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18 Economic Environment

18.1 Introduction

This chapter compliments the economic assessment carried out for the Project (Volume 1, Chapter 22 of the EIS) and provides specific economic assessment in relation to the Glebe Option. In general, the key economic benefits from the Glebe Option are indirect, flow on benefits from the development of the mine, at a regional, state and national level. However, the Glebe Option itself will contribute directly to the local and regional economies, through increased demand for goods and services during construction, including local expenditure on support services, fuel, accommodation, cafes and retail.

18.2 Existing Economic Character

18.2.1 The Region

For the purposes of this study, the relevant region is the Dawson River catchment area (referred to as the region). The Dawson River catchment includes the towns of Mount Morgan, Biloela, Duaringa, Woorabinda, Baralaba, Moura, Theodore, Taroom, Wandoan and Injune.

Historically, the region's socio-economic performance has been heavily dependent on agriculture, initially dryland farming but with gradually increasing irrigation. The local agriculture has been a mixture of grazing (cattle breeding and fattening) some dryland farming (principally sorghum and wheat) and irrigation. Generally speaking, the region's agriculture is strong due to a combination of adequate rainfall and farm size, the high quality of most the country, pockets of intensive irrigation and the progressive approach of the landholders (Hyder Environmental, 1997). While the economic base of the region is still dominated by agriculture, over the past 15-20 years, large scale mining has become an increasing feature of the economic and social landscape.

18.2.2 Irrigation

The Dawson Valley Irrigation Scheme commenced in 1924 with establishment of the Theodore Section on the right (east) bank of the Dawson River. A major expansion occurred in the 1950s with establishment of the Gibber Gonyah section on the left bank. Glebe Weir was built in 1971 as the uppermost storage in the scheme and as such to supplement downstream water usage but also to supply medium priority water (totalling 1,160 ML/a) to three farmers riparian to the weir itself. These farmers use the water mainly via centre pivot irrigation to grow fodder crops.

Operation of the existing Dawson Valley Water Supply Scheme is a key aspect of the agricultural industry in the region. The Dawson Valley Water Supply Scheme is supported by five weirs and an off-stream storage at Moura (**Chapter 8**). Together, these storages produce an annual yield of almost 62,000 ML. The annual yield from the system is expressed in terms of zones, nominal allocation and supply priority as shown in the **Table 18-1**.

Table 18-1. Distribution of allocation within the Dawson Valley Water Supply Scheme

Zone	Medium priority water allocation	Medium A priority water allocation	High priority water allocation
	(ML)	(ML)	(ML)
Dawson M	1,160	0	0
Dawson L	0	0	0
Dawson K	2,500	0	400
Dawson J	5,850	0	0
Dawson I	2,074	19,456	862
Dawson H	6,524	0	0
Dawson G	9,131	0	3,319
Dawson F	0	0	0
Dawson E	2,720	0	0
Dawson D	4,263	0	648
Dawson C	1,892	0	0
Dawson B	683	0	350
Total	36,797	19,456	5,579

Source: Fitzroy Basin Resource Operations Plan (NRW, 2006a)

Currently there are about 135 irrigators operating in the Dawson Water Supply Scheme. Approximately one-third of their total allocation is supplied via the Theodore Channel with the balance being pumped directly from the Dawson River or the weirs. The volume actually delivered varies from year to year depending on the yield capabilities of the system.

Historically, most of the irrigation water has been used to grow cotton but resources are switched between crops depending on relative economics and available allocation. In years past Theodore has grown up to 7,000 ha of irrigated cotton but 'other' irrigated crops have reduced this figure substantially over recent years. Water harvesters, not connected to the Water Supply Scheme, extract water from the river during flood flows (**Chapter 8**).

18.2.3 Other industries

Other than agriculture, there are no industries within the footprint of impact that will be affected by the Glebe Project. The need for raw materials for construction of the weir will be met from existing licensed sources or by opening new extraction sites following standard approval processes (**Chapter 5** of Volume 4, Project Description).

The Dawson Valley Water Supply Scheme currently supports a number of industrial and urban water users. Total high priority allocation from the scheme is 5,579ML/a, which is very low compared to other schemes in the Fitzroy which supply between 25,520 and 50,000ML/a (**Chapter 8**), reflecting the relatively low level of industrial and urban development in the region. The primary users are Moura Mine, Queensland Nitrates, Sedimentary Holdings Limited and a number of small towns.

The Dawson Valley offers strategic advantages as a future development corridor between southern and central Queensland. Most of the catchment is within 350 km of the developing urban and industrial centres of the Capricornia Region, it includes parts of both the Surat and Bowen coal basins and the fast growing urban areas of southeast Queensland are approximately 400 km away. In particular, it is expected the valley will become an important corridor for the transport of mineral products to the port city of Gladstone following development of the 'Missing Link' railway (Surat Basin Rail) between Moura and Wandoan.

18.2.4 Local housing market

As noted in **Chapter 17**, short-term housing rental opportunities are very limited in Taroom and the caravan park has limited space for permanent or long-term stays. One motel has 15 rooms while the other Hotel/Motel has 14 rooms. Budget accommodation is available in eight cabins managed by one of the fuel outlets (but no meal facilities are provided). Temporary accommodation is planned to be provided for workers during the construction phase of the weir upgrade and pipeline installation, as described in **Chapter 5**.

It is noted however that the supply of short term accommodation in the region is increasing, with two hotels having been approved for development or expansion since the development of the Project was announced (Volume 1, Chapter 21 Social Impact). In terms of rental accommodation, Wandoan has the highest vacancy rate in the region (at 30%), followed by Taroom (24%). The Project (including the Glebe Option, if selected) will increase demand for temporary accommodation in the region.

18.3 Potential Impacts and Mitigation Measures

For the purposes of this chapter, as the weir and pipeline works will be constructed over the same time period, the Glebe Project is assessed as a whole. The capital cost of the Glebe Project is expected to be \$160M, of which approximately $\frac{3}{4}$ relates to the pipeline (**Chapter 2**).

No areas of economic mineralisation will be sterilised as a result of the Glebe Project, nor will this limit development in the area in any way that differs from the present.

18.3.1 Potential Beneficial Economic Impacts

18.3.1.1 Local expenditure

Two local construction camps will likely be established, the weir camp near Taroom and the pipeline camp close to Wandoan. One option is for the Wandoan camp may be integrated with the Project construction camp, the impacts of which are dealt with in Volume 1 of the EIS. The location of the construction camps has been discussed with Dalby Regional Council and Banana Shire Council. Banana Shire supported the Taroom option and Dalby Regional Council had no objection to the Wandoan option and has expressed a preference for use of sites that have access to water, sewerage and telecommunications. Taroom, with a population of 661 (Chapter 17) has about 30 business enterprises that would benefit from the Glebe Option construction phase (Table 17-2).

Businesses most likely to benefit, given the skills needs of the construction workforce and the service requirements of the camp, include:

Construction related:

- tradesmen
- the fuel distributor
- mechanic,
- tyre fitter and retailer
- concrete supplier
- welding and fabrication.

Camp and workforce service related:

- grocer and butcher
- cleaner
- doctor / pharmacy
- hotel, motel, café
- Bowls and Golf club
- hairdresser / barber
- newsagent, and
- transport operator.

In addition, there are about 20 non-business enterprises that could expect some increase in activity on account of a major infrastructure project in the immediate area. These include council service charges, the post office, churches and various social clubs. The existing businesses will have the capacity to handle a greater volume of customers simply by carrying more inventories and in some cases by making more hours available to casual staff. This will be a short-term benefit (approximately 22 months) during the construction phase.

It is possible that because local business services will be more heavily utilised, the waiting time for a job to be undertaken may be longer than usual.

Based on previous construction projects, it is likely that consultants and senior visiting staff may preferably be accommodated in the locally available rooms rather than the construction camp. This will maximise the income to local businesses. Similarly some senior long term staff may choose to attempt to rent a house rather than stay in the quarters or a hotel room though as noted in **Section 17.4.1.2**, supply of and demand for houses is very limited so this opportunity may not exist. Similarly as noted by the resident SunWater liaison officer in Taroom, the single house available in mid-2008 was on the market for at least six months, so having one or two more potential renters will reduce the period that a house is empty rather than impact on affordability.

18.3.1.2 Regional Expenditure

At a regional scale, the expenditure related to the Glebe Option will have flow-on economic benefits. It is expected that Gladstone and Brisbane will supply the bulk of the necessary material (cement, steel products, pumps, electrical gear etc). This will be transported to site on trucks owned by operators from various locations. The trucks will likely refuel in Taroom or Wandoan and the drivers may stay overnight.

Also remote from the site will be the design and overall project management and administration activities, primarily undertaken in Brisbane.

The greater economic benefits of the Wandoan Coal Project are discussed in Volume 1 of the Wandoan Coal Project EIS. As water supply is a component of the project, the Glebe Weir raising contributes to the economic costs and benefits of the Project.

18.3.1.3 Commercial timber harvest

The volume of class one and two timber in the area that is necessary to clear has been estimated at 35,000 m³ (**Chapter 12**). Discussions with the mill owners at Wandoan indicated a value of about \$1.8 M. It is planned to market this timber via standard State government processes.

18.3.1.4 Employment

The main secondary benefit normally associated with infrastructure development is job creation with the significance of this indicator depending on the size and duration of the project build and the existence of unemployed workers who are willing and able to take-up any jobs on offer. However 'infrastructure job creation' will not generate strong secondary benefits – even in remote areas – if there is no pool of suitable unemployed people who might take advantage of the employment opportunities. Job opportunities are not currently scarce in regional Queensland and there is a prospect that labour demands of the Glebe Option will exceed local supply.

Given that the unemployment rate in Taroom and district is low (**Chapter 17** Social Environment) job creation associated with construction and operation of the infrastructure will be relatively minor. At any one time, it is expected that fewer than 30 people will be employed during the weir raising component. However, the construction phase will not extend beyond 22 months. Once the system becomes operational, the labour demands will be minimal.

It is expected that up to 50 people will be employed to construct the Glebe-Wandoan pipeline with the team being accommodated in Wandoan. Employment opportunities for locals would be similar to those for Taroom, though with other developments occurring near Wandoan, the likelihood of finding local workers will be limited.

Some local residents with existing employment may choose to take a position on the Glebe Option workforce if the income were higher. As the period of construction is relatively short this is unlikely to attract many currently long term employed people and any such impact will be short-lived.

18.3.2 Potential Adverse Economic Impacts

18.3.2.1 Loss of Agricultural Land

Potential adverse economic impacts from the Glebe Project will occur at a local level and relate primarily to the loss of productive agricultural land.

The loss of agricultural income from the three properties that lose areas of Good Quality Agricultural Land, some including irrigated pasture, will occur at the individual farm level and indirectly in the local area as the expenditure related to operating the land and the income derived from it will be lost. Two of the three properties are owned by the State and operated under short-term leases while the other is privately owned. The major area of impact is 710ha of Class A crop land and 150ha of Class C grazing land near Cockatoo Creek where water spills over the banks of the river and creek (**Section 7.8.2**). Based on a valuation of \$2,000 per ha the total cost of the land to the weir portion of the project is estimated at \$1,720,000 (State Valuation Service, 2008).

While the farmers who currently use the area will be compensated for the land area, there might be implications for efficiency and viability due to loss of scale. Lot 15 (The Glebe) is affected in this regard because approximately 20% of its total area would be lost to inundation. Whilst significant, this loss does not prevent the ongoing operation of "The Glebe" as a grazing property, and the current lessee has expressed a desire to stay and run the property. For the areas that are currently used for irrigation (including on the left bank), as the rights to water are not impacted, it is likely that the irrigated area can be shifted to nearby cleared river flats so the productivity from this activity will not be lost. Costs associated with shifting the irrigation area will be met by SunWater.

As the pipeline will be underground throughout its length and ground cover will be restored following construction, there will be no long term loss of grazing capacity. The approximately 1ha that will be required for the balancing

storage will not be available for grazing however consultation with the property owner has established that this is not a significant impact in that area and the owner will be compensated for the loss of grazing capacity.

In comparison with the regional, state and national economic benefits derived from the Project as a whole, the local loss of agricultural land is insignificant.

18.3.2.2 Water user impacts

Flow-on implications for downstream irrigators will be dependent on the volume of water that the Wandoan Coal Project requires from Glebe Weir (**Chapter 8**). All existing allocations and environmental flows will be maintained in accordance with the ROP. A small proportion of water harvesters in the Dawson will be impacted by the raising, and this impact is limited to a maximum loss of one day of water harvesting availability. With respect to these water harvesters, SunWater will discuss with NRW and the individual entitlement holders concerned what the implications are and options for compensatory arrangements. The current ROP includes provision, with respect to the possible development of Nathan Dam, that water harvesting rights would be converted to medium priority allocations. They could then be treated as any other tradeable water right.

If trading is used to increase the volume obtainable by the Wandoan Coal Project, then this will lead to decreased irrigation production downstream. However, the entitlement will have been purchased from willing sellers so it is assumed such sellers either plan or have already started to use their property for other ventures. The potential volume that would be required to lift the Glebe Option's allocation from the 6,500 ML provided by the Glebe Weir raising to the 8,500 ML required by the Project will vary depending on the location within the Dawson scheme from which the allocation is sourced, but is expected to represent between 5 and 10% of the existing medium priority entitlements.

18.3.2.3 Loss of Recreation Area during construction

The recreational benefit of the existing weir will be temporarily lost for the construction phase. The weir pool, current or expanded, probably provides a greater social recreational benefit than an economic one as there are no commercial facilities on site and no formal tours are known to utilise the area. There are a number of other regional facilities which are similar in terms of the bush camping experience and these are likely to experience a slight increase in usage but the change is not expected to be significant and little change to regional expenditure by tourists is predicted.

Since Glebe Weir already exists as a recreation area, any further benefits will be marginal.

18.3.2.4 Other Project Costs

A cost to the Glebe Option is the offset required under the *Vegetation Management Act 1999*. An allowance has been provided in project costings however the process to achieve the outcome may be linked to that of the Project. While this is a financial cost it also has considerable environmental and therefore social benefits.

Environmental monitoring in accordance with the requirements of the Resource Operating License has been incorporated in project costings provided by SunWater and was based on their present costs associated with the existing structure. All such costs will be borne by SunWater.

18.4 Conclusion and Summary of Recommendations

The major economic benefits of the Glebe Option are directly related to the development of the Wandoan Coal Project. There will be some local economic flow on benefits during the construction period.

Commitments with respect to economic values in relation to the Glebe Option include:

- establish an expression of interest process for local businesses and service providers to register for opportunities related to the construction works.
- provide the list generated above to the tendering contractors and contractually guarantee their compliance with state policies regarding local industry participation, indigenous employment opportunities and training.
- through ongoing consultation with land managers (owners or lessees), develop strategies to minimise impacts on productive land use, including assistance with relocation of irrigation infrastructure, appropriate fencing, the pasture species to be used in rehabilitation of pipeline areas, or other agreed actions.
- the recreation area at Glebe Weir will be re-instated to cater for potentially enhanced tourism and recreational benefits to the community.
- all impacted roads will be re-instated to at least the same standard as pre-construction (**Chapter 9**)
- any extractive resource licences obtained for the Glebe Project will be in favour of the respective local government body if they so wish.
- the potential impact on downstream irrigators is limited to a maximum of 1 day of pumping opportunity for a minority of water harvesters. SunWater and NRW will discuss impacts with each individual affected and equitable solutions are envisaged.
- if purchase of entitlement by way of trading is required in order to provide the full requirement of the Glebe Option, it is assumed that as the sellers would be willing and would have alternative productive land uses planned.

Historically, the economic prosperity of Taroom and the region has been highly dependent on extensive agriculture. This has resulted in a small local economy often subject to fluctuations of drought and cattle prices. The result has been narrow employment profile and a declining population. New employment opportunities offered by the mining industry, coal seam gas development, railway and other associated developments, will temporarily broaden the economic and employment base and increase the population.