

# **ECONOMIC AND SOCIAL IMPORTANCE OF THE PORT OF GLADSTONE**

**9<sup>th</sup> September 2002**

## **Introduction**

The Port of Gladstone is located adjacent to the city of Gladstone and the shire of Calliope, in the Fitzroy region of Central Queensland, approximately 500km north of Brisbane. This region, as defined by the Australian Bureau of Statistics, comprises 12 local government areas with a resident population of 181 202 persons as at 30th June 1999. The Port of Gladstone is a key part of the transport chain for the Fitzroy region and adjacent parts of Central Queensland. The regional economy served by the Port of Gladstone has expanded rapidly over the last 30 years in response to major mining (predominantly coal) and industrial projects of state significance.

## **National and State Economic Importance**

In tonnage terms, the Port of Gladstone is the State's largest multi-cargo port and Australia's fourth largest port. The port is the second largest coal export port in Queensland, third largest coal export port in Australia, and the fourth largest coal export port in the world.

Gladstone Port's social and economic importance to Queensland and Australia can be readily seen in Table 1 which shows Gladstone's share of the international sea freight market for the year 1999/00. At that time Gladstone Port's export tonnage represented 25% of Queensland's exports and nearly 7% of Australia's exports.

**Table 1: Gladstone's Share of International Sea Freight Market FY 1999/00**

	Imports		Exports	
	Value (\$000s)	Tonnage	Value (\$000s)	Tonnage
Share of Queensland Market	2.65%	8.65%	18.79%	25.65%
Other Queensland Ports	97.35%	91.35%	81.21%	74.35%
Share of Australian Market	0.38%	2.24%	3.82%	6.95%
Other Australian Ports	99.62%	97.76%	96.18%	93.05%

Information obtained from the Bureau of Transport & Regional Economics *Australian Sea Freight 1999-2000* report.

## **Social & Economic Importance to the Fitzroy Region of Central Queensland**

The Port of Gladstone is of extremely high social and economic importance to Central Queensland. Coal is exported through Gladstone Port from 10 mines located in the Bowen Basin area and is the largest export commodity for the port. Coal exports of 37.5 million tonnes in 2001/02 were worth \$2.06 billion and accounted for 63% of total port throughput. Coal is exported to 36 countries, of this the top 5 are Japan, India, Korea, Taiwan and the Netherlands.

Every major industry in the Gladstone/Calliope region, including Queensland Alumina Limited, Boyne Smelters Limited, Queensland Cement Limited, ORICA, Ticor and Southern Pacific Petroleum are dependent on the port for the import of raw materials and/or export of finished product. Export products include, but are not limited to alumina, aluminium, cement clinker, cement, flyash, woodchip, grains such as sorghum, magnesia, containerised and general cargo. Total exports (excluding coal) of 5.46 million tonnes in 2001/02 were worth \$1.75 billion. Imports of 10.87 million tonnes in 2001/02 were worth \$0.9 billion.

Total trade in Gladstone Port for 2001/02 of 53.8 million tonnes was worth \$4.7 billion.

Nearly 1000 ships call at Gladstone Port each year. Every ship loaded in Gladstone represents two full-time jobs for the region; \$5 million of Australia's export earnings and \$73,000 of income for regional households. The results of a study undertaken in 2001 by the Bureau of Transport Economics (BTE) using 1999/2000 data show that the Gladstone Port plays a large role in the social and economic well-being of communities in the region (Table 2).

The BTE report indicated that for 1999/2000 the port directly resulted in \$44 million of household income and 738 jobs in the Fitzroy region of Central Queensland. The ports total impact on communities in the region was \$68 million of household income and 1,758 jobs (Table 2).

**Table 2: Economic & Social Impact Findings**

Function	Output (\$m)	Value added (\$m)	Household income (\$m)	Employment (number)
<b>Direct Effects</b>				
Port authority operations	81	55	23	364
Ship operations	16	12	7	135
Ship loading/unloading	14	9	5	80
Cargo services	4	3	2	40
Land transport and storage	18	13	5	93
Government agencies	2	1	1	26
<b>Total</b>	<b>135</b>	<b>93</b>	<b>44</b>	<b>738</b>
<b>Total Impact</b>				
Port authority operations	127	79	35	893
Ship operations	30	19	11	296
Ship loading/unloading	26	16	9	220
Cargo services	7	4	3	70
Land transport and storage	30	19	8	228
Government agencies	4	3	2	51
<b>Total</b>	<b>224</b>	<b>139</b>	<b>68</b>	<b>1758</b>

Table 5.3 Economic Impact of the Port of Gladstone by Function 1999-2000  
Note components may not sum to totals due to rounding. Source – BTE analysis

The Gladstone Port benefits the community in other ways including:

- Providing earthworks services for construction sites eg school and church buildings, development sites;
- Mowing over 1400 hectares of sporting fields and parks every year, which is the equivalent to mowing the Melbourne Cricket Ground twice a day, 365 days a year;
- Provision and maintenance of the Gladstone Marina and associated parks and picnic areas including the waterfront Spinnaker Park; and
- Stocking the Awonga Dam with recreational fish species eg barramundi, mangrove jack and mullet in a joint venture with the Gladstone Harbour Water Board.

## **Future Social and Economic Importance**

The only State Development Area in Queensland has been established in the Calliope Shire adjacent to the Port of Gladstone. The Aldoga State Development Area (ASDA) is promoted by the Department of State Development and the Gladstone Industry and Economic Development Board to potential industries. The combination of the ASDA's close proximity to existing and planned future port facilities at the Port of Gladstone is one of the major drawcards to national and international industries due to the greatly reduced transport costs for importing raw materials and exporting products.

Industries considering establishment in the ASDA include a smelter, carbon calcining plant, Chlor Alkali/Ethylene Dichloride (EDC) plant, ferro- chrome plant and an automotive component manufacturing plant which are worth a combined total of \$4.5 billion. Such industries involve extremely large construction workforces (200 – 3500 people per project) and significant operational workforces providing many hundreds of permanent jobs eg Aldoga Aluminium Smelter alone is expected to provide 900 full-time jobs once fully commissioned (see Project Status Report attached).

Gladstone City and Calliope Shire would not be one of the most attractive industrial development areas in the world if convenient, efficient and cost-effective port facilities were not available. The Gladstone Port Authority has developed a strategic plan for the next 50 years to facilitate industry development and provide the import/export facilities required.

Total port trade forecast for 2011/12 is estimated to be 100 million tonnes of imports/exports, compared to 53 million tonnes in 2001/02.

## **Current Management Approaches**

The Port of Gladstone is located within the Great Barrier Reef World Heritage Area, however, only some fringe portions of the outer port limits overlap the Great Barrier Reef Marine Park. The port is a large estuarine system sheltered from the open sea by Curtis and Facing Islands. The Calliope River and Boyne River catchments empty into the port. Port activities, which have the potential to adversely influence water quality, include dredging, placement of dredged material at sea, reclamation, and stormwater runoff from bulk product stockpiles and partially developed sites.

The Gladstone Port Authority (GPA) is licensed under the Environmental Protection Act for operating a port. The GPA is licensed for 11 Environmentally Relevant Activities and operates in accordance with its Environmental Authority and Integrated Environmental Management System (IEMS). The IEMS is made up of a number of subordinate management plans, guidelines and an environmental monitoring programme. Stormwater discharge is monitored as required under the licence and control measures are implemented as per licence conditions and the Erosion and Sediment Control Guidelines developed and adopted by the Port. Port landscaping and earthworks / development sites are required to have plans documenting management of erosion including the use of sediment curtains, rock filters and revegetation. All bulk product stockpile areas drain to either settlement ponds or pollutant traps prior to discharging to drains and the harbour.

Port projects, whether carried out by port employees or contractors, are also required to have a project specific environmental management plan that documents how environmental issues will be addressed including those issues that influence water quality.

Dredging and reclamation are carried out in accordance with approvals obtained from the Environmental Protection Agency including undertaking water quality monitoring and monitoring of sensitive areas eg seagrass and mangroves. Placing dredged material at sea is carried out in accordance with an approval from Environment Australia including monitoring of the macrobenthic infauna in and around the placement site. Prior to dredging or placement at sea, material to be dredged is tested for contaminants and potential for acid

sulfate. As part of the Port's commitment to ensuring its activities are environmentally sustainable, the GPA is in the process of developing an Integrated Monitoring Program for the whole port in conjunction with local industry, local government and the Environmental Protection Agency.

The threat of oil spills from shipping within Port Limits is addressed through the GPA's Oil Spill Contingency Plan. GPA personnel undergo regular oil spill response training with Queensland Transport (Maritime Division) and participate in oil spill exercises.

## **Conclusion**

The economic importance of Gladstone Port to the Fitzroy region and Queensland cannot be overstated. Likewise, the significance of the Great Barrier Reef and the need to protect the reef is acknowledged. However, it is our view that the Port of Gladstone and other Queensland ports can operate effectively and expand with future industry demands without detriment to the Great Barrier Reef.

Ports have carried out and continue to conduct significant monitoring and research programmes within port areas to ascertain the risk of port activities to the marine and estuarine environment. Generally, results to date indicate that, apart from those areas directly impacted eg shipping channels, dredged material sea placement sites and areas reclaimed, marine and estuarine flora and fauna are not adversely impacted by port activities.

The relatively low Effects of port activities compared to impacts of land clearing, agriculture and natural disturbances in tropical climates eg storms and cyclones, in combination with the high social and economic importance of ports, needs to be duly considered when developing plans and policies in relation to managing port activities to protect the Great Barrier Reef. Policies restricting port activities and/or imposing additional port costs eg environment levies are likely to adversely affect port competitiveness at the state, national and international levels and therefore adversely affect port economic viability. Any such adverse influences would be felt by the regional and state economies that ports support.