### Queensland Murray-Darling Committee Inc.'s comments on the Inquiry into rail freight use by the agriculture and livestock industries

#### 21 February 2014

#### Submission to:

The Research Director Transport, Housing and Local Government Committee Parliament House George Street Brisbane Qld 4000 thlgc@parliament.qld.gov.au

#### Submitting organisation:

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These comments are presented by the Chief Executive Officer, Geoff Penton, on behalf of the Queensland Murray-Darling Committee Inc. (QMDC). QMDC is a regional natural resource management (NRM) group that supports communities in the Queensland Murray-Darling Basin (QMDB) to sustainably manage their natural resources.

#### 1.0 General comments

In 2012 QMDC commissioned a project to undertake a high-level emissions inventory of the QMDB region and report on the findings. The project aimed to establish an emissions baseline for the region in accordance with national standards for carbon accounting, which can be used as a lead into more detailed calculation work in the future, and ultimately, inform the formation of carbon mitigation strategies. A report was prepared by the University of Queensland's UQ Smart Group, *Queensland Murray Darling Basin Regional Greenhouse Gas Emissions Inventory 14 August 2012* (the Report). The QMDB region, spanning from Toowoomba to the west of Charleville, has an area of over 286,000km<sup>2</sup> and accounts for 15 per cent of the total area of Queensland.



The Report provides an estimate of the total inventory of all six Kyoto greenhouse gas (GHG) emissions for the 2010/2011 fiscal year, and a 12 month projection has also been provided. The inventory has been defined according to eight sectors: Mining; Transport; Industry; Agriculture; Water; Stationary Energy (including households); Local Government; and; Waste.



The GHG emissions were separated in to Scope 1 (direct) and Scope 2 (indirect) emissions, with some sectors considering an estimate of scope 3 (indirect) emissions. The calculations were based on both the National Greenhouse Account (NGA) factors and previous emissions calculations. The emissions were also measured in terms of their total tonnes of carbon dioxide equivalent (tC02e).

For the financial year 2010-11, the Report was able to tell QMDC what the estimated total GHG emissions (Scope 1 and 2, as consistent with national measurement standards) for the QMDB region were (the equivalent to approximately 9.1 million family sedans on the road) and the relative percentage of each industry's emissions. The highest emitters were stationary energy, industry, transport, mining and agriculture.

Energy use and emissions vary greatly between the different modes of transports but based on the report's findings it is evident that transport is a significant contributor to carbon emissions in the QMDB. Emissions associated with transport for the 2010-11 year are 5,767,089 tonnes CO2-e with an expected rise of 210,283 tonnes CO2-e for the 2011-2012 year due to a mean population growth of 0.83% in the region. These emissions are Scope 1 emissions under the NGER Act because they are from the direct burning of fuel. The Report found that the major source of emissions is road vehicles, which contributes to 98.6% of the total emissions.

Rail freight development therefore needs to be developed to enable both the agricultural sector and Queensland communities to access and utilize the railway network to freight produce/commodities. This will reduce the demand for trucks and cars and lessen the ever increasing impact road transport is having on existing highways. It will also reduce overall energy consumption and cost.

Reducing road transport through establishing a rail system in the QMDB that is strategic - serving multi industries and passenger travel, efficient, and environmentally conscious is much needed and strongly supported by QMDC.

#### 2.0 Specific comments

### 2.1 Identify opportunities to enhance coordination and collaboration across government, transport industry and primary producers about rail freight;

Modification of the West Moreton line, Doctor's Creek Bridge and rail embankment between Jondaryan and Oakey caused major flooding of Oakey in January 2011 (120 homes and businesses flooded) due to the restriction of Doctor's Creek flows - this has still not been corrected. Collaboration and coordination is urgently needed between local councils, Main Roads, communities, NRM bodies, transport, mining and agricultural industries to deal with this specific issues and other related transport infrastructure and floodplain management matters.

Level crossings are dangerous in many country areas e.g. Bridge St in Oakey and Kingsthorpe-Haden Rd in Kingsthorpe. They cannot cope with increased trains without road or rail modification.

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# 2.2 Provide future direction for enhancing the utilisation of the rail system for primary producers and their freight needs including the demand for freight, including future volume, nature, timing and frequency;

#### a. Existing opportunities in QMDB

The Murray Darling Basin is one of Australia's most important agricultural area and produces over one-third of Australia's food supply. Specifically, the agriculture sector in the QMDB consists of 1,559,195 hectares of croplands and 8,156,154 hectares of pasture for grazing (Australian Bureau of Statistics 2010). It extends across a total area of more than 9.7 million hectares and supports more than 6,900 agricultural businesses.

The QMDB makes up approximately 25% of the Murray Darling Basin. Major agricultural activities in the QMDB region are split into livestock (39% - sheep, beef, dairy, pigs and poultry), and, cropping (61%) (ABS 2010). The Grain industry also has a major presence in the region.

Based on the above statistics there is a major opportunity to provide a rail system in this region that will be well utilised.

b. New horticulture development

In the future there is potential for increased horticulture development and freight demand around Inglewood, Goondiwindi, St George and Chinchilla.

c. Freight to processing works

The QMDB continues to be a big cattle farming region. Major processing works are situated at Dinmore. There is an opportunity to freight cattle by rail to processing works, reducing road traffic

### 2.3 Identify the characteristics of the future transport system for primary producer freight needs;

a. Establishment and operations of a development will not be permitted to impact on high-conservation areas

QMDC argues that overall proponents for development through the EIS and EA process have not demonstrated scientific understanding of the importance of remnant vegetation and preventing further fragmentation or destruction of ecosystem corridors in the QMDB.

QMDC asserts that designs for a future transport freight system therefore need to take into account national and state biodiversity policy and strategies e.g. the National Wildlife Corridors Plan and the objectives of the EPBC Act and the impact new rail projects will have on statewide bioregional corridors. In this region serious consideration must be given to the impact rail projects will have on the Southern Brigalow Belt. This region's NRM Plan identifies the baseline of natural resource assets in the QMDB. The target intentions for vegetation and biodiversity are summarised below:

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#### Vegetation and Biodiversity Target Intentions

Priority landscape scale ecosystems are maintained or improved.

Natural assets including native vegetation are managed or conserved to maintain ecological processes and ecosystem linkages, and increased in extent and abundance at priority catchment scales.

Increase in area of sustainably managed native vegetation for landscape and biodiversity outcomes through traditional and innovative economic uses.

Areas of identified high nature conservation significance are maintained in current condition and improved against the Common Nature Conservation Classification System.

Decline in populations of 'at risk' flora and fauna species are halted.

The biodiversity condition and ecological health of native vegetation in priority catchments are maintained or improved.

b. Adverse impacts on natural resource assets avoided

Additional to the above need to protect high conservation areas and regional vegetation ecosystems, QMDC submits that the following impacts needed to be well managed and avoided if possible:

- Impacts on fauna, human and stock health and rural amenity values caused by changes to air quality through increased dust from construction, freight, noise, and lighting. All freight should be therefore covered. The veneering of coal is like hairspray- it does not work for long, it does not apply to empty carriages, and it is unsatisfactory for trains through the suburbs of Brisbane. Small particulate pollution is a health risk.
- Impacts on vegetation and biodiversity and agricultural production caused by weed and pest spread through construction of railway lines and clearing of vegetation and by way of transportation from one area to another. Planned coal mine expansions in the region (New Acland Stage 3 and Cameby Downs) will greatly increase coal traffic on the West Moreton line. This coal transport has effectively squeezed out the rail freight of agricultural goods. The disturbance to Strategic Cropping Land or Good Quality Agricultural Land should not be allowed as part of extending rail freight opportunities. Grasslands such as RE 11.3.21 (blue grass lands (dicanthium)) are the most critically endangered ecosystems in Australia and should be conserved at all costs- the remnants flank the Warrego Highway and West Moreton line and represent < 1% of pre-settlement levels.</li>
- Impacts on waterways, floodplains, wetlands caused by inappropriate design and construction of infrastructure. Maintaining a crown height of a road or railway line in a flood section to 100mm above natural ground level will reduce diversion of overland flood flows and erosion problems on surrounding land; and
- Risks and hazards caused by fire.

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#### c. Multi-use easements

The potential for multi-use easements/ corridors must also be considered in order to reduce the impact on vegetation and agricultural land.

2.4 Identify a broad range of options, including appropriate risk sharing amongst supply chain participants, for delivering freight solutions for primary producers;

#### 2.5 Optimise the capacity and performance of the rail system for freight;

a. Increasing the availability of passenger rail transport

This will have the same benefits described above.

In 2012 QMDC commissioned a project to undertake a high-level emissions inventory of the QMDB region and report on the findings. The project aimed to establish an emissions baseline for the region in accordance with national standards for carbon accounting, which can be used as a lead into more detailed calculation work in the future, and ultimately, inform the formation of carbon mitigation strategies.

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Based on the report and QMDC's working knowledge of the region optimising the capacity and performance of rail freight in the QMDB should include actions such as:

- Establishing infrastructure in the region for electric trains.
- Requiring all freight trains leaving the region to Brisbane and other ports to bring back goods instead of empty carriages into the region. These return loads could, for example, consist of waste able to be converted into soil nutrients/compost for improving agricultural production.

### 2.6 Plan a rail system that is positioned to exploit future freight, particularly export, opportunities; and

a. Duplicating rail line to Roma

QMDC believe duplicating this rail line with electric rail or heavy haul freight will improve current delivery of services and provide new business opportunities.

b. Cypress pine timber production

There may be opportunities for the timber industry and landholders to utilise rail freight especially from cypress pine plantations and the harvesting of regrowth.

c. Freight to processing works

The QMDB continues to be a big cattle farming region. Major processing works are situated at Dinmore. There is an opportunity to freight cattle by rail to processing works, reducing road traffic.

## 2.7 Develop sustainable long-term solutions for freight movement by rail for the agriculture and livestock industry.

NSW Government's Transport for NSW department has recently revised its existing sustainability framework for Transport Projects. The review process was done in consultation with other government agencies resulting in updated key sustainability indicators and targets. The sustainability targets address eight themes:

- 1. energy management
- 2. pollution control
- 3. climate change resilience
- 4. resource management
- 5. biodiversity
- 6. heritage
- 7. livable communities
- 8. corporate sustainability.

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QMDC suggests the research and work currently being done by Transport for NSW provides a useful guideline for the development of long term sustainable solutions in Queensland. Further information is available in <u>Transport Project's Sustainability Framework (pdf 922KB)</u>.

Transport for NSW has also produced the Sustainable Design Guidelines Version. These guidelines introduce a range of sustainability outcomes initiatives to improve the sustainability performance of transport infrastructure.

<u>NSW Sustainable Design Guidelines Version 3.0 (pdf 6.1MB)</u> <u>NSW Sustainable Design Guideline Checklist Version 3.0 (xlsm 2.9MB</u>

http://www.transport.nsw.gov.au/projects/Planning-and-assesment/sustainability

UIC as the worldwide international organisation of the railway sector also offers some useful information and tools for the sustainable development of rail freight in Queensland. UIC's broad membership and experience is in our opinion invaluable to this Inquiry.

UIC has 197 members across 5 continents. They include integrated railway companies, infrastructure managers, railway or combined transport operators, rolling stock and traction leasing companies service providers (restaurant services, sleeping cars, public transport, maritime transport). These members are:

- 82 active members (including the railways from Europe, Russia, the Middle East, North Africa, South Africa, India, Pakistan, China, Japan, Korea, Kazakhstan, and companies operating worldwide such as Veolia Transport)
- 80 associate members (including railways from Asia, Africa, America and Australia)
- 35 affiliate members (related or ancillary rail transport businesses or services)

UIC's mission is to promote rail transport at world level and meet the challenges of mobility and sustainable development.

The UIC Declaration on Sustainable Mobility & Transport provides UIC members with a credible tool for continuous improvements of the rail sectors' sustainability performance. The Declaration is supported by United Nations Environment Program (UNEP) and Global Compact, is in line with the Global Reporting Initiative (GRI) and is part of the voluntary commitments made at Rio+ 20.

The UIC Declaration on Sustainable Mobility & Transport contains key messages on railway's contribution to sustainable mobility and transport. The messages are targeting society, customers and the rail sector itself. The UIC Reporting Guideline on Sustainable Mobility & Transport provides explanation and support to each statement. Both documents have been developed within the framework of the UIC Environment, Energy & Sustainability (EES) Platform and are the results of the UIC Sustainability indicators project.

These publications and others relevant to sustainable development can be found at: <a href="http://www.uic.org/etf/publication/publication-resultat.php?domaine=5">http://www.uic.org/etf/publication/publication-resultat.php?domaine=5</a>

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