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# Abbreviations

Abbreviation	Description
ABS	Australian Bureau of Statistics
AGL	AGL Energy
AIP	Australian Industry Participation (Plans)
Arrow	Arrow Energy
С	Construction (phase)
CSG	Coal Seam Gas
DEEDI	Department of Employment, Economic Development and Innovation
DIDO	Drive in/drive out
DIP	Department of Infrastructure and Planning
DoC	Department of Communities
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
FIFO	Fly in/fly out
HR	Human Resources
HSD	Health Service District
ICN	Industry Capability Network
IHS	Integrated Housing Strategy
IPP	Indigenous Participation Policy
Km	Kilometres
Km <sup>2</sup>	Square kilometres
LIPP	Local Industry Participation Plan
LNG	Liquefied natural gas
MW	Megawatt
0	Operations (phase)
OESR	Office of Economic and Statistical Research, Queensland Government
OH&S	Occupational Health & Safety
PC	Pre-Construction (phase)
RCCC	Regional Community Consultative Committee
SD	Statistical Division
SEIFA	Socio-Economic Indices for Areas
SGS	SGS Economics and Planning
SIMP	Social Impact Management Plan
SQIT	Southern Queensland Institute of TAFE
TWAF	Temporary worker accommodation facility
TAFE	Technical and Further Education
TJ	Terajoule
ULDA	Urban Land Development Authority
URS	URS Australia Pty Ltd
WWW	World Wide Web



A draft social impact management plan (SIMP) was stipulated in the Terms of Reference for the Surat Gas Project EIS as a requirement for the SIA. The SIMP is modelled on the DIP SIA Unit Guideline to preparing a social impact management plan published in September 2010, and addresses medium to high impacts identified in the SIA.

The SIMP is intended to support ongoing management of the potential social impacts of the Project. In recognition of the changing nature of impacts over the life of the Project, the SIMP should be adaptive and reassessed at regular intervals. Benchmarks should be established and monitored continuously throughout implementation and the management plan adapted as required. A comprehensive review of the SIMP should be undertaken following each release of new census data (5 yearly) and monitored in conjunction with biennial Surat Basin non-resident workforce updates (produced by the Office of Economic and Statistical Research (OESR)) to proactively identify any sudden or unexpected changes in the social environment or impacts.

The SIMP is based on a three stage approach:

- Stage 1: Develop the draft SIMP based on the SIA analysis and conclusions;
- **Stage 2**: Consult key stakeholders on the details of the SIMP, roles and responsibilities, benchmarks, reporting, monitoring and program evaluation; and
- Stage 3: SIMP implementation.

This draft SIMP submitted with the Project EIS is within Stage 1. Submission of the draft SIMP does not necessarily signify completion of Stage 1. Further consultation with the DIP SIA Unit and local governments may be required to refine the template prior to expansion of the various components.

## 1.1 Project Summary

## 1.1.1 Project Proponent

Arrow is an integrated energy company with interests in coal seam gas field developments, pipeline infrastructure, electricity generation and a proposed liquefied natural gas (LNG) projects.

Arrow has interests in more than 65,000 km<sup>2</sup> of petroleum tenures, mostly within Queensland's Surat and Bowen basins. Elsewhere in Queensland, the company has interests in the Clarence-Moreton, Coastal Tertiary, Ipswich, Styx and Nagoorin Graben basins.

Arrow's petroleum tenures are located close to Queensland's three key energy markets; Townsville, Gladstone and Brisbane. The Moranbah Gas Project in the Bowen Basin and the Tipton West, Daandine, Kogan North and Stratheden projects in the Surat Basin near Dalby comprise Arrow's existing coal seam gas production operations. These existing operations currently account for approximately 20% of Queensland's overall domestic gas production.

Arrow supplies gas to the Daandine, Braemar 1 and 2, Townsville and Swanbank E power stations which participate in the National Electricity Market. With Arrow's ownership of Braemar 2 and the commercial arrangements in place for Daandine and Townsville power stations Arrow has access to up to 600 MW of power generation capacity.

Arrow and its equity partner AGL Energy have access rights to the North Queensland Pipeline which supplies gas to Townsville from the Moranbah Gas Project. They also hold the pipeline licence for the proposed Central Queensland Gas Pipeline between Moranbah and Gladstone.



Arrow is currently proposing to develop the Arrow LNG Project, which is made up of the following aspects:

- Arrow LNG Plant The proposed development of an LNG Plant on Curtis Island near Gladstone, and associated infrastructure, including the gas pipeline crossing of Port Curtis.
- Surat Gas Project The upstream gas field development in the Surat Basin, subject of this assessment.
- Arrow Surat Pipeline Project (Formerly the Surat Gladstone Pipeline), the 450 km transmission pipeline connects Arrow's Surat Basin coal seam gas developments to Gladstone.
- Bowen Gas Project The upstream gas field development in the Bowen Basin.
- Arrow Bowen Pipeline The transmission pipeline which connects Arrow's Bowen Basin coal seam gas developments to Gladstone.

## 1.1.2 Project Description

Arrow proposes expansion of its coal seam gas operations in the Surat Basin through the Surat Gas Project. The need for the project arises from the growing demand for gas in the domestic market and global demand and the associated expansion of LNG export markets.

The Project development area extends from the township of Wandoan in the north towards Goondiwindi in the south, in an arc adjacent to Dalby. Townships within or in close proximity to the project development area include (but are not limited to) Wandoan, Chinchilla, Kogan, Dalby, Cecil Plains, Millmerran, Miles and Goondiwindi. Arrow holds petroleum tenures across this area and operates existing gas fields at Tipton West, Daandine, Stratheden and Kogan North near Dalby.

While a field development plan will be established for the Project using exploration and appraisal data, conceptually, the Project will involve the staged development of:

- Approximately 7,500 production wells producing approximately 1,050 TJ/d. The peak gas
  production comprises 970 TJ/d for LNG production (including a 10% fuel gas requirement for
  facility operation) and a further 80 TJ/d for supply to the domestic gas market;
- Associated gas and water gathering infrastructure;
- · Eighteen facilities comprised of:
  - Six Field Compression Facilities;
  - Six Central Gas Processing Facilities (incorporating water transfer facilities);
  - Six Integrated Processing Facilities (incorporating water treatment and storage facilities).

Compression, power generation and water treatment equipment will be 'modular' allowing facilities to be scaled up and down to cope appropriately with gas and water abstraction volumes through the different stages of the development's life.

• Underground high-pressure gas pipeline infrastructure to link the facilities to the existing gas transmission network (and to each other where appropriate).

### 1.1.3 Social and Cultural Area of Influence

Arrow's Project development area is located approximately 160 km west of Brisbane in Queensland's Surat Basin. It extends from the township of Wandoan in the north towards Goondiwindi in the south, in an arc adjacent to Dalby. The total Project development area is approximately 8,600 km<sup>2</sup>.

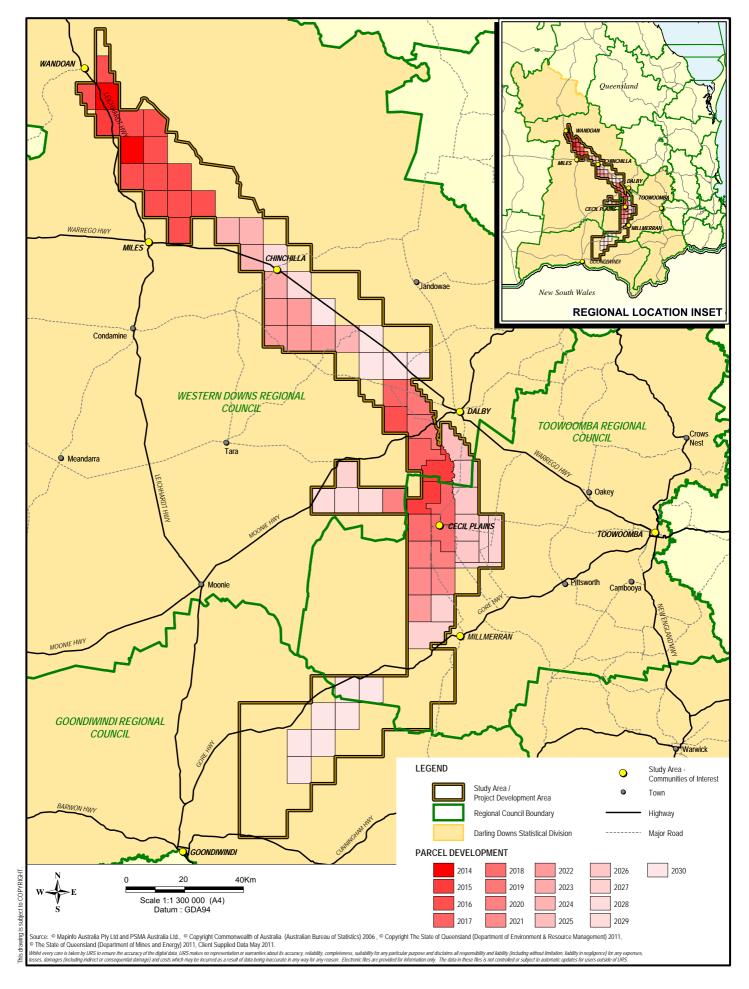


The social impact assessment (SIA) study area (the study area) includes the land and communities within the Project development area and a number of towns in its vicinity. These towns herein, called the 'communities of interest', are:

- Cecil Plains;
- Chinchilla;
- Dalby;
- Goondiwindi;
- Miles;
- Millmerran;
- Wandoan; and
- Toowoomba city and surrounding towns/localities within Toowoomba Regional Council.

The study area is located in the Darling Downs Statistical Division (SD) that includes the regional councils of Toowoomba, Goondiwindi and Western Downs. Figure 1-1 shows the location of the study area, including the Project development area and the communities of interest.





COFFEY ENVIRONMENTS

SURAT GAS PROJECT

**PROJECT STUDY AREA** 



## 1.1.4 Baseline Summary

The following is a summary of the key characteristics and social issues identified within the study area during the baseline assessment.

## History and Settlement

The study area has a long agricultural history, yet in recent years, the region has experienced rapid expansion of resource industries, including CSG, coal mining and underground coal gasification. These are occurring across the region.

## People - Population, Demographic and Household Composition

A summary of key population, demographic and household characteristics is presented in Table 1-1 below:

Table 1-1 Selected Population, Demographic and Household Characteristics - 2010

Selected characteristics	Cecil Plains	Chinchilla	Dalby	Goondiwindi	Miles	Millmerran	Toowoomba	Wandoan	Darling Downs (SD)	Queensland
2010 population (a)	241	4,445	11,097	1,259	6,593	1,348	106,743	420	241,537	4,513,850
Annual pop. change 2001- 2010	(1.6%)	3.5%	1.6%	2.2%	0.6%	0.9%	2.2%	0.7%	2.1%	2.6%
Median age of persons	39	39	34	34	41	39	35	40	37	36
Indigenous % of pop.	3%	3.5%	6.1%	4.4%	7.5%	3.8%	2.9%	1%	3.1%	3.3%
Average household size	2.4	2.4	2.6	2.6	2.3	2.3	2.5	2.2	2.6	2.6
% of families that are couples with no children	39%	46%	38%	40%	43%	47%	44%	46%	41%	39%
% of families that are single parents with children aged 15 or below	19%	7%	11%	8%	11%	10%	1%	10%	9%	10%

Note: (a) Preliminary OESR 2010 population estimates

Source: OESR 2011; ABS 2006

## Economy, Employment and Enterprise

- CSG production in the Darling Downs region commenced in 2006.
- An increase in the cost of living (including housing costs) arising from development in the area has been identified as a key concern in Project stakeholder engagement;

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- The Darling Downs region has experienced significant fluctuations in prosperity over time, due to either economic or environmental variability, such as commodity prices, seasonal weather variations and drought;
- Indigenous unemployment is high in all the regional council areas, as compared to the State, and is particularly high in the Goondiwindi region (28.9%) (ABS, 2006);

Critical skills shortages for the CSG industry have been identified in the areas of:

- Drilling Assistants;
- Production Technicians;
- Maintenance Technicians:
- Electrical and Instrumentation Technicians;
- Logistics Technicians/ Administrators;
- Petroleum, Chemical and Mechanical Engineers; and
- Geologists and Geophysicists (Energy Skills Queensland, 2011).

Additional summary data is presented in Table 1-2 below.

As can be seen, Miles, Millmerran and Wandoan experience the lowest median incomes within the region, while Goondiwindi experiences the highest median incomes. Across the Darling Downs Statistical Division as a whole, Agriculture, Forestry and Fishing and Retail work are the most common industries of employment, while managers are the most common occupational category (due to the number of agricultural enterprises with owners categorising their occupation as managers). Within the region, Millmerran has the highest unemployment rate, whilst Miles has the lowest.



Table 1-2 Summary Economic Data for the Study Area

Selected data	Cecil Plains	Chinchilla	Dalby	Goondiwindi	Miles	Millmerran	Toowoomba	Wandoan	Darling Downs (SD)	Queensland
Median Individual Income (\$/weekly)	466	407	453	501	386	393	436	416	420	476
Median Household Income (\$/weekly)	850	921	940	1,034	626	719	907	623	1,059	1,033
Median Family Income (\$/weekly)	949	1,083	1,073	1,147	918	911	1,096	914	875	1,154
Most common industries of employment (% of employed persons aged 15+)	Manufacturing.: 30% Agric., forestry & fishing: 19%	Construct: 18% Retail trade: 15%	Retail trade: 14% Manufacturing: 30%	Retail trade: 17% Agric., forestry & fishing: 12%	Health care & social assist.: 14% Retail trade and Public admin & safety: both 12%	Agric., forestry and fishing: 15% Construct: 11%	Health care & social assist.: 14% Retail trade: 13%	Public admin & safety: 14% Retail trade: 14%	Agric., forestry & fishing: 12% Retail trade: 12%	Manufacturing.: 14% Construct: 14%



Selected data	Cecil Plains	Chinchilla	Dalby	Goondiwindi	Miles	Millmerran	Toowoomba	Wandoan	Darling Downs (SD)	Queensland
Most common occupation categories (% of emp. persons aged 15+)	Machinery operators & drivers: 35% Labourers: 29%	Tech. and trades: 20% Labourers: 19%	Tech. & trades: 18% Clerical & Admin.; and Labourers: both 15%	Tech. & trades: 16% Managers; Clerical & Admin.; and Labourers: all 14%	Managers: 18% Labourers: 18%	Labourers: 20% Tech. & trades: 18%	Professionals: 18% Tech. & trades: 16%	Labourers: 20% Machinery operators & drivers; and Managers: both 17%	Managers: 17% Professionals; Tech. & trades; and Labourers: all 15%	Professionals: 17%; Tech. & trades; and Clerical & Admin.: both 15%
Total Labour Force (No.)	115	1,745	4,617	2,842	492	569	45,020	190	101,290	1,915,949
% of labour force unemployed	5.2	4.1	5	4.6	3.3	5.6	4.9	4.7	4.5	4.7

Source: ABS 2006



### Housing and Accommodation

There have been sharp increases in demand for housing in some locations within the study area and this has impacted upon housing costs, particularly in Chinchilla, and to a lesser extent Dalby. Table 1-3 below shows that median rental rates for 2 and 3 bedroom rentals are still significantly below the Queensland median however they have been increasing over recent years.

Table 1-3 Median Rental Costs for Regional Councils in the Study Area 2010

Regional	3 Bed	lroom	2 Bedroom		
Councils	Median Rent (\$) weekly	% Change over year	Median Rent (\$)	% Change over year	
Toowoomba	260	4	200	8.1	
Western Downs	270	-3.6	190	-13.6	
Goondiwindi	240	4.3	160	0	
Queensland	330	0	300	0	

Source: DoC, 2011

Table 1-4 shows median house prices for the regional councils within the study area against the Queensland median.

Table 1-4 Median Housing Costs in the Regional Councils of the Study Area 2010

Regional Council	Median Sales Dec Qtr 2010 (\$)	% Change over year
Toowoomba	319,000	4.6
Western Downs	286,000	2.1
Goondiwindi	285,000	8.8
Queensland	425,000	-1.6

Source: DoC, 2011

In Chinchilla much of the serviced, zoned residential land has either been developed, is being developed or is subject to development application; in addition, the capacity of the power supply is a potential limitation for growth in Chinchilla.

In June 2008 Dalby Local Government Area (now Western Downs Regional Council) had 1208 non-resident workers. 60% of these people stayed in temporary accommodation facilities (TWAFs), the majority of these being in or near the towns of Dalby (491 workers), Chinchilla (318) and Miles (228). Another 171 people lived in TWAFs located on resource leases. The remainder of non-residents stayed in hotels/motels, caravan parks or had other arrangements (DIP, 2008).

Hotels and motels are experiencing high demand across most of the study area and are frequently booked out, particularly from Monday to Wednesday.

Increased housing demand is putting pressure on the more vulnerable sections of the community.

## **Education and Training**

Summary points relating to education and training within the study area are as follows:

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- A large proportion of the study area population over 15 years of age have completed a year 10 equivalent education. However, the number of residents with a year 12 qualification ranged widely between Wandoan (20.6%) at the lower end and Toowoomba (39.3%) at the higher end. These figures particularly for year 12 education are well below the Queensland average for residents with a year 10 qualification (76.4%) and year 12 qualification (41.3%) (ABS, 2006);
- Year 12 graduates in the region exhibit similar patterns of behaviour as do other regional
  Queenslanders, with less entering University and more likely to enter employment based training,
  than those living in the city (Education Queensland, 2010); and
- Education facilities available in the study area include child care centres, schools (offering prep to year 12 in some places), university and TAFE as well as private training facilities. Consultation indicates that schools in the district have spare capacity to cope with potential additional demand.

Table 1-5 outlines the number of child care, primary and secondary educational facilities available as well as current student enrolment numbers for the schools.

Table 1-5 Child Care, Primary and Secondary School Services Available and School Enrolment Numbers

Community of	No. of child care	Student enrolment numbers by school type						
interest	facilities	Prep to Year 7	Prep to Year 10	Year 8 to Year 12				
Cecil Plains	1	0	92	0				
Chinchilla	3	745	0	480				
Dalby	3	2060	0	1,030				
Goondiwindi	4	950	0	485				
Miles	1	0	395	0				
Millmerran	2	105	332	0				
Toowoomba	88	9,050	0	4,800				
Wandoan	1	0	137	0				

Source: Education Queensland, 2010, SGS, 2011, Yellow Pages, 2011.

### Health and Wellbeing

Socio-Economic Indexes for Areas (SEIFA) is a summary measure of the social and economic conditions of geographic areas across Queensland; it is a ranking of comparative socio-economic disadvantage, with the base measure being 20% of the Queensland population falling within each quintile of disadvantage for the State as a whole. Using this measure, the Darling Downs SD experiences a greater degree of disadvantage than does the State as a whole, as can be seen from Table 1-6 below. Of the Darling Downs SD population, 26.4% are within the most disadvantaged quintile (compared with the 20% for the State) while only 12.6% of the population of Darling Downs SD were in the least disadvantaged quintile (ABS, 2006).

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Table 1-6 Socio-Economic Index of Disadvantage (Percentage of Population) for Darling Downs SD, 2006

Quintile 1 (most disadvantaged)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (least disadvantaged)
26.4%	28.7%	18.8%	13.4%	12.6%

Source: ABS, 2006

Key health statistics are only available at the Queensland Government Darling Downs-West Moreton Health District Service level. This is a broad district that encompasses the study area, yet also includes areas to the east of the study area, these being the regions around Ipswich, Cherbourg, and Stanthorpe. There is no significant difference in health indicators between Darling Downs-West Moreton Health Service District (HSD) and the Queensland average (Queensland Health, 2010). Toowoomba offers many of the health services available to a well-resourced hospital and operates as the primary regional health referral centre, and Dalby Hospital is considered as a key hospital provider to surrounding rural communities.

The "need for assistance" indicator derived from the ABS Census data measures the number of people with a profound or severe disability. The percentage of the population identified as requiring assistance in Darling Downs SD area was 10,034 persons (4.4%). This is higher than the State average of 3.8% (ABS, 2006).

#### Community Services and Facilities

Toowoomba appears to be relatively well serviced, with no major service gaps identified through the consultation carried out as part of the SIA process. In general, Toowoomba acts as a hub for community services, with more remote areas, where possible, accessed through outreach services. Outside of Toowoomba, there is limited local access to social services, as well as a lack of doctors, medical specialists and dentists. Mental health services and health promotion are also considered to be lacking.

Key service gaps identified within the Western Downs Regional Council area are for the following service types:

- Youth support, and child and family support
- Aged care;
- Specialist counselling; and
- Cultural diversity (SGS, 2011).

#### Community Infrastructure

In recent years, the expansion of coal mining in the Surat Basin has resulted in increases in road freight transport as rail coal transport has reduced the capacity of the rail network to carry freight; the movement of freight though urban areas has been identified as an issue for the region.

#### **Emergency Services**

Emergency services for the study area generally consist of the Queensland Police Service, Queensland Fire Service, Queensland Ambulance Service and State Emergency Services. The number of emergency personnel in each town in the region is based on population. Toowoomba,



Goondiwindi and Dalby therefore have the highest level of emergency service personnel across all three disciplines.

#### Cohesion and Crime

The study area lies within Queensland Police's Southern Region, which includes the districts of Charleville, Roma, Dalby, Warwick, Toowoomba and Ipswich. The districts of Dalby, Toowoomba and Warwick are of particular relevance to the Project. Relative to the rest of Queensland, many crimes committed in these regions, occur less frequently on a per capita basis (Queensland Police, 2009). The most common offences to occur in the study area relate to traffic (inclusive of drink driving) (pers. comm., Snr Const Peterson, Toowoomba police station, 2010).

## 1.1.5 Project Monitoring Process

The Proponent will implement a social impact monitoring process that will monitor impacts as well as the effectiveness of management strategies throughout the construction and operational stages of the Project.

## 1.1.6 Stakeholder Engagement

The stakeholder engagement undertaken specific to the EIS has been a part of the broader Arrow Energy Surat Gas Project (the Project) consultation process. Engagement activities have included:

- A series of focus groups to identify areas of concern and aspirations relating to the Project;
- A detailed, statistically valid, quantitative telephone survey of the study area and communities of
  interest to quantify the weight, or level of importance, placed on identified issues or opportunities.
   The survey also sought to identify perceptions around CSG producers' ability to manage these
  impacts;
- Meetings and interviews with key stakeholders to understand the existing social baseline in the area and identify areas of concern and aspirations relating to the Project;
- · Review and interpretation of other independent stakeholder analysis; and
- Biannual consultation in towns within the Project development area; Wandoan, Chinchilla,
   Millmerran, Dalby, Cecil Plains and Goondiwindi. This consultation involved key Arrow personnel (senior management) and comprised presentations to the general community followed by one-on-one discussions where the community was able to ask specific questions directly to Arrow.

In evaluating potential impacts, the SIA considered stakeholder perceptions, concerns and expectations of the Project. It is evident that the community has become increasingly informed and aware of the CSG industry and the Project. Key issues and concerns raised within the consultation process that were consistent across the study area are as follows:

- Impacts relating to groundwater, water and associated effects on water security, property and livelihoods;
- Salt creation and salt management;
- Impact on good quality and intensively farmed agricultural land;
- Impacts to housing and living costs:
- Maintaining good relationships with land holders;
- Providing open and honest communication;
- Impacts on community services and infrastructure (particularly health services);

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- Road safety and increased traffic concerns;
- Maximising integration of the workforce into the community;
- Local employment and business opportunities

There was variation across the study area and between stakeholder interest groups on the importance of some issues. On some topics, there were contradictory views on Project impacts.

### 1.1.7 Proposed Workforce Profile

Construction of the gas fields and compression facilities for the Project will commence in 2013 and continue through to 2036. The peak workforce requirement for both operations and construction occurs in 2021 where approximately 1075 personnel will be required, as shown in Figure 1-2.

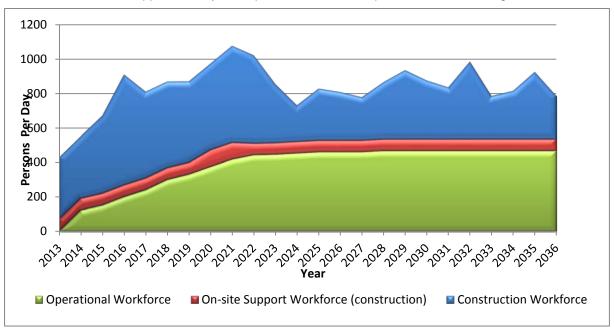


Figure 1-2 Forecast Project Workforce

The majority of jobs on the Project will be in vocational occupations with technical skills such as drilling, process plant operations and diesel fitting. Other vocational occupations such as logistics, transport, warehousing will also be required in large numbers. The construction workforce will typically work 10-12 hour shifts on a 21-day on, 7-days off roster.

Arrow has a preference to provide employment to people based locally (i.e. living within the study area) through its selection of staff and contractors. However due to existing low unemployment rates and the high demand for workers by development projects across central Queensland, this may not be realistic for the majority of its human resource requirements.

Table 1-7 shows the likely sources of the workforce for construction and operation, and the likely additional housing requirements. For construction Arrow will aim to source 20% of the workforce locally. The SIA has assumed that of this 20%: 75% (15 of 20%) will be existing residents; and 25% (5 of 20%) will relocate to the local area. The majority of the construction workforce (80%) will be sourced from outside of the local area and will stay in temporary accommodation facilities (TWAFs). Five TWAFs will be constructed across the Project development area at the site of an integrated



processing facility central to each development region; Wandoan, Chinchilla, Millmerran, Dalby, Goondiwindi. Additional mobile drilling camps may be established as required.

Table 1-7 Number of Field Based Workers and Housing Requirements for Surat Gas Project

Workforce Type and Likely Source	Level		Year				
		2016	2021	2029	2032	2035	
Construction Workforce							
Main construction workforce	N/A	640	560	400	450	390	
Existing resident (existing accommodation in the area)	15%	96	84	60	68	59	
New resident (seeking accommodation in the area)	5%	32	28	20	23	20	
Non-resident (camp based)	80%	512	448	320	360	312	
Onsite Support Workforce (Construction)	N/A	70	100	70	70	70	
Existing resident (existing accommodation in the area)	20%	14	20	14	14	14	
New resident (seeking accommodation In the area)	80%	56	80	56	56	56	
Operational Workforce							
Operational Support Staff at Depots	N/A	125	200	200	200	200	
Existing resident (existing accommodation in the area)	50%	63	100	100	100	100	
New resident (seeking accommodation In the area)	50%	63	100	100	100	100	
Field and Facility Operations Workforce	N/A	74	215	264	264	264	
Existing resident (existing accommodation in the area)	50%	37	108	132	132	132	
New resident (seeking accommodation In the area)	50%	37	108	132	132	132	
TOTAL WORKFORCE	N/A	909	1,075	934	984	924	
Net change in new resident workers	N/A	188	316	308	311	308	
Net additional housing requirements	N/A	188	128	0	0	0	

Note: N/A - not applicable

Source: Arrow, 2011

For the operations workforce, Arrow aims to fill approximately 50% of the new operations positions for the Project from within or nearby the study area. The remaining 50% of staff (around 230 workers) are expected to be recruited from outside of the study area and relocate to towns in and around the study area. The company has no plans to establish fly-in/fly out or drive-in/drive-out shift operations, though cumulative impacts from multiple projects in the region may require additional options to be explored in the future. This is not a current strategy direction for the Project on its own.

Operational workforce shifts are as follows:

• Support staff (administration, stores and engineering staff) will typically perform 8-10 hour shifts during daylight hours, typically five days per week;



- Staff at central gas processing and integrated processing facilities will typically work 10 hour shifts during daylight hours, five days per week;
- Well operations staff will typically perform 8-10 hour shifts during daylight hours, typically five days per week. Well workover crews will work similar shifts when workovers are being carried out.

## 1.1.8 Existing Social Management Commitments and Activities

Arrow Energy takes a proactive approach to enhancing communities rather than just the management of potential adverse social impacts. Arrow's principles on social responsibility include the following:

- Community Wellbeing "Arrow is committed to protecting and promoting the social and environmental values of communities in which we live and work"
- Community Investment "Our long term success is closely linked to the social wellbeing of the communities where we work"
- Community Engagement "Arrow is committed to keeping the community informed about our existing and proposed coal seam gas activities"
- Indigenous Relations "Managing relationships with Aboriginal communities holding traditional connections or historical links to areas where we operate is as important to Arrow as managing our operations"
- Local Business Development "Arrow strives to use local suppliers who adhere to our OH&S,
   Cultural Heritage, Native Title and Environment policies"
- Local Recruitment "For the Surat Gas Project, Arrow Energy plans to prioritise recruitment from the local area, with all operational staff based in the region"
- Health and Safety "Arrow employees are continually striving for zero harm in the workplace"
- Education and Training "Arrow strives to develop the knowledge and skills base of staff through the delivery of a variety of training and development programs".

A summary of Arrow's existing and planned initiatives for social management are shown in Table 1-8.

## 1.1.9 Potential Contribution to Regional Development

Arrow will work with the Western Downs, Toowoomba and Goondiwindi regional councils to identify and contribute (where possible and appropriate) to regional development that is supported by the relevant plans developed under the *Sustainable Planning Act 2009* or the *Local Government Act 2009*, predominantly through Community Plans or similar. Action plans and other mitigation and enhancement measures identified through finalisation of the SIMP will align (where possible and appropriate) with State government regional planning strategies such as the *Major Resource Projects Housing Policy* (DEEDI, 2011a), the *Surat Basin Workforce Development Plan* (Skills Queensland, 2011) and the *Queensland Regionalisation Strategy* (when released).

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Table 1-8 Summary of Arrow Initiatives for Social Management

Area	Arrow Initiatives
Stakeholder engagement	Ongoing stakeholder engagement program; Stakeholder engagement program to incorporate development of SIMP; Stakeholder committees (e.g. Intensively Farmed Land Committee).
Grievance management	Complaints Management System – records and tracks grievances; Land Liaison Officers; 1800 free-call number – to register grievances.
Landholder relations	Sustainable Development and Constructive Community Engagement Policies  – set out protocols for fostering positive relationships with landholders and the wider community;  Land access rules.
Regional social planning	Participants in regional bodies including – Surat Basin Engagement Committee; and Industry taskforce on skill development and workforce availability.
Employment and training	Preferential local employment; Various vocational and specialist training programs; traineeships; graduate development program; school based training programs.
Local Business development	Australian Industry Participation (AIP) Plans; Business vendor register (including use of Industry Capability Network); Local supplier information sessions – communicate opportunities to supply goods and services and provide assistance on meeting Arrow tender requirements.
Indigenous participation	Indigenous Participation Policy – identifies strategies relating to Indigenous employment and enterprise opportunities.
Community Investment	Brighter Futures Program – community investment program – focussing on health and safety; education; environment
Workforce Behaviour	Code of Conduct and disciplinary procedures

Source: Arrow, 2011

## 1.2 Impact Assessment

Criteria were established through the impact assessment process to assess the consequence of the potential impacts. This then allowed the significance of potential impacts to be determined, based on the likelihood of the potential impact actually occurring and the associated consequences. The significance of each potential impact was rated as of being of very high, high, medium or low significance.

Table 1-9 shows the significant potential impacts which acquired a rating through the significance assessment process as being of medium, high or very high (however, no potential impacts were found to be of very high significance).

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Table 1-9 Potential Impacts Identified as Medium or Above Significance

Potential Impact	Phase	Pos/Neg	Likelihood	Consequence	Significance					
Change	es to Pop	ulation and	Demographic	Profile						
Off-set population decline in smaller rural communities	C,O	Positive	Possible	Moderate	Medium					
Higher skilled resident workforce	C,O	Positive	Possible	Moderate	Medium					
Retention of younger population	C,O	Positive	Possible	Moderate	Medium					
Impacts on Employment, Skills and Business										
Increased local employment opportunities	C,O	Positive	Likely	Moderate	High					
Increased training and skill development opportunities for the local population	C,O	Positive	Almost Certain	Moderate	High					
Local business difficulties faced by operating in changed environment (increased costs, competition, and labour)	C,O	Negative	Possible	Major	High					
Increased labour force participation and reduction in unemployment	C,O	Positive	Possible	Moderate	Medium					
Increased local expenditure on goods and services through Project activities	C,O	Positive	Likely	Moderate	Medium					
Increased local expenditure on goods and services by incoming workers and residents	C,O	Positive	Possible	Moderate	Medium					
Increased potential for local business expansion / business establishment in local area	C,O	Positive	Likely	Minor	Medium					
	Impacts o	on Land Use	and Property	1						
Increased landholder and community uncertainty	C,O	Negative	Likely	Moderate	High					
Reduced vulnerability to impacts associated with agriculture (drought, pests)	C, O	Positive	Likely	Moderate	Medium					
Loss of social connection to land/ agricultural production	PC, C	Negative	Possible	Moderate	Medium					
Impa	cts on Co	mmunity Va	lues and Life	styles						
Increased participation and support in the community (e.g. volunteers, involvement in sport and social organisations, support for local events)	C,O	Positive	Likely	Minor	Medium					
Increased potential for social divide and social tension	C,O	Negative	Possible	Moderate	Medium					



Potential Impact	Phase	Pos/Neg	Likelihood	Consequence	Significance						
Potential for increased community conflict if overseas workers are employed with the Project and move into the community	C,O	Negative	Possible Moderate		Medium						
Impacts to Community Infrastructure and Services											
Increased demand on medical and health facilities	C, O	Negative	Likely	Moderate	High						
Heightened road safety risk	C,O	Negative	Possible	Major	High						
Increased demand on emergency services	C, O	Negative	Possible	Moderate	Medium						
Impacts on Housi	Impacts on Housing and Accommodation Availability and Affordability										
Increased house, land purchase and rental prices resulting in diminished levels of housing affordability	C,O	Negative	Possible	Major	High						
Reduction in availability of accommodation for low income and vulnerable groups including Indigenous groups	C,O	Negative	Possible	Major	High						
Increased returns to existing residents through higher house, land and rental prices	C,O	Positive	Possible	Moderate	Medium						
High demand for hotel/motel/caravan park accommodation.	С	Negative	Possible	Moderate	Medium						
Impa	acts on H	ealth, Safety	and Environ	ment							
Increased community anxiety on health, safety and environment effects of Project	C,O	Negative	Likely Moderate		High						
Heightened road safety risk	C,O	Negative	Possible	Major	High						

## 1.3 Impact Mitigation and Management

Table 7-10 below outlines mitigation (for negative impacts) and enhancement (for positive impacts) measures for addressing those potential impacts considered as medium, high or very high significance. Social mitigation and enhancement activities have been split into the following themes:

- · Population and demographic change;
- Employment, skills and business;
- Land use and property;
- Community values and lifestyles
- Community infrastructure and services;
- · Housing and accommodation availability and affordability; and
- · Health, safety and environment.



The responsible parties for mitigation/enhancement have been categorised as Arrow; or Arrow and Contractor. Phases for implementation of mitigation/enhancement measures are project planning (i.e. prior to construction); construction; or operations. Note that mitigations, which are occurring through all phases of the Project, are defined as "ongoing" in the table.

The tables below also include a monitoring component. The "Indicators/target measures" column provides targets/outcomes to assess progress in implementing the mitigation measure. The "Verification" column identifies who is responsible for monitoring the indicators/target measures; the timing for monitoring and where it is to be documented (e.g. Contractor monthly accommodation audit).

## 1.3.1 Regional Community Consultative Committee

Arrow proposes to establish and contribute to a regional community consultative committee (RCCC) with membership extended to key stakeholders from State and local government, community and business organisations, service providers, industry peak bodies and other resource companies, in order to effectively and proactively plan for and respond to challenges resulting from cumulative impacts of the Project. The RCCC will provide oversight of implementation of the social impact mitigation/enhancement and management strategies outlined within the final SIMP. Following consultation on the draft SIMP, Arrow will define the terms of reference and its resourcing commitments for the RCCC, and propose any alternative models to its structure as agreed upon through consultation. Options include linkages with other planning and consultation mechanisms being established across the Surat Basin and CSG industry leadership groups.



Table 1-10 Impact Mitigation and Management Measures

	Population and Demographic Change									
		Monitoring 8	<b>Verification</b>							
Impact	mpact Neg/Pos impact Mitigation / Enhancement Responsibility Timeframe					Verification				
Off-set	Pos	numbers and projected tamilies to assist in their future Arrow		Construction and Operation	Annual meetings held with government and service providers	Meeting records and minutes				
population decline in smaller rural communities		Encourage local population growth where it is desired, and planned for, enforcing the expectation that non-local operations employees will relocate to the project area as there are no plans to establish FIFO or DIDO operations.	Arrow	Ongoing	Annual employment database review	SIMP annual reporting				
		Consider flexible shift hours and rosters to encourage participation of under-employed sectors (e.g. family-friendly shift arrangements for locally-based operational workforce)	Arrow	Operation	Industrial awards and site agreements	SIMP monitoring				



	Population and Demographic Change									
		Monitoring & Verification								
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Timeframe	Indicator/ target measures	Verification				
		Make available information and Australian cultural awareness briefing for overseas workers and their families on undertaking day to day activities, for example provide advice on banking and shopping.	Arrow	Ongoing	Australian cultural awareness briefing available	SIMP annual reporting				
		Opportunities provided for qualified females and people from other underrepresented groups	Arrow and Contractors	Ongoing	Demonstrations of policy in place	Bi-annual workforce review				
Higher skilled resident workforce	Pos	Implement an Operational Workforce Policy preferring local residence for operational staff	Arrow	Operation	% of operational workers on DIDO/FIFO roster arrangement	Annual workforce review				
Retention of younger population	Pos	Training and employment program for local school leavers	Arrow	Construction and Operation	Number of local school leavers employed with the Project     Number of local apprenticeships     Annual number of local residents in receipt of training support	HR records     RCCC progress     report				



	Employment, Skills and Business									
		Impact and Mitigation	Monitoring 8	Monitoring & Verification						
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification				
Increased local employment opportunities		Implement hierarchy of preferred employment for employees and contractors based on home or source location. Highest preference is living within Project study area		Construction, Operation	20% construction workforce sourced from local area;	Annual Workforce planning review				
	Pos		Arrow and Contractors		<ul> <li>50% operational workforce sourced from local area; and</li> </ul>	Annual Workforce planning review				
					Balance of operational workforce relocates to the local area.	Annual Workforce planning review				
Increased training and	Pos	Liaise with local employment and education/training organisations (e.g. SQIT) on training and skill development programs, to identify workers within the region who have the ability to obtain qualifications based on Recognition of Prior Learning.	Arrow	Planning	Training and skill development programs implemented in partnership with education/training institutions	Annual training program review				
skill development opportunities for the local population		Implement training and skill development programs including: apprenticeships,		Construction	<ul> <li>Number of apprenticeships, scholarships awarded yearly;</li> </ul>	Annual training program review				
		scholarships, vocational training, support for work readiness programs and pre-trade training	Arrow and Contractors	and Operation	<ul> <li>Number of positions for vocational training, pre- trade training and support for work programs.</li> </ul>	Annual training program review     RCCC progress report				



	Employment, Skills and Business									
		Impact and Mitigation	Monitoring 8	Monitoring & Verification						
Impact	Neg/Pos impact	Mitigation / Enhancement Responsibility Phas		Phase	Indicator/ target measures	Verification				
		Identify the range of skills required for the labour force and undertake a gap analysis against skills availability. Where gaps exist, in consultation with the Energy Skills Queensland, Manufacturing Skills Queensland and Construction Skills Queensland, identify the method or strategy through which these skills will be filled (e.g. DIDO; training)	Arrow	Planning	Gap analysis conducted     Consultation with Energy     Skills Queensland,     Manufacturing Skills     Queensland and     Construction Skills     Queensland	Annual Workforce planning review				
		Undertake regular review of labour requirements and current skills sets to ensure that training strategies meet these needs	Arrow	Construction and Operation	Review of training strategy for adequacy carried out	Annual training program review				
		Participation in existing employment and training programs developed by the State and federal government (e.g. Critical Skills Investment Fund, Productivity Places Program; Indigenous Cadetship Support; Indigenous Employment Program; Skilling Queenslanders for Work Initiative)	Arrow and Contractors	Construction and Operation	Number of trainees under Arrow facilitated programs	Annual training program review				
		Arrow will work with Skills Queensland to deliver work readiness and skills development training programs for vulnerable local people such as the long term unemployed or under skilled, in order to assist them to gain employment,	Arrow and Contractors	Construction and Operation	Documented involvement with Skills Queensland	Annual training program review				
		Notify local people of employment opportunities through recruitment websites; local advertising; local recruitment agencies;	Arrow and Contractors	Ongoing	Number of positions advertised locally	Annual Workforce planning review				



	Employment, Skills and Business										
		Impact and Mitigation			Monitoring 8	Monitoring & Verification					
Impact	Neg/Pos impact	Mitigation / Enhancement Responsibility		Phase	Indicator/ target measures	Verification					
		information sessions									
		Develop an Indigenous participation policy (IPP) and implementation plan which identifies strategies relating to Indigenous employment and enterprise opportunities	Arrow and Contractors	Construction and Operation	•Arrow has IPP • Refer KPIs within IPP	Annual training program review     Progress report updates to RCCC					
Local business difficulties faced		Provide industry support organisations with the information they require to assist local businesses improve their skills base and respond to Project needs	Arrow	Ongoing	Information provided to organisations in response to request	SIMP annual reporting					
by operating in changed environment (increased costs, competition and labour)	Neg	Collaborate with the existing job referral service set up by other proponents to make available information on positions vacant in local businesses with similar trade/skills requirements. This will allow applicants to choose between industry and non-industry jobs.	Arrow	Ongoing	Arrangements made for referral service	6 monthly RCCC reporting     SIMP annual reporting					
		Provide medium and long term contract	Arrow and Contractors	Construction,	380 - medium term contract positions	Workforce planning review					
Increased labour force participation and reduction in	Pos	position opportunities	7. Tow and Contractors	Operation	200 - long term contract positions	Annual Workforce planning review					
unemployment		Facilitate opportunities for workers to transition to other Project phases (e.g. facility construction to facility operation)	Arrow and Contractors	Construction, Operation	Employment opportunities communicated to workers	Annual Workforce planning review					



	Employment, Skills and Business									
		Impact and Mitigation	Monitoring & Verification							
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility Phase		Indicator/ target measures	Verification				
		Consider flexible shift hours and rosters to encourage participation of under-employed sectors (e.g. family-friendly shift arrangements for locally-based operational workforce)	Arrow and Contractors	Planning	Alternative shift options available	Annual Workforce planning review				
		Continue to ensure that equal opportunity policies are in place addressing ethnicity,	Arrow and Contractors	Construction,	•Number of female workers	Annual Workforce planning review				
		gender or disability should be developed  Arrow and Contractors  Opera		Operation	•Number of Indigenous workers	Annual Workforce planning review				
Increased local expenditure on goods and services through Project activities and by incoming workers and residents	Pos	Develop a Local Industry Participation Plan (LIPP) in consultation with DEEDI and consistent with the Australian Industry Participation (AIP) Plan.	Arrow and Contractors	Construction and Operation	LIPP implemented     refer KPIs within LIPP	6 monthly progress reports of LIPP				
Increased potential for local business expansion / business	Pos	Continue to use Industry Capability Network (ICN) database for potential suppliers in the area			Number of local contracts awarded     Value of contracts awarded to local suppliers	Annual review of contracts database				



	Employment, Skills and Business								
		Impact and Mitigation	Monitoring 8	<b>Verification</b>					
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification			
establishment in local area		Develop and maintain the Arrow Business Vendor Register	Arrow	Construction and Operation	Number of local contracts awarded through business vendor register	Annual review of contracts database			
		Organise local supplier information sessions to inform business of Arrow's development plans, tender opportunities for local business; and how to complete tender requirements	Arrow	Ongoing	Number of information sessions held	SIMP annual reporting			



	Land Use and Property									
		Monitoring &	Monitoring & Verification							
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification				
		Close engagement with landholders to minimise impacts on their land and existing agricultural activities.	Arrow	Ongoing	Number of complaints from landholders;     Number of successful land access agreements	Annual stakeholder management review     Review of community issues and attitudes.				
	Neg	Prior to initial activities, communicate with landholders at least three months before any activities take place on private property	Arrow and Contractors	Construction	Number of successful agreements	Annual stakeholder management review				
Increased landholder and community uncertainty		All Project personnel access land only in accordance with accepted Land access Code and protocols.	Arrow and Contractors	Ongoing	Access in accordance with land access agreements     No grievances	Quarterly review of landholder liaison database				
		Ongoing provisions of Community Officers, Land Liaison Officers and the 1800 free call number, for people to ask questions or raise concerns about Arrow's activities	Arrow	Ongoing	Number of calls received on 1800 number	Quarterly review of landholder liaison database				
		Develop and implement a compensation framework which is consistent for all landholders and which seeks to 'add value' rather than just compensating for impacts (a nil sum game).	Arrow	Ongoing	Annual stakeholder management review	Time taken to reach agreement				



	Land Use and Property								
	Impact and Mitigation								
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification			
Reduced vulnerability to impacts associated with agriculture (drought)	Pos	Continue regular consultation with landholders through mechanisms such as the Intensively Farmed Land Committee	Arrow	Ongoing	Annual stakeholder management review	SIMP annual reporting			
Loss of social connection to land/ agricultural production	Neg	Close engagement with landholders to minimise impacts on their land and existing agricultural activities.	Arrow	Ongoing	Number of complaints from landholders;     Number of successful land access agreements	Annual stakeholder management review     Review of community issues and attitudes.			
	1109	Continue regular consultation with landholders through mechanisms such as the Intensively Farmed Land Committee	Arrow	Ongoing	Annual stakeholder management review	SIMP annual reporting			



	Community Values and Lifestyles								
	Impact and Mitigation								
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification			
Increased participation and support in		Consult with Councils and RCCC for their views on which social, community or recreational infrastructure in Western Downs region is being directly impacted by the project and to what extent. Liaise with the relevant body to coordinate efforts across all proponents and identify opportunities that may potentially ease or mitigate impacts	Arrow	Construction and Operation	Impacts on social infrastructure assessed and mitigations identified	SIMP annual Reporting			
community (e.g. volunteers, involvement in sport and social organisations, support for local events)	Pos	Expand the opportunities available for the region under the Brighter Futures program and the Social Investment Plan.	Arrow	Construction and Operation	Plan in place for supporting community events / services / organisations	Annual review of Brighter Futures program			
		Encourage resident employees and contractors to integrate and become involved in local community (e.g. volunteer work, participation in clubs and organisations).	Arrow and Contractors	Operation	Number of workers known to participate in community activities.	SIMP annual reporting			
Increased potential for social divide and social tension	Neg	Ensure that all direct employees and contractors adhere to the Code of Conduct and that disciplinary procedures for inappropriate behaviour of employees will be documented.	Arrow and Contractor	Construction and Operation	Feedback from stakeholders	SIMP annual reporting			



Community Infrastructure and Services							
		Monitoring & Verification					
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Timeframe	Indicator/ target measures	Verification	
Increased demand on emergency services	Neg	In accordance with project requirements, an emergency management plan will be developed that will cover joint emergency response planning in collaboration with emergency service providers.	Arrow and Contractor	Ongoing	Emergency response procedures developed	Annual review of Emergency response procedures	
		Ongoing provision of a medivac service to respond to various community or Project related emergency situations.	Arrow and Contractor	Ongoing	Number of medivac call-outs	Annual SIMP reporting	
Heightened road safety risk	Neg	Traffic management plans developed including:     Preferred routes for travel and measures to reduce risk of accidents;     Road safety awareness initiatives for Project personnel and local residents;     Procedure for notifying council and road authorities for any disruptions/road closures;     Road management strategy to manage any increased road maintenance requirements imposed by the Project.	Arrow	Construction and Operation	Development of traffic management plans	Compliance with traffic management plans	
		Ongoing consultation with all levels of Queensland Police Service regarding vehicle movement.	Arrow	Construction	Internal documentation of consultation with all levels of Queensland Police Service	SIMP annual reporting	
Increased demand on medical and health facilities	Neg	Provide medical assistance with opportunities to extend to wider communities where possible.	Arrow	Construction	Documented consultation with State and local authorities	Annual SIMP reporting	



	Housing and Accommodation Availability and Affordability						
		Impact and Mitigation	Monitoring & Verification				
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification	
	Neg	Provision of high quality TWAF accommodation for all non-resident construction workforce	Arrow	Construction	% non-resident construction workforce in TWAF	Monthly accommodation audit	
Increased house,		Prior to decommissioning consider use of TWAF during operational phase to ease housing demand in towns	Arrow	Operation	Documented review of housing requirements for operations workers Documented review of workforce requirements	SIMP annual reporting	
land purchase and rental prices resulting in diminished levels of housing		Continue to collaborate with other proponents in the region and identify opportunities to share temporary accommodation where possible for the construction and maintenance workforces	Arrow	Ongoing	Discussions held on TWAF requirements with other proponents	SIMP annual reporting	
affordability		Encourage workers relocating to the area to move to towns better suited to growth by:  •providing accommodation advice services for workers and their families  •providing work shuttle buses between work site and towns with an employment pool (e.g. Toowoomba, Dalby, Cherbourg).	Arrow	Ongoing	Shuttle bus service in operation	SIMP annual reporting	



	Housing and Accommodation Availability and Affordability							
		Impact and Mitigation	Monitoring & Verification					
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification		
		Develop an Integrated Housing Strategy (IHS) that considers:  • Continued participation in initiatives set out in the Major Resource Projects Housing Policy (DEEDI, 2011a; Draft Resource Town Housing Affordability Strategy; and the proposed Western Downs Regional Council housing affordability strategy and implementation of the Surat Basin Future Directions Statement (DEEDI, 2011b);  • Support the intent of the Surat Basin Regional Planning Framework and work with State government, Councils, ULDA, building industry, realtors and other project proponents to identify co-operative strategies that address cumulative housing impacts and to ensure that developable land is brought to market to meet demand;  • Providing incentives to private investors and developers of accommodation such as through head leasing agreements, rental guarantees;  • Contributing to a Government sponsored community and affordable housing initiative; and  • Housing 'rent to buy scheme' option for workers.	Arrow	Ongoing	IHS developed	Annual review of IHS document		



	Housing and Accommodation Availability and Affordability						
		Impact and Mitigation	Monitoring & Verification				
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Phase	Indicator/ target measures	Verification	
Reduction in availability of accommodation of low income and vulnerable groups	Neg	Support government reviews on housing availability and affordability, and impacts on low income groups	Arrow	Ongoing	Participation made to review	SIMP 6 monthly reporting	
	Neg	Visiting workers will stay in TWAFs in preference to hotel/motel accommodation where possible.	Arrow	Ongoing	% of non-resident workforce in TWAF	Monthly accommodation audit	
High demand for hotel/motel/caravan park		Avoid reserving hotel/motel accommodation for long blocks of time without a demonstrable need preference	Arrow	Ongoing	% of non-resident workforce in TWAF	Monthly accommodation audit	
accommodation		Inform the tourist body and other peak business bodies of anticipated time frames for peak temporary accommodation demand	Arrow and Contractors	Ongoing	Tourist bodies advised in advance of increased demand	SIMP annual reporting	



Health, Safety and Environment							
		Monitoring & Verification					
Impact	Neg/Pos impact	Mitigation / Enhancement	Responsibility	Timeframe	Indicator/ target measures	Verification	
	In accordance with project requirements, an Emergency Management Plan will be maintained that will cover joint emergency response planning in collaboration with emergency service providers.  Maintain the grievance process (Complaint Management System) for community to register complaint/issue/comment/suggestion  Continue to implement a robust community engagement program and other measures to notify community of Project activities and to identify and address community issues  Implementation of Environmental Management Plans that address potential impacts relating to groundwater, water management, salt management, dust and noise generation.  Arrow will publicly release information on how environmental impacts are being offset by the project.	Emergency Management Plan will be maintained that will cover joint emergency response planning	Arrow and Contractor	Ongoing	Emergency Response Procedures maintained	Bi-annual review of Emergency Response Procedures	
		Management System) for community to register	Arrow (develop) Arrow and Contractor (implement)	Construction and Operation	Number of recorded issues / grievances / comments     Report status of grievances	SIMP annual reporting	
Increased community anxiety on health, safety and environment effects		engagement program and other measures to notify community of Project activities and to	Arrow	Ongoing	Consultation program developed	Quarterly review of consultation program	
of Project		Implementation of Plans that addregroundwate	Plans that address potential impacts relating to groundwater, water management, salt	Arrow and Contractor	Ongoing	Number of recorded issues / grievances / comments     Report status of grievances	EMP annual reporting (or at frequency agreed in each specific plan)
		Arrow	Ongoing	Information program developed	Bi-annual review of information program		
		Ensure progress of workplace health and safety is communicated to the public and the RCCC as part of Arrow's annual sustainability reporting	Arrow	Ongoing	Monitoring results provided	Annual sustainability reporting	



	Health, Safety and Environment						
Impact and Mitigation					Monitoring	& Verification	
Impact	mpact Neg/Pos impact Mitigation / Enhancement Responsibility Timeframe				Indicator/ target measures	Verification	
		Land Liaison Officers and Community Officers are available to discuss landholder and residents' concerns	Arrow	Ongoing	Number of complaints	Annual review of consultation database	



## 1.3.2 Reporting

### Reporting to stakeholders

The Proponent will report the findings of the monitoring strategy as part of their Project annual reporting through the SIMP, Communications and Community Engagement Plan and Community Consultation Program. The Proponent and the councils will determine the most appropriate reporting mechanism as part of Stage 2 of the SIMP development process.

### Reporting to the Social Impacts Assessment Unit

As per the draft SIMP Guidelines, the Proponent will report on the monitoring program to the Social Impact Assessment Unit of the Department of Infrastructure and Planning on an annual basis during construction.

The Proponent will report on the operational impacts of the Project to the Social Impact Assessment Unit of the Department of Infrastructure and Planning every three years.

- As per the draft SIMP Guidelines, reports prepared for the Social Impact Assessment Unit will include:
- An overview of the effectiveness of implementation;
- An assessment of progress against nominated performance indicators;
- An explanation of why any actions were not undertaken as planned and if required; and
- Recommendations to improve future performance.

### 1.3.3 External Review

The Proponent will agree to an external review of the SIMP when requested by the Social Impact Assessment Unit of the Department of Infrastructure and Planning. Details of the review will be determined at a later date.

### 1.3.4 Amendment and Termination

Amendments and updates to the SIMP will be considered as part of the SIMP internal SIMP Review, which will be timed with the Reporting to the SIA Unit and councils, and will consider findings of the external reviews.

## 1.4 Communications and Community Engagement

The Proponent has an existing stakeholder engagement program. The consultation program will be expanded to:

- Introduce or provide further discussion of the proposed SIMP to stakeholders and seek feedback;
- Report the findings of the SIMP monitoring strategy;
- Develop a dispute resolution mechanism that addresses the requirements of Section E of the Guideline to Preparing a Social Impact Management Plan (DIP, 2010).

A list of stakeholder groups and their interests are shown in Table 1-11 below.

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Table 1-11 Stakeholder Groups for SIMP

Stakeholder Group	Stakeholders
Community	Landholders will be directly impacted by the Project Residents in surrounding towns
Regional Committees	Surat Basin Engagement Committee Regional Development Australia
Regional Councils	Western Downs Regional Council Toowoomba Regional Council Goondiwindi Regional Council
Queensland Government	Department of Infrastructure and Planning (Social Impact Assessment Unit)
	Department of Employment, Economic Development and Innovation;
	Department of Communities;
	Department of Education and Training;
	Queensland Police;
	Department of Transport and Main Roads;
	Department of Environment and Resource Management; and
	Queensland Health.
Service providers in the study area	For example, health, education, training, emergency services.
Businesses in the study area	Local Chambers of Commerce
	Local progress associations
	Advance Western Downs economic development group
Interest groups	For example, environmental groups, industry groups



## References

ABS, 2006. Statistical areas. Australian Bureau of Statistics, Canberra, ACT.

DEEDI, 2011a. *Major Resource Project Housing Policy*, Office of The Coordinator-General. A WWW publication accessed on 28 September 2011 at http://www.deedi.qld.gov.au/cg/resources/Major-Resource-Projects-Housing-Policy.pdf

DEEDI, 2011b. *Surat Basin Future Directions Statement*, A WWW publication accessed on 30 November 2011 at <a href="http://203.210.126.185/dsdweb/v4/apps/web/secure/docs/4547.pdf">http://203.210.126.185/dsdweb/v4/apps/web/secure/docs/4547.pdf</a>. Department of Employment, Economic Development and Innovation.

DIP, 2008. *Surat Basin population report*. A WWW publication accessed on 24 March 2011 at http://www.dip.qld.gov.au/publications/planning-information-and-forecasting-research.html. Department of Infrastructure and Planning, QLD

DIP, 2010. Social Impact Assessment – Guideline to preparing a social impact management plan, September 2010

DoC, 2011. *Queensland Housing Market Report December quarter 2010.* A WWW publication accessed on 21 March 2011 at <a href="http://www.public-housing.qld.gov.au/partnerships/pdf/market-report-dec10.pdf">http://www.public-housing.qld.gov.au/partnerships/pdf/market-report-dec10.pdf</a>

Education Queensland, 2010. *Next Step 2010 – Darling Downs-South West Regional Report*. A WWW publication accessed on 25 March 2011 at <a href="http://education.qld.gov.au/nextstep/2010regions.html">http://education.qld.gov.au/nextstep/2010regions.html</a>

Energy Skills Queensland, 2011. CSG-LNG Workforce Planning Flyer. A WWW publication accessed on 30 March 2011 at <a href="http://www.energyskillsqld.com.au/esq-publications/workforce-planning-for-the-csg-lng-industry">http://www.energyskillsqld.com.au/esq-publications/workforce-planning-for-the-csg-lng-industry</a>

OESR, 2011. Estimated resident population by local government area, Queensland, 2000 to 2010, Queensland Treasury, Office of Economic and Statistical Research, accessed on 1 June 2011 at <a href="http://www.oesr.qld.gov.au/subjects/demography/population-estimates/tables/erp-lga-reformed-qld/index.php">http://www.oesr.qld.gov.au/subjects/demography/population-estimates/tables/erp-lga-reformed-qld/index.php</a>

Personal Communication, 2010. Snr Constable Peterson, Toowoomba Police Station.

Queensland Health, 2010. Self Reported Health Status 2010: Darling Downs-West Moreton HSD Summary Report. Queensland Health: Brisbane

SGS, 2011. Western Downs Community Plan - Community Facilities and Services Report. A WWW publication accessed on 18 May at http://www.wdrc.qld.gov.au/web/guest/draft-documents

Skills Queensland, 2011. *Surat Basin Workforce Development Plan*, Skills Queensland. accessed on 27 September 2011 at http://www.skills.qld.gov.au/suratworkforceplan.aspx

Yellow Pages, 2011. Accessed on 1 March 2011 at <a href="http://www.yellowpages.com.au/search/listings?clue=child+care+centres&locationClue=Goondiwindi+QLD&x=32&y=16">http://www.yellowpages.com.au/search/listings?clue=child+care+centres&locationClue=Goondiwindi+QLD&x=32&y=16</a>





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