1	.5%
Dooralong	1	.5%
Dora Creek	1	.5%
Empire Bay	1	.5%
Erina	16	7.9%
Erina / Holgate	1	.5%
Ettalong	1	.5%
Glennings Valley	1	.5%
Gorokan	2	1.0%
Gosford / East Gosford / North Gosford / West Gosford	35	17.4%
Green Point	1	.5%
Holgate	1	.5%
Kanwal	3	1.5%
Kariong	1	.5%
Killarney Vale	3	1.5%
Killclare	1	.5%
Kincumber	4	2.0%
Koolewong	1	.5%
Kulnura	1	.5%
Lakehaven	6	3.0%
Lake Munmorah	3	1.5%
Lisarow	2	1.0%
Long jetty	5	2.5%
Macmasters Beach	1	.5%
Mandalong	1	.5%
Mangrove Mountain	1	.5%
Manning Park	1	.5%
Mardi	1	.5%
Morisset	2	1.0%
Narara	1	.5%
Norah head	1	.5%
Noraville	1	.5%

North Entrance	1	.5%
Ourimbah	4	2.0%
Point Clare	1	.5%
Saratoga	1	.5%
Somersby	3	1.5%
Terrigal	5	2.5%
Toowoan Bay	1	.5%
Toukley	7	3.4%
Toukley / Berkeley Vale / Kanwal / Hillside	1	.5%
Tuggerah	18	8.8%
Tumbi Umbi	2	1.0%
Umina / Umina Beach	5	2.5%
Wamberal	3	1.5%
Woy Woy	8	4.0%
Wyee	2	1.0%
Wyoming	2	1.0%
Wyong / Wyong North	14	7.0%
<b>Total</b>	<b>204</b>	<b>100.0%</b>

## Appendix V: Characteristics of residents surveyed

<b>Q7 Gender</b>	<b>No.</b>	<b>%</b>
Female	210	52.5%
Male	190	47.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q8 Age Group</b>	<b>No.</b>	<b>%</b>
18 – 24 years	40	9.9%
25 – 34 years	65	16.2%
35 – 49 years	115	28.9%
50 – 64 years	85	21.2%
65 years and over	95	23.7%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q9 How many people, including yourself live in your household?</b>	<b>No.</b>	<b>%</b>
1	56	14.1%
2	146	36.5%
3	43	10.8%
4	96	23.9%
5	47	11.7%
6	7	1.8%
7	3	0.8%
12	2	0.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q9a And how many of these people are aged 18 or over?</b>	<b>No.</b>	<b>%</b>
1	74	18.4%
2	232	57.9%
3	55	13.8%
4	29	7.2%
5	9	2.2%
10	2	0.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q11 How long have you lived in the area? (In years)</b>	<b>No.</b>	<b>%</b>
1 year or less	6	1.5%
2 - 5 years	75	18.9%
6 - 10 years	73	18.3%
11 - 20 years	114	28.5%
21 years or more	132	32.9%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q10b What is your home postcode?</b>	<b>No.</b>	<b>%</b>
2250	107	26.7%
2251	36	8.9%
2253	2	0.5%
2256	9	2.4%
2257	30	7.5%
2258	12	3.0%
2259	102	25.5%
2260	16	4.0%
2261	37	9.4%
2262	22	5.5%
2263	22	5.5%
2264	2	0.6%
REFUSED	2	0.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q12 What best describes your work status?</b>	<b>No.</b>	<b>%</b>
Paid full-time employment	150	37.6%
Paid part-time employment	37	9.2%
Paid casual employment	23	5.8%
Looking for paid employment	3	0.7%
Student	18	4.6%
Home duties	29	7.2%
On a pension other than the age pension	20	4.9%
Retired [Age Pension / Self-funded Super]	114	28.4%
Other	6	1.5%
<b>Total</b>	<b>400</b>	<b>100%</b>

<b>Q12 In your main job, what industry are you employed in?</b>	<b>No.</b>	<b>% of employed</b>	<b>% sample</b>
Health & Community Services	39	18.3%	9.7%
Retail Trade	24	11.3%	6.0%
Construction	23	10.7%	5.7%
Property & Business Services	21	9.8%	5.2%
Education	20	9.4%	4.9%
Manufacturing	16	7.8%	4.1%
Transport & Storage	15	7.3%	3.8%
Finance & Insurance	12	5.7%	3.0%
Communication Services	9	4.2%	2.2%
Government Administration & Defence	8	3.8%	2.0%
Personal & Other Services	8	4.0%	2.1%
Wholesale Trade	6	2.7%	1.4%
Accommodation, Cafes & Restaurants	5	2.6%	1.3%
Utilities	3	1.6%	0.8%
Cultural & Recreational Services	2	0.9%	0.5%
<b>Total employed</b>	<b>211</b>	<b>100%</b>	<b>52.7%</b>
Not Employed	189		47.3%
<b>Total</b>	<b>400</b>		<b>100%</b>

<b>Q10 What is the name of your home suburb?</b>	<b>No.</b>	<b>%</b>
Avoca Beach	8	1.9%
Bateau Bay	7	1.6%
Bensville	2	0.4%
Berkeley Vale	5	1.2%
Berkley Vale	0	0.1%
Blue Haven	9	2.1%
Booker Bay	2	0.5%
Budgewoi	10	2.5%
Buff Point	2	0.4%
Calga	0	0.1%
Chain Valley Bay	6	1.4%
Charmhaven	0	0.1%
Chittaway Bay / Point	1	0.4%
Copacabana	4	1.1%
Daleys Point	1	0.3%
Davistown	2	0.4%
Empire Bay	2	0.6%
Erina / Heights	10	2.4%
Ettalong / Beach	4	0.9%
Forresters Beach	1	0.3%
Fountaindale	1	0.2%
Glenning Valley	1	0.3%
Gorokan	13	3.3%
Gosford /East/North/West	20	4.9%
Green Point	11	2.8%
Gwandalan	9	2.3%
Hamlyn Terrace	4	0.9%
Holgate	3	0.8%
Horsfield Bay	1	0.2%
Jilliby	6	1.4%
Kangy Angy	0	0.1%
Kanwal	5	1.2%
Kariong	10	2.5%
Kariong	1	0.3%
Killarney Vale	12	2.9%
Killcare	1	0.3%
Kincumber	4	0.9%
Kulnura	3	0.8%
Lake Haven	2	0.6%
Lake Munmorah	10	2.5%
Lisarow	13	3.2%
Long Jetty	7	1.6%
Mandalong	0	0.1%
Mannering Park	10	2.6%
Mardi	4	1.0%
Matcham	1	0.3%
Morisset	2	0.4%
Narara	19	4.7%
Niagara Park	3	0.7%
Norah Head	2	0.6%
Noraville	1	0.3%
Ourimbah	10	2.4%
Point Clare	7	1.9%
San Remo	3	0.8%



Saratoga	5	1.2%
Somersby	1	0.2%
Springfield	4	1.0%
St Huberts Island	1	0.3%
Summerland Point	8	2.0%
Tacoma / South	2	0.5%
Tascott	1	0.3%
Terrigal	8	2.0%
The Entrance / North	1	0.2%
Toukley	3	0.8%
Tuggerah	1	0.1%
Tuggerawong	5	1.3%
Tumbi Umbi	4	1.0%
Umina / Beach	16	4.0%
Wamberal	4	1.0%
Warnervale	2	0.4%
Watanobbi	9	2.2%
Woongarra	4	0.9%
Woy Woy / Bay	6	1.5%
Wyee / Point	4	1.1%
Wyoming	15	3.8%
Wyong / Creek / North	7	1.6%
Wyongah	7	1.8%
Yarramalong	3	0.7%
Yattalunga	4	0.9%
Refused	2	0.5%
<b>Total</b>	<b>400</b>	<b>100%</b>



## **Appendix VI: Final comments by business managers/owners**

### **General comments**

#### ***Positive***

Get it going!

The sooner, the better.

I would agree, providing there was significant benefit to the Central Coast.

I wonder if people know how many holes there already are, so what is one more?

Any proposal will be appreciated and all businesses within the Central Coast should support it.

There are already coal mines in this area. There will be no new or increased impact from a new mine.

#### ***Negative***

Don't do it!

We have enough coal.

I'll be part of the fight against it.

I don't really want the mine there.

I don't really know enough about it to comment, but I don't like the idea.

I am shocked at the proposal and concerned for the Wyong people.

I do not think it would be a good thing for the Coast - strongly disapprove.

The negative aspects outweigh the positive benefits. We have seen this with other mines.

There are other more suitable coal areas than the Central Coast where they are proposing to mine.

#### ***Neutral***

What are the issues 25 years down the track? Don't know all the questions now.

## **Economic and employment opportunities**

### ***Employment - Positive***

As I said before, the job opportunities would be good.

I prefer jobs to go to local people, otherwise don't have it.

Good for jobs but you have to look at the ecological side of things.

Good luck. If it creates employment and brings money into this area it will be a good thing.

I would like to see locals employed or NSW residents. I would like to see local products used for the mine.

Business-wise it's a good idea: creating more jobs. But for the area and the people that live there, they have concerns regarding the mine.

### ***Employment - Negative***

It is too built up now to do this and it won't promote jobs for Central Coast people.

Most of the infrastructure is already in Newcastle. It won't make much difference to job growth here.

It won't create any new employment on the Central Coast as people will just travel from other regions.

I believe most of the work and contracts will go to outside Central Coast. Residents will be very upset about the water usage.

Jobs that are to be filled would be filled by previously employed people in the mining industry so it might not bring many more people to the area.

I cannot see that any Central Coast person or business will benefit from the mine. Most of the people who will work in the mine will be from Newcastle so the extra money generated will go to Newcastle, not the Central Coast.

I am against coal mining. It is shortsighted to rely on the notion of 300 jobs in the area. They can be employed in other industries. There needs to be government spending at federal and State level for unemployment problems.

### ***Other economic issues***

Please use local businesses.

It would be positive economically. Health-wise it could be negative.

My business is a mariner and the mine will have no impact on the business.

If KORES owns the mine then we should not sell our land for extraction of resources for direct export.

Increases in the normal building industry rate would boost the economy more efficiently and effectively.

Although it would have benefits business-wise, the Central Coast cannot have any more people in the area.

We should keep a reserve of our coal because we might need it and not just export it, particularly if profits are going overseas.

## **Environmental issues**

### ***Water problems***

Sink money into water not coal.

Concerned about water and environmental issues.

Worried about threats to the water catchment area.

Very concerned about the effect it will have on the water table.

I am concerned about the mine's effect on Central Coast water.

It shouldn't go ahead due to water and environmental concerns.

As long as it doesn't have a negative impact on the water table I would approve it.

A bad decision. Too many people living on the Central Coast and it will affect the already fragile water supply.

Water resources are now limited and further residential development needs consideration for increases in water usage.

Given all the media coverage over water restrictions, what impact will a new mine have on these water problems over a 42 year period?

It will rob the water from the water table and we haven't got enough water as it is. The company should look at water problems first before any mine construction.

A short-sighted decision by government. It will be an environmental disaster especially for water issues. Issues of up to 1 meter subsidence will impact on properties and their value.

### ***Conditional support for project dependent upon environmental protection***

Provided it doesn't impact on the water tables adversely then it's ok.

If it can be proven that there is no environmental impact then it should go ahead.

I offer conditional support in consideration of the environmental impact assessment.

I am happy for it to go ahead if there is no effect, long or short-term, on the environment.

I am sure the regulations are in place to protect the environment and people of the area.

If the EIA (environmental impact assessment) is satisfactory, I would support the project.

If it's not going to have a negative environmental impact then I don't have any objections.

As long as the environmental impacts are minimised and OH&S practices are adhered to I would not have a problem.

I would support the mine as long as they look after the environment and do the right thing by the local people and business owners.

I would support the mine as long as all environmental measures are implemented to make minimal impact on the natural environment and the community.

### ***General environmental concerns***

I hope they will look after the environment.

I have environmental concerns about the mine.

The environmental impact of the mine is of concern.

Main problem is the environmental downside to be minimized.

Worry for damage to the natural habitat and species loss to the area.

Concerned that we are digging everything up and it is a finite resource.

My concerns are the environment, water, the subsidence or by-products.

I don't want to support an increase in the coal industry because of the environment.

I am mostly concerned about the environmental impact. I really don't know enough about it.

The Yarramalong Valley is a beautiful place to live and I would not like that to be adversely affected.

I have serious concerns about environmental damage caused by an underground mine and its effects on residents' health.

Concerns over the environment impact and mine subsidence due to mining. I am also concerned about the safety of the workers.

Think the mine is too close to the geographical location of the town. I have witnessed the damage caused by similar mines from an aerial perspective. I am seriously worried about the environmental damage and health damage from coal mining.

### ***Mine subsidence***

People owning land above the mine should be compensated for the mess it will create.

My property is on the edge of one of the valleys and I am concerned it will be affected in some way.

There is an upside and a downside as it is a rural area and there is already subsidence in the area. I would hope it didn't get any worse.

The area is far too close to residential zones and future residential and business development that could generate alternative income to a mine proposal. There are already subsidence issues along the freeway.

### ***Climate change: Alternate fuel sources***

I think we should be shutting coalmines and looking for other viable sources of energy.

I believe that new alternate fuel sources should be considered before taking more coal from any area in Australia, fossil fuels should be replaced.

Coal mining should be avoided at all costs because of the negative affect of global climate change. We need to quickly move away from a carbon economy towards renewable sources of energy.

## **Information, communication, and consultation**

### ***Information and communication about the mine***

I'd like to know more about it.

I don't have enough knowledge.

It has been very poorly promoted.

I need more information about the project.

Need more information to be fully informed.

Not enough information to make a decision.

I need more knowledge to be able to comment.

I need more information as to environmental issues.

I need more information to make an informed decision.

I need more information on what is going to happen in the catchment area.

It would be great to have more information about the environmental impact of the mine.

I do feel that I cannot comment too much as I was not aware of the proposal before this, that is until I have had a closer look at the project.

I would be concerned about the impact of the mine on the Yarramalong and Dooralong Valleys and I would want to have reports on the same.

I don't really know enough to make an informed decision about the project. The public should be more informed about what impact it will have on the environment.

I would like more information in the local newspapers and on the local television about the project, not just snippets that don't really tell you anything but more meaningful information.

### ***Consultation with local community***

I am hoping for further debate locally about the new mine.

Don't think there has been enough local discussion. Transport issues are going to have a negative impact on roads and road safety. Mining should not encroach into bush land areas surrounding built up areas.

## **Infrastructure**

The present railway is not up to scratch and any further load on the system will see it collapse.





## **Appendix VII: Final comments by residents**

### **General comments**

#### ***Positive***

Bring it on.

Sounds ok.

Good for the economy.

I believe that it should go ahead.

I hope it gets off the ground (pardon the pun).

If it is all the way up there in the bush, then build it.

Good for environment, economy and employment.

They do good in other places. It should be good for the Central Coast.

That industry has probably been the backbone of the area so if you don't like it then get out.

People are hypocritical; they use modern technology anyway like power, so therefore they shouldn't complain about a new mine.

Potential for growth and job prospects is of greater benefit to area. I don't think environmental impacts would be very bad.

#### ***Negative***

Do not do it.

Do not do it.

I can do without it.

I do not want it here.

It shouldn't go ahead.

I don't think we need it.

Mine should not be here.

I don't agree with it at all.

Hope it doesn't go ahead.

I'm totally against the proposal.

I don't think we should have it.

I do not support the proposal.

Not happy to have a new mine.

Hope they pick somewhere else.

I disagree that it should go ahead.

I don't like all that mining business.

I would prefer not to have the mine.

Let them dig up their own backyard.

There is nothing to be gained by a mine.

I can't see that it will advantage anybody.

We don't need it, not in favour of mining coal.

I do not think many people want the mine.

I think mining for more coal is absolutely stupid.

Don't have it, it will cause a decline in property values.

We do not want it. Too much impact on the landscape.

Would ruin the area in regards to traffic and cost of housing.

Although we need coal I am yet to be convinced of this mine.

It is a ridiculous idea. It will be never ending mining expansion.

I think they are getting too greedy, we have more than enough mines.

It scares me, we don't know enough about the effect on the environment.

Why do we need it? It would ruin the area. We haven't got the water resources.

I don't like the idea of a mine and what damage they can do on the Central Coast.

I have friends in the Yarramalong Valley who strongly oppose the mine and so do I.

Don't think it should go ahead given the consequences to property and the environment.

We're already having problems with the current mines, why are we having another mine?

I think there are not enough natural areas for tourism now. It is too beautiful an area for a mine.

Don't think there is any need for the new mine. It is mainly being emphasised because of politics.

As an ex-miner, I believe they didn't do the coal mines right in the area in the beginning so don't try again now.

I have known the area since the 1930s and I strongly disagree with over-development of any coal mines.

I think it should not be on the Central Coast but out further west where they need the employment.

Strongly oppose the mine in drought conditions and with offshore owners and it will only benefit the State Government.

I feel we have one of the most beautiful valleys and I do not want it to become like the Wollongong area.

The environmental impacts would outweigh the economic benefits and therefore the mine should not go ahead.

If I lived closer I would strongly disagree with the mine. If there is any effect on water at all I would strongly disagree with the mine.

I don't see how a coal mine could benefit the community or the area in any way. It would degrade the beautiful Yarramalong Valley.

I think it is most important to keep the Central Coast the way it is and not to negatively impact on the environment with a new coal mine.

I know what the mines have done to real estate and employment in other areas but it looks so bad at the mine site. I don't want them here.

I don't think this area needs another coal mine, the gas mine is enough. There will be no benefit from the coal mine to the Central Coast community.

There will be an impact on the Central Coast with the buildings at the northern entrance clearing the bush, etc. It will have too negative an impact on the Central Coast.

I strongly disagree with it and think that there are other areas to mine instead of this one. I think that it won't attract people to the area. I think that people would avoid the area if there was a mine.

I do not think it is necessary. We don't need more coal, it should stay in the ground. There are already too many people in the Central Coast. The roads can't handle them and neither can the water supply.

I don't think the underground water would survive the impacts of a new mine. I would not answer some of the questions relating to the community benefits as I think they are irrelevant as the mine shouldn't go ahead at all.

I have lived in an underground mining community. I strongly disagree with the destruction of the environment and the residential housing market and the negative effects on health, especially in light of the lack of health resources in the Wyong Shire.

### ***Neutral***

I am not sure.

Act responsibly.

Okay, but not near me.

Okay economically, but not in the long-term environmentally.

I wouldn't want to stand in the way of progress, but I have my reservations.

The area needs jobs, but the Dooralong Valley is beautiful and should not be spoiled.

There are reasons for and against the proposal and the outcomes on the people. We need to protect the environment more.

There are economic benefits as well as environmental and residential drawbacks to the project and they need to be addressed.

## **Economic and employment opportunities**

### ***Employment***

Employment.

Employment.

The employment would be good for business.

It would help the economy and help employment.

It would be good for employment in the community.

It would be good for employment, but I am not sure about environmental issues.

The jobs and the good money would be good for the economy and job opportunities.

It will provide jobs where too many local people have to commute to Sydney everyday.

It would be good for the economy, good for employment, and the environment issues are well looked after.

Anything that gives employment to people on the Central Coast would have to be a benefit to the Central Coast and its public.

Anything that brings employment and improves the infrastructure of the Central Coast is important. It may have a positive impact on the water crisis in the area.

### ***Foreign ownership***

Where is the money going to?

Is Australia going to benefit from the mine?

The benefits of job creation would be good for the area but I feel it should be mined by an Australian company not Korean.

Most of the money will be profiting the overseas company. I also have great concern about our water what effect will it have on it, pollution and supply.

I don't have enough information from their side but I really wouldn't like to see it in the area especially if it is not an Australian company and I believe it is not.

### ***Other economic issues***

I am not sure a new mine is needed with all the coal in the Hunter.

Most of the workers should come from the Central Coast unemployed.

The whole area supports a diverse range of activities and there are already a lot of coal mines and there would only be a small benefit for only a few.

I think that there are enough mines in the area that haven't been fully mined and have just been closed. I don't see why they should just start a new one.

## **Environmental issues**

### ***General environmental concerns***

Pollution and the environment.

I am worried about environmental issues.

The water, the environment and the visual effects.

I am concerned about industrial development in rural areas.

I would be concerned about the impact to the local environment.

It is a shame to spoil the Dooralong Valley because it is so lovely.

The environmental effects should be outlined for the general area.

It would create jobs but the environment comes first, including the water.

It will have a negative effect on the environment, especially noise pollution.

I am against it at this stage because of its negative impact on the beauty of the valleys.

I don't want any more bushland lost and I am worried about any impact on water supply.

My main concerns are the environmental issues and being too close to residential areas.

I am concerned about the impact on the environment and water supply by the introduction of a new mine.

I am concerned about the pollution and I think that they should have something else instead of the coal mine.

I am mostly negative about the mine with the main concern being its negative effect on the environment on the Coast.

Yarramalong is a beautiful valley and should not be spoiled in any way. We have enough coal mines and don't need any more.

Increased traffic, wildlife, water, flora, mine subsidence. There are already too many people on the Central Coast. There will be less water.

I don't think it is a good idea and I think that it is environmentally unfriendly and that it will impact negatively on the water supply in the local area.

I would prefer not to have more people attracted to the area. It is already over-populated and there is not enough water to support the population at the moment.

I am worried about the water supply and the general pollution levels resulting from the mine. I am also concerned about the disruption to the Central Coast lifestyle.

I am extremely concerned about the disturbance of the rivers and water supply. The government is not strong enough to control the mining owners. Using longwall mining causes serious land subsidence.

I have concerns for the contamination of water and stockpiling at the surface? Will these contaminate the water supply? I would like to know more about whether the depth is deep enough. I would like to know more about everything before agreeing.

## **Dust**

I am concerned about the dust.(black dust).

I am concerned about environmental issues and the dust from mine.

I am concerned about the coal dust and coal trucks being too close to national parks and residences.

## **Water**

Water is a priority, not coal.

The water situation is of concern.

Will it cut into the natural water supply?

How is it going to affect our water supply?

Will it have any effect on the water supply?

As long as it doesn't impact on the water supply.

I just think with the water position up here that it's just too risky.

It concerns me as it will have a severe impact on our water supply.

I am most concerned about the impact on the water and environment.

I hope they have looked into the water supply and environment issues.

Mining under the water basin is extremely erroneous, for example there are creeks drying up in Singleton.

What concerns me greatly are the impacts on the water table, water supply, and water quality, and also mine subsidence.

Is the coal going to be washed, and if it is, is the water going to be re-used? Where will it be sourced from?

I am worried about the lack of water. I would hate anything to happen to our underground water table, it may be threatened.

I strongly disagree with coal being exported and my greatest concern is the effect on groundwater from all of the mines in the Central Coast.

There is a natural water resource there in the valleys and I feel the mine would impact negatively on the current low level of water resources in the area.

Our main problem on the Central Coast is water and if the mine attracts more people to the Central Coast it will increase the demand on the water supply.

Coal mines and all mining significantly affect and consume water and it is stupid to invest in activities that further deplete water in this area and have low returns for the workers and the community.

***Conditional support for project dependent upon environmental protection***

The mine needs to be environmentally friendly.

Environmental issues should be looked into properly.

Make sure that the environment issues are dealt with.

As long as it doesn't affect the environment and water.

As long as the environment issues were well looked into.

I am really concerned about the water and the environment.

As long as the environment issues are addressed accordingly.

I would support it only if the environment issues are well looked into.

The mining company needs to have looked into the environmental issues.

If it doesn't have too much impact on our water supply it could be positive.

As long as flora and fauna are not affected I would approve of the project.

As long as it doesn't affect the water supplies it should be allowed to go ahead.

The mine needs to be kept within normal standards and look after the environment.

The environmental issues should be well looked at with no effect on the water supply.

They need to guarantee that there will be no impact on the underground water supply.

They need to guarantee that the operation will not affect the community's water supply.

An extensive environmental study needs to be undertaken before the mine is approved.

I would support it if they transport the coal by rail only. I have seen what coal trucks have done to roads.

I would consider it. It would be good for job opportunities, but I am a little concerned about the environmental impacts.

It would be good for the economy and jobs as long as the appropriate action is taken to ensure it is good for the environment.

I believe if the mine is properly designed, in accordance with the present guidelines, there is no reason for it not to go ahead.

I would like environmental checks to be continually maintained in order to preserve the integrity of the flora and fauna of that area.

I think that it needs to be done correctly especially in regards to environmental issues, and it is about time the Central Coast got some decent paying jobs.

I feel that as long as everything is monitored and kept within environmental guidelines it would be very positive for the Central Coast people and the economy.

Although I have environmental concerns, as long as there are no alternatives for energy sources and the company is doing the right thing regarding the community's issues, I would support the need for a coal project.

### ***Climate change and alternate fuel sources***

Coal is dirty energy.

I prefer alternate forms of energy.

We need to look for other sources of energy.

We should be looking at a better energy sources.

I am concerned about fossil fuels and global warming.

I think we need to get on with green fuels instead of fossil fuels.

We should be looking at alternate energy supplies such as solar energy.

Coal is a dirty fuel source which impacts on the environment causing problems.

Australia should stop focusing on coal as a natural resource. I would prefer green sources of power.

I am dead-set against the idea of coalmining. We need to think about alternatives for energy other than coal.

Overall I would rather see the reduction in the use of coal as it increases air pollution which affects global warming.

Selling coal to countries that have agreed to reduce their greenhouse gas emissions is a fairytale. Money always speaks.

The mine shouldn't go ahead because there should already be sufficient mines to provide energy. Alternate forms of energy should be sought.

Australia relies too much on exports and coal mining contributes to the greenhouse effect. I am aware of this even though I am not a "greenie".

I am against the mining of coal on the Coast. I believe strongly in the need to cut greenhouse gases and coal radiates this, so I disagree with selling only to those who signed Kyoto as I disagree with selling it to anyone.

### ***Mine location***

The position is not good.

Take the mine elsewhere.

The mine should be further west.

The mine is too close to residents.

The mine shouldn't be put in that area.

The mine is not appropriate in this area.

I would be concerned if I was situated close to the mine.

The mine needs to be further west, away from the freeway and the coast.

Take it away from the Central Coast environment, we want other attractions here.

The young people would benefit from jobs but the impact of living near the mine, especially the emissions, worries me for the health of the young babies and the young people.



### ***Mine subsidence***

Subsidence can and does happen.

I feel that the subsidence is a concern.

I am concerned about more mine subsidence.

I would worry about earthquakes with a new mine, like Newcastle.

I am concerned that longwall mining may increase the chances of subsidence.

I am worried about the effects on the water and the houses near it. I have previously lost a home to mine subsidence and it is very traumatic.

It will help employment but I am worried about the deformation of the ground. You can subside up to 20 to 30 feet with a longwall, but pillar extraction does not cause subsidence.

I think coal is just a quick fix. I don't think that Australia really needs another mine. Also there was a cave-in a few years ago around a lake that dropped about a metre and flooded the surrounding area. I think it was in the Wyee area.

### **Information, communication, and consultation**

#### ***Information and communication about the mine***

I find the information confusing.

I don't know enough about project.

I don't know enough about the mine.

I don't know anything about the mine.

I do not understand enough about the issues.

I don't know enough about the project to comment.

I don't know enough about the project to comment.

I would like more information before giving support.

I don't have enough knowledge to make a comment.

They should inform the public more about the project.

I would like more information about the proposed mine.

I would like to have been more informed about the project.

I would like to know more before agreeing to support the mine.

I feel that I need more information to make an informed decision.

We need to be more informed, especially about the water issues.

I think what they have to do is to be upfront with the amount of mine subsidence.

I was unaware of what was happening until this interview. I took the web address.

I would like to have known more about the project before answering the questions.

Thanks for the info it was welcome. The community can't respond without information.

I feel that I don't have enough information to provide an informed opinion about the mine.

There is not enough information available at the moment, they need to justify their case for the mine.

I think they should be more open with information about the effect it will have on the local area and water supply.

I have not heard about the proposal at all. I am in that area of work and I would like to know when it might be going ahead.

I don't have enough background information to base opinions on, to help answer the questions, or to decide whether to support mine.

It needs careful consideration of the pros and cons and I would like to know more before I agree to support the opening of a new mine.

I would appreciate more information being made available to the public but it should be independent, not company funded information.

I will find out more information. I don't know how it would decrease the risk of flooding. All the records should be made public. The way the questions were worded was leading.

### ***Consultation with local community***

If the people of the Central Coast have an input into the proposal it would be a good thing.

### **Infrastructure**

The rail wouldn't cope, an earthquake could be triggered.

They need to make sure that the infrastructure surrounding the area is updated and maintained. They need to make sure the appropriate and relevant studies are done and they shouldn't be swayed by Gosford and Wyong Councils' regulations and restrictions on everything.

### **Other**

The destruction is already done.

Answering the questions unprepared is very difficult.

They should have other means to generate electricity; it is too dangerous for workers.

It will bring attention to the Central Coast. My only concern is for the safety of workers.

There are other ways of getting fuel. There should be more care for what the community wants. What benefits does this mine have?

## Appendix VIII Additional tables

Q1 I am going to read out a list of statements about important issues on the Central Coast. After each one, I would like you to give me your opinion about whether you agree or disagree.						
The overall quality of the environment on the Central Coast is good				People on the Central Coast have good access to education services		
	No.	%			No.	%
Strongly disagree	2	0.4		Strongly disagree	6	1.4
Disagree	49	12.4		Disagree	28	7.0
Neither	16	4.0		Neither	32	7.9
Agree	280	69.9		Agree	281	70.1
Strongly agree	49	12.3		Strongly agree	20	4.9
Don't know	4	1.0		Don't know	35	8.7
Mean score out of 5	3.82			Mean score out of 5	3.77	
There is a good range of recreation facilities on the Central Coast				People on the Central Coast have good access to health services		
	No.	%			No.	%
Strongly disagree	20	5.1		Strongly disagree	28	6.9
Disagree	77	19.3		Disagree	88	22.0
Neither	26	6.4		Neither	29	7.2
Agree	236	58.9		Agree	231	57.7
Strongly agree	31	7.7		Strongly agree	20	5.1
Don't know	10	2.6		Don't know	5	1.2
Mean score out of 5	3.46			Mean score out of 5	3.32	
Housing is generally affordable on the Central Coast				The Central Coast has a good public transport system		
	No.	%			No.	%
Strongly disagree	22	5.4		Strongly disagree	63	15.7
Disagree	79	19.7		Disagree	133	33.3
Neither	47	11.8		Neither	40	10.1
Agree	232	58.0		Agree	126	31.5
Strongly agree	7	1.7		Strongly agree	10	2.4
Don't know	14	3.4		Don't know	28	7.0
Mean score out of 5	3.32			Mean score out of 5	2.70	

Crime levels are low on the Central Coast		
	No.	%
Strongly disagree	44	10.9
Disagree	191	47.7
Neither	56	14.0
Agree	80	20.0
Strongly agree	1	0.3
Don't know	29	7.1
Mean score out of 5	2.47	
The road network on the Central Coast is well maintained		
	No.	%
Strongly disagree	94	23.5
Disagree	196	49.0
Neither	37	9.2
Agree	71	17.6
Strongly agree	2	0.4
Don't know	1	0.2
Mean score out of 5	2.22	

There are enough good jobs on the Central Coast		
	No.	%
Strongly disagree	63	15.8
Disagree	194	48.5
Neither	25	6.2
Agree	74	18.4
Strongly agree	2	0.5
Don't know	42	10.6
Mean score out of 5	2.32	
The Central Coast has a good availability of drinking water		
	No.	%
Strongly disagree	138	34.4
Disagree	150	37.6
Neither	10	2.6
Agree	91	22.7
Strongly agree	4	1.0
Don't know	7	1.7
Mean score out of 5	2.17	

**Q4 I am now going to read out a list of potential environmental issues that have been raised in relation to the Wallarah 2 Coal Project's proposed underground mine.**

**After each one, I would like you to tell me how concerned you would be about each one.**

Impacts on the groundwater supply in the local area			Impacts on the surface water supply in the local area		
	No.	%		No.	%
Not at all concerned	25	6.3	Not at all concerned	24	6.1
Slightly concerned	15	3.7	Slightly concerned	21	5.2
Moderately concerned	50	12.4	Moderately concerned	53	13.2
Very concerned	111	27.9	Very concerned	95	23.6
Extremely concerned	179	44.9	Extremely concerned	188	46.9
Don't know	20	4.9	Don't know	20	5.0
Mean score out of 5	4.07		Mean score out of 5	4.05	
Mine subsidence impacts to houses and structures			Increasing the risk of flooding in some areas		
	No.	%		No.	%
Not at all concerned	37	9.4	Not at all concerned	54	13.5
Slightly concerned	27	6.8	Slightly concerned	33	8.2
Moderately concerned	81	20.2	Moderately concerned	82	20.4
Very concerned	123	30.8	Very concerned	102	25.4
Extremely concerned	121	30.2	Extremely concerned	97	24.2
Don't know	11	2.6	Don't know	33	8.3
Mean score out of 5	3.67		Mean score out of 5	3.42	
Noise produced by machinery at the mine's surface facilities			Increased vehicle movements around the mine entrance		
	No.	%		No.	%
Not at all concerned	116	29.0	Not at all concerned	111	27.8
Slightly concerned	35	8.8	Slightly concerned	53	13.2
Moderately concerned	83	20.9	Moderately concerned	100	25.0
Very concerned	85	21.2	Very concerned	73	18.4
Extremely concerned	69	17.3	Extremely concerned	59	14.7
Don't know	12	2.9	Don't know	4	0.9
Mean score out of 5	2.89		Mean score out of 5	2.79	

More trains moving on local railway lines			The visual appearance of buildings at the mine's surface facilities		
	No.	%		No.	%
Not at all concerned	142	35.4	Not at all concerned	155	38.7
Slightly concerned	55	13.8	Slightly concerned	62	15.5
Moderately concerned	76	19.1	Moderately concerned	79	19.8
Very concerned	66	16.5	Very concerned	53	13.2
Extremely concerned	58	14.5	Extremely concerned	44	10.9
Don't know	3	0.7	Don't know	7	1.7
			Refused	1	0.2
Mean score out of 5	2.60		Mean score out of 5	2.41	
Decreasing the risk of flooding in some areas					
	No.	%			
Not at all concerned	150	37.4			
Slightly concerned	49	12.3			
Moderately concerned	82	20.4			
Very concerned	36	8.9			
Extremely concerned	31	7.8			
Don't know	53	13.2			
Mean score out of 5	2.28				

Q5 I am now going to read out a list of statements about some issues relating to the Wallarah 2 Coal Project's proposed underground mine. After each one, I would like you to give me your opinion about whether you agree or disagree. ...							
<b>Property values of the houses and land above a new mine would be negatively affected</b>				<b>Mostly Central Coast people should be employed by a new mine</b>			
					<b>No.</b>	<b>%</b>	
				Strongly disagree	2	0.6%	
				Disagree	28	6.9%	
				Neither	17	4.1%	
				Agree	222	55.4%	
				Strongly agree	122	30.5%	
				Don't know	10	2.4%	
				<b>Total</b>	<b>400</b>	<b>100.0%</b>	
				<b>Mean score out of 5</b>	<b>4.11</b>		
<b>Coal from a new mine should only be exported to countries that have agreed to reduce their greenhouse gas emissions</b>				<b>A new mine would help to generate jobs in Central Coast businesses</b>			
					<b>No.</b>	<b>%</b>	
				Strongly disagree	10	2.6%	
				Disagree	38	9.4%	
				Neither	32	8.0%	
				Agree	184	45.9%	
				Strongly agree	123	30.7%	
				Don't know/ Refused	13	3.4%	
				<b>Total</b>	<b>400</b>	<b>100.0%</b>	
				<b>Mean score out of 5</b>	<b>3.96</b>		
<b>A new underground mine would have a significant negative impact on the Central Coast's natural environment</b>				<b>A new mine would contribute significantly to the Central Coast economy</b>			
					<b>No.</b>	<b>%</b>	
				Strongly disagree	15	3.8%	
				Disagree	79	19.8%	
				Neither	35	8.6%	
				Agree	152	38.1%	
				Strongly agree	95	23.9%	
				Don't know	23	5.8	
				<b>Total</b>	<b>400</b>	<b>100.0%</b>	
				<b>Mean score out of 5</b>	<b>3.62</b>		
				<b>Mean score out of 5</b>		<b>4.03</b>	

A new mine would help to generate income for Central Coast businesses		
	No.	%
Strongly disagree	8	2.0%
Disagree	70	17.5%
Neither	35	8.8%
Agree	245	61.3%
Strongly agree	28	6.9%
Don't know	14	3.5%
Total	400	100.0%
Mean score out of 5	3.56	
New businesses would be attracted to the Central Coast by a new mine		
	No.	%
Strongly disagree	14	3.4%
Disagree	141	35.3%
Neither	35	8.7%
Agree	162	40.6%
Strongly agree	20	4.9%
Don't know	28	7.1%
Total	400	100.0%
Mean score out of 5	3.09	

The Central Coast community would benefit from a new mine		
	No.	%
Strongly disagree	24	5.9%
Disagree	105	26.3%
Neither	56	14.1%
Agree	173	43.3%
Strongly agree	22	5.6%
Don't know	19	4.8%
Total	400	100.0%
Mean score out of 5	3.17	
A new mine would attract people to live on the Central Coast		
	No.	%
Strongly disagree	27	6.6%
Disagree	164	40.9%
Neither	35	8.9%
Agree	141	35.3%
Strongly agree	12	3.0%
Don't know	21	5.2%
Total	400	100%
Mean score out of 5	2.86	