



13 December 2012

GBR Ports Strategy Project Manager
Department of State Development, Infrastructure and Planning
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Dear Sir/Madam,

RE: SUBMISSION ON THE GREAT BARRIER REEF PORTS STRATEGY

PREAMBLE & POSITION

The Capricorn Conservation Council, since 1973 has been the principal non-government environmental organisation in Central Queensland. CCC covers environmental issues in the Fitzroy Basin, plus coastal and marine areas from Baffle Creek to St Lawrence (Broadsound Coast) and extends into the Desert Uplands, including the Galilee Basin (Belyando catchment).

CCC welcomes the opportunity to comment on the GBR Ports Strategy, however questions the timing of this document, given that it will be finalised before the Great Barrier Reef Strategic Assessment is completed and considered by UNESCO and Federal and State Governments. CCC holds the position that a port strategy for the GBR and Queensland should be completed after the Strategic Assessment of the Great Barrier Reef World Heritage Area (Coastal and Marine components) is complete and has been considered by UNESCO in 2015. In addition GBRMPA is finalising a Port position paper and CCC urges much greater cooperation and correlation of the multiple jurisdictions for ports and coastal shipping.

The Strategy focuses heavily on economics and development, and fails to mention or acknowledge the importance of a healthy and resilient environment.

This document is not a Strategy rather it is a discussion paper of limited detail and information. There is no clear direction or statements provided to give an understanding of the Government's position on what new ports are being considered, potential; port expansions or consolidation of existing ports. Also there is no assessment of how anticipated demand is being assessed or when and where port projects may be considered. CCC would welcome an opportunity to comment on an improved and detailed Strategy document, after the Strategic Assessment is complete and a ministerial and UNESCO decision provided (2015).

GENERAL COMMENTS ON THE GBR PORT STRATEGY

- The port strategy for the GBR and Queensland should be completed after the Strategic Assessment of the Great Barrier Reef World Heritage Area (Coastal and Marine components) is complete and has been considered (and a decision made) by UNESCO in 2015 on the management of the World Heritage Property.
- The Strategy has a narrow focus on economic development and has a very limited and poor consideration of impacts to the environment and communities (social impacts).

- Impacts and threats to the GBRWHA and each of its Outstanding Universal Values (OUV) from port development are not considered. The strategy must address this and provide information on threats, impacts and management actions to conform to the recommendations and conclusions of the UNESCO WHC 2012.
- Port Alma is not part of Gladstone Harbour or Gladstone Port and should remain a small port for current/existing cargo only. CCC's position is that Port Alma, the Fitzroy River Delta, Keppel Bay or the World Heritage Areas of Balaclava Island and Curtis Island are ecologically unsuitable for coal ports or port expansions or developments.
- Limit the growth and expansion of ports in Gladstone Harbour – no further expansions or new ports. Maximise efficiency of current capacity (existing infrastructure and already approved infrastructure). Improve compliance monitoring and enforcement to protect the environment and GBRWHA.
- Complete an independent review of the management arrangements of Gladstone Harbour, as requested by UNESCO WH Committee .

SPECIFIC COMMENTS ON SECTIONS OF THE GBR PORT STRATEGY

1. About this Strategy

No information is provided on which Ports Strategy, the *Great Barrier Reef Ports Strategy* or the proposed future *Queensland Ports Strategy*, will have precedence or higher priority out of the two. CCC requests that this information be provided to the public and refers to the following statement on page 5 of the strategy:

“Consultation on this document will inform a Queensland Ports Strategy and the actions that government undertakes with industry, port authorities, communities and other partners to optimise the future operation and function of ports in Queensland.”

The statement above, suggests that this strategy is purely focused upon ‘optimising’ future operations and functions of ports in Queensland from a productivity and economic point of view, rather than considering the environmental and social values of the Great Barrier Reef World Heritage Area (GBRWHA) and coastal zone that the ports are operating within.

Furthermore, the Strategy fails to mention or address (in this section or in later sections) how port development and operational activities will impact upon the Outstanding Universal Values (OUV) of the GBRWHA. This must be addressed and rectified, especially given that the UNESCO World Heritage Committee Report (of 36th Session – 24 June to 6 July 2012) on the GBR property clearly states:

“A central issue is that there does not appear to be consistent or specific recognition of OUV in plans and decision taking processes, and there is concern regarding the protection of a range of aspects that make up the OUV of the property, as these are not all being consistently considered.”¹

and

8. *Recommends the State Party, in collaboration with its partners, to sustain and increase its efforts and available resources to conserve the property, and to develop and adopt clearly defined and scientifically justified targets for improving its state of conservation and enhancing its resilience, and ensure that plans, policies and development proposals affecting the property demonstrate a positive contribution to the achievement*

¹ WHC-12/36.COM/7B.Add, p 24. “State of conservation of World Heritage Properties Inscribed on the World Heritage List”

of those targets, and an overall net benefit to the protection of Outstanding Universal Value;²

3. Ports facilitate Queensland's four pillar economy

Issue 3.1

It is short sighted not to include the environment as part of Queensland's Economy as it is universally accepted that a healthy, diverse and resilient environment underpins a diverse and resilient economy; if the environment crashes, so too will the economy.

Response 3.1

Include the Environment as a fifth pillar to the economy.

Issue 3.2

Paragraph 1 in this section of the strategy states:

Ports are essential to the function and growth of Queensland's four pillar economy based on tourism, agriculture, resources and construction. The Queensland Government is committed to working with industry, across government and private partners to optimise the efficiency of the state's port operations.

Response 3.2

The Great Barrier Reef is essential to the economy and environment of Queensland, and the health of the GBR is particularly important to tourism, recreation and fishing and the economy they generate. *Growth* of the economy is not essential, however *sustaining* an economy and *protecting* the environment is even more essential. The GBR Port Fast Facts on page 7 of the strategy identify that Coal attributes to 79% of the total thru-put (volume) of export product (2010-11). The Queensland Government and Australian government need to recognise that the short term economic gain of coal mining and its export will have long-term detrimental and irreversible impact to the Reef and other coastal, marine and terrestrial ecosystems and species, as a direct result of the climate change impacts from Queensland's coal being dug up and 'burnt' somewhere in the world.

Issue 3.3

Paragraph 2 identifies that the GBR is internationally renowned and recognised by UNESCO as World Heritage Area, however fails to identify and address how each of the Outstanding Universal Values (OUV) of the Great Barrier Reef World Heritage Area (GBRWHA) will be impacted by current and proposed ports operations.

Response 3.3

Identify and list the OUV of the GBRWHA, how each relates to the economy and how each OUV will be impacted by current and proposed port operations. Identify scientifically justified targets to protect the OUV of the GBRWHA, and manage port development appropriately to ensure these targets are met.

Issue 3.4

Final sentence on page 7 states:

A balanced approach to economic growth within the Great Barrier Reef region is required to ensure the integrity of this world renowned site is not compromised.

What is the '*balanced approach*' that the Queensland Government propose to ensure the GBRWHA is not compromised? No information is given.

² WHC-12/36.COM/7B.Add, p 26. "State of conservation of World Heritage Properties Inscribed on the World Heritage List"

Response 3.4

Provide detailed information on the what, where, when and how of a 'balanced approach' to economic growth and how this will achieve targets to protect the OUV of the GBRWHA. CCC recommends that the *balanced approach* is a *precautionary approach* and must be focused on protection and long-term conservation of the GBRWHA and its species and ecosystems.

Issue 3.5

Figure 1 incorrectly labels Rockhampton as a Port. There is no port at Rockhampton, however there is a small port at Port Alma in the Fitzroy River Delta.

Response 3.5

Correctly label the Port as Port Alma. Provide information on

4. Protecting the Great Barrier Reef*Issue 4.1*

Failure to identify and address how each of the Outstanding Universal Values (OUV) of the Great Barrier Reef World Heritage Area (GBRWHA) will be impacted by current and proposed ports operations.

Response 4.1

Please provide this information and include proposed targets and actions to protect the OUVs.

Issue 4.2

Failure to identify the importance of conservation, recreation and cultural activities in the GBR.

Response 4.2

Please identify these uses, activities and importance of management, and the environmental and cultural values of the GBR.

Issue 4.3

Focus on the GBR being a 'multiple-use' area, with extensive management arrangements and regulation of 'activities', however no details or references provided to say what these are, and no reference to the need to include and recognise the OUVs in management decisions and plans.

Response 4.3

The Strategy must be amended to focus on and prioritise protection and conservation of this World Heritage Asset and its OUVs, such that it is given the same (or higher) priority level as 'use' and activity management or regulation.

Environmental Impacts*Issue 4.4 and Response 4.4*

No detail provided on the environmental impacts of ports in the GBR, on either an individual or cumulative basis. This is unacceptable and details must be provided.

Issue 4.5 and Response 4.5

Reference is given to the *Great Barrier Reef Outlook Report 2009* and the threats to the health of the Reef identified in this report. This 2009 report and the 'threat' level is now out-dated by the UNESCO and IUCN 2012 Reactive Monitoring Mission report and World Heritage Committee 36 session report on the GBRWHA property.

Ports and shipping are no longer localised or moderate threats to the GBRWHA and this must be addressed. This is supported by the following statements from the UNESCO WHC report:

“The information provided by the State Party and the findings of the mission, shows a rapid and recent increase in proposals for coastal development with potential impacts on the OUV of the property. The information illustrates that, to date, about 70% (41 out of 61) of all such proposals determined over the past decade (1999-2011) have been approved, presumably with a range of attached conditions. More than 60% of all such development proposals (67 of 108 proposals in total) were made in the last 5 years, with a substantial and consistent increase since 2008 notably in relation to projects associated with the export of coal and Liquefied Natural Gas.”³

and

“The World Heritage Centre and IUCN note the conclusions contained in the mission report. Since the listing of the Great Barrier Reef as World Heritage, the property has tackled a series of threats effectively. However the OUV of the property is threatened and decisive action is required to secure its long-term conservation. The rapid increase of coastal developments, including ports infrastructure is of significant concern. The property further lacks an overall plan for the future sustainable development of the reef that will lead to protection of OUV in the long-term.”⁴

Issue 4.6 and Response 4.6

No detail provided on the coastal or marine ecosystems, habitats or species that are or will be threatened or impacted by current ports and future port development.

Please provide this information.

Issue 4.7

The Queensland Government needs to tackle Climate Change as it is a major threat to the Reef. The UNESCO World Heritage Committee report on the GBRWHA from July 2012, states that *“Climate change is a key threat to the property and building resilience, through the reduction of other pressures, is a means to maximize the capacity of the ecosystem to adapt to its impacts.”*

Response 4.7

CCC urges the Queensland Government to achieve this by having no further development or expansion of new coal ports, coal mines, gas projects or gas ports in Queensland and the GBRWHA. Coal export accounted for 79% of port exports from the Ports in the GBR in 2010-11; we have no hope of saving the reef from global warming, ocean acidification and sea temperature rises associated from climate change if we continue to increase mining (and export) of coal and gas from Queensland. Slow down on fossil fuel use and export.

Issue 4.8 and Response 4.8

There is no detail provided on how the ‘balance’ between environmental values, habitat protection and port development is expected to be achieved.

Please provide details on threats to environmental values and habitat from port development and the proposed management actions to address these threats.

Issue 4.9 and Response 4.9

The Queensland Government needs to work with more than just the ‘*relevant proponents*’ in environmental impact assessment of port development.

Community, community organisations, local government and independent scientists must be involved.

³ WHC-12/36.COM/7B.Add, p22-3, “State of conservation of World Heritage Properties Inscribed on the World Heritage List”

⁴ WHC-12/36.COM/7B.Add, p25, Conclusions, “State of conservation of World Heritage Properties Inscribed on the World Heritage List”

Consultation Q.

How can we meet the demand for port capacity while minimising environmental impacts?

- No further port expansions and no new ports in the GBRWHA and Queensland.
- No coal ports or other ports in the Fitzroy Delta, Port Alma and Keppel Bay, and no further expansion of (or new) coal ports or LNG ports in Gladstone Harbour and Port Curtis.
- Gladstone Harbour is an example of how environmental impacts of port development are not 'minimised' when it comes to the operational phase and compliance and monitoring of the development; the environmental and social impacts of large scale coal and gas port development in Gladstone continues regardless of water quality impacts, fish health and disease impacts, seagrass loss, turtle and dugong habitat loss, ecological impacts, failure to comply with environmental conditions and various social and human health impacts (housing, cost of living, increased traffic and accidents, impacts of coal dust etc). Please stop putting economic gain ahead of environmental and community health and well-being. Improve compliance and monitoring and take more severe action on environmental impact and condition breaches.
- Fully independent and peer reviewed scientific Environmental Impact Assessment process and consultation.

Social Impacts*Issue 4.10*

Recognising social and cultural impacts is not enough. This Strategy fails to identify or list social and cultural impacts of port development, associated infrastructure and flow-on effect impacts to community.

Response 4.10

Please identify and list social and cultural impacts of port developments and associated infrastructure. This should include but not be limited to impacts to health, indigenous culture and heritage, cost of living, family impacts, transport impacts, small business and local government impacts.

Issue 4.11

Reference is made to resource projects being required to access social impacts and produce management plans. Social Impact Management Plans (and assessment) within the Environmental Impact Statement process are consistently inadequate forms of consultation and impact assessment for social and cultural impact matters. This is due to the fact that proponents and consultants 'cherry pick' what groups and individuals they want to 'consult' with, and it is in a very short time frame and they do not necessarily address concerns or impacts appropriately. The focus is on doing the least possible to get the project approved, rather than on true avoidance or reduction of actual impacts to local and regional society and culture.

Response 4.11

Full and independent public consultation (not the proponent paying a consultant) on social and cultural impacts must occur to ensure the impacts are avoided or minimised.

Consultation Q.

What are important factors in social and cultural planning?

- Independent public consultation and assessment on social and cultural impacts of projects. Current EIS social impact assessments and plans have proven to be inadequate and companies undertake the least amount of work required to get a project approved.
- Impacts to community, community health, cultural heritage, local economy, local government and businesses from air, water and land pollution directly or indirectly resulting from the port development.
- Health impacts of coal dust are particularly important to human and environmental health and well-being.

Shipping & Shipping Management

Issue 4.12

Failure to identify the upcoming future export of gas as LNG from Gladstone and Curtis Island and its associated threats and impacts to the GBRWHA from increased shipping and associated dredging and spoil dumping.

Response 4.12

Please provide details of pressures, threats and management actions from/for gas exports on the GBRWHA, Curtis Island and threatened & endangered species and ecosystems/communities. This must include shipping and associated dredging and spoil dumping.

Issue 4.13 and Response 4.13

Failure to provide a breakdown of the exports and imports at GBR ports in relation to the commodity or produce.

Please provide this detail and information. Export of Coal and Gas will result in the biggest increase in shipping traffic in the GBRWHA.

Issue 4.14

Figure 2 identifies a high growth forecast scenario of 6,100 ship calls in ports in the GBR by 2022. This modelling is based on previous trend data from the last 10 years of activity, capturing exports and imports. A more accurate and true prediction of coal export shipping is provided by Greenpeace's "*Boom Goes the Reef*" document, because it provides a cumulative total of the predicted coal export tonnage from all proposed and current port facilities and projects known at the time, and the vessels required to export this tonnage. This methodology identified almost a 6 fold increase in coal export vessel movements alone.

Response 4.14

Please use known current and proposed (cumulative) port export capacity figures for the highest growth forecasts predictions.

Issue 4.15 and Response 4.15

The strategy fails to identify the need for maintenance and capital dredging to facilitate port access and depth requirements for ships and shipping in the GBR.

Please provide individual and cumulative totals expected for maintenance and capital dredging in the GBR marine park and WHA.

Issue 4.16

No identification of the threats and impacts of dredge management and dredge spoil dumping that is associated with port development in the GBRWHA, the GBR marine park or on coastal land adjacent to the GBR. CCC finds this to be totally inadequate. Poor water quality is a serious threat to the health of the reef (*UNESCO and Great Barrier Reef Outlook Report* identify this), yet the direct and indirect individual and cumulative impacts of dredging upon water quality are not considered or mentioned in the Strategy.

Response 4.16

Please provide quantitative and qualitative threat and impact assessment, to the OUV of the GBRWHA, water quality, ecological health, fish health, marine and coastal habitat and species (especially vulnerable, threatened or endangered habitats and species such as sea turtles, dugongs and inshore dolphins) that will directly or indirectly associated with dredging. This must include quantitative cumulative impact assessment.

Issue 4.17

Increases in ship movements and the number of vessels associated with port development, such as barge and personnel traffic, must be considered and factored into the management of shipping

and impacts to the GBRWHA. They are not mentioned or detailed in the strategy and can have significant impact on increased death and injury rates to already vulnerable and endangered sea turtles and dugongs in GBR port areas. This MUST be dealt with in this strategy.

Gladstone Harbour is a point in case where shipping and vessel management of go slow zones and mitigation measures to reduce impacts to marine mega-fauna, such as sea turtles and dugongs, are only being implemented two years after the project was approved and dredging and project works commenced.

Response 4.17

More comprehensive analysis of impacts of shipping in the GBR, to include small vessels and craft such as barge traffic, personnel boats and other craft associated with port management, operation and development. Implement management actions to reduce death and injuries to Dugongs and Sea Turtles from traffic and vessels entering or using GBR port areas, before project works commence and as a HIGH PRIORITY during day to day operations. This should include go slow zones, no go areas and limited traffic areas.

Issue 4.18

The five dot points detailing the ship management measures is commendable, however these are all preventative measures and there are no reactive measures identified to deal with shipping incidents and associated pollution incidents and impacts. CCC finds this to be unacceptable and knows too well the pollution and damage impacts associated with shipping incidents or mal practice, given that the Shen Neng and recent garbage pollution incidents were in CQ waters.

Response 4.18

Identify actual reaction and response measures for shipping pollution and damage incidents in the GBRWHA in the Strategy. This should include a how, what, where, when Response Plan to oil leaks/spills, coal spills, structural damage to reef, chemical spoils, agricultural produce spills, cargo spills etc.

Consultation Q.

What are the opportunities for owners, charterers, terminal operators, ports and government to improve shipping management?

- Reduce projected shipping movements in the GBRWHA and marine park, and the associated risks and threats to the OUV's, reef and marine species, from increased shipping and spills or pollution, by containing and reducing port development - no further port expansions or new ports in the GBR. Coal and gas exports should remain at current capacity.
- Continue implementing ship management measures in the GBR, particularly compulsory and recommended pilotage regimes and ship tracking/surveillance systems.
- Higher environmental compliance fines for pollution and shipping accidents in the GBRWHA and Marine Park, to reduce the likelihood (economic incentive) of accidents and deliberate pollution from ships and vessels.
- No further capital dredging to occur in the GBRWHA or GBR marine park.
- Improved management, compliance, monitoring and fines for dredging activities and dredge spoil dumping in marine or coastal environments and the GBRWHA or marine park. Dredging is an activity that is directly associated with shipping and vessel access for port development and operation and must be considered in this Strategy.

Consultation Questions for Environmental Impacts:

Q. How can we meet the demand for port capacity while minimising environmental impacts?

The immediate issue and problem with this question is how the question is posed; it focuses on port capacity as the priority and puts environmental impacts as a secondary priority. Given the

immediate threat of the GBRWHA being put on the world heritage in danger list if the (development) threats to the OUV of the property are not addressed, it is imperative that the State Government considers the threats and impacts to the OUV, and the environmental and social impacts to the property and adjacent coastal lands as the FIRST priority. The OUV are not a 'clearly defined and central element within the protection and management system for the property'⁵ within the Port Strategy (or Queensland Government literature and activities that we are aware of) and decisive action is not being taken to *secure long-term conservation*⁶ of the OUV as requested by UNESCO. The long-term conservation of, and a protection and management system for the OUV of the GBR, must become an integral component of this Strategy and to the management of the GBR and GBRWHA by the Queensland Government.

To sum this up, CCC believes that current Port capacity should not be expanded and no new ports allowed to progress. Impacts and threats to the OUV, the reef and coastal and marine environments, from current Port operations or proposed expansions, should be avoided at all costs. A *highly precautionary approach*⁷ should be taken as requested by UNESCO.

5. Principles of future port development

Issue 5.1

Principle 1 is economic-centric without considering the economic, environmental, social and cultural values of the GBRWHA. Secondly, ALL of the five principles fail to identify or consider the OUVs of the GBRWHA, which in essence is ignoring recommendation seven of the UNESCO WHC report 2012:

*7. Urges the State Party to establish the Outstanding Universal Value of the property as a clearly defined and central element within the protection and management system for the property, and to include an explicit assessment of Outstanding Universal Value within future Great Barrier Reef Outlook Reports;*⁸

Response 5.1

Principle 1 should be changed to be titled '*Strategic Use of Ports to facilitate protection of the Outstanding Universal Values (OUVs) of the GBRWHA*' rather than '*Strategic use of ports to facilitate economic growth*'. Management to protect each of the OUV of the World Heritage Property needs to be put in place now.

Issue 5.2 and Response 5.2

The four pillar economy needs to be updated to include environment as a fifth pillar.

Issue 5.3

Details of each existing port (such as capacity, infrastructure, export and import products, environmental values, OUVs), and current and future port development in the GBR is not listed or referenced. Detailed maps of each port are not provided. Collation, reference and provision of this information must be provided so that the Strategy actually does become a Strategy document.

Response 5.3

⁵ WHC-12/36.COM/7B.Add, p26, Decision 7, "State of conservation of World Heritage Properties Inscribed on the World Heritage List"

⁶ WHC-12/36.COM/7B.Add, p25, Conclusion, "State of conservation of World Heritage Properties Inscribed on the World Heritage List"

⁷ WHC-12/36.COM/7B.Add, p25, Conclusion, "State of conservation of World Heritage Properties Inscribed on the World Heritage List"

⁸ WHC-12/36.COM/7B.Add, p26, Recommendation 7, "State of conservation of World Heritage Properties Inscribed on the World Heritage List"

Include detailed information and maps of existing ports and current and future port development for each port in the GBR area.

Issue 5.4

It is stated on page 14 of the Strategy that:

“The outcomes of consultation will inform actions to apply these principles through a Queensland Ports Strategy and achieve a balance of economic growth and environmental protection.”

How, what, where, why and when is this balance to environmental protection and economic growth going to occur and be applied? There are absolutely no details provided.

Response 5.4

This strategy needs to provide a detailed plan (of how, what, where, when and why) to achieve a balance between environmental protection and economics. Continual economic growth is not a sustainable model.

Principle 1 – Strategic Use of Ports to facilitate economic growth

Issue 5.5

Figure 4 on page 15 focuses solely on resource commodity future export in GBR ports. There are two problems with this. Firstly it does not list future LNG export and CSG industry. Secondly it does not list or map other commodities such as sugar, grain, general cargo, explosives etc.

Response 5.5

The Strategy needs to broaden to include maps and information on other future commodity export movements and ports. LNG and CSG must be included, as should all other commodities and cargo.

Issue 5.6

Principle 1 is totally focused on the resource and construction elements of the four pillar economy. Agriculture and Tourism do not even get a mention (and they are two of the four pillars). Environment is the forgotten fifth pillar. This is not a balanced approach to the management and sustainable development of the GBRWHA and port development within this area. It conflicts with the recommendations of UNESCO WHC 2012 report.

Response 5.6

Principle 1, as a principle must be changed to be titled ‘*Strategic Use of Ports to facilitate protection of the Outstanding Universal Values (OUVs) of the GBRWHA*’ rather than ‘*Strategic use of ports to facilitate economic growth*’. Management to protect each of the OUV of the World Heritage Property needs to be put in place now at each port in the GBRWHA.

Broaden Principle 1 to include and present information on and consideration of Agriculture, Tourism, Environment, Culture and Society and Health.

Principle 2 – The right balance between economic development and environmental protection

Issue 5.7

On page 17 it is stated that:

“Limiting significant port development to within existing port limits over the next ten years will ensure that impacts on environmental values are contained. Fewer, larger port areas will mean less disruption to the environment and marine wildlife than would occur if new port areas were established.”

Response 5.7

- a) Restricting port development in the GBRWHA must be a long-term solution and not just for the next 10 years. Current Strategic Plans for Gladstone Harbour are 50 years. Commitments to protect the environment, marine species and OUVs of the GBRWHA need to be 50 years and more also.
- b) A definition of ‘significant port development’ must be provided in the Strategy. Consultation must occur with the public on this matter.
- c) Information detailing ‘Existing port limits’ (maps and written) must be provided to the public and be included in the strategy. Consultation must occur with the community/public on this.
- d) What are the environmental values and how are the impacts going to be ‘contained’ and what is the definition of ‘contained’? Please provide this information. Gladstone Harbour may be an example considered to be ‘contained’ by industry, government, corporations and others, yet unacceptable levels of disruption and destruction to wildlife, environment and WHA are occurring.
- e) CCC requests that no port development occur at Port Alma, Balaclava Island, Raglan Creek, Northern end of Curtis Island or any other part of the Fitzroy Delta and Keppel Bay.
- f) CCC requests that no further LNG or coal port development occur at Gladstone Harbour or on Curtis Island (than is already approved to date), so that the WHA environment and species that dwell there-in have an opportunity to recover from the cumulative impacts of port development and associated infrastructure projects. Enough impacts (environment, social, economic, public health) and destruction of environmental values & habitat have occurred in this region already and development needs to be ‘capped’ at existing approvals to avoid further unacceptable impacts.

Issue 5.8

Dot point 1 on page 17:

“Port development decisions informed by rigorous analysis of full costs and benefits, including consideration of how to minimise environmental impacts to the Great Barrier Reef and other environmental values.”

Response 5.8

CCC agrees that full cost benefit analyses must be completed, however appropriate and current methods of Cost Benefit Analysis must be used and Input-Output methodologies should not be used.

More than ‘consideration’ needs to be given to environmental impacts to the GBRWHA. Avoidance of impacts, rather than minimisation, must be the first and foremost measure to protect the OUVs, environment and species of the GBRWHA. Environmental protection and prevention of environmental harm must be the priority to inform port development decisions.

Issue 5.9

Point 5 on page 17:

A whole of region approach to offsetting impacts, that cannot be avoided or mitigated, that directs funds to tackle the most significant issues facing the Great Barrier Reef region

Response 5.9

- a) Protection of the environment, species, reef and OUV of the GBRWHA must be of the highest priority and a precautionary approach taken to development (as recommended and concluded by UNESCO). Offsets allow a net loss of biodiversity and habitat to occur to enable development to proceed and often don't deliver the necessary habitat requirements for species and ecosystems directly and indirectly impacted by the development. Offsets are not a solution to impacts – the impacts still occur and there is still a net loss of biodiversity and habitat.
- b) We know what the most significant issues are facing the Great Barrier Reef. Climate Change, declining Water Quality and Coastal Development are recognised in UNESCO's report and the Reef Outlook Report 2009 as some of the key/significant threats or conservation issues for/to the GBR. Port development, particularly for coal and gas export, will increase these particular threats and issues to/of the GBRWHA greatly; there will be direct climate change impacts to the reef from the burning of Queensland's coal and gas (local or export), further declining water quality resulting from increased dredging for ports, reduced quality and quantity of coastal habitat from port and infrastructure development. This needs to be acknowledged and addressed. It is absolute hypocrisy to suggest that offsetting port development impacts will address and '*direct funds to tackle the most significant issues facing the Great Barrier Reef region*' when in actual fact, as suggested earlier, port development and associated development will be increasing the significant threats and issues to the GBR region and decreasing the values and long-term protection and management of the GBR region.

Issue 5.10

Dot point 3 on page 17 states:

“Environmental assessments of port development to have an increasing focus on cumulative impacts including shipping.”

CCC agrees with the principle that Cumulative impacts need to be a focus of Environmental Assessments, however they (cumulative impact assessments in EIS process) have been completed to a very poor standard to date in Queensland. Immediate and urgent focus is necessary, with improved standards.

Response 5.10

Cumulative impact assessments:

- a) Need to be quantitative and qualitative, with a priority and emphasise on quantitative assessment and data. Methods, breadth and standards of Cumulative Impact Assessments need to improve.
- b) Must include the downstream and whole of catchment impacts associated with the export and production of a product (for example coal and gas), such that greenhouse gas emissions (scope 3) and climate change impacts are considered, and the full environmental impacts of mine operations in catchments considered in the assessment (water quality, river diversion, species and habitat loss etc.).

Financial bonds should be considered and put forward by companies undertaking developments and if environmental harm occurs as a result of the development, the bond is retained by government and used for environmental remediation.

Issue 5.11 and Response 5.11

Review of offsets is described in brief on page 19. Of great concern is the focus towards land management and land-based offsets, particularly as port development is occurring in and having impact on the marine and coastal environments. Whilst successful offsets in the marine environment have not been achieved to date, it is of great concern and unacceptable, that impacts to marine environments (such as removal/destruction of seagrass beds and fish habitat) could be offset with land-based ecosystem management, recovery or reconstruction. Loss of seagrass

beds (food for turtles and dugongs) should not be allowed to occur in return for restoration or management of a coastal or terrestrial ecosystem – turtles and dugongs will not receive any benefit and still lose out.

Also of concern is the '*greater flexibility in the offsets regime*' as no information is provided to detail what this greater flexibility is. Please provide this information. The suggested 'streamlined framework' is likely to deliver less outcomes for the environment and an easier approval process for companies to remove habitat and ecosystems that stand in the way of development; such a situation is not supported by CCC.

Principle 3 – Maximise Efficiency throughout the port system

Issue 5.12

Dot point 4 on page 20 states:

“Streamline regulation and environmental assessment and approval processes to provide certainty.”

Response 5.12

Environmental assessment, approval and regulation needs to be strengthened not '*streamlined*' and reduced. Environmental assessment and regulation is to ensure environmental protection. It is not 'red tape'. Environmental protection and prevention of environmental harm must be the priority, particularly in the case of the GBRWHA, endangered or threatened species and ecosystems. Investor certainty should not take priority over environment. Principles of Ecological Sustainable Development (ESD) must be implemented, such that economy and financial investment does not take priority above social and environmental values.

Issue 5.13 and Response 5.13

This section of the Strategy fails to identify current and future infrastructure and port capacity of each port in the GBR, individually and cumulatively. This is appalling for a Strategy. How can efficiency of current ports be maximised if

Please provide detail on export and import statistics for each port (current and future demand), specifications of operations and management, and maps and information on current and proposed infrastructure.

Issue 5.14 and Response 5.14

Efficiency of the port system is necessary to ensure environmental and social impacts of port operation and development are limited.

Ensure this efficiency is of the current port infrastructure and limit development (no new ports or expansions) to provide a long-term conservation measure and plan for the OUV of the GBRWHA.

Conclusion

CCC requests to be included in future consultation on the Queensland Ports Strategy and Queensland GBR Port Strategy development and urges the process be fully referenced and correlated with the GBRMPA Ports position, the Federal Government Port Strategy, the GBR Strategic Assessment, the GBR Outlook report (2014) and the UNESCO World Heritage Committee review.

Yours sincerely,

Chantelle James
Project Officer.



31 December 2012

Department of State Development, Infrastructure and Planning (DSDIP)
Regional Planning
PO Box 15009, CITY EAST, QLD 4002
E: cqregionalplan@dssip.qld.gov.au

Dear Sir/Madam,

Submission - CQ Regional Plan – Feedback on Issues

The Capricorn Conservation Council (CCC) welcomes the opportunity to comment on regional issues that should be addressed in the CQ Regional Plan.

Please find attached a completed copy of the feedback form on behalf of the Capricorn Conservation Council. Further to this completed form, we would like to provide the following comments:

Issues Paper

1. CCC welcomed the opportunity to participate in the CQ Regional Plan workshop held in October 2012, however we were very disappointed and appalled that the themes of Natural Environment, Tourism and Flooding were not workshopped at this meeting.
CCC seeks advice from the Department (DSDIP) on when these particular 'themes' will be considered, and when the public and stakeholders will be given the opportunity to comment on these?
2. The copy of the Draft Issues paper that CCC was provided with at the October Workshop, had a significant number of pages that were not provided/omitted (pages 4, 6,7,8,11,13, 14, 17, 19, 23-31, 33-42). This included the omission of Appendices B, C and D which contain a record of the issues from local government, industry and community and State Agencies. CCC seeks to receive a full copy of the issues paper and a subsequent second opportunity to comment on this.
3. Themes (section 4, page 5)
 - a. Water Quality and availability deserve their own 'theme' area as water is essential to life and both quality and availability/quantity are a limiting factor to the health of the environment, people, wildlife, agriculture and any type of development.
4. Resources (section 4.3, page 10)
 - a. The Priority Issues identified here are limited and we suggest they be expanded to include:
 - i. Cumulative impacts to agricultural productivity and loss of land and water as a direct result of resource sector, mining and associated infrastructure projects and development (such as pipes, railway, roads etc);
 - ii. Cumulative impacts to and loss of endangered/threatened/vulnerable Ecological Communities, species, high value wetlands, conservation lands and World Heritage Areas as a direct result of resource sector, mining and associated infrastructure projects and development (such as pipes, railway, roads etc);
 - iii. The financial impacts and social and community changes imposed upon regional towns and communities as a result of resource sector 'boom' and

influences. Issues such as large price increases to services and accommodation due to large salaries of resource sector employees in area, and reduced affordability or availability of services and accommodation due to resource sector influences (tourists, tourism, agriculture, small business and non-resource sector miss out and have to try and compete with resource sector).

- iv. Renewable energy resource sector –solar thermal and wind for regional power generation.

5. Natural Environment (section 4.6, page 15)

- a. The Context is limited and does nothing to describe the natural environment of Central Queensland. In fact a third of the content is focussed on the Strategic Assessment. The context needs to be expanded to list and identify significant natural and cultural assets of Central Queensland. This should include areas, species and ecosystems and wetlands and waterways.
- b. The dot points identified in the Response are limited and ineffective to provide any guarantee of protection of the natural environment and its values, species, ecosystems, areas, functions and services:
 - i. Mapping the World Heritage Area and MNES areas in the region should already be known or completed, however, mapping them is only a starting point. Taking action to protect them from development is what is important and what is required. Maps don't protect – actions to protect do.
 - ii. Environmental and scenic amenity corridors are a starting point, however large tracts of biodiversity need to be set aside for nature conservation purposes and protected from development (on public and private land).
 - iii. Nature Refuges and conservation areas need to be protected and exempt from mining and petroleum exploration and activities (i.e. no go areas).

Yours sincerely,

Chantelle James
Project Officer.



Regional Plan Feedback Form

Your views are important to us. Your feedback will help in the preparation of the regional plan.

Q1. I am happy with the key themes currently being considered for my region in the Draft Regional Plan Issues Paper (liveability, economic, agriculture, resources, tourism, infrastructure, natural environment, flooding).

Disagree

Q2. Do you think any critical regional issue/s have been missed?

Yes – (please detail) _

The information provided on the DSDIP website and the six pdf documents available for download, do not clearly identify the 'issues' of the CQ region. The only place I could find any reference to 'ISSUES' was in the *'Have your say'* section of the website; which included liveability, economic development, agriculture, resources, tourism, infrastructure, the natural environment and flooding. Yet these exact same words are used as 'themes' for OUTCOMES? This is poor use of the English language and poor communication for a regional plan.

Some major themes that have not been considered, and should be, are:

- Water quality and availability – with a high priority for towns (community), public health, environment and agriculture. Flooding would fall in to this category. Resource (mining and gas) industry should be given a low priority for water allocation from rivers and storage and be heavily regulated for water quality in relation to discharges of contaminated water into surface, ground and river waters.
- Community – This is more encompassing of all people living in towns, cities and regions, irrespective of their work area/sector, and should be used instead of 'liveability'. 'Liveability' does not deal with real issues, needs and aspirations of the people in a community.... And what is it by definition? And who decides the criteria of 'liveability'?
- Soil health and productivity – this is relevant across the agricultural, natural environment and resources sector. Of particular concern is that good soils for agriculture, forests and woodlands (nature conservation), are being destroyed and their nutrient and biological balance turned



upside down for and by the mining resource sector. Rehabilitation of mine sites in

CQ can and does not replace what has been removed or destroyed to

- Renewable energy – CQ needs to make a transition from a fossil fuel based energy dominated sector to a renewable energy dominated sector – our climate, our future, our water, health and environment will be depending on it.

3. What are the three most important issues/themes you believe should be addressed in the regional plan?

i) **Water quality & quantity** (of surface, groundwater, riverine and marine) for environmental health and human health is vital and essential to our future. Environmental flows are important for CQ's freshwater and marine and estuarine ecosystems . Coal seam gas production and its polluted water, polluted mine water discharges, more dams and weirs for coal and gas and industry, and competition of water between mining industry and agriculture, community and environment, are just some of the issues that are threatening the health and quality and availability of our natural water systems.

ii) **Natural Environment** – CQ has an amazing natural landscape and environment, which our tourism and agricultural and fishing industries depend upon. Endangered and threatened ecological communities and species need to be protected outright from development (mitigating and offsetting does not protect – there is still an unacceptable net loss). Mining has a higher priority than nature conservation – this is not acceptable and needs to be reversed (natural environment and agriculture higher priority than mining) now for a future that respects and protects our beautiful natural environment.

iii) **Agriculture** – our agricultural lands and farmers need to be treated with respect and protection and priority given to agriculture above mining and resource sector.

iv) **Renewable energy** development of this energy sector must be a priority above coal and gas development – a safer, cleaner future for the health of our communities and our environment in CQ.

Q4. Do you have any ideas about how the regional plan could respond to these issues?

i) No new weirs or dams. No new coal mines. No CSG. No discharge of coal seam gas water (even if it is treated) in to CQ waterways. Higher value and priority placed on water for public health, environment, agriculture and community above industry. Coal mine contaminated water to be treated



by reverse osmosis and strict monitoring and regulations implemented prior to any discharges to waterways.

ii) Do not allow mining (petroleum, mineral, gas or coal) in or underneath Nature Refuges, Nature Conservation areas, National Parks, Conservation Parks. Protect endangered, vulnerable, rare and threatened (EVRT) species and communities/ecosystems (state and federal) by not allowing any further removal or alteration of the habitat of EVRT species or ecosystems for development (mitigation and offsetting are not solutions – protect means protect). Mine voids are legally required to be backfilled by companies so that no final voids exist in the landscape. Complete a thorough cumulative impact assessment on creeks, rivers and EVRT species and communities in CQ. _____

iii) _____

Q5. What do you consider to be the three major land use conflicts in your region?

i) Agriculture and mining (coal, gas and petroleum) _____

ii) Nature & biodiversity conservation and mining (coal, gas, petroleum and ports) _____

iii) Proposed dams & weirs and Nature & biodiversity conservation _____

Q6. Do you have any ideas about how the regional plan could respond to these land use conflicts?

i) Refer to responses to question 4

ii) _____

iii) _____

Q7. It is important to encourage and facilitate regional economic development.

Disagree

The model of continued economic growth is flawed. Principles of Ecological Sustainable Development (ESD) must be upheld and implemented in the CQ regional plan. Focusing totally on economy, as is what is being done here, is totally flawed and set to ensure the collapse of natural and social and cultural systems which support human existence. Money cannot be eaten. There is greater value in the preservation of our environment and social and cultural structure.



Q8. What do you consider are the three most significant factors affecting (positively or negatively) economic development in the region?

i) The single minded attitude and focus on ECONOMY and ECONOMICS in relation to DEVELOPMENT. ENVIRONMENT, SOCIETY/SOCIAL & CULTURE/CULTURAL must also be considered in relation to development by way of implementing existing principles of Ecological Sustainable Development. Economy does not exist without our environment, our people, our culture. Implement Ecological Sustainable Development (ESD) not Economic Development alone. _____

ii) _____

iii) _____

Q9. What do you consider are the three most significant infrastructure challenges in the region?

i) Ports - Consolidate and cap port development to current infrastructure in Gladstone. No coal ports in Fitzroy Delta. No new coal or LNG facilities in Gladstone, other than that which is already approved.

ii) Water - No more dams and weirs in the Fitzroy River system. Protect the Fitzroy River Turtle and other EVRT species and communities by working smarter with our current water allocations and uses.

iii) _____

Q10. Do you have any further comments in relation to the issues paper or the regional plan?

- The 'issues paper' is not available to the public – it is not available on the website for download or viewing and as far as we are aware, not available on public display at the local DSDIP office in Rockhampton. The public are not able to answer this question about the 'issues paper' because it is not readily available (and this is not acceptable).
- CCC was fortunate (and appreciates) the invite to attend a workshop in October, which was attended by Mr Michael McCabe. Fortunately a copy of the draft issues paper was received at this workshop meeting, however, this was not the document in its entirety (please refer to our letter for further details).



The following information will assist in analysing the responses received.

Region:

Central Queensland

City/Town of residence: _N/A – community environmental group in CQ

Submitter type:

Community group

Personal Details (Optional)

Name: ___ Capricorn Conservation Council (CCC) – Chantelle James

Postal Address: PO Box 4011 Rockhampton Q 4700 _____

Email Address: ccc@cqnet.com.au



30 April 2012

Strategic Assessment Project
Great Barrier Reef Marine Park Authority
PO Box 1379
TOWNSVILLE QLD 4810

Email: sap@gbmpa.gov.au

Attention Bronwyn Holden

Draft Terms of Reference Recommendations

Capricorn Conservation Council welcomes the opportunity to participate in the Great Barrier Reef World Heritage Area and adjacent coastal zone strategic assessment. The Capricorn Conservation Council Inc. (CCC) is the principle not-for-profit environment organisation in Central Queensland. CCC was founded in 1973 and has been actively campaigning on regional environmental issues ever since. Thank you for the opportunity to comment and make recommendations on the Draft Terms of Reference.

CCC strongly supported the advances made since the introduction of Australian and Queensland Government legislation and management agencies to protect the Great Barrier Reef and catchments. We play an active role on a range of consultative groups such as GBRMPA Local Marine Advisory Committee, Shoalwater Bay Training Area Environmental Advisory Committee, Fitzroy Water Quality Advisory Group, Gladstone Harbour Fish Health/Water Quality Extended Oversight Committee and many others. CCC is concerned that the current and planned surge in coal mining, coal seam gas, port expansion, increased shipping and coastal urban growth will overwhelm the ecological resilience of the Great Barrier Reef. In the central Queensland region, despite 45 years industrial expansion around Gladstone the coastline North and South is still relatively undisturbed with only small towns, national parks, low intensity grazing lands.

Overall, the Draft Terms of Reference are very basic for such an important review. The content and the length of the document was far less than CCC was expecting for a Terms of Reference (ToR) for the iconic and WHA of the GBR and its adjacent catchment areas, when it is compared to a Terms of Reference for an Environmental Impact Assessment.

The attached document describes the range of issues which CCC considers must be considered in the Strategic Assessment. For example, the massive expansion of coal mining (new and expanding coal mines) in the Fitzroy River Basin/Catchment and the five to six mega mines proposed in the 'Galilee Coal Basin' or the upper reaches of the Burdekin River Basin/Catchment, will have a major impact on the downstream water quality to the Reef and WHA in these catchments, yet I believe would not be considered under the coastal management framework. Cumulatively, coal and gas projects and other major developments will have a major impact to the reef and WHA by way of water quality and climate change impacts (scope 3 emissions from the removal and export of coal and gas in Queensland).

Furthermore, the ToR and the reports of the GBR Strategic Assessment should include the identification, analysis and assessment of direct and indirect environmental impacts from past, current and future developments, including their climate change impacts with scope three greenhouse gas emissions, on the GBRWHA.

Recommendations:

1. That 'the Program' be expanded to include the consideration of urban, industrial, mining and port developments within Great Barrier Reef catchments and their impacts to the GBR and WHA.
2. That 'the Program' ensure the inclusion and consideration of scope three greenhouse gas emissions in assessments and the report, and the subsequent direct and indirect impacts to the Reef and WHA from climate change resulting from these scope three emissions.
3. There needs to be a greater focus on assessing base line ecological conditions to improve the predictive nature of the EIS process.
4. Monitoring and compliance with EIS conditions is extremely fragmented between State and federal agencies as well as the self regulation of industry. A more rigorous, transparent and scientifically peer reviewed process is needed.
5. Requests for data (e.g. species demographic monitoring and water quality monitoring) may be specified in approved conditions but are often thwarted by insistence requests go through FOI/RTI processes which are cumbersome and costly for all parties). Conditions relating to access to information need to improve.
6. Projects already announced should be included under the Strategic Assessment
7. Conditions on approved projects need to have strengthened capacity to halt, delay or permanently cease projects if ecological harm or risks emerge.

1. Purpose and description of the program

Recommendations:

The geographic extent to which the strategic assessment applies must include Great Barrier Reef Catchment areas, including those catchments that do not have water quality arrangements. CCC would like to see the inclusion particularly of the following catchments, but not limited to these, of the following creeks and rivers: Fitzroy River and associated coastal creeks and rivers such as Boyne River, Calliope River, Waterpark Creek, Styx and Herbert Rivers: Burdekin River: Whitsunday and Mackay regional rivers/creeks.

The ToR fails to identify the applicability of 'avoidance of impacts' as a first priority. It also fails to identify current approved projects that should be assessed and audited as example, test or demonstration cases of 'The Program' and the approved projects themselves, to avoid, mitigate and offset impacts appropriately and if the mitigation or offsets have actually been achieved, delivered, failed or require improvement. Gladstone and Port Curtis area and the subsequent approved LNG facilities and Western Basin dredging project should be included in this 'audit' and assessment of demonstration/test cases; this is vitally important to show failures and successes given the 5 other port proposals currently in the development assessment process within the GBRWHA.

Recommendations:

Avoidance of Impacts must be given the utmost priority in the ToR and report. The report should identify and describe the success or failure of 'the program' and projects to date, that have 'avoided' impacts, rather than just mitigating or offsetting. A percentage figure of projects assessed in the past that have 'avoided' all impacts must be provided, along with a percentage of that each for mitigating, offsetting and adaptive management.

Include multiple demonstration or test cases of current approved projects in port, urban and industrial project fields, and how successful they have been at avoiding, mitigating, offsetting and adaptive management. The 3 approved LNG facilities on Curtis Island and the Western Basin Dredging and Disposal Project in Gladstone Harbour must be included as a priority demonstration case for port developments.

2.4 Demonstration of the program

CCC finds the requirement of a minimum of one demonstration case to test the effectiveness of 'the program' to be totally inadequate. Rather than only two cases, as suggested in the existing draft ToR (to assess a regional or local plan and a development area (state)), there should be two or more demonstration cases per Reef Catchment flowing to the GBRWHA. As there are 6 regional NRM bodies that 'manage' catchment areas that flow to the GBRWHA, and if these boundaries are utilised as the 'framework', then this requires a minimum of 12 demonstration cases. Major development projects in Gladstone and on Curtis Island that are approved and in construction phase within the WHA (including the three LNG (Liquefied Natural Gas) facilities and the Western Basin Dredging and Disposal Project), must be included as demonstration cases in the Strategic Assessment. Tourism demonstration cases should also be included.

Recommendations:

The Western Basin Dredging and Disposal Project and all 3 LNG facilities already approved under the EPBC Act and Queensland legislation with numerous conditions for mitigation and offset and adaptive management of impacts, must be included as demonstration cases for port development and a state development area and urban development. These demonstration cases must be an 'audit' of the effectiveness of 'the program', the EPBC Act and other legislation, policy and programs, to adequately monitor and manage compliance with conditions to mitigate, offset and adaptively manage impacts to the GBRWHA of these already approved and 'in progress' projects. The 'legacy' issues of past and current industrial, agriculture and urban development and operation, must be considered and analysed and interpreted in the demonstration cases for Port Curtis/Gladstone, particularly pollutant and eco-toxic substances within marine and estuarine sediments and the water column. Naturally occurring 'legacies' such as acid sulphate soils should also be considered, analysed and interpreted.

The Broadsound, Shoalwater, Capricorn Coast and Fitzroy River Delta area must be included in the demonstration cases and compared to the demonstration cases identified above at Gladstone and Curtis Coast (or Port Curtis), particularly for proposed port facilities in the Fitzroy Delta.

Demonstration case studies must be undertaken in each Reef catchment area flowing to the Great Barrier Reef WHA, for a tourism project, urban project, port project and industrial project. It is strongly suggested that the catchment boundaries of regional NRM bodies flowing to the Reef (there are 6 of these) are used to identify 'Reef catchment' areas, as these areas have already been utilised for implementation other Reef based catchment and water quality programs. A minimum of two demonstration cases should be included for each 'Reef catchment'. Tourism projects must also be included in the demonstration case studies.

4. Adaptive Management

The concept of adaptive management, and what appears to be a reliance on being able to 'fix' or adapt to an incidence of environmental harm resulting from inappropriate or inadequate avoidance and mitigation, is of great concern to CCC. We believe that adaptive management is inadequate to provide for environmental and biodiversity conservation protection measures; in many cases it may be too late to 'adapt' for environmental protection and biodiversity once the

'action' is implemented or undertaken and the 'harm' or 'impact' is irreversible.....leaving our environment, flora and fauna, and people to suffer the consequences and ultimately lose out on protection and conservation.

Recommendations:

Adaptive Management must be clearly stated as a 'last resort' in the priority of decision making using the "key steps for achieving positive outcome for MNES" (as identified in figure 1 of the document titled 'A Guide to undertaking Strategic Assessments') in managing for direct, indirect and cumulative environmental and biodiversity conservation impacts from development projects, and in the Strategic Assessment process.

Priority must be given to and every effort must be made to avoid impacts first and foremost, and figure 1 (A guide to undertaking Strategic Assessment) should be considered a hierarchy of management decisions to proposed actions. Higher consequences in compliance and legislation should be given to projects that take the lower priority and higher risk of 'adaptive management'.

7. Endorsement criteria

Improvement is required to the language and consideration of exactly what the Minister regards in relation to how the program meets the objects of the EPBC Act when determining his/her decision on whether to endorse the program or not.

Improvement is also required in the consideration by the Minister of how the program identifies direct, indirect and cumulative impacts on MNES, and how they are avoided, mitigated and offset. Again, we express the same concerns regarding 'adaptive management' as discussed above under the heading of item 4. Adaptive management.

Recommendations:

Prior to determining whether or not to endorse the program, the minister must also have regard to the implementation and provision of (and not just promotion of) ecologically sustainable development, conservation of biodiversity, the environment, and protection of conservation and heritage, when considering the extent to which 'the program' meets the objects of the EPBC Act.

Adaptive Management must be clearly stated as a 'last resort' in the priority of decision making using the "key steps for achieving positive outcome for MNES" (as identified in figure 1 of the document titled 'A Guide to undertaking Strategic Assessments') in managing for direct, indirect and cumulative environmental and biodiversity conservation impacts from development projects, and in the Strategic Assessment process. Priority must be given to and every effort must be made to avoid impacts first and foremost, and figure 1 (A guide to undertaking Strategic Assessment) should be considered a hierarchy of management decisions to proposed actions. Higher consequences in compliance and legislation should be given to projects that take the lower priority and higher risk of 'adaptive management'.

The Minister should consider the proposed hierarchy of management decisions outlined above, when considering how 'the program' and legislation, policy and programs address direct, indirect and cumulative impacts.

Further general comments

Despite conditioning of projects through the EIS process to reduce and mitigate environmental impacts, there needs to be more rigour provided in monitoring and compliance over the 'conditions' of approved and proposed projects assessed under the Environmental Impact Assessment Process and the Strategic Assessment process.

Recommendations:

The ToR and report for the GBR Strategic Assessment must include a more rigorous monitoring and compliance procedure and system in relation to environmental approvals and conditions. Population growth and tourism developments must also be considered in the Strategic Assessment and a community consultation process must be identified and implemented through all stages of the Strategic Assessment.

In closure, we would like to identify and uphold our support of the issues, concerns and recommendations identified in the Queensland Conservation Council's (QCC) submission on the ToR for the Coastal component of the GBRWHA Strategic Assessment

Michael McCabe
Coordinator

Chantelle James
Project Officer

Appendix:**MATTERS OF ENVIRONMENTAL SIGNIFICANCE to the GBR - Capricorn Region**

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Matters of environmental significance to the Great Barrier Reef in the Capricorn Region

BROADSOUND/SHOALWATER BAY – GBRMP MPZ-15

The coastal area from the township of Clairview to the Torilla Peninsula has little in the way of intensive agriculture and industry, being south of the sugar cane growing areas. This area contains the Clairview Dugong Protection Area, large productive tidal estuaries and off-shore the hundreds of island and outcrops of the Northumberland Group. The area protected to a degree from the massive sediment plumes from major rivers such as occurred in 2011 and is critical as a refuge for aquatic species. Wild Duck Island and its critical nesting sites for Flatback Turtle (*Natator depressus*) has suffered damage from inappropriate and failed tourism operations.

There has been significant clearing of coastal native vegetation and introduction of exotic pasture grasses for beef production until recent years. A significant shift is occurring in coastal grazing practices towards better manage soil health, maintaining ground cover, sustainable stocking regimes, transition to sustainable stocking rates and organic beef and protection of riparian zones and wetlands. While these changes have improved the water quality and connectivity of streams and wetlands entering the GBR lagoon there is still much to do to ensure the ecological resilience of the area. Former practices of ponded pasture (using invasive exotic grasses) and installation of tidal banks and other barriers like road and rail corridors are still impacting on the connectivity of freshwater systems and the GBR intertidal areas.

CCC believes more should be done to ensure land management practices continue to be improved for example to reduce cattle grazing on important wetlands at St Lawrence. Major barriers to fish migration are still in place on many streams reducing the capacity of our many catadromous fish species (salt water spawning/freshwater maturation) to sustain fish populations in the Southern Great Barrier Reef. CCC believes the area is unsuitable for intensive agricultural industries such as expansion of sugar cane growing, beef feedlots or aquaculture because of the risk of further loss of riparian vegetation, fresh and intertidal wetlands, or harmful run-off to this reasonable well protected stretch of the GBR Marine Park. Fringing reef along sections of mainland and inshore islands including the islands of Broadsound have the highest tide range in Queensland (8 metres plus). CCC is sponsoring a three year survey with Birds Australia (Birdlife Australia) of shorebird roosts in Broadsound to complement work done by the Fitzroy Basin Association and Wetlands International. This area is absolutely critical for migratory and local shorebirds, especially given the massive coastal developments elsewhere along the GBR coast.

SHOALWATER BAY TRAINING AREA– GBRMP MPZ-15

This area (total 453 000 Ha, of which 164 000 Ha is marine environment) is managed for dual use, defence and conservation. In the past there have been many proposals for sand mining, port and industrial developments. The management of such a large diverse area with conflicting goals creates considerable challenges. The chief conservation concerns relate to feral animal control, ecologically sustainable fire management regimes, noxious weeds, endangered plants and animals communities, erosion control, fish habitats, turtle and Dugong protection.

While CCC is generally satisfied with the environmental management efforts, there has not been a comprehensive review of state of the environment of Shoalwater Bay Training Area (SBTA) since 2008.

Some wildfires of control burns have damaged areas and a new fire management regime is being put in place. Illegal fishing, especially netting which can drown turtles and Dugong, needs extra surveillance, more so between military exercises when aerial monitoring is less frequent.

The main concern CCC has expressed is the increased use of SBTA. There is now an annual rolling series of Australia Defence Force, (Exercise Hamel), Singapore Airforce/Army (Exercise Wallaby) and the large joint bi-annual exercises with the US and New Zealand (Talisman Sabre). The shorter gaps between exercises combined with recent highly variable weather patterns, long dry spells and record wet years, has put unreasonable pressure on the environmental managers of the area. Enforcement of sector closures, fire management, feral animal and weeds control programs have to compete with the demand for the increased military training use.

The SBTA represents the largest, mostly intact land and sea ecosystem of the Southern Great Barrier Reef. It's use for military training while intense, currently protects the area from mining, ports, and coastal urban and industrial expansion. CCC considers that an update review of the state of its environment is necessary, along with an independent scientific assessment of long term environmental management practices, given predictions of greater climatic variability and potential for increased storm surge and coastal erosion events.

EMERGING THREAT- GBRMP MPZ-15

Coal and unconventional gas and possible shale oil exploration is occurring throughout the Broadsound-Shoalwater area. There are enormous problems (some suggest impossibility) of managing mine rehabilitation to anything approximating a return to productive agriculture or nature conservation in the fragile and often sodic soils of the nearby Bowen Basin. Other problems have been managing mine water discharge, flooding of pits during major rain, flood events, stream diversion, lack of suitable 'off-set' areas for lost vegetation communities, permanent large final voids, dissection of the landscape with rail and pipeline corridors. These problems would be magnified if coal mining and major coals seam gas (CSG) production was allowed in the Broadsound-Shoalwater coastal area. While government agencies claim that 'adaptive management' practices and the 'precautionary principle' are applied to mining and gas approvals, CCC considers that the encroachment of such activities onto the coastal plain adjacent to the Great Barrier Reef Marine Park and World Heritage Area pose an unacceptable risk of permanent ecological harm.

BYFIELD- GBRMP MPZ-16

Immediately south of the SBTA in the Byfield National Park, small communities and farms, as well as a large exotic pine plantation run by Forest Plantations Queensland Pty Ltd (formerly State owned). Aside from the extensive clearing of coastal heathland communities and sclerophyll forests for pine plantations the area is largely intact ecologically. The main impacts are from increasing access to remote beaches and dunal systems from people using 4 wheel drive vehicles. While this impact is reasonable well managed under the Byfield Area Management Plan

(Queensland Parks and Wildlife Service), there has been damage to vegetation, disturbance to vulnerable species like the Beach Stone Curlew *Esacus magnirostris*, and waste disposal problems.

Similar to the Broadsound Coast, there are extensive coal exploration permits in the area. The catchment of Corio Bay is fed by deep sandy aquifers and would be highly prone to damage from mine exploration and definitely from coal mining if ever it was approved. The Federal Government recently rejected a proposal for a coal export terminal and rail corridor through the area, noting its environmental sensitivity and importance. CCC considers that this area should not be mined due to potential for destruction of the Corio Bay catchment and estuary.

Extraction for urban water supplies for the growing population of the Capricorn Coast was reducing freshwater flows from the sandy aquifers and causing intrusion of the saline estuary and mangroves into coastal rainforest. This risk has been mitigated by the construction of a pipeline from the Fitzroy River Barrage to the Capricorn Coast. Corio Bay and surrounding intertidal and supratidal are extremely valuable habitats for aquatic and terrestrial species. Corio is protected on the northern side by National Park but the western and southern catchments are vulnerable to inappropriate human activities. In the 1970s significant tidal barriers were created reducing the extent and interconnectivity of extremely important freshwater and saline ecosystems. Illegal clearing of vegetation by both commercial entities and recreational visitors still occurs despite the best efforts of government agencies to monitor the area.

Recreational 4 wheel drive vehicles are permitted access along Farnborough Beach which forms the seaward side and dunal protection for the southern part of Corio Bay. Beach driving access is lightly regulated and there is no limit of numbers or vehicles. A combination of storm surges, illegal cutting of trees and beach driving appears to be the cause of the loss of up to 500 metres of Sandy Point in recent years. The increasing traffic of heavy vehicles puts stress on the microscopic sand dwelling biota essential for beach stability. Dunes and dunal vegetation are being damaged, reducing the stability of the easterly protection for the critical fish habitat of Fishing Creek. Recent experience with tropical cyclone 'Yasi' (category 5) has demonstrated the risk to coastal ecosystems from major storm surges. Conversely, intact vegetated dunes, mangroves and stable beaches offer protection and assist rapid recovery of natural coastal systems. If Corio Bay and adjacent areas are damaged or substantially altered through inappropriate developments and human activities, it would be a severe loss to the biodiversity of Keppel Bay and the inshore water of the Southern Great Barrier Reef.

KEPPEL BAY – GBRMP MPZ-17

While there continues to be steady urban growth the beaches, estuaries, coastal vegetation communities and in-shore waters remain relatively intact ecologically. There have been some inappropriate residential projects which have built on 'reclaimed' intertidal salt flats (e.g. Coorooman Creek). Continuation of such practices would progressively lessen the sediment trapping, nutritional storage/exchange ecosystems services of these areas. The Queensland Coastal plan has now been released and if applied fully and effectively across whole of government planning and decision making should assist in minimising further loss of important habitats. Against this is enormous pressure from developers and so called 'sea-changers' seeking beach front or nearby land for housing. CCC considers that more needs to be done to fully engage

the community in understand coastal management priorities and practices and to accept the best available science about predicted increases in sea level and storm surge events.

KEPPEL BAY ISLANDS – GBRMP MPZ-17

Most of the islands of Keppel Bay are protected as national parks or appropriate GBR Marine Park zonings. The major concern from CCC is that there is insufficient investment in scientific study of the Bay, Islands and reefs. Keppel Bay supports a small commercial fishing /pawning industry and is an important base for such activities on the Swain Reefs. The lack of comprehensive base line data and continuous assessment of marine health creates uncertainty about the sustainability of fish stocks. Like the rest of the Queensland coast, the Capricorn Coast has an ever increasing increase in recreational boating and fishers. With the projected growth in population and proportionate rate increase in boating, recreational and commercial fishing, CCC is concerned that we don't have enough knowledge to avoid a collapse in fish stock or key species. Sharks are routinely taken on fixed 'drum-lines' off swimming beaches, more as a public relations exercise than effective protection against possible human shark attack. In the past ten years the take has roughly halved and fishery agencies have no current explanation for the trend. Commercial shark fishing still occurs but CCC considers more thorough study is required into the sustainability of the industry and the ecological impacts of selectively targeting key species of high order predators.

GREAT KEPPEL ISLANDS – GBRMP MPZ-17

Great Keppel Island - GKI (Woppa in the language of traditional owners the Woppaburra People) is the largest island in the Keppel group. The removal of the Woppaburra People and grazing substantially changed the environment of the island and surrounding waters and reefs. There are estimated to be over 300 feral goats damaging native vegetation and causing erosion of the fragile soils into the waters of the fringing reefs. The majority of the island (known as Lot 21) is covered in intact or substantially regrown native forests. Tracks and exposed areas are infested with noxious weeds such as Rubber vine and Lantana. A succession of tourism ventures has heavily impacted on the western shores of GKI which currently has an abandoned resort being considered for re-development, a small airstrip, small tourist/backpacker operations and some freehold shops and houses. CCC has been arguing for better environmental management of GKI for 30 years. Only small sections of surrounding waters are mapped as a GBRMP Conservation Zone.

CCC supports the Queensland Government's own assessment that the state owned leasehold lands on GKI should be kept intact and protected under the Nature Conservation Act (National or Conservation Park). The current proposal by GKI Resort Pty Ltd (Tower Holding) is awaiting environmental impact assessment and, if approved, would involve the demolition of the old resort, rebuilding of a 250 bed hotel, dredging and construction of a 250 berth marina, construction of 1050 residences and a golf course.

The proponents estimate *'an average of around 2,360 visitors, staff and residents on the Island each day, totalling around 860,000 person days per year'*. Contrast this with the much larger Hinchinbrook Island in the northern part of the GBR which restricts walking /camping permits to 40 and houses a small 50 bed resort. GKI and surrounding reefs and waters are too important as unique examples of southern GBR ecological communities to be 'loved to death' as (WHA listed) Fraser Island the world's largest sand island to the south, is described.

CCC fully supports environmentally sensitive redevelopment of the resort and accepts that some form of improved marine facilities would assist visitors accessing GKI. CCC considers that dredging the shallow Putney Beach for a marina would destroy the fringing corals, sea grass beds and threaten the water quality and nutritional values of the nearby deep channels and the reefs of the nearby islands (Middle, Miall). Clearing of bushland for roads, golf course and residences on Lot 21 would cause significant damage to the terrestrial ecosystem, and create the risk of erosion and contamination of the two major creeks and intertidal wetland (Putney and Leekes).

GKI supports a range of vulnerable species and is an important example of a terrestrial ecosystem of a rocky island in the Southern GBR. The coral communities and associated species of the Keppels present a special representation of inshore fringing reefs in the Southern GBR. Their in-shore location under the influence of discharges from the Fitzroy River, the largest flowing into the GBR lagoon, makes them quite special. Major floods impact heavily on the corals with the influx of fresh water (The 2011 flood event exceeded 40 Gigalitres) and the accompanying sediment load carrying high levels of nutrient and contamination from agricultural run-off and mine discharges.

Like other areas (Stanage Bay, Inshore Islands of Broadsound) the hard and soft coral communities of Keppel Bay are highly tolerant of the tidally induced turbidity. These coral communities have survived and adapted to the historical flows from the Fitzroy but are struggling to recover a year after the 2011 event. CCC considers that much more data and long term study is needed to understand the influences on coral community resilience and capacity to adapt to probable changes in sea temperature and pH, storm and flood event frequency and severity and increasing human activities.

CCC has been seeking support to better manage activities such as the sustainability of coral and marine life collecting for the aquarium trade. While the Keppels are currently subject to a voluntary aquarium industry moratorium due to the poor recovery after the 2011 floods, CCC considers it inappropriate to take coral and selected species of fish and marine life from the accessible reefs in Keppel Bay. This appears to be in total contradiction to the 'multiple use' principles of the GBR.

Low impact tourism around the Keppels to view intact reefs (at least once they recover) would rate more highly under ecological sustainability principles than taking of live coral specimens and fish for an uncertain fate in the aquarium supply chain.

Increasing recreational boating and resultant anchor damage is a problem around popular fishing spots and preferred island camping sites. CCC accepts there have been efforts to create 'no anchor' zones and educate the boating public but much more need to be done as recreational boating increases. When the former GKI resort was operating there was strong evidence of increased boat strike on turtles especially from the high speed jet-skis.

FITZROY RIVER & DELTA – GBRMP MPZ-17

The GBR World Heritage Area covers the Fitzroy Estuary tidal wetlands and surrounding areas. The effective length of the estuary was roughly halved around forty years ago by the construction of a

tidal barrage to provide Rockhampton with a reliable freshwater supply. Despite the installation of a fishway the barrage creates a significant barrier to fish migration and a substantial reduction in the size of the estuarine habitat. Little is understood about the changes to aquatic biodiversity as the project was completed before the more rigorous environmental assessments required today. Anecdotally, the variety of fish in the freshwater sections has significantly reduced and the main species now evident are catfish. Fortunately big flood events such as in 2011 allow the Fitzroy to flow around the obstruction of the Barrage and allow migrating fish to swim upstream into freshwater refugia.

Studies have shown changes to the deposition of silt in the river from activities such as the extensive clearing of Brigalow scrub from the 1960 (now controlled under the vegetation Management Act). Other 'natural' changes to the River have been the 1991 flood eroding through a narrow isthmus and reducing and changing the flow patterns and silt deposition in the delta. The only other industry currently around the delta (apart from commercial fishing) is for salt production. While this activity does have a negative ecological affect the current footprint is reasonable in proportion to the remaining areas of intertidal salt flats. CCC is concerned that very large adjacent areas are under mineral (salt) mining exploration leases and if fully exploited the loss of ecosystem services would be immense.

These events and activities are mentioned as they are relevant to the current proposals to totally change the character and environment of the Delta through installation of multiple coal ports. While there has been shipping in the Fitzroy and Delta since European settlement in the 1860s, the current port caters for a limited number of small vessels which require minimal maintenance dredging. There are currently two port proposals being considered and a third, potentially the largest of all, remains part of a 'strategic plan'.

The first current port proposals for Balaclava Island Coal Export Terminal (BICET) would require a rail corridor across tidal creeks and marine plains, coal stockpiles adjacent to a tidal estuary, and major causeway across intertidal wetlands, potential loss of endangered coastal beach scrub, and a major dredging program (>6.5 million m³).

The proposed dredging is in the preferred habitat (most frequently sightings) of the Australian Snub-fin Dolphin, Australia's, only endemic dolphin; identified as a separate species in 2005. The species is shy and highly prone to disturbance from boat movements. The Snub-fin is a specialised river delta animal and the Fitzroy is the known limit of its south-eastern range. Little is known about the Dolphin, though the population in the Fitzroy delta have been found to be genetically isolated from North Queensland populations. Any reasonable application of the precautionary principle would suggest that destructive activities of major ports, dredging and shipping major should not be allowed and certainly not without very substantial research.

Studies by Danielle Cagnazzi of Southern Cross University, spanning some 5 or more years in the CQ coastal environment, have indicated there are less than 100 individuals in the Delta and little is known about its breeding success. CCC considers this isolated population must be protected at the highest possible level by government and community, and the way to do this is to actively protect their habitat (riverine/delta/coastal) from any proposed or future development. If any of the

proposed coal port developments are approved by our government/s, then this will likely bring about extinction of the Snub-fin Dolphin in the Fitzroy River. Their population is far too small to cope with the destruction and disruption to their habitat (and that of fish species which they feed upon) from proposed capital and maintenance dredging, increased shipping traffic and increased noise and light levels.

This is an isolated population that is not known to migrate or to interbreed with other geographically located populations. The Fitzroy River Snub-fin Dolphin population size, low genetic diversity and isolation is likely to reduce its resilience to survive, or adapt to, activities that substantially change the delta's ecosystem and habitat, such as anthropocentric development proposals for coal ports and climate change. The continuance of the species in GBR waters will depend on the survival of such isolated populations. The next known population of Snub-fin Dolphins is some 500+km north of the Fitzroy River. CCC is very concerned that the Australian Snub-fin Dolphin is still not correctly assessed and listed under environmental protection laws, and is still referred to as a migratory Irrawaddy Dolphin in environmental impact assessments.

The Fitzroy Terminal Project (FTP) proposes to operate 10 000 tonne coal barges on a 24 hour 7 day week cycle to transhippers moored in deeper waters off Curtis Island to load the larger bulk ships. The full details of the project have not yet been released but initial indication are that there would be less need to dredge the Delta, only a section of Raglan Creek near the barge loading facility. While proposing less dredging than BICET, the proposal would mean far greater movement of large vessels through the same channel frequented by the Snub-fin Dolphin. Again the potential for disturbance and reduced consequent reduced breeding success could create unacceptable risk of a population collapse. CCC is aware of no successful protection programs for the world's rare river dolphin, through relocation or habitat offsets which are the type of environmental conditions suggested for other port approvals in the GBR region. The FTP proposal suggests that the sea and wind conditions would allow for transhipper operations over 200 days per year. CCC understands the sea currents and prevailing winds off the northern end of Curtis Island create an unacceptable hazard for transshipping coal in the GBR Marine Park and World Heritage Area.

FTP unlike the BICET proposal involves an unknown number of large bulk ships queuing at unknown locations in Keppel Bay awaiting transhipment. BICET claim that their ships will only arrive for a two day turnaround when scheduled. Either way the two projects would introduce numerous large bulk ships into the shallow waters of Keppel Bay and the Fitzroy Delta.

Both projects have the potential to disturb the environment of Peak Island, a GBRMP Preservation Zone and the largest Flat-back Turtle hatchery in the GBR. Dredging, spoil dumping, ship movements, anchor drag, coal dust hazards by themselves, all create great environmental risk without even the consideration of maritime accidents on the ecosystem.

Even larger than the BICET and FTP proposals is the strategic plan of the wholly Queensland Government owned Gladstone Ports Corporation Ltd.(GPC) for 4-6 ports on Balaclava Island and even more on the northern (Sea Hill) end of Curtis Island. This plan was not in the public domain until a GPC map was published in the local newspaper. GPC have since acknowledged the plan, but have yet to issue an Initial Advice Statement. The GPC 'Port Planning and development Master

Plan – Port Alma Balaclava Island and Sea Hill’, depicts 2900Ha of Future Strategic Port/industrial land on the northern (Keppel Bay) end of Curtis island immediately adjacent to the Queensland Government declared Fish Habitat area. A road and rail corridor would, if it proceeds to the full extent of the concept map, dissect protected areas and reserves on Queensland’s second largest island. Shipping traffic in Keppel Bay large bulk vessels traversing the Southern GBR would be in the hundreds per week.

While some improvement have been made to better track ship movement, incidents of ships’ captains taking short cuts though GBR are still occurring. The full extent of long term damage from the coal bulker Shen Neng colliding with Douglas Shoal east of Keppel Bay (2010) is still being assessed; (physical destruction plus many layers of anti-fouling paint affecting marine regrowth).

The large tides of the Fitzroy Delta are known to stimulate the release of nutrients from intertidal areas. These form the marine food chain. The projects have the potential to substantially change tidal flows, siltation and erosion patterns and these have unknown impacts on the ecological productivity of the Delta. Any changes could have wide scale impacts in the GBR. Barramundi, a large migratory fish are known to spawn in the outer delta; these and other fish species use the variety of refugia offered by the largely intact Delta before surviving of juveniles are able to follow fresh water flows to inland waters until they reach sexual maturity. Barramundi released into the Fitzroy system are known to travel hundreds of kilometres north and south of Keppel Bay. Dredging of Potential Acid Sulphate Soils (PASS) and Actual Acid Sulphate Soils (AASS), changes to Delta hydrology, dumping of spoil on land or in the marine Park, shipping activities and construction activities all have the potential to irreparably change biological interrelationships with far reaching unknown consequence for the southern GBR and beyond. North Curtis and Fitzroy Delta port and projects represents a 50-60 km extension of industrial sprawl. Rail lines, roads and dredging of The Narrows are all being suggested projects. Extension of Gladstone Port activities to Fitzroy River Delta and the strategic plans for a Port/Industrial region on North Curtis Island which currently has almost zero population and minor infrastructure change would be a huge environmental hazard for the Southern GBR.

A summary of CCC’s concerns in relation to the proposed coal ports in the Fitzroy River Delta, and the impacts to ecological processes, systems and species, can be found on our website at <http://www.cccqld.org.au/balaclava.html> .

PORT CURTIS-BUSTARD BAY – GBRMP MPZ-17

Curtis Island

Curtis Island is the second largest island off the Queensland coast and the largest in the GBR World Heritage Area. Until the approval of the Liquefied Natural Gas projects the only human disturbance to the island was a small residential area at South End, limited cattle grazing, some small tourist

ventures, fishing huts, lighthouses and, historically, an immigration and quarantine station. Aside from clearing for the LNG processing plants Curtis Island remnant vegetation communities are largely intact. Feral animals (horses and wild pigs) are present and, being an island, could more easily be controlled or eliminated than from the mainland. Sections of the island are protected by a patchwork of National or Conservation Parks with the rest under grazing or resource (timber) reserve. Marine areas on the eastern side are under GBRMP zonings of Marine National Park (Green), Conservation Park (Yellow), and habitat protection Zones (Blue) reflecting the critical importance of the Curtis coast bio-region.

CCC considers that the entire remaining area of Curtis especially north of Graham Creek should become a National Park to ensure the permanent protection. Approvals for the LNG industry included the creation of ‘environmental precincts’ in the area south of Graham Creek. This provides no guarantee to protect their natural values, including migratory bird habitats from further industrial or residential expansion. GPC is known to have plans for bridges across The Narrows and Graham Creek and roads into the buffer zone on south Curtis. These plans came to the attention of the public only in March 2012.

Fringing reefs close to Port of Gladstone.

Just outside the limits of the Port of Gladstone are the GBRMP Habitat Protection and Conservation Park zones of Facing Island, slightly further to the south, are the important zones of Rodds Bay and Peninsula. The Port of Gladstone Western basin project dredge spoil dumping at East Banks, just off Facing Island, is within Port limits but inside the GBR WHA and just outside the GBRMP. CCC is concerned that the monitoring of water quality within the potential zone of influence of spoil dumping is inadequate. Requests to GPC Ltd and government agencies water quality data have been frustrating despite the legal requirements of the environmental approvals for full access by the public. CCC requested data for the twelve months, including the period prior to commencement of the Western Basin dredging program. Data for only the last six months was provided. Repeated requests to obtain information about official audits of water quality and compliance activity have gone unanswered. Official responses from the Ports Corporation and government have attempted to dismiss concerns about the proximity of the dredging and spoil dumping to the GBR. GPC publishes misleading maps or statements about how far the spoil grounds are from Heron Island or the Whitsundays, ignoring the in-shore coral reefs in the WHA.

Rodds Bay Dugong Protection Area

This ‘sanctuary’ covers all of Gladstone Harbour but appears to offer no protection whatsoever from massive environmental degradation of their habitat, including the continued loss of the ecologically productive foreshores. The loss of sea-grass meadows from the Western Basin – Fisherman’s Landing reclamation site and the dredged shipping lanes, the uncertainty over higher

rates of Dugong mortality in 2011 and the capacity of the Harbour to support a viable population during the dredging activities and beyond, is of great concern to CCC.

Rodds Bay is understood to be an essential habitat for the southern GBR population of Dugong and if suitable habitat is permanently lost or reduced it could have consequences for the capacity of the species to re-locate from The Great Sandy and Moreton Bay area when these become stressed by natural events and increased human population pressures.

The Narrows

The Narrows is a GBRMP Habitat Protection Zone and was previously listed on the Register of the National Estate though this lapsed in 2012 through a previous federal government decision. CCC considered there are unknown or inadequately understood potential hydrological and ecological changes resulting from Western Basin dredging and the industrialisation of both northern and southern tidal channels. Shale Oil exploration leases have been granted right along the full length of the western side of The Narrows. A decade ago, the initial attempt to extract oil from these shales failed due to the release of noxious emissions. There has been a permit issued for a trial shale oil plant close to the Fisherman's Island landfill. After the two year trial of the new technology the company is expected to seek approval for mining and oil/gas extraction for their leases. If these are approved there would be significant loss of vegetation, impacts on ground water and potential leachate containing a wide range of contaminants including Vanadium.

Coastal Dolphins – Indo-Pacific Humpback

Studies prior to the LNG- Western Basin approvals indicated a population of around 100 Indo-Pacific Humpback Dolphins throughout the Port Curtis and Capricorn Coast in-shore waters. There were concerning levels of dolphin morbidity in 2011 and CCC understand that recent surveys have indicated they are now limited to a small pod (3-4) in Auckland Creek and to the southern end of Rodds Bay. When CCC endeavoured to raise the apparent decline of this key high order predator as a possible negative indicator of ecosystem health, the question was dismissed by senior staff of the relevant government agencies. Further prompting, did however suggest that the need for further research and population surveys may be required. CCC considers this is a pertinent example of the lack of sufficient base line scientific / ecological knowledge, the inadequacy of environmental assessment processes (EIS), approvals and effective conditions. The ongoing uncertainties surrounding water quality and fish health in Gladstone Harbour further reinforce this point.

Gladstone fish health and water quality studies

With 40+ years of industrial growth in Gladstone over 3000Ha of intertidal areas including mangroves The CCC has been actively concerned about the expansion of Gladstone Harbour for LNG facilities and coal ports, and the ecological and environmental harm (to aquatic and terrestrial species) which may or has occurred as a result of the development projects and proposals. CCC has been actively involved in commenting on projects in the assessment process, providing environmental and conservation comment on Initial Advice Statements, Terms of Reference, Environmental Impact Statements and EPBC referrals for LNG facilities and the Western Basin Dredging Project and Fisherman's Landing. CCC has also been commenting on the management,

implementation, monitoring, regulation and science of the approved Western Basin Dredging and Disposal Project and LNG projects in Gladstone Harbour.

CCC is also a member of the Gladstone Harbour Fish Health Extended Oversight Committee, managed by the Queensland Government for community engagement and communication with peak stakeholders regarding fish health and water quality. It is worthy to note that CCC had to make a formal request to be included on this committee in January 2012 and had to point out that there was no conservation representation for 'community engagement' prior to our complaint and request. This committee is now in recess with a lack of assurance of any continuation.

CCC is not completely satisfied with the management of these meetings and their outcomes, specifically in relation to answers or the responses provided by government staff to questions raised by stakeholders regarding concerns on fish health, ecosystem health or water quality health (and reports) in the Gladstone Harbour. Whilst there are fish and water quality monitoring and reports being undertaken/produced by the Queensland Government on an ongoing basis, initiated as a response to investigate fish and human health issues in the harbour, we have great concerns that these studies and investigations are omitting and not thoroughly investigating an existing ecological stressor in the harbour; that is dredging operations for the Western Basin Dredging and Disposal Project and the LNG berths.

We also believe that the conditions and monitoring sites for regulatory water quality monitoring for these projects are not sufficiently adequate to identify and prevent environmental harm from occurring (to the reef, water column and marine fauna and flora). Furthermore, dredging operations by the Gladstone Port Corporation have been voluntarily suspended and environmental protection orders also served by the government to suspend dredging operations on numerous occasions in the past 6-9 months, as turbidity levels have been exceeded beyond limits of approval/s. This has generally resulted in the 'shut-down' of the cutter suction dredge, whilst the back-hoe dredges continue to operate.

It is our belief that the back-hoe dredges, operating to remove sediment for the LNG berths, are disturbing and digging up both potential and actual acid sulphate soils, resulting in increases and changes to turbidity, pH and potentially the availability of dissolved metals/heavy metals in the water column. However monitoring sites that could identify the back-hoe dredges direct and actual impact on physical and chemical water quality parameters are not included in the regulatory monitoring sites under DERM's conditions. Gladstone Ports Corporation (GPC) has water quality monitoring sites near each of the three back-hoe dredging operations for LNG facilities on the western side of Curtis Island, yet this data is not publicly available and not part of DERM's approval conditions.

CCC has suggested at a previous Extended Oversight Committee meeting, that the monitoring data for these sites should be requested from GPC and analysed and interpreted to identify if the back-hoe dredges are, or are not, contributing to raised turbidity (or changes to other water quality parameters) in the Gladstone Harbour, particularly whilst the cutter suction dredge operations are suspended. To the best of our knowledge, we don't believe this has occurred.

CCC has also been instrumental in contacting Gladstone Port Corporation (GPC) for a copy of all of their water quality data, graphs and reports for the Western Basin Dredging Project. After some avoidance, GPC provided 6 months of data but not the full 12 months as requested.

It is worthy of noting that it is a condition (condition 24) under the Federal EPBC approval for such information to be provided on the public request. CCC is concerned at drops in pH and increases in turbidity in some of the water quality graphs provided by GPC to CCC. Furthermore, GPC's website that hosts the water quality information on the Western Basin Dredging Project is currently providing graphs for dissolved oxygen, pH, temperature and salinity, for the period of April to August 2011 (turbidity is weekly and heavy metals over a year or more until November 2011). CCC is therefore concerned that data and graphs for dissolved oxygen, pH, temperature and salinity from August 2011 until present, are not currently available for the public to access and that turbidity data cannot be viewed cumulatively over time (only weekly).

GPC Ref: http://www.westernbasinportdevelopment.com.au/water_quality_monitoring/.

In closure, CCC supports the independent research and findings of the Gladstone Fishing Research Fund by Dr Matt Landos and the information and comments presented by the Gladstone Conservation Council. Furthermore, CCC would like to provide more detailed information regarding water quality and the health of marine species in the Gladstone Harbour in the near future.

WHOLE OF CATCHMENT IMPACTING GBR WHA

The following matters relate to inland terrestrial areas and rivers outside of the GBR WHA but nevertheless have very significant impacts on the Reef. CCC accepts there have been greatly improved natural resource management (NRM) in the predominant primary industries of cattle grazing and cropping to protect the GBR catchment. Land clearing, overgrazing and inappropriate soil management practices have left a legacy of excessive silt discharge, contamination from fertilisers, pesticides and increased seepage of minerals and salts into the GBR lagoon. CCC applauds the 'quiet revolution' in farming practices which has seen land managers become converts to protecting soil health, riparian vegetation, biodiversity corridors, and water quality.

Dams weirs and barrages have significantly reduced connectivity of the rivers and wetlands so important for many aquatic species which migrate to and from the GBR lagoon. Attempts have been made to create artificial fishways, but little is known about their effectiveness. This is especially relevant to the major river systems of the Fitzroy and Boyne. The escape of an estimated (but not proven) 30,000+ artificially stocked Barramundi from the Awoonga dam on the Boyne has been a suggested cause of the major fish morbidity and mortality in Gladstone Harbour.

On the Fitzroy River, above the estuarine barrier of the Barrage, Eden Bann Weir has an ineffective fish lock system to aid migration. While mature fish heading back to the sea can survive traversing the Weir it is known that this and other weirs are death traps for freshwater turtles. Weirs also are not ideal habitats for the vulnerable cloacally ventilated endemic Fitzroy River Turtle *Rheodytes leucops* which prefers natural streams, and well oxygenated pools below riffle zones. These habitats are lost when weirs and dams are built.

To provide water security for the ever increasing industrialisation of Gladstone there are proposals to raise the level of Eden Bann and to construct a massive weir further upstream at Rookwood.

To cater for massive coal mining proposals in the Bowen and Galilee Basin there are proposals to dam the only remaining 'wild' river in the Fitzroy Basin, the Connors and also to build a 1.1 Gigalitres dam on the Dawson River. These ecological barriers and the consequential loss of riparian corridors and changes to water flows, and quality will have consequences with for the GBR.

Currently there are ~50 Coal mines operating in Central Queensland plus 35 proposed new or expanded coal mines (this includes the Bowen and Galilee Coal Basins). Further to this existing and proposed coal development, is the exploration and operation of coal seam gas measures in both basins. The coal industry in Queensland is expanding at an unprecedented rate. For example, Greenpeace notes in their report titled 'Boom goes the reef' (available at <http://www.greenpeace.org/australia/en/news/climate/Save-The-Reef-from-coal/>), that the capacity for coal export in Queensland is predicted to expand from 156 million tonnes per annum in 2011, to 944 million tonnes per annum in 2020, increasing the number of coal ships passing through the GBRWHA from 1,722 per annum (2011) to 10,150 per annum in 2020.

CCC is concerned about the cumulative impacts to surface and ground water quality, threatened ecological communities, threatened species and terrestrial and aquatic ecosystem function in general, as a direct and indirect result of the coal mine operations and expansion in the Fitzroy River Basin and Burdekin River Basin. Already, the Fitzroy Basin and the quality of its river water has been impacted by discharges of contaminated (and saline) water from coal mine and gas field operations. The Ensham mine water discharge of saline and contaminated mine water in 2008 into the Nogoia River, a major tributary of the Fitzroy River Basin, is an example of the downstream indirect consequential impacts of mining development on water quality entering the Great Barrier Reef WHA. Further information about this incident can be found at www.fitzroyriver.qld.gov.au.

The point of our cumulative impact concerns of coal and gas development in Central Queensland is that the water and any contaminants from mine or gas field operations flow directly to the Great Barrier Reef and the World Heritage Area via the two largest river catchments flowing to the Great Barrier Reef; the Fitzroy and Burdekin. This begs the question; Can our river, ecosystems and GBR can survive the massive expansion of coal in Central Queensland and remain in a healthy and viable state? We don't believe so and have grave concerns for their future.

It is our belief that the state and federal governments regulatory frame work, approval process and legislation is unable to keep up with the 'boom' in the resource sector.

The massive increase is in projects being put forward for assessment (and regulatory monitoring once approved), under the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) and the Environmental Protection Act 1994 (Qld) for coal and petroleum projects and their associated ports.

Most importantly, to the best of our knowledge, we don't believe that state or federal governments, or project proponents (coal and gas and ports), are actively quantifying or monitoring (to the extent required) the cumulative impacts of existing and proposed coal and gas projects upon threatened ecological communities, species, water quality, rivers systems, the Reef and climate change.

CCC is endeavouring through EIS submissions to ensure that the massive expansion of coal mining, coal seam gas extraction, road and rail corridors do not further threaten the endangered Regional Ecosystems of the Brigalow bioregion, of Semi Evergreen Vine Thicket and Native Grasslands. These are essential habitats for terrestrial species, soil and stream health and ultimately for the health of the GBR. The EIS process, approvals and monitoring are totally inadequate in regard to considering accumulative impacts over whole catchments and the GBR.

Despite decade of open cut coal mining in the region there is little evidence of any success in rehabilitating the often sodic soils of the region to any state useful for productive agriculture or natural habitats and corridors. Hundreds of kilometres of open pits and spoil dumps pit the river catchments. Based on existing and approved mines and the current practice pit of allowing multiple final voids the rivers are at permanent risk of reduced water quality and accumulative toxins flowing into the GBR. Mines are given approval for major diversion of streams and wetlands adding to the risk to the GBR. Offset policies which require mines to either protect other remnants or to pay for loss of biodiversity are ineffective due to the depletion of available sites and the lack of protection for the offset areas from future mining.

Improvement have been made to some mining practices, such as water management, since the disastrous floods of 2008. This resulted in improvements in greater understanding the hydrology of the Fitzroy Basin, fewer pit total flooding events and uncontrolled discharges, increased water quality monitoring and reporting, improved compliance regimes and agreed water quality standards. The floods on 2011 exceeded the estimated maximum possible river heights for some major Fitzroy Tributaries and resulted in over 40 coal mines requiring temporary permits to discharge water outside their environmental authorities. With a possible doubling of mines in the Basin and the likelihood of increasing variability in rainfall, increased severe storm and cyclones the CCC considers that the capacity of the river system and the GBR to cope with the impacts of mining will be exceeded.

If the multi-billion tonne Galilee Basin mines proceed there will eventually be 400+ kilometres of open cut mining trough the currently un-mined Belayndo/Burdekin catchment with even less predictable consequences to the whole GBR.

Michael McCabe
CCC Coordinator
14 March 2012

Chantelle James
CCC Project Officer
14 March 2012



30 April 2012

Great Barrier Reef Strategic Assessment Submissions
Department of Environment and Resource Management
GPO Box 2454
Brisbane QLD 4001

Email: planning.support@derm.qld.gov.au

Dear Sir/ Madam,

**Re: Submission on the Draft Terms of Reference (ToR) for the Coastal Component of the
GBR WHA and Adjacent Coastal Zone Strategic Assessment**

The Capricorn Conservation Council Inc. (CCC) is the principle not-for-profit environment organisation in Central Queensland. CCC was founded in 1973 and has been actively campaigning on regional environmental issues ever since. Thank you for the opportunity to comment and make recommendations on the Draft Terms of Reference for the Coastal component of the Great Barrier Reef World Heritage Area (GBRWHA) and adjacent Coastal Zone Strategic Assessment. CCC welcomes the Queensland and Federal Government's decision to undertake a Strategic Assessment of the GBRWHA.

Overall, the Draft Terms of Reference for the Coastal component or Adjacent Coastal Zone is extremely disappointing. The content and the length of the document was far less than CCC was expecting for a Terms of Reference (ToR) for the iconic and WHA of the GBR and its adjacent catchment areas, when it is compared to a Terms of Reference for an Environmental Impact Assessment. The Draft ToR is far too limited by 'The Program' being defined as Queensland's coastal management, planning and development framework and assessment of its implementation. The definition of the coastal zone under the Coastal Protection and Management Act 1995 includes Qld waters, all islands and adjacent inland areas up to 5km from the coast or 10m AHD contour (whichever is furthest) and this is a limiting or weak point in relation to assessment of developments that occur on coastal land or in catchments adjacent to the GBR that have direct and indirect impacts on the GBRWHA and Matters of National Environmental Significance.

For example, the massive expansion of coal mining (new and expanding coal mines) in the Fitzroy River Basin/Catchment and the five to six mega mines proposed in the 'Galilee Coal Basin' or the upper reaches of the Burdekin River Basin/Catchment, will have a major impact on the downstream water quality to the Reef and WHA in these catchments, yet I believe would not be considered under the coastal management framework. Cumulatively, coal and gas projects and other major developments will have a major impact to the reef and WHA by way of water quality and climate change impacts (scope 3 emissions from the removal and export of coal and gas in Queensland).

Furthermore, the ToR and the reports of the GBR Strategic Assessment should include the identification, analysis and assessment of direct and indirect environmental impacts from past, current and future developments, including their climate change impacts with scope three greenhouse gas emissions, on the GBRWHA.

Recommendations:

- That ‘the Program’ be expanded to include the consideration of urban, industrial, mining and port developments within Great Barrier Reef catchments and their impacts to the GBR and WHA.
- That ‘the Program’ ensure the inclusion and consideration of scope three greenhouse gas emissions in assessments and the report, and the subsequent direct and indirect impacts to the Reef and WHA from climate change resulting from these scope three emissions.

1. Purpose and description of the program

Recommendations:

- The geographic extent to which the strategic assessment applies must include Great Barrier Reef Catchment areas, including those catchments that do not have water quality arrangements.
 - CCC would like to see the inclusion particularly of the following catchments, but not limited to these, of the following creeks and rivers: Fitzroy River and associated coastal creeks and rivers such as Boyne River, Calliope River, Waterpark Creek, Styx and Herbert Rivers: Burdekin River: Whitsunday and Mackay regional rivers/creeks.
- All other national, state and regional legislation, plans, policies and programs involved in assessing land, water and marine environmental impacts from development projects, including, but not limited to:
 - State Development and Public Works Organisation Act (Qld)
 - Water Act (Qld)
 - Mineral Resources Act (Qld)
 - Petroleum and Gas Act
 - Vegetation Management Act (Qld)
 - Urban Land Development Authority Act
 - Transport Infrastructure Act
 - Environment Protection and Biodiversity Conservation (EPBC) Act
- Identify how the precautionary principle applies and how all other principles of Ecologically Sustainable Development (ESD) listed in the EPBC Act apply to ‘The Program’ and the assessment.

2.1 Identification of MNES

Recommendations:

- List and provide baseline studies, historical data and reports for identified MNES, including listed threatened or endangered communities and species and migratory and marine species.

2.3 Measures to avoid mitigate and offset impacts

The ToR fails to identify the applicability of ‘avoidance of impacts’ as a first priority. It also fails to identify current approved projects that should be assessed and audited as example, test or demonstration cases of ‘The Program’ and the approved projects themselves, to avoid, mitigate and offset impacts appropriately and if the mitigation or offsets have actually been achieved, delivered, failed or require improvement. Gladstone and Port Curtis area and the subsequent approved LNG facilities and Western Basin dredging project should be included in this ‘audit’ and assessment of demonstration/test cases; this is vitally important to show failures and successes given the 5 other port proposals currently in the development assessment process within the GBRWHA.

Recommendations:

- Avoidance of Impacts must be given the utmost priority in the ToR and report. The report should identify and describe the success or failure of ‘the program’ and projects to date, that have ‘avoided’ impacts, rather than just mitigating or offsetting. A percentage figure of projects assessed in the past that have ‘avoided’ all impacts must be provided, along with a percentage of that each for mitigating, offsetting and adaptive management.
- Include multiple demonstration or test cases of current approved projects in port, urban and industrial project fields, and how successful they have been at avoiding, mitigating, offsetting and adaptive management. The 3 approved LNG facilities on Curtis Island and

the Western Basin Dredging and Disposal Project in Gladstone Harbour must be included as a priority demonstration case for port developments.

2.4 Demonstration of the program

CCC finds the requirement of a minimum of one demonstration case to test the effectiveness of 'the program' to be totally inadequate. Rather than only two cases, as suggested in the existing draft ToR (to assess a regional or local plan and a development area (state)), there should be two or more demonstration cases per Reef Catchment flowing to the GBRWHA. As there are 6 regional NRM bodies that 'manage' catchment areas that flow to the GBRWHA, and if these boundaries are utilised as the 'framework', then this requires a minimum of 12 demonstration cases. Major development projects in Gladstone and on Curtis Island that are approved and in construction phase within the WHA (including the three LNG (Liquefied Natural Gas) facilities and the Western Basin Dredging and Disposal Project), must be included as demonstration cases in the Strategic Assessment. Tourism demonstration cases should also be included.

Recommendations:

- The Western Basin Dredging and Disposal Project and all 3 LNG facilities already approved under the EPBC Act and Queensland legislation with numerous conditions for mitigation and offset and adaptive management of impacts, must be included as demonstration cases for port development and a state development area and urban development. These demonstration cases must be an 'audit' of the effectiveness of 'the program', the EPBC Act and other legislation, policy and programs, to adequately monitor and manage compliance with conditions to mitigate, offset and adaptively manage impacts to the GBRWHA of these already approved and 'in progress' projects. The 'legacy' issues of past and current industrial, agriculture and urban development and operation, must be considered and analysed and interpreted in the demonstration cases for Port Curtis/Gladstone, particularly pollutant and eco-toxic substances within marine and estuarine sediments and the water column. Naturally occurring 'legacies' such as acid sulphate soils should also be considered, analysed and interpreted.
- The Broadsound, Shoalwater, Capricorn Coast and Fitzroy River Delta area must be included in the demonstration cases and compared to the demonstration cases identified above at Gladstone and Curtis Coast (or Port Curtis), particularly for proposed port facilities in the Fitzroy Delta.
- Demonstration case studies must be undertaken in each Reef catchment area flowing to the Great Barrier Reef WHA, for a tourism project, urban project, port project and industrial project. It is strongly suggested that the catchment boundaries of regional NRM bodies flowing to the Reef (there are 6 of these) are used to identify 'Reef catchment' areas, as these areas have already been utilised for implementation other Reef based catchment and water quality programs. A minimum of two demonstration cases for each 'Reef catchment'.
- Tourism projects must also be included in the demonstration case studies.

4. Adaptive Management

The concept of adaptive management, and what appears to be a reliance on being able to 'fix' or adapt to an incidence of environmental harm resulting from inappropriate or inadequate avoidance and mitigation, is of great concern to CCC. We believe that adaptive management is inadequate to provide for environmental and biodiversity conservation protection measures; in many cases it may be too late to 'adapt' for environmental protection and biodiversity once the 'action' is implemented or undertaken and the 'harm' or 'impact' is irreversible.....leaving our environment, flora and fauna, and people to suffer the consequences and ultimately lose out on protection and conservation.

Recommendations:

- Adaptive Management must be clearly stated as a 'last resort' in the priority of decision making using the "key steps for achieving positive outcome for MNES" (as identified in figure 1 of the document titled 'A Guide to undertaking Strategic Assessments') in managing for direct, indirect and cumulative environmental and biodiversity conservation impacts from development projects, and in the Strategic Assessment process. Priority must be given to and every effort must be made to avoid impacts first and foremost, and figure 1 (A guide to undertaking Strategic Assessment) should be considered a hierarchy of

management decisions to proposed actions. Higher consequences in compliance and legislation should be given to projects that take the lower priority and higher risk of 'adaptive management'.

7. Endorsement criteria

Improvement is required to the language and consideration of exactly what the Minister regards in relation to how the program meets the objects of the EPBC Act when determining his/her decision on whether to endorse the program or not.

Improvement is also required in the consideration by the Minister of how the program identifies direct, indirect and cumulative impacts on MNES, and how they are avoided, mitigated and offset. Again, we express the same concerns regarding 'adaptive management' as discussed above under the heading of item 4. Adaptive management.

Recommendations:

- Prior to determining whether or not to endorse the program, the minister must also have regard to the implementation and provision of (and not just promotion of) ecologically sustainable development, conservation of biodiversity, the environment, and protection of conservation and heritage, when considering the extent to which 'the program' meets the objects of the EPBC Act.
- Adaptive Management must be clearly stated as a 'last resort' in the priority of decision making using the "key steps for achieving positive outcome for MNES" (as identified in figure 1 of the document titled 'A Guide to undertaking Strategic Assessments') in managing for direct, indirect and cumulative environmental and biodiversity conservation impacts from development projects, and in the Strategic Assessment process. Priority must be given to and every effort must be made to avoid impacts first and foremost, and figure 1 (A guide to undertaking Strategic Assessment) should be considered a hierarchy of management decisions to proposed actions. Higher consequences in compliance and legislation should be given to projects that take the lower priority and higher risk of 'adaptive management'.
- The Minister should consider the proposed hierarchy of management decisions outlined above, when considering how 'the program' and legislation, policy and programs address direct, indirect and cumulative impacts.

Further general comments

Despite conditioning of projects through the EIS process to reduce and mitigate environmental impacts, there needs to be more rigour provided in monitoring and compliance over the 'conditions' of approved and proposed projects assessed under the Environmental Impact Assessment Process and the Strategic Assessment process.

Recommendations:

The ToR and report for the GBR Strategic Assessment must include a more rigorous monitoring and compliance procedure and system in relation to environmental approvals and conditions.

Population growth and tourism developments must also be considered in the Strategic Assessment and a community consultation process must be identified and implemented through all stages of the Strategic Assessment.

In closure, we would like to identify and uphold our support of the issues, concerns and recommendations identified in the Queensland Conservation Council's (QCC) submission on the ToR for the Coastal component of the GBRWHA Strategic Assessment.

Yours sincerely,

Chantelle James
Project Officer



10 October 2012

Referral Business Entry Point (EPBC Act)
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
Canberra, ACT 2601
E: epbc.referrals@environment.gov.au

Dear Sir/Madam,

RE: EPBC REFERRAL # 2012/6558 - GLADSTONE DUPLICATION CHANNEL PROJECT

The Capricorn Conservation Council Inc. (CCC) is the principal not-for-profit environment organisation in Central Queensland and a community based conservation group with a membership concerned about various environmental issues. CCC was founded in 1973 and has been active on regional environmental issues ever since.

SUMMARY

We consider that the proposed action will have significant and adverse impacts to the Matters of National Environmental Significance (MNES). **Given the ongoing severe issues with marine environment and ecosystem health in Gladstone and Port Curtis, and the adverse effects and impacts to fish health and water quality, CCC requests that Minister Burke take a precautionary approach to this referral and the action, to make a decision that the impacts (direct, indirect and cumulative) to MNES are clearly unacceptable under s74B of the *Environmental Protection and Biodiversity Conservation (EPBC) Act* and that the project CAN NOT proceed.** Further details and comments from CCC in relation to each MNES, the referral sections and attachments to the referral, are outlined in this submission (and appropriately titled).

We request that the precautionary principle be upheld and the project not be allowed to proceed to the EIS phase. **CCC requests that the Minister reject this project until the Strategic Assessment of the Great Barrier Reef is completed and considered by the UNESCO World Heritage Committee in June 2015.**

CCC holds grave concerns for the future condition and ecological health of Port Curtis and the GBRWHA and fears the current activities and new project proposals in Gladstone Harbour will put the Reef on the World Heritage in Danger list because the '*highly precautionary approach*' that UNESCO has recommended, is not being adhered to.

The proposed duplication channel project would add a further 12 million m³ of seabed floor to be dredged on top of the already approved 46 million m³ within the Great Barrier Reef World Heritage Area (GBRWHA). If Arrow Energy's LNG project (currently in EIS phase) is approved, this will add a further 1 million m³ of material to be dredged within Port Curtis and the GBRWHA. Cumulatively, this equates to approximately 60 million m³ of dredge material and seabed disturbance in the Port Curtis region of the GBRWHA alone, which will also result in water quality impacts to the GBRWHA such as increased turbidity, increased nutrient loads (by disturbance of sediment laden with nutrients), and changes to pH and bioavailability of heavy metals and other toxicants in the water column (via disturbance of sediments and sediments containing Acid Sulphate Soils).

CCC further requests that the Minister reject this project, based on cumulative impacts, and put a moratorium on any further project proposals in Port Curtis and Gladstone Harbour, until the recommendation of UNESCO WHC (from June 2012 meeting) to implement an “*independent review of the management arrangements for Gladstone Harbour*” is completed (the independent review is recommendation 9 of UNESCO WHC June 2012 document).

CCC also notes, and is appalled that the referral documentation and attachments provided/submitted by GPC does not include the Initial Advice Statement (IAS); this has been verified by checking section 7.3 (attachments) of the referral. This is a clear omission by GPC to not provide DSEWPac with this document (IAS) in their EPBC referral, as our internet research today proved that an IAS document exists and was submitted to the Queensland Government (Department of State Development, Infrastructure and Planning) on the 18 September 2012. This IAS and other info is available at www.dsdip.qld.gov.au/assessments-and-approvals/port-gladstone-gatcombe-golding-cutting-channel-duplication-project, however given the time constraints, CCC is unable to peruse the IAS before finalising our EPBC referral comments.

Given the failure of GPC to provide the IAS to DSEWPac, and that there are many other omissions of detail or lack of information provided in the referral (as we have identified in our comments in this submission, with particular reference to our comments relating to section 2 of the referral and dredge spoil disposal), **CCC requests that the Minister reject the referral and furthermore use the discretion of his powers under section 74A of the EPBC Act 1999 to request referral of a larger action.**

I have considered the Significant Impact Guidelines 1.1 for EPBC Act. Within these guidelines, the following definition of a ‘significant impact’ is provided:

A ‘significant impact’ is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.

Of particular interest to CCC in relation to this referral are the items listed on page 5-6 of the guidelines that should be considered when determining whether an action will have a significant impact or not. The final two bullet points from these pages of the guidelines are of utmost importance in relation to the current situation in Gladstone Harbour and Port Curtis (that is, the ‘cause’ of the fish health and disease has not been identified according to Qld government science) and the cumulative impact of further projects (including this referral):

- existing levels of impact from other sources, and*
- the degree of confidence with which the impacts of the action are known and understood.*

SPECIFIC COMMENTS ON SECTIONS OF THE REFERRAL IN RELATION TO MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE (MNES)

1.3 Locality and property description

It is stated in this section of the referral that “*Both offshore and onshore dredge spoil disposal options will be investigated during the EIS process.*”

CCC finds waiting to the EIS process to investigate disposal options and subsequent impacts to MNES to be unacceptable. Offshore disposal is the first preference identified in section 2.1 of the referral and it is clear this would occur within the GBRWHA, or maybe the GBR Marine Park, according to the figures (maps) provided with the referral. Very limited details of any dredge spoil disposal options, either offshore or onshore, are provided in this referral, rather just a reference to the 'project area' (inclusive of the potential spoil disposal site. Full details of offshore and onshore disposal options and the significance of the impacts for each disposal option must be provided in this referral (and they are not). This lack of detail prevents the Minister from considering the significance of the impacts of the dredge spoil disposal to the GBRWHA, GBR Marine Park and other MNES now, in the referral stage, which is when it must occur (rather than the EIS phase).

CCC requests that the description of the action (in all relevant sections of the referral) be amended to include a description of dredge disposal options and to provide brief technical and scientific supporting documentation (as appendices or attachments) on disposal options and the significance of their impacts to the MNES.

It is stated in this section of the referral that *"Figure 1 illustrates the Project area and surrounding port infrastructure and facilities."*

Figure 1 and this statement is misleading because it does not provide the full extent of the port infrastructure and facilities (completed or in development). For example, the Western Basin land reclamation area and full extent of the Fisherman's Landing extension (~300 hectares) as identified in annexure 2 of the EPBC conditions (2009/4904) for the WBDDP, should be considered as port infrastructure, yet it is not included in the map (figure 1) of this current referral. This reclamation area is either completed or near completion and should be included.

2.1 Description of the project

The description of the placement, and impacts associated with, the disposal of the 12 million m3 of dredge spoil material for this project is inadequate for this referral. **CCC requests that the description of the 'action' be corrected to include the details of potential disposal sites and impacts to MNES.**

Below is a direct extract of the paragraph that describes the disposal in this section of the referral:

"Disposal of 12 Mm³ of dredged material is proposed to occur, either offshore (within a 20 nautical mile radius) and/or onshore (within close proximity to the Port of Gladstone coastline). As part of the EIS process, a range of options will be assessed for suitability for spoil disposal. Offshore disposal is the first preference for spoil disposal locations as there is limited space available onshore. If onshore disposal is necessary for some portion of the spoil, it will depend on space and also the quality of dredged material. Disposal location options will be determined against various criteria, including proximity to the dredge footprint and likelihood of impacting upon the surrounding environment. Options will be assessed and compared during the EIS process, ultimately determining the most preferred disposal location(s)."

There are NO initial or preliminary research findings provided in the referral to identify and describe potential locations (rather than an area) for dredge spoil disposal. Rather it has been deferred and deflected to the EIS process to research the options. CCC finds this to be unacceptable (to defer investigation to EIS), and **requests that the Minister asks for preliminary investigation of dredge spoil disposal location within the referral stage**, because the disposal of dredge material will have an impact on the GBRWHA and the Outstanding Universal Values (OUV's) of the GBRWHA. CCC strongly believes that the significance of the impact to these and other MNES should be determined or implied in the referral stage.

The referral goes on to state that a Long Term Sediment Disposal Plan will be produced for the WBDDP, this proposed project and the long term disposal requirements of the Port. Given that condition 4 of the WBDDP EPBC conditions of approval, require that a LTSDP be submitted to SEWPaC not less than two years prior to the commencement of stages 2,3 and 4 of the WBDDP, CCC wonders why the LTSDP has not been produced already to manage upcoming disposal requirements for stages 2,3 and 4?? Therefore, CCC requests that DSEWPaC investigate this

issue. Our calculations for all three projects nominated in this referral (outside of the approved 11 million m3 of dredge spoil disposal at East Banks) to be included in the LTSDP, equates to a total of 33 million m3 of dredge spoil to be disposed of somewhere offshore and or onshore in GBRWHA. This is a significant and severe impact to the GBRWHA and such a long term plan should be produced prior to this referral even being considered.

2.2 Alternatives to taking the proposed action

The information provided does not fully describe the 'take no action' option or alternative to the project proposal (an extract of the description is provided below in italics). Environmental implications and benefits of not taking the action are not described. Only the economic implications and port transport capacity implications are described of the take no action option. This fails to address requirements to consider environmental and social benefits or implications of no action or alternatives. Furthermore, this fails to address the integration principle of Ecologically Sustainable Development [Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the 'integration principle')] and the other four principles of ESD as identified in section 3A of the EPBC Act. In light of these points, CCC therefore requests for the description of the 'alternatives to taking the proposed action' to be amended and improved, to be a more accurate and considered response with the principles of ESD being addressed.

"Choosing to not proceed with the duplicate shipping channel would result in port traffic congestion / delays and significant limitations to the Port capacity. This will restrict the ability of the Port to meet future import / export requirements, hindering the economic viability of the region. The result of this is a loss of the potential employment opportunities and the local, state and national economic benefits."

2.3 Alternative locations, time frames or activities that form part of the referred action

No feasible alternatives to the proposed action were identified or considered in section 2.2 of the referral, so the question has to be asked as to why other existing port facilities at Hay Point, Dalrymple Bay and Abbott Point are even mentioned or considered in this section of the referral? The 'referred action' has a defined area as identified in Figure 1 of the referral, and section 1.2 of the referral; these are within Port Curtis and Gladstone marine areas, not Mackay and Bowen where the other port facilities terminals are located. Below, in italics is an extract of the statement regarding possible consideration of other existing port facilities:

The possibility of upgrading and utilising other existing port facilities along the Queensland coast were considered; these being:

- Mackay, including Hay Point Coal Terminal (HPCT) and Dalrymple Bay Coal Terminal (DBCT) and adjoining area
- Bowen, including Abbot Point Coal Terminal (ABCT) and adjoining area

This whole section appears to be multiple paragraphs of information that have no distinct correlation or relationship with each other. It appears the actual referred action has been confused and presented here instead of actual information on alternatives that are part of the action, as a lot of the language and description is identical to the description of the project.

The statement in this section of the referral that *"Alternative locations to dispose of dredge spoil will be investigated in consultation with relevant regulators during the EIS phase of the Project"* is misleading because the actual locations for disposal of the dredge spoil have not at all been identified within this referral, rather the 'project area' has been identified as 'inclusive of potential spoil disposal area' (in Figure 1). So the actual and alternative locations (as opposed to potential areas) for disposal of dredge spoil have not been identified in this referral. **CCC therefore requests that referral action be amended to include identification of potential locations (not just areas).**

2.5 Environmental Impact Assessments

It is stated that *"GPC currently undertakes regular public consultation through their Environmental Working Group, a regular community consultative process to create awareness of port activities."* As a

community group with regular and ongoing concerns in relation to management of GPC's dredging project (WBDDP), CCC is not aware of this 'Environmental Working Group' and is certainly not part of it or advised of it, nor do we know of any other community groups included in the working group. This leaves CCC wondering if the working group actually exists and who is included.

2.7 A staged development or component of a larger project

GPC describe this project as a 'stand alone project', yet list four other project areas that are dependent on this project for their success. The projects listed include the WBDDP, the Western Basin Reclamation Area (Fisherman's landing extension), Wiggins Island Coal Export Terminal (WICET) and various LNG projects.

Clearly, this duplication channel project should have been considered and referred under the EPBC Act as a larger action with the WBDDP and the Reclamation area projects three years ago in 2009. This staged approach to seeking project approvals appears to be a tactic to downplay the significance of the impacts of a larger plan for port expansion and development.

The information provided in this section in regards to the other four projects listed, is misleading and inaccurate because the most up to date details of current project status has not been provided. For example,

- the WICET project is described as "has received approval to commence construction of the WICT" when in actual fact the construction of this project commenced in January 2012 with large earth moving works having rapidly changed Wiggins Island and the intertidal salt marsh and mangrove communities to the north of the Calliope River on the mainland over the past 9 months;
- the Western Basin Reclamation area project is described as "GPC has gained approval" and "reclamation area will be constructed to allow for disposal of dredged material associated with the LNG industry and to provide further land to support construction of new port infrastructure and industries", yet in actual fact, the Western Basin Reclamation area is either near complete or complete since the approval and completion of a TEP to fix the bund wall of the reclamation area (TEP under Qld EP Act granted 25 June 2012).
- The WBDDP is described as though the project has not commenced yet with language such as "GPC has received approval to undertaking dredging" and there are no facts or figures provided as to the status or extent of the dredging completed to date. In actual fact the dredging project is 37% complete (according to the Western Basin Port Development website on 09/10/12 www.westernbasinportdevelopment.com.au)

3.1 (a) World Heritage Properties

Description

As stated in previous comments, CCC finds it to be totally unacceptable that GPC has not considered nor provided the disposal options in detail as is evident in the statement: "Both onshore and offshore dredge disposal options to be investigated during the EIS process, are likely to be within and/or adjoining the GBRWHA." In fact, it appears that any detail and information that might actually prove the project could have significant or unacceptable impacts to the GBRWHA, is being omitted as a tactic to obtain a controlled action approval.

In this section of the referral, a description of the GBRWHA for the Gladstone and Port Curtis area, where the 'action' is proposed, has not been provided. Only a brief bullet point description of the four 'natural criteria' (as quoted from the referral) that enabled the adoption of the GBR as a WHA is included. The referral fails to identify the OUV directly. **CCC request that the description of the WHA be amended to include a local description of the OUV of the Port Curtis region of the GBRWHA property.**

Impacts

Considering UNESCO's recommendation to 'ensure that development is not permitted if it would impact individually or cumulatively on the Outstanding Universal Value of the property', this referral must identify how the action will impact (directly and indirectly) and cumulatively upon the OUV of the property and the Gladstone/Port Curtis section of the WHA property, yet it does not.

I refer you to Recommendation 5 of the UNESCO WHC decisions and recommendations (from WHC June/July 2012 36th session document WHC-12/36.COM/7B.Add):

Notes with great concern the potentially significant impact on the property's Outstanding Universal Value resulting from the unprecedented scale of coastal development currently being proposed within and affecting the property, and further requests the State Party to not permit any new port development or associated infrastructure outside of the existing and long-established major port areas within or adjoining the property, and to ensure that development is not permitted if it would impact individually or cumulatively on the Outstanding Universal Value of the property;

Cumulative impacts:

The description provided of the nature and extent of likely impacts to the GBRWHA (and the GBRMP) in the referral **does not address cumulative impacts to the WHA from existing projects in operation in Port Curtis (such as the WBDDP and all LNG facilities and associated dredging activities and other impacts to OUV of the WHA), and proposed projects in the EIS phase in Port Curtis (such as Arrow Energy's LNG facility and associated proposed dredging), along with the impacts of this proposed dredging and disposal project.**

The proposed duplication channel project would add a further 12 million m³ of seabed floor to be dredged on top of the already approved 46 million m³ within the Great Barrier Reef World Heritage Area (GBRWHA). If Arrow Energy's LNG project (currently in EIS phase) is approved, this will add a further 1 million m³ of material to be dredged within Port Curtis and the GBRWHA.

Cumulatively, CCC calculates this equates to approximately 60 million m³ of dredge material and seabed disturbance in the Port Curtis region of the GBRWHA alone. Dredging and disposal of 60 million m³ of sediment/sea bed floor will result in significant water quality impacts to the GBRWHA such as increased turbidity, increased nutrient loads (by disturbance of sediment laden with nutrients via dredging), and changes to pH and bioavailability of heavy metals and other toxicants in the water column (via disturbance of sediments and sediments containing Acid Sulphate Soils).

Given the dredging for the WBDDP project is 37% complete (according to Western Basin Port Development website), and (a), there have been ongoing compliance issues with turbidity levels for this dredging project, and (b), since the commencement of this dredging project there have been fish health and water quality issues that are the subject of ongoing investigation independently and by the Queensland Government, CCC believes the cumulative risk and impact of a further 13 million m³ of dredging in the Port Curtis region of the GBRWHA will be unacceptable.

By not providing cumulative impact information in this section of the referral, GPC appear to have failed to implement the Significant Impact Guidelines for MNES and have not addressed the following points (from the guidelines) to determine whether the action will have a significant impact on the GBRWHA:

- *existing levels of impact from other sources, and*
- *the degree of confidence with which the impacts of the action are known and understood.*

CCC believes that the cumulative impacts of 60 million m³ of dredging and disposal in the Port Curtis area of the GBRWHA, will risk serious or irreversible damage to the GBRWHA and its water quality, particularly in the Port Curtis region. The lack of scientific evidence provided in the referral about the potential impacts of an action does not itself justify a decision that the action is not likely to have a significant impact on the GBRWHA.

Individual impacts:

The list of individual direct and indirect impacts of the action on the GBRWHA provided in this section of the referral, are not comprehensive enough. For example, there is no mention of the disturbance of Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils by the dredging and disposal, or what the impacts of this may be upon water quality within the GBRWHA.

3.1 (d) Listed threatened species and ecological communities

Description

Threatened species and ecological species in the project area have been identified in the referral only by way of the EPBC Online Protected Matters Search Tool, with a list provided in Appendix A. CCC finds it unacceptable that GPC have completed (themselves or via contracted consultants) many research reports and documents associated with the WBDDP EIS and approval conditions in relation to threatened species and ecological communities, yet they fail to refer to or provide any of these as supporting information.

Furthermore, CCC is concerned that the two reports generated from the Online Search Tool and provided in Appendix A, were generated in May and June 2011 some 16 months ago, yet the referral was submitted in September 2012. CCC questions the validity of the information, given the large time gap between the generated reports and the referral submission. Considering these points, CCC requests that more up to date information be provided on threatened species, ecological communities and all MNES.

6.1 Does the party taking the action have a satisfactory record of responsible environmental management?

GPC claimed yes to this question. CCC disagrees and believes GPC do not have a satisfactory record of responsible environmental management, which is evident from the actions or lack of actions taken in compliance with the WBDDP dredging and disposal.

Apart from providing their environmental policy in Appendix B, which proves nothing about management actions and compliance of dredging projects, GPC have failed to provide information that supports their statement that they have a satisfactory record. What GPC have not provided, and we believe should have been provided as supporting documentation with this referral, is their environmental management and compliance history with past and current projects and operations. The environmental policy alone is not an accurate reflection of the actions taken by GPC in regards to projects and operations. For example, the WBDDP third party environmental audit provided to DSEWPaC and dated December 2011, clearly identifies one (1) non-compliance and five (5) partial compliances. Please refer to our comments on Appendix B in this submission for further details of the compliance issues.

Some of the things that give CCC evidence to believe GPC does not have a satisfactory record of responsible environmental management include:

- 1 non-compliance and 5 partial compliance issues identified in the December 2011 third party audit of the Western Basin Dredging and Disposal Project (WBDDP) which GPC manage;
- GPC have recorded 49 environmental incidents associated with the WBDDP between May 2011 and September 2012 (source of information: www.westernbasinportdevelopment.com.au/environmental_incidents_register). As GPC do not provide the public with the information or detail of what the incidents were and actions taken to mitigate or prevent such incidents from reoccurring in the future, we can not inform you what they are;
- Since dredging for the WBDDP project began, the publicly available turbidity levels at a number of monitoring stations in the harbour have been above GPC's environmental licence conditions for more than 48 hours but rarely has any action been taken by the State Department of Environment and Heritage Protection (formerly Department of Environment and Resource Management);
- One environment protection order was given to GPC on the 10th January 2012 by DERM for dredging above turbidity levels identified in the DERM permit conditions. However similar episodes which included Christmas 2011, Australia day, Easter and Labour Day holidays in 2012, were not enforced by DERM/ DEHP; and

- Approval of a Transitional Environment Program (TEP) by DEHP was granted on 25 June 2012 for the management of and accelerated bund wall sealing of the Western Basin Reclamation Area due to leakages. CCC would like to point out that GPC were aware of the leaking bund wall back in September 2011 (refer to statement below that is sourced from GPC's TEP document page 2, attached with DEHP TEP approval). Why did it take GPC nine months to do something about the leaking bund wall?

When the Reclamation Area was completed and pumping of dredge spoil into the bund wall started in September 2011; it was observed that the structure of the wall caused leakages. These leakages are likely to have contributed to the exceedances of inshore compliance sites. These exceedances were particularly pronounced at QE4 and ST1 because they are in close proximity to the reclamation area and have lower compliance limits.

CCC therefore concludes that the statement provided in this section of the referral ("*GPC has been heavily involved in water quality monitoring and has adopted adaptive management techniques to minimise the environmental impacts as part of the Western Basin Project.*") is insufficient to give evidence of responsible environmental management.

CCC further requests that the Minister and DSEWPaC staff investigate the compliance issues and environmental incidents associated with the WBDDP, and determine what environmental harm has occurred and whether the action taken to mitigate or prevent further occurrences has been sufficient or effective, **before considering this project or future projects/referrals from GPC.** Failure to do so would be failing to ensure the OUV of the GBRWHA are being protected in Gladstone Harbour and Port Curtis.

6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?

The answer provided in the referral to this question is 'No'. CCC questions the validity of this statement given that GPC were subject to court proceedings recently in the Planning and Environment Court (Qld) by commercial fisherman in relation to diseased fish. I refer you to the link www.abc.net.au/news/2012-08-30/fishers-lose-court-appeal/4232570 and request that DSEWPaC investigate this matter further.

COMMENTS ON FIGURES 1- 7 PROVIDED WITH THE REFERRAL

All maps (Figures 1 to 7) fail to identify the Bund Wall and Reclamation Area (extension) of Fisherman's Landing. The WBDDP channels and swing basins, existing Channels and the proposed duplication of Golding Cutting and Gatcombe Channels are identified on the maps/figures, however failing to identify the full extent of existing impacts from dredging and disposal upon the MNES in Port Curt Curtis by omitting the Fisherman's landing extension is unacceptable. This omission on all figures/maps in the referral is a failure to identify "existing levels of impact from other sources" as identified in the EPBC Significant Impact Guidelines.

All maps (Figures 1 to 7) display the duplication of Golding Cutting and Gatcombe Channels in a misleading way when compared with the short description of the action (section 1.1 of the referral). The short description states that the duplication '*will run parallel to the existing channel*' yet all the figures provided show the proposed duplication channel over the top of the existing channel rather than in parallel.

Figure 3: Seagrass communities (2009)

By utilising the 2009 mapping of seagrass communities in Port Curtis, this map is misleading as to the current extent of seagrass communities in 2012, because approximately 443 hectares of

Seagrass communities were approved for removal/destruction for the Western Basin Dredging and Disposal Project by GPC. The majority of the mapped *Halophila dicipiens* (pink on the map) and *Zostera capricorni* (yellow on the map) communities to the north of Fisherman's Landing (as identified in figure 3 of the referral) no longer exists, because it is now underneath the completed (or near completed) extension of Fisherman's Landing reclamation area. Approval by the Queensland Department of Environment and Heritage Protection for a Transitional Environment Program (TEP) on 25 June 2012 to fix the leaking bund wall of the Reclamation Area has meant that the reclamation has been completed ahead of time (completed on 2 August 2012 under the TEP). As Figure 3 (map of seagrass communities) was produced on 4 June 2012, GPC and Aurecon would have known that the seagrass extent had changed and reduced since 2009 with the approval of 3 LNG facilities and the WBDDP; seagrass behind the bund wall of the reclamation area and that which has been removed by dredging activities no longer exist. Subsequently, they should have provided an updated and accurate map of the current extent (2012) of seagrass communities in Port Curtis, not the 2009 mapping extent.

COMMENTS ON APPENDIX A and B:

Appendix A contains two EPBC Act Protected Matters Reports; the first report was generated on the 26 May 2011 at 13:28 hours using a 10km buffer for the coordinates of -23.90861 and 151.39778, and the second report was generated on the 10 June 2011 at 13:47 hours using a 10km buffer for the coordinates -23.81014 and 151.29103.

Providing two reports that were generated some 16 months ago is totally unacceptable. Additional or updated data relating to the MNES may well have been added in to the Protected Matters Database since these searches/reports were completed in 2011. Furthermore, GPC themselves have completed or commissioned numerous investigations and research relating to MNES and impacts to MNES for the WBDDP and other projects, yet these are not provided.

Appendix B is the GPC's Environmental Policy. I would like to point out that bullet point two (2) of the environmental policy states:

"Maintain compliance with all environmental legislation and other related requirements for all stages of GPC's projects and operations."

We believe that GPC have not maintained compliance requirements under state and federal legislation with the WBDDP since the project commenced. For example, GPC have recorded 49 environmental incidents associated with the WBDDP between May 2011 and September 2012 (source www.westernbasinportdevelopment.com.au/environmental_incidents_register).

What GPC have not provided, and we believe should have been provided as supporting documentation with this referral, is their environmental management and compliance history with past and current projects and operations. The environmental policy alone is not an accurate reflection of the actions taken by GPC in regards to projects and operations. For example, the WBDDP third party environmental audit provided to DSEWPaC and dated December 2011, clearly identifies one (1) non-compliance and five (5) partial compliances. These are summarised as follows by James Hart, the auditor, on page five (5) to six (6) of the Audit Report (for EPBC 2009/4904):

One non-conformance was raised during the audit.

· No evidence was available to verify that the independent auditor had been approved and the audit criteria agreed to by SEWPaC prior to the audit being conducted;

In addition to the one non-conformance, 5 areas of partial compliance were identified.

· While systems to minimise impacts from TSHD have been identified in Table 6.1 (A30), No other mitigation measures have been identified in the plan, although several were observed in practice, e.g. Procedures for fauna sightings during dredging and disposal operations, removal of fauna from WBRA;

- *The objectives identified in Section 1.3 of the WQMP do not align with the primary objectives identified by condition 22;*
- *Description of the water quality monitoring methodology does not include visual techniques;*
- *The ERMP refers to an adaptive management response as shown in Fig. 1. However, fig. 1 not included in ERMP;*
- *While plans make reference to the Great Barrier Reef World Heritage Area and National Heritage Place (e.g. WQMP – Section 4 Key Environmentally Sensitive Locations, ASSMP – Site Characteristics) the values of the Great Barrier Reef World Heritage Area and National Heritage Place, and EPBC Act listed species and habitat likely to be impacted by the components of the action have not always been clearly described in all plans and reports.*

Given the compliance issues identified and outlined above in an EPBC condition compliance audit (for WBDDP 2009/4904) with the same proponent (GPC), the proposed referral should not be considered until the proponent can demonstrate that non-conformance (partial and full) identified and outlined above has been fully addressed and rectified.

Yours sincerely,



Chantelle James
Project Officer.



16 October 2012

Referral Business Entry Point (EPBC Act)
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
Canberra, ACT 2601
E: epbc.referrals@environment.gov.au
CC email: kate.paull@environment.gov.au

Dear Sir/Madam,

RE: EPBC REFERRAL # 2012/6558 - GLADSTONE DUPLICATION CHANNEL PROJECT

The following letter is a supplementary submission and comments on the Port of Gladstone Gatscombe and Golding Cutting Channel Duplication Project, further to CCC's earlier submission submitted on the 10th of October 2012. Thank you for the extension of time to submit this supplementary submission.

SPECIFIC COMMENTS ON SECTIONS OF THE REFERRAL IN RELATION TO MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE (MNES)

3.1 (d) Listed threatened species and ecological communities

Description

Further to our concerns raised in our 10 October submission regarding the validity of using two 16 month old EPBC protected matters search lists (and therefore potentially missing or omitting threatened species and communities and providing misleading information), I would like to provide verification of these concerns with two lists that were generated today (16/10/12) using the exact same coordinates (and a 10km radius) as those provided in Appendix A of the Referral.

There are 6 more threatened species listed and 1 more threatened ecological community identified in our (CCC) current search of the EPBC protected matters. A summary of the differences between our search list and GPC's (the referral) search list are provided below in table 1. This is a significant increase in the species listed. The two current search lists generated 16/10/12 are attached to this email submission (called CCC_EPBC_PM_search_2012-10-16_PMST_DPC4TX.pdf and CCC_EPBC_PM_search2_2012-10-16_PMST_HYRQ4X.pdf).

	Appendix A of referral – search list 1	Appendix A of referral – search list 2	CCC search list 1	CCC search list 2
Threatened ecological communities	1	1	2	2
Threatened species	28	30	36	34

Table 1: Comparison between GPC's search list (May June 2011) and CCC's current search list (October 2012).

Given the results above, CCC requests that DSEWPaC consider the detail (and additional TEC and species) of the 'current' search lists and dismiss or reject the old search lists provided in the referral.

TEC

CCC's EPBC protected matters search list also identified the critically endangered TEC of Lowland Rainforest of Subtropical Australia. CCC requests that this community be taken in to consideration by DSEWPaC as part of the referral. CCC would like to point out that the referral documentation does not provide any maps or spatial reference to known sites and locations of the two TECs (Lowland Rainforest and Littoral Rainforest) within the Port Curtis region. Figure 5 provided in the referral documentation is of regional ecosystems (Queensland classification and not EPBC listed TEC's) and is therefore irrelevant to assess potential impacts for the two rainforest TEC's.

It is unacceptable that the referral does not identify potential onshore dredge spoil disposal sites and therefore does not make any attempt to determine the potential impact of disposal upon these two TECs. Onshore disposal (and onshore reclamation) of any amount of the 12 million m³ of dredge spoil would cause unacceptable impacts upon terrestrial and coastal environments and these two TEC's (if they are nearby, adjacent to or directly removed for onshore disposal).

CCC requests that a decision on the referral is not made without the consideration of the full extent and details of potential onshore disposal on TEC's in the Port Curtis region. This would require either the Minister to refuse the referral and/or the long term disposal of dredge spoil to submitted for consideration.

Threatened species

The Water Mouse – The referral states it is possible this species is present in the area as suitable habitat for the species occurs adjacent to the dredge area (mangroves and salt marsh communities). Given that this species has been identified in survey work of the Port Curtis Intertidal wetlands for the proposed Yarwun Coal Terminal (EPBC # 2012/6348), and it is known to occur on nearby Hummock Hill Island (EPBC # 2005/2502 – referenced in Departmental Advice), it is most probable that this species will be present in other mangrove and saltmarsh communities in the greater Port Curtis area.

Provided below is an extract from the Initial Advice Statement for the Yarwun Coal Terminal Project:

Two Water Mouse (Xeromys myoides) individuals were captured within the vicinity of the proposed coal terminal site during surveys in December 2011 (GHD, 2012). The capture locations were approximately 150 m from the eastern boundary of the stockyard.

This referral document (for Gladstone Duplication Channel project) does not consider direct, indirect or cumulative impacts for this vulnerable species. Nor does the referral identify any measures to avoid or reduce impacts to this species (in section 4). This is not acceptable as it fails to address the significant impact guidelines for MNES to determine:

- *existing levels of impact from other sources, and*
- *the degree of confidence with which the impacts of the action are known and understood.*

Cumulatively, the impact and threats to this species from previous, current and proposed developments in the Port Curtis region would be *significant* due to the direct loss and fragmentation of mangrove and salt marsh habitat (for breeding, feeding/foraging and shelter), altered hydrological regimes, pollution and exposure or disturbance of Acid Sulphate Soils.

CCC urges DSEWPaC to consider the cumulative impacts to this species and to quantify the cumulative loss (hectares) and fragmentation of habitat from coastal and industrial development in the Port Curtis region in the last 20 years.

The Black-breasted Button Quail and Australian Painted Snipe will potentially be impacted by this proposal with onshore disposal and the cumulative impacts of other industrial projects already underway in Port Curtis, due to potential impacts to their respective habitats of Littoral Rainforest

and Intertidal Wetlands in Port Curtis. This referral has not even considered such impacts. CCC finds this to be unacceptable.

Further direct, indirect and cumulative impacts that will be of an adverse and significant extent and nature to endangered and vulnerable marine turtles are likely to occur as a direct result of the dredging and disposal from this project, and particularly when considered cumulatively with 60 million m³ of dredging and disposal within their known marine habitat of Port Curtis. This referral has not considered the cumulative impacts of sea grass loss, habitat destruction, turbidity increases and toxic effects of disturbance of sediments containing PASS, ASS, heavy metals and other toxicants. Given the loss of some 443 hectares or more of seagrass in the Port Curtis area, in the GBRWHA, such cumulative impacts to the health and survival of the species must be considered.

Nature and extent of likely impact

This referral only considers the impact to threatened marine mammals, reptiles and sharks. It fails to consider any direct, indirect or cumulative impacts of the project upon birds, terrestrial mammals and plants. Given that the proposal identifies onshore disposal of dredge spoil will be considered, the impacts and threats of terrestrial disposal (onshore disposal) upon threatened species of birds, plants and terrestrial mammals must be considered and researched in the referral stage. This is essential to determine the nature and extent of the impact.

The list of potential direct and indirect impacts is limited and needs to be expanded to include:

- noise and light pollution from dredging and piling operations;
- loss of breeding habitat
- disturbance of acid sulphate soils (ASS and PASS) and subsequent adverse changes and impact to pH and metal concentrations in the water column;
- nuisance to species from increased and constant dredging;
- reduced water quality impacting upon birds, mammals and plants;
- disturbance and mobilisation of sediments via dredging, that can cause indirect health issues and death for threatened species as a result of changed water quality conditions in the marine environment.

CCC urges and requests that the Minister and DSEWPaC uphold the 'precautionary principle' to protect threatened species and communities from the direct, indirect impacts and cumulative impacts by refusing the project.

3.1 (e) Listed Migratory Species

CCC urges DSEWPaC to consider and reference relevant research reports on migratory birds and marine megafauna in the Port Curtis and Port Alma regions (which are available on GPC's western basin port development website), before making a decision on this referral. Information should also be sort from the LNG projects approved and in the EIS phase in relation to listed migratory species.

The nature and extent of the impact upon significant species such as the Dugong, Humpback Dolphin, and migratory shorebirds, which are known to occur within Port Curtis, have not been considered or discussed appropriately within this referral. There are no specific considerations of the cumulative impacts of the cumulative total of 60 million m³ of dredging and associated dredge spoil disposal (onshore and offshore) to the marine and coastal (terrestrial) habitats of these species.

CCC urges and requests that the Minister and DSEWPaC uphold the 'precautionary principle' to protect listed migratory species from the direct, indirect impacts and cumulative adverse impacts to habitat and water quality in Port Curtis, by refusing the project.

4.0 Measures to avoid or reduce impacts

Cumulative impacts and measures to reduce or avoid impacts of industrial projects (existing, in construction, approved or in the EIS phase) in the Port Curtis region have not been considered or

discussed in the referral and measure. CCC finds this to be unacceptable. Onshore disposal impacts have not been considered; 'various criteria' are not identified or listed.

The potentially adverse and significant direct, indirect and cumulative impacts of this project (and others) upon individual threatened species, threatened communities and listed migratory species have not been discussed in this referral. This is not acceptable and does not allow for effective assessment of the proposal under the significant impact guidelines.

Given the ongoing severe issues with marine environment and ecosystem health in Gladstone and Port Curtis, and the adverse effects and impacts to fish health and water quality, CCC requests that Minister Burke take a precautionary approach to this referral and the action, to make a decision that the impacts (direct, indirect and cumulative) to MNES are clearly unacceptable under s74B of the *Environmental Protection and Biodiversity Conservation (EPBC) Act* and that the project CAN NOT proceed.

6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?

Further to our statement in our submission on the 10 October, attached to this email submission is a copy of the ruling from the Planning and Environment Court of Queensland for the *Falzon v Gladstone Ports Corporation & Anor [2012]* (pdf document titled Commercial Fishers Compensation Ruling August 30, 2012.pdf).

Yours sincerely,


Chantelle James
Project Officer.



28 May 2012

The Coordinator General
c/- EIS Project Manager - Arrow LNG Plant
Significant Projects Coordination
Department of State Development, Infrastructure and Planning
PO Box 15517
CITY EAST QLD 4002

Fax: 07 3225 8282

Email: arrowlng@coordinatorgeneral.qld.gov.au

Dear Sir/Madam,

RE: EIS SUBMISSION ON THE ARROW LNG PLANT

Capricorn Conservation Council Inc. (CCC) is the principal not-for profit environmental organisation in Central Queensland.

CCC is not in favour of another LNG facility on Curtis Island in World Heritage Area (Great Barrier Reef). CCC requests that the project be considered as part of the Strategic Assessment of Great Barrier Reef. Furthermore, CCC requests that a decision on the project be put on hold until the ecological and environmental stressors upon fish health, water quality and marine fauna and flora in the Gladstone Harbour and Port Curtis and Curtis Coast area, can be determined and can be proven not to be a result (direct, indirect or cumulative impact result) of the current Western Basin Dredging Project. There are signs of eco-toxic effects upon fish health and other marine life health at present in Gladstone Harbour and the ecosystems of Curtis Island and Port Curtis do not need another potential project and its associated environmental impacts (direct, indirect and cumulative) adding to this.

CCC requests further time to consider and comment upon this project and the EIS due to the constraints of many development projects in Central Queensland for our organisation to consider and comment upon in short time frames, alongside our other day to day activities.

Please find following our current submission for your consideration.

Yours sincerely,

Chantelle James
Project Officer.

Submission on the environmental impact statement (EIS)—Arrow LNG Plant

Submissions close at **5pm on Monday 28 May 2012**

Name:	Chantelle James	Email:	ccc@cccqld.org.au and ccc@cqnet.com.au
Organisation (if applicable):	CAPRICORN CONSERVATION COUNCIL Inc.	Telephone:	(07) 4927 8644
Address:	PO Box 4011 ROCKHAMPTON QLD 4700		

Section of EIS	Describe the issue	Suggested solution
1.1.1	CCC feels there is inadequate consideration of the cumulative impacts of all major projects (including other LNG plants) in Gladstone. Cumulative impacts are a major consideration in assessing whether development will be ecologically sustainable.	<p>The cumulative impact assessment associated with these combined projects needs to be far more robust. The cumulative impacts of the LNG projects and other industrial projects in the region, will affect air quality, nature conservation, climate change, marine environment, and community quality of life. This project should not proceed until a detailed assessment of cumulative impacts (short term and long term) is completed and communicated to the public.</p> <p>The Precautionary Principle should be used fluidly in this case: <i>The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.</i> (Section 391, EPBC Act)</p>
1.2.1 and other relevant sections of EIS	The project is located inside the Great Barrier Reef World Heritage Area (but outside the Great Barrier Reef Marine Park and outside the Great Barrier Reef Coast Marine Park)	The UNESCO meeting on world heritage issues concerning the management of the Great Barrier Reef World Heritage Area [and particularly issues with approvals of LNG facilities (and associated dredging) in Gladstone and on Curtis Island] is in June 2012 in St Petersburg. Resulting recommendations from this (UNESCO World Heritage Committee) meeting applying to the GBRWHA should be applied to and incorporated into this EIS (and Supplementary EIS). Prior to the receipt of these recommendations, any operations or EIS process should be completely suspended.

Section of EIS	Describe the issue	Suggested solution
1.2.1 Project Location	Statement that 'two' of the other LNG facilities are under construction is incorrect, because there are three in construction at the moment.	Correct statement and replace 'two' with the word 'three'.
1.2.2	Marine facilities will include a LNG jetty, materials offloading facility (MOF), personnel jetty and mainland launch site. Three options are being considered for the above.	CCC would prefer a minimum of facilities for exclusive use by all LNG proponents in Port Curtis/Gladstone harbour, and therefore request as many shared facilities as possible, including LNG jetty, MOF, personnel jetties, dredging, pipeline and services tunnels and the mainland launch site. This type of sharing has been suggested by the CG department. Whilst CCC does not endorse a 4 th LNG facility, shared and existing facilities (or facilities that will be available after construction) must be used to reduce environmental impacts from dredging and infrastructure construction.
1.2.2	Tunnels under harbour	CCC is concerned about the sheer number of proposed tunnels. We suggest sharing tunnels as above for jetties etc.
1.2.2	Additional dredging required	Turbidity has been a recent serious concern. The locality in tidal flood areas with adjacent islands is likely to present considerable challenges. We suggest seeking alternative locations for marine facilities. CCC does not support the additional dredging required or proposed for the Calliope River. This is in World Heritage Area and removal of 1,000,000m ³ of sea and river bed would impact directly upon estuarine and marine ecosystems, fish habitat, important dugong habitat and sea grass beds (near Wiggins Island), benthic flora and fauna and other marine fauna (including endangered turtles and dolphins). Cumulative impacts to this area will be unacceptable. Preference must be given to the MOF and personnel launch facility at Fisherman's Landing.
Figure 1.1	The representation and demarcation of the Great Barrier Reef World Heritage is confusing and misleading with only a red line marking the end of the world heritage area on land.	Fix the map by including a 'fill colour' or 'hatching colour' to identify the land and marine mass included in the World Heritage Area.
1.3 Project Rationale	The Project Rationale – The Australian domestic gas market? Is it not true that all or the majority of the gas will be shipped overseas! And not for domestic market?	Less Carbon intensive energy producing sources for Australian and International market must be given higher priority (such as solar thermal energy producing power) and consideration above the CSG industry. Short term economic gain for 35 years will result in far greater environmental consequences than the economic gain is worth.

Section of EIS	Describe the issue	Suggested solution
1.3.1	Negative social and economic impacts listed that 'may' occur, will no doubt occur because these very impacts identified are occurring already as a result of other LNG facilities, GPC dredging projects etc	Change wording from 'may' occur to 'will' occur.
4.3.1 Environment Workshop	Who was invited to this workshop? There is no reference to a list of invited persons to identify what group or individuals were invited and who attend.	Provide and reference a list of invitees and attendees to the Environment Workshop identified on page 4-6.
6.1.1 Material Offloading Facility	Three sites investigated. Two or all three are greenfield sites. Boatshed Point and Hamilton Point are considered and Boatshed Pt is identified as the preferred option. CCC objects to another MOF and personnel jetty and dredging in a greenfield site (either Hamilton Point on GPC land or at Boatshed point) when impacts could be reduced by sharing the GLNG jetty facility.	Alter preferred option to reduce environmental impacts and share resources for MOF and personnel jetty with GLNG
6.4.3 Wastewater treatment system Pge 6-25	The Controlled Discharge Facility and Observation Pond: 1. The proponent identifies that the 'controlled discharge facility' will 'collect and treat all potentially contaminated (water) or contaminated run-off' and that it will be monitored with continual monitoring equipment prior to discharge. Nowhere in this section of the EIS does it identify what water quality parameters or contaminants will be measured and by what standards it will be monitored under prior to a decision being made about release to the Port Curtis marine environment waters; this must be identified in this and other sections of the EIS. 2. The proponent states that if the run-off water is unsuitable for discharge, it will be diverted to the treatment plant and then discharged. What are the parameters that are unsuitable and what will the treatment plant be able to effectively treat or remove of contaminants or high levels?	1. Identify, document and list the water quality parameters that will be monitored by continual monitoring equipment in the controlled discharge facility and Observation Pond, prior to any discharge, and the 'standards' or trigger levels that will be used to identify release limits for each parameter. Identify, document and list the contaminants that will be monitored in the controlled discharge facility and the observation pond, prior to any discharge, and the 'standards' or trigger levels that will be used to identify release limits for each contaminant. 2. Identify contaminants that the treatment plant can successfully remove or lower. Identify how these contaminants and water quality will be measured again after treatment, prior to discharge to the marine environment.
13.1.2 Guidelines, Policies & Plans	1. The proponent identifies the 2008 Environment Protection (Water) Policy (EPP Water) and discusses that environmental values have not been identified for Calliope River Basin or Curtis Island yet, however they are expected to be completed by 2013. The 2009 EPP Water has been updated to include the EV (environmental values) and WQ (water quality) objectives for the Fitzroy Basin. The Fitzroy Basin EV and WQ should be used as a guide until the draft versions of the Boyne, Calliope and Curtis areas are complete and available. 2. ANZECC and Queensland Water Quality Guidelines are identified. The Fitzroy Basin Environmental Values and Water Quality Objectives under the EPP Water are not identified; these should be used for a more regionally accurate perspective on water quality, in conjunction with ANZECC, Queensland and any Curtis Coast info.	1. Amend this section of the EIS and utilise the updated EPP Water (2009, not 2008) that includes environmental values and water quality objectives for the Fitzroy Basin as a guide (from schedule 1 of the Environmental Protection (Water) Policy 2009 that are available on the DERM website .), until draft values and objectives are available for Boyne and Calliope Rivers and Curtis Island. The Fitzroy Basin Association are currently drafting environmental values for these basins on the Curtis Coast. 2. Refer to and include the EV and WQO's for the Fitzroy Basin waters, amended in the EPP Water 2009, in this chapter and other relevant chapters of the EIS.

Section of EIS	Describe the issue	Suggested solution
13.2.1 Water Quality Pge 13- 6	<p>1.The proponent identifies that an ‘assessment was made on water quality conditions’ in Targinie and Boat Creeks and that these creeks are the only freshwater creeks that water quality may be impacted by project activities. CCC believes this to be incorrect and that other creeks and rivers will be impacted by the project activities. For example, proposed dredging of Calliope River will most definitely have an impact on water quality in the estuarine and freshwater sections.</p> <p>2. Water quality tests of a recent nature for Boat and Targinie Creeks (or any other creeks) were not completed physically by the consultants, rather data from external sources was utilised (PCIMP and DERM and APLNG). The data is from 2010 and 2011; data from 2012 should also be included in the assessment and the proponent should complete their own testing for</p> <p>3. Ephemeral creeks on Curtis Island were not tested for water quality (parameters or levels) at all. CCC finds this to be unacceptable and believes that monitoring data from the previous wet season could have been collected for flow events in unnamed waterways on Curtis Island (particularly those that will be impacted by the project). Data must be collected by the consultants/proponent on the freshwater and estuarine waterways.</p>	<p>1. Collect water quality data for 2012 on all ephemeral and permanent waterways on the mainland and Curtis Island that will be potentially impacted by the project and activities. Monitoring data for water quality conditions must include Calliope River freshwater and estuarine environs.</p> <p>2. Proponent and consultants of the proponent must collect water quality samples and complete analyses for 2012 on all ephemeral and permanent waterways on the mainland and Curtis Island that will be potentially impacted by the project and activities. Monitoring data for water quality conditions must include Calliope River freshwater and estuarine environs.</p> <p>3. Sample and test the ephemeral creeks on Curtis Island for water quality parameters. If opportunities from this wet season have been missed, then complete sampling and testing at nearest opportunity, particularly next wet season.</p>
Table 13.8 Sensitivity of environmental values	World Heritage Area values for the Great Barrier Reef appear not to have been considered in the compilation of this table (13.8) of information.	Consider and use the World Heritage Values identified in 1981 and thereafter, in the compilation of table 13.8 and other information in this chapter; any ‘values’ identified for the Curtis Coast area in UNESCO, UNEP or Australian or Qld government documents during this time should also be identified, referenced and utilised.
18.1 Legislative context & Standards (within Freshwater ecology chapter)	It appears the proponent has failed to identify the STATE PLANNING POLICY 4/11 - Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments in Chapters 18 and 13 (and potentially other chapters of the EIS). This Policy under the Sustainable Planning Act 2009 must be included and considered in the EIS, particularly in regard to determining impacts to freshwater and marine ecosystems on the mainland, Curtis Island and Port Curtis.	The proponent must identify and utilise the STATE PLANNING POLICY 4/11 - Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments in Chapters 18 and 13 (and potentially other chapters of the EIS). This policy must be used and referenced when determining impacts to freshwater and marine ecosystems on the mainland, Curtis Island and Port Curtis, associated with the project.
Ch. 32 Cumulative Impacts 32.2.1	Only including the projects which made an investment decision by January 2011 (as stated in the first paragraph of this section of the draft EIS) in the cumulative impact assessment is absolutely appalling and totally unacceptable.	All projects that are in consideration, whether or not they have an investment decision, MUST be included in the Cumulative Impact Assessment. The assessment must include the Tenement to Terminal project.
Table 32.2	Misleading and false information that there is no fish or intertidal habitat in this table for Arrow LNG and other LNG facilities and WBDDP.	The LNG plant dredging and Calliope river proposed dredging would be disturbing fish or intertidal habitat. What is the definition that has been used for fish and intertidal habitat in this table?

Section of EIS	Describe the issue	Suggested solution
32.3.5 Marine impacts – Lighting	Poor qualitative assessment of the cumulative lighting impacts upon marine turtles. Identified as 'low' but no justification or explanation of how the assessment came to this scientifically.	Identify and list the known impacts from the EIS and operational knowledge of the 3 LNG facilities.
32.3.5 Marine impacts – shipping	Extremely poor assessment of shipping impacts. No qualitative or quantitative numbers of cumulative shipping or boating mentioned. This is unacceptable. Quantitative figures for increased shipping and boating traffic (including LNG tankers and personnel and MOF boat traffic), noise levels from construction and boating and cumulative impacts to loss of habitat for marine species (inc. from loss of benthic habitat, loss of sea grass, loss of mangroves & intertidal salt marshes and fish habitat in the harbour) must be provided.	Provide figures for quantitative and qualitative impacts to marine flora, fauna and water quality from cumulative shipping, boating and associated dredging with all proposed and current projects known in the Gladstone and Port Curtis area.

If there is insufficient space in the table above, please attach additional pages.

Signature:(A submission by more than one person must be signed by *each* submitter.)

Complete, print and sign this form and send it to one of the following:

Email arrowlng@coordinatorgeneral.qld.gov.au

Post

The Coordinator-General
C/- EIS project manager—Arrow LNG Plant
Significant Projects Coordination
Department of State Development, Infrastructure and Planning
PO Box 15517
City East QLD 4002 Australia

Privacy: Your personal information is being collected as part of a public consultation by the Department of State Development, Infrastructure and Planning on behalf of the Coordinator-General. The Coordinator-General is authorised to collect personal information under sections 24 and 29 of the *State Development and Public Works Organisation Act 1971* (SDPWO Act). Your personal information will be used for the purpose of considering your submission, assessing the EIS, completing the EIS process and the performance of functions under the SDPWO Act and other legislation relevant to the proposed project. Your personal information may be disclosed to the project proponent or other government agencies that are involved in the proposed project, and is also subject to disclosure under the *Right to Information Act 2009*. Your personal information will not otherwise be disclosed, unless disclosure is authorised or required by law, or is permitted under the *Information Privacy Act 2009*.

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24 August 2011

Referral Business Entry Point, EIA Policy Section (EPBC Act)
Environment Assessment Branch
Department of Sustainability, Environment, Water, Population & Communities
GPO Box 787
Canberra ACT 2601

Dear Sir/Madam,

**RE: Fitzroy Terminal Project Pty Ltd/Fitzroy Terminal Project
EPBC Referral Number: 2011/6069**

Railway spur

The Initial Advice Statement (IAS) describes the FTP as initially handling “10 Mtpa of coal from the existing Blackwater and Moura rail networks via the multi-use rail spur corridor also proposed for Xstrata Coal’s Balaclava Island Coal Export Terminal (BICET).” CCC has great concerns about the use of this multi-user rail spur corridor; it is CCC’s understanding that Xstrata require the sole use of this rail spur for the transfer of their own coal product to deliver their own export requirements (350 mtpa), and that a combined multi-user railway line is not agreed to by Xstrata. CCC requests that the proponent clarify and confirm the actual availability and use of this corridor with Xstrata before the FTP proceeds any further, and prior to any EPBC approval. It would appear that one railway line would not be sufficient for both the BICET and FTP projects; the construction of a second railway line within the proposed railway corridor of the BICET project would have unacceptable and increased impacts to the hydrology of the Fitzroy floodplain, the breeding grounds and essential habitat for the Yellow Chat, and the Raglan Creek freshwater and estuarine systems.

IAS - Section 1.3 Project need

The proponent fails to identify what coal mine projects out of the current, new and expanding mine proposals in the Bowen Basin (or Surat or Galilee Basins) are proposing to utilise the proposed FTP infrastructure and coal exporting facility. CCC requests that the proponent identify the potential and actual coal mine projects that the FTP will support for coal export; the potential impacts of construction and operation of the FTP are far too great to warrant not having identified customers.

EPBC referral – section 2.3 – Alternative locations, time frames or activities

The proponent has briefly discussed five (5) options, which includes the preferred Raglan Creek option, however they have failed to identify the current and existing issues associated with transportation of ammunitions from Bajool to Port Alma (and exported from Port Alma) in any of their alternative or the preferred option discussions. CCC believes that the proponent must provide information regarding this conflicting issue, especially as the proposed coal barges will be moved within the same area (Port Alma) as the ships containing ammunitions which may pose a threat to marine and estuarine fauna and flora and human life.

The proponent states that the Raglan Creek option ‘is located outside of the Fish Habitat Area, requires minimal dredging and is currently used by other ships entering Port Alma.’ CCC would

like to point out that the Raglan Creek and Port Alma and Balaclava Island areas, where the FTP is proposed, were included in the original proposal and research for the Fitzroy River Fish Habitat Area; 'Habitats and Fisheries of the Fitzroy River Estuary (CQ)' authored by Long, P.E. & McKinnon, S.G. These areas, which include the proposed barge loading facilities and barge shipping channels for the FTP, do in-fact still provide much needed feeding, breeding and nursery grounds for fish and crustaceans and inshore dolphins (endangered and isolated populations of Snub-fin and Indo-pacific humpback dolphins). CCC is concerned about the cumulative environmental impacts of increased boat traffic, dredging and disturbance of Acid Sulphate Soils (ASS) and Potential Acid Sulphate Soils (PASS) upon marine and estuarine fauna and flora, wetlands and fish habitat and the Great Barrier Reef World Heritage Area (GBRWHA) and Marine Park. The cumulative impacts must be considered by the proponent, DSEWP&C and other port development companies/proponents, because the Raglan Creek area, Port Alma area, Balaclava Island area and the shipping channels in the Fitzroy River, GBRWHA & Marine Park, are associated with the 3 known port development and expansion activities; FTP, BICET and expansion of Gladstone Port Corporation's port land into operational coal ports (GPC have publicly spoken of up to 8 berths in the Curtis Island, Balaclava Island and Port Alma area, 2 berths would be Xstrata's for BICET and 6 berths for GPC).

EPBC referral – section 2.4 - Context, planning framework and state/local government requirements

The proponent states that 'Part of the conveyor route and the barge loading facility is proposed within Strategic Port Land'. CCC questions whether negotiations and/or agreements have occurred with the relevant Port Corporation, Gladstone Port Corporation, regarding this fact and strongly suggests that the proponent provides more detailed information regarding the negotiations and progress in relation to use and access to port lands, prior to a decision being made on the EPBC referral.

EPBC referral – section 2.6 – Public Consultation

The proponent states in the referral that '*as part of the selection of the preferred FTP site the project team have consulted with..... Capricorn Conservation Committee...the Local Marine Advisory Councils....*'.

We assume that the Capricorn Conservation Committee is actually the management committee of our organisation; Capricorn Conservation Council Inc. CCC would like to confirm that the proponent has not directly consulted with our committee or employees or members to our knowledge, in relation to the Fitzroy Terminal Project. FTP consultants and an FT manager were present on a recent Fitzroy River boat trip for the Capricorn Coast Local Marine Advisory Committee, which CCC attended, however this was an LMAC information session and not individual consultation on their project with our organisation.

EPBC referral – section 3.1 (a) – World Heritage Properties

It is identified by the proponent in the Description that '*FTP's offshore activities are located within and adjacent to the boundaries of the GBRWHA*', however the proponent fails to describe specific local values of the GBRWHA area they are proposing to implement their offshore activities within. This information must be provided; only providing generic UNESCO criteria as the proponent has done, is not acceptable.

Table 6 – This table lists the actions and assessment of the likely to impacts the values of the World Heritage property. In Row 5 of Table 6 (on page 19 of the referral), the proponent claims that there will be 'negligible increases in suspended sediment....as a result of initial dredging or through barge traffic'. CCC has noted that the proponent has focused predominantly on suspended sediments in their assessment of impact of proposed action; CCC believe that the action of dredging will most definitely result in the disturbance of Acid Sulphate Soils and Potential Acid Sulphate Soils, which would have an impact on the water quality in the nearby GBRWHA and the Fitzroy River estuary as a result of marine and estuarine currents and fluvial dynamics. CCC also believes that the disturbance of marine sediments from dredging in Raglan Creek and the shipping channel within the Fitzroy River, will result in the suspension of sediment in the water column, and is likely to be coupled with the potential suspension of heavy metals, nutrients and pollutants attached to these sediments.

The Fitzroy River Catchment is an agricultural and mining catchment. A 2006 Coastal CRC Technical report on *"Pesticides, polycyclic aromatic hydrocarbon and metal contamination in the Fitzroy Estuary"* (available at www.ozcoasts.org.au) identified Atrazine, Tebuthiuron and Diuron at levels above the ANZEEC trigger values for freshwater (in water column), although these and other herbicides were not detected in benthic sediment samples, probably as a result of the high water solubility of these herbicides, it is quite possible that other pollutants such as heavy metals and PAH will be present in the areas earmarked for dredging in the FTP. The 2006 Coastal CRC technical report did however find that PAH's (polycyclic aromatic hydrocarbons) were detected at low levels in the Fitzroy Estuary.

Worthy of noting is the comparison made between the highly industrialised Port Curtis area and the then low industry Fitzroy mouth in this report as follows; *"In contrast, many more types of PAHs and higher concentrations were detected in benthic sediments of the more industrialised part of central Queensland, Port Curtis, including some PAHs (e.g. benzo[b+k]fluoranthene and benz[a]pyrene), which are potentially toxic to biota and carcinogenic to humans"* and *"The recent rapid expansion of commercial mining activities in the central Queensland region could result in increased PAH and metal contamination"* (in Fitzroy River). CCC has concerns about the cumulative impacts of increased industrialisation of the Fitzroy River mouth and Curtis Island and the surrounding and nearby GBRWHA, in relation to increased pollutant levels in the water column and benthic sediments as a result of the proposed coal export facility projects for Xstrata, Fitzroy Terminal and Gladstone Port Corporation. Of even more concern, are the potential impacts of increased pollutants upon the known populations of marine mega-fauna including dugong, turtles and in-shore dolphins such as the Australian Snub-fin Dolphin and Indo-pacific Humpback dolphin.

EPBC referral – section 3.1(c) Wetlands of International Importance

The proponent states that there are *'several High Ecological Significant (HES) wetlands within and adjacent to the study area'*, however they fail to provide relevant information about these wetlands in the referral or in the Initial Advice Statement (referred to as Attachment I by the proponent). Section 3.3.3 on wetlands in the Initial Advice Statement (IAS) has the most minimal and unacceptable detail about the wetlands within the study area, with only a map (figure 3.2) showing where the Shoalwater-Corio Bay Ramsar Wetland is located in relation to the FTP. The proponent must provide a map with all the wetlands identified and named/labelled, including those of international, national and local significance. Furthermore, the proponent provided a cross reference to section 3.4.3 of the IAS, which does not even exist, and a cross reference to section 4.3.3 of the IAS which has a one line statement regarding hydrology impacts to wetlands to be considered in full during the EIS process; this vagueness and lack of information to describe the wetlands and the extent and likelihood of impacts associated with the FTP is totally unacceptable.

Of concern for CCC, is the direct, consequential and cumulative environmental impacts that will occur as a result of the FTP proposed activities/actions and that of the BICET project and future GPC port expansions in the same area, to a), the two nationally listed significant wetlands of the Fitzroy River Delta and Fitzroy River, which are also within a Declared Fish Habitat Area, and b), the nearby GBR Habitat Protection Area of The Narrows (between Curtis Island and the main land).

EPBC referral – section 3.1 (d) Listed threatened species and ecological communities

Again, the information and comments provided within this section of the referral is very limited and lacks the necessary localised information regarding the threatened species and communities in the project area, which the proponent and consultants should have been able to access and provide and have knowledge of. It is appalling that only a risk matrix has been used to determine the nature and extent of the impacts to threatened ecological communities and species in the project area from the FTP actions/activities, and that *'no further investigations into the potential for these species to exist within the Project Area have been conducted at this stage'*. CCC finds this unacceptable and disagrees with the proponent's conclusive statements that there are no unacceptable risks to TEC's and species from the FTP and that *'the risks to habitat and populations of common species, barriers to wildlife movement, species richness and distinctive plants/ecosystems are likely to be acceptable and to populations of EVM species likely to be low with appropriate mitigation and management.'*

CCC believes that the proponent and consultants have not undertaken a thorough enough desktop study for this EPBC referral to provide these conclusive statements. Furthermore, we believe the proponent must be counting on accessing and utilising Xstrata's survey data on threatened ecological communities and species for the *'further investigations and detailed surveys'* to be conducted as part of the EIS process. Whilst this makes logical sense, it must be acknowledged that the seasonal survey information from Xstrata will not necessarily cover all of the foci area, species and impacts for the FTP. For this reason, CCC requests that DSEWPaC seeks clarity on this issue with the proponent, and takes this into consideration when assessing the referral and any future EIS material.

Birds

The Capricorn subspecies of the Yellow Chat does occur within the project area and research, education and protection measures have been undertaken by the Fitzroy Basin Association (FBA) and Central Queensland University (CQU) since 2002 (refer to http://www.fba.org.au/programs/yellow_chat.html). More recently, Xstrata have invested in research/investigations on the Yellow Chat. The Southern Fitzroy Floodplain is a well-known and documented area for breeding and feeding by the Yellow Chat. A journal paper on the range of the Yellow Chat (*Houston, W. et al 2009*) clearly identifies that Twelve Mile Creek is a known breeding site and sightings have occurred in Raglan Creek, Inkerman Creek and numerous other sites of the Southern Fitzroy Floodplain and delta system, including salt pond areas at Port Alma. Habitats of the Yellow Chat include tall sedgeland, grassland and saltmarsh on marine plains; vegetation types and ecosystems that FTP proposed to traverse with a railway line, conveyor belt and barge loading facilities. Given that the population of this subspecies is estimated at less than 400 (*Houston, W. et al. 2009*) in the Capricornia region, and that between 1 and 28 birds have been sighted at each of the six sites surveyed by Houston, W et al. (2009) during 2005-2008, CCC has grave concerns for the survival of this species with the impacts to habitat and hydrology associated with the FTP and other coal port proposals in the area.

The Threats Summary in the Yellow Chat recovery plan (EPBC) identifies that *'habitat occupied by the Capricorn Yellow Chat is threatened by modifications to hydrological regimes through flow reductions (by dams or ponded pastures) into catchments and construction of barriers within tidal areas where the subspecies occurs'* and *'The potential for industrial expansion may also lead to further habitat loss in the Fitzroy Delta.'* CCC strongly believes that the cumulative impacts of industrial development (associated with the FTP and BICET projects and future GPC coal port expansions) will cause irreversible hydrological and flow changes to known breeding, feeding and nesting habitats of the Yellow Chat on the Southern Fitzroy Floodplain.

Discussions with Xstrata have identified that the proposed railway corridor for their BICET project is not a multi-user railway facility however they are potentially prepared to share road, water and power facilities in the corridor. Secondly, discussions with Xstrata recently indicated that the costs of building (pole) elevated creek and wetland railway crossings is cost prohibitive and such elevated structures would be strategic and minimal for their railway spur. This

indicates to CCC that the majority of the railway spur and loop (whether one or two or more) will be constructed using standard railway corridor formation earthworks, which we believe will significantly obstruct and alter overland/surface water flow, riverine flow and ground water flows to an extent that freshwater and intertidal flows will be irreversibly changed with negative ecological impacts.

Our discussions with Xstrata strongly suggest that a second railway line spur will have to be built to provide for the FTP, which would result in double the creek crossings, hydro-geological and flow changes in the vicinity of Twelve Mile Creek and Christiansen's Oxbow and other wetland sites within the Raglan Creek Catchment and Fitzroy Floodplain and Delta; areas which are known sites for the Yellow Chat (including breeding). We find this to be an unacceptable risk which would go against the recovery objective and actions for the Yellow Chat and cause the following threats identified in the recovery plan: 1. Interfere with surface flows upon which productivity of these marine plain wetlands are dependant, 2. Reduce habitat and hydrological complexity, 3. Damage sedges or grasses that provide shelter and nesting habitat, 4. Cause habitat loss, 5. Introduced plant species that would compete with sedge and grassland habitat (by construction of multi-use corridor), and 6. Increase groundwater salinisation (from changes in ground water flow and movement associated with compaction of ground under and around railway line formation) and the consequential change in vegetation composition and structure.

The Squatter pigeon

The EPBC protected matters search provided by the proponent identifies that the Squatter Pigeon (southern) and the Australian Painted Snipe have 'species or species habitat known to occur within the area.' Again the referral itself is vague and provides no real attempt at providing evidence to support or disagree with the presence of these birds, which is disappointing when the information provided in Attachment F of the referral (Wildlife Online search) clearly identifies one recorded listing for the Squatter pigeon and one recorded listing for the Squatter pigeon (southern).

Australian Painted Snipe

The presence of the Australian Painted Snipe is a high possibility within the proposed development area. Little is understood about this species, which is very much a biome restricted species (only to wetland habitats). The Australian Painted Snipe brochure provided on the DSEWPaC website states that the bird '*is usually found in shallow inland wetlands, either freshwater or brackish, that are either permanently or temporarily filled. It is a cryptic bird that is hard to see and often overlooked.....It nests on the ground amongst tall reed-like vegetation near water, and feeds near the water's edge and on mudflats, taking invertebrates, such as insects and worms, and seeds.*' The FTP project area and footprint is located within the Southern Fitzroy Floodplain and Delta which has marine, estuarine, intertidal and freshwater wetland habitats that would clearly provide nesting and feeding habitat for this species. CCC urges the proponent and DSEWPaC to ensure thorough field searches are implemented to locate these birds because, a) they are enigmatic and very hard to see amongst grass or wetland vegetation, b) you can be within one metre of them before they will fly off and then can be readily identified, c) they feed early in the morning and late afternoon and d) a winter month survey would be required to identify their distribution and abundance because they migrate to southern areas of Australia in the summer months.

Black-breasted Button Quail (BBBQ)

The Black-breasted Button Quail is a vulnerable species which relies on Semi-evergreen Vine Thickets and Littoral Rainforest for their habitat. CCC believes that it is highly likely that there is a small population of the BBBQ utilising the Vine Thicket habitats on the Fitzroy Floodplain and Delta. As the remnant patches of these ecosystems are in isolated areas, where access is difficult for people, sightings are unlikely to have occurred or been recorded previously, however the strong likelihood of their presence means the precautionary principle should be undertaken to avoid any development near Regional Ecosystem 11.2.3 and other Littoral Rainforest and Vine Thicket ecosystems (11.11.5, 11.11.18 etc), so as to avoid increasing the identified threats and objectives detailed in the recovery plan of this species. Furthermore, the

proponent must ensure they undertake rigorous surveys for the BBBQ as part of any future EIS process.

In summary regarding threatened bird species, CCC requests that the proponent undertakes rigorous desktop and field based research for all the threatened bird species listed in the EPBC protected matters search, particularly the Yellow Chat, Squatter Pigeon, Australian Painted Snipe and Black-breasted Button Quail as these species would be affected by habitat loss and alteration as a direct result of the proposed actions of the FTP. Furthermore, the recovery plan for the Yellow Chat provides some great migratory bird and wetland/waterbird information for the Fitzroy Floodplain, which CCC requests DSEWPaC refer to as part of the assessment of this referral. Although access for bird surveys (and fauna and flora surveys) is difficult in the marine and intertidal areas of the Fitzroy River Delta, Birddata (Bird Atlas of Australia) would provide some much needed information on waterbirds and bird species; CCC requests that the proponent and DSEWPaC access and utilise Birddata for the submission and assessment of the referral.

Turtles

A total of 5 (five) EPBC listed sea/marine turtle species potentially occur with the FTP area. CCC believes that these 5 species are likely to frequent waters within the proposed barge and transshipping areas of the FTP. This would easily be clarified with the Marine Mega-fauna research data and report which Xstrata have completed and apparently submitted to DSEWPaC as part of the requirements of the BICET project. CCC requests that DSEWPaC staff refer to this report in the assessment of this referral because it contains crucial data and information in relation to sea turtle, dugong and dolphin sightings in the Fitzroy River mouth and nearby coastal waters of the GBRWHA.

Of the utmost concern for CCC is that fact that the proponent has failed to identify Peak Island and its value for sea turtles in the EPBC referral (maps and written material in the referral and IAS have strategically eliminated this island and its GBRMP zoning). Peak Island is located in a Preservation (Pink) Zone and is a major nesting site for Flatback turtles, and forms one of the two largest nesting populations in eastern Australia (Limpus, 1983). Flatback turtles are listed as **vulnerable** under the EPBC Act 1999 and are recognised internationally as a species of conservation concern, being listed in the 2000 IUCN (World Conservation Union) Red List of Threatened Animals. One of the Flatback turtles principal feeding areas are the shallow bays of the Keppels, particularly south of Peak Island. We are particularly concerned about the following individual and cumulative impacts with other coal port proposals:

1. The impacts of increased shipping on turtle nesting and shallow feeding areas close to Peak Island as the shipping channel is located within 6km of this protected site;
2. The impacts of increased noise and lighting on Flatback turtle nesting and hatching cycles;
3. The impacts of increased vibration from shipping on Flatback turtles, other sea turtles and marine cetaceans in the mouth of the Fitzroy River; and
4. The possibility of a major oil or coal spill so close to Keppel Bay Islands.

Communities

Semi-evergreen vine thicket (SEVT) does occur in the project area of the FTP. It is present on the northern and eastern areas of Balaclava Island, the most eastern tip of Casuarina Island (just above Port Alma) and Mackenzie Island. As the Queensland Regional Ecosystem mapping was completed at a scale of 1:100,000 it is highly likely that this mapping has not identified some occurrences of, or the entire extent of, SEVT and critically endangered Littoral Rainforest in the Fitzroy River Delta area (or the FTP area), because these communities are often small and/or narrow linear remnant patches that are not identified in such broad-scale mapping. For this reason, CCC requests that DSEWPaC ask the proponent to provide more detailed mapping (such as 1:5,000 or 1:1,000) on the critically endangered Littoral Rainforests and SEVT within their project area.

Remnant patches of SEVT and Littoral Rainforest may be present in the Port Alma and Raglan Creek area but are not mapped. If they are present in this vicinity, the construction and

operation of the conveyor belt and barge loading facilities proposed in the FTP may impact on the integrity, conservation and habitat value of the ecosystem and its extent by way of: increased weed species introduction and occurrence, changed fire regimes and changed hydrogeology and ground water/underground aquifer regimes.

In summary, the proponent should have completed a more rigorous desktop study on the threatened species and communities and migratory species identified in the EPBC protected matters report, but failed to do so. The proponent must provide this information, which is easily at hand, as part of their EPBC referral. Therefore CCC requests that the proponent resubmit the referral at a later stage with such detail from a rigorous desktop study.

EPBC referral – section 3.1 (e) Listed Migratory species

The proponent makes reference to the Australian Snubfin dolphin and research in the referral, indicating that *“they are irregular visitors to, rather than residents of the region”* in relation to surveys and reports undertaken by Daniele Cagnazzi and GHD on this species. CCC disagrees with this statement made by the proponent and believes that this is incorrect. CCC understands that Daniele’s research and that of GHD indicate the population is a localised and isolated population. CCC request that DSEWP&C obtain the GHD report and Daniele’s reports to confirm the correct information.

Sea turtles, dugong and the Australian Snubfin Dolphin and Indo-pacific Humpback Dolphin are known to occur in the mouth of the Fitzroy River and the coastal waters surrounding the FTP proposal. The proponent’s referral information makes no attempt to comment on these (except the Snubfin dolphin) and other listed migratory species likely to occur in the FTP project area. CCC have witnessed a copy of the maps provided in Xstrata’s Marine Mega-fauna report, which clearly indicates there are sightings of these migratory sea turtles, dugong and inshore dolphins (Australian Snubfin and Indo-pacific Humpback Dolphin). Again, CCC request that DSEWP&C obtain and refer to the GHD report (for Xstrata) and Daniele’s reports in the assessment of this referral.

CCC strongly believes that the cumulative extent and nature of the impacts to inshore dolphins, sea turtles and dugong associated with the FTP, BICET and other future industrial projects will be high and unacceptable. Dredging requirements and associated water quality impacts, increased boating traffic and decreased sea grass productivity associated with the 2011 flood impacts (for the entire Queensland Coast, but particularly in the Gladstone and Keppel Bay monitored sea grass beds) will ultimately result in increased deaths of sea turtles, dugongs and inshore dolphins due to starvation, habitat loss and increased boat strikes. This is unacceptable and would result in a decrease in the population and extent of these species. Given the 2011 death figures in the Gladstone harbour area for these species, which is likely to be a combination of the issues described above in the second sentence of this paragraph, CCC strongly believes that referral and project activities should be refused on the grounds of unacceptable impacts to these migratory species.

GBRWHA and recent UNESCO World Heritage Committee meeting decisions

Outlined below is the UNESCO-WHA Report Summary for discussions regarding the GBRWHA at the recent World Heritage Area committee meeting in Paris in June 2011:

10. Great Barrier Reef (Australia) (N 154) Decision: 35 COM 7B.10

The World Heritage Committee having examined document WHC-11/35.COM/7B.

1. Notes with extreme concern the approval of Liquefied Natural Gas processing and port facilities on Curtis Island within the property;
2. Urges the State Party to undertake a comprehensive strategic assessment of the entire property, identifying planned and potential future development that could impact the Outstanding Universal Value to enable a long-term plan for sustainable development that will protect the Outstanding Universal Value of the property;
3. Regrets that the State Party did not inform the Committee as per paragraph 172 of the Operational Guidelines and requests the State Party to report, in accordance with paragraph 172, its intention to undertake or to authorize any new development

- that may affect the Outstanding Universal Value of the property before making decisions that would be difficult to reverse;
4. Also requests the State Party to invite a World Heritage Centre / IUCN reactive monitoring mission as soon as possible to consider the state of conservation of the property as a whole, and to contribute to the strategic assessment process;
 5. Welcomes the State Party's commitment to improve the property's resilience and its ability to adapt to climate change and other forms of environmental degradation following the extreme weather events;
 6. Further requests the State Party to submit to the World Heritage Centre, by **1 February 2012**, a report on the course of action taken in response to this decision for examination by the World Heritage Committee at its 36th session in 2012.

Given the concerns and requirements outlined above by the WHA committee, and the continuing marine mega-fauna deaths in nearby Gladstone Harbour, CCC requests that DSWEPC refuse this referral and put a halt to further industrial development in the Fitzroy River mouth and GBRWHA.

Conclusion

Overall, it appears that the proponent has rushed the EPBC referral and IAS, providing limited and misleading or inaccurate information in some sections. We therefore strongly suggest (and request) that the proponent be asked to provide more detailed and clear information regarding the Project and potential impacts for this EPBC referral before a decision is made on whether it is a controlled action.

Yours sincerely,

Michael McCabe
Coordinator

Chantelle James
Project Officer

Submission on the draft terms of reference for BalACLava Island Coal Export Terminal project

Name:		Email:	ccc@cgnet.com.au
Organisation (if applicable):	Capricorn Conservation Council Inc	Telephone:	(07) 4927 8644
Address:			

Section	Describe the issue	Suggested solution
2.3.3 <i>Dredging & spoil disposal</i>	<p>This section lists and requests information, including the potential impacts, to the area (its land, marine habitats, flora and fauna) proposed for dredging, reclamation and spoil disposal, but it fails to identify or specifically request the potential impacts to the area surrounding and adjacent to the proposed dredging areas. As the impacts of dredging and reclamation will move beyond the proposed areas into the surrounding and adjacent marine environment to impact upon its habitats, flora and fauna, this information needs to be requested in the Terms of Reference (ToR) and provided by the proponent in the EIS.</p> <p>Dot points which fail to request sufficient information include:</p> <ul style="list-style-type: none"> • 3rd dot point on page 19 – <i>“potential impacts on the marine habitats and species within the proposed dredged area, including any marine flora and fauna protection measures proposed”</i> • 4th sub-point of final dot point on page 19 – <i>“location of marine plants and species habitat within the land to be reclaimed and existing and proposed bunds”</i> 	<p>Directly request for information, including the potential impacts to, the adjacent and surrounding environments and their marine flora, fauna and habitats in this section of the ToR. This could be done as follows:</p> <ul style="list-style-type: none"> • 3rd dot point of page 19 - <i>“potential impacts on the marine habitats and species <u>within, adjacent and surrounding the proposed dredged area, including any marine flora and fauna protection measures proposed</u>”</i> • 4th sub-point of final dot point on page 19 - Alter the wording of the statement to read as <i>“location of marine plants and species habitat <u>within, adjacent and surrounding the land to be reclaimed and existing and proposed bunds</u>”</i>



<p>2.3.3 <i>continued</i></p>	<p>The opening statement does not directly request maps to accompany the description and data on Dredging and spoil disposal. Maps are an essential item to identify and understand the description of potential impacts of this activity and hence should be directly requested.</p>	<p>Change the opening statement to specifically include maps. For example, the opening sentence/statement of this section should be changed to: <i>“Describe the dredging and spoil disposal elements of the project, supported by maps, including:”</i></p>
	<p>There is no request for a discussion of the potential impacts from the <u>proposed dredging and disposal activities</u> upon relevant matters of National Environmental Significance (NES) - as identified in the controlled action referral decision under the EPBC Act - such as the Great Barrier Reef Marine Park, other World Heritage areas, National Heritage places, Wetlands of International Importance, listed threatened species and ecological communities and listed migratory species. As it stands, the current draft ToR only requests for a discussion on <u>how the land reclamation</u> affects these matters; this is not acceptable and dredging and disposal impacts should be included.</p> <p>Given the nature of the location of Balaclava Island in relation to the above listed matters, it is essential that this discussion and further information on dredging and disposal be requested so that the potential impacts can be clearly defined and assessed under the EPBC Act. Historical baseline data regarding benthic sediment quality and water quality should also be requested.</p>	<p>Directly request for information, including the potential impacts, of proposed dredging and disposal on the relevant matters of NES identified in the controlled action referral decision of the EPBC Act. The following statement is suggested to request this discussion and other information:</p> <p><i>“A discussion of how dredging and disposal may affect the area of the proposed action and its potential impact on the relevant matters of NES (World Heritage, National Heritage, Wetlands of International Importance, listed threatened species and ecological communities and listed migratory species). This discussion should be underpinned by data and information specific to the proposed action and should include site monitoring data and/or modelling, and maps identifying the potential impacts and the locations of relevant matters of NES. The potential for the disturbance of acid sulphate soils with dredging and reclamation works should be considered and appropriate monitoring data provided in the discussion. The potential impacts to these relevant matters of NES that are associated with the suspension of benthic sediments in the marine and estuarine environment as a result of proposed dredging and reclamation works should be identified and described and the appropriate modelling, data and maps provided. The discussion and information regarding the potential impacts should include the suspension and transportation (or mobilisation) of nutrients, metals and contaminants into the water column of the marine and estuarine environment as a result of benthic disturbance with proposed dredging and disposal activities. Historical and current baseline data should be provided in the EIS on the metals, contaminants & nutrients located in benthic sediments and how this may impact upon water</i></p>



		<i>quality parameters and marine habitats, flora and fauna.</i> "
2.5.2 Rail transport	No reference made to a description of the potential impacts upon terrestrial flora and fauna and matters of NES (listed as controlling provisions of EPBC controlled action approval). Such matters should be included and reference made to the relevant sections in the EIS for further information.	<i>Consideration must be given to and a brief description provided on the potential impacts of the construction and operational phases of the rail transport facilities upon matters of NES and terrestrial flora and fauna, specifically endangered and threatened species and communities such as the Yellow Chat and Littoral Rainforest & Beach Scrubs (otherwise known as Beach Chenier's). Reference should be made to other sections of the EIS that contain such and further information.</i>
2.5.3 Port description	<p>Dot point 5 of this section of the draft ToR only requests information relating to ship size, frequency, speed and route for current Port Alma operations and fails to request this information for proposed future Balaclava Island Coal Port Terminal operations and future operations of Port Alma.</p> <p>Given the Fitzroy River Delta area, including Balaclava Island and surrounding estuarine creek systems, are known feeding grounds and habitat for the following vulnerable and rare marine species listed under the EPBC Act - the Indo-Pacific Dolphin, Snub-fin Dolphin & Green Sea Turtle -, such information regarding proposed port & shipping operations are crucial to determine the potential impacts on these and other species of marine fauna, their habitats and flora. Reference should also be made to other sections of the EIS that contain information relating to the potential impacts on marine fauna, flora and habitat with proposed port operations.</p>	<p>Amend dot point 5 to include proposed future operations of Balaclava Island Port Terminal and Port Alma as follows:</p> <ul style="list-style-type: none">• <i>"Ship numbers, size, frequency, speed and route within Port Alma and through the Great Barrier Reef Marine Park for the current <u>and future</u> Port Alma operations, <u>and current and future</u> operations of Balaclava Island Coal Export Terminal".</i> <p>Include reference to other sections of the EIS that consider potential impacts to marine flora, fauna and habitats associated with current and future port operations. This could be done as follows:</p> <ul style="list-style-type: none">• <i>Considerations should be given to the impacts of increased shipping frequency, size, speed and route in relation to marine fauna, flora and habitats - specifically marine cetaceans, turtles, dugong and EPBC listed species –with Port Alma, the Great Barrier Reef Marine Park, adjacent wetlands of international significance and other matters of NES. Specific reference should be made to other sections of the EIS that contain such and further information.</i>
4.1.3 Social baseline study	<i>"-use of the social and cultural area for forestry, fishing, recreation, business and industry, tourism, aquaculture, and Indigenous cultural use of flora and fauna".</i> Keppel Bay currently has little impact from heavy industry and shipping. Insertion of a coal port and greatly increased shipping will significantly change the social,	The EIS should provide studies on the impact on the social and economic impacts to tourism, tour boat charter operators, recreational and commercial fisheries as well as to the potential loss value for recreational users of Keppel Bay and residents of the Capricorn Coast.



4.1.3 (cont)	economic base and visual amenity of the Capricorn Coast, Keppel Bay and Islands	
9.1 Impacts on world heritage properties & natural heritage places	Peak Island is a GBRMPA Preservation Zone set up to protect the Island flat back turtle nesting sites provided a degree of protection around nesting beaches and immediate marine environment but does not take account of the “actual” areas of dispersal of the hatchling turtles or of known or surmised feeding areas for <i>Natator depressus</i>	Study should include impact assessment on the integrity the turtle and other marine populations reliant on Peak Island and surrounding waters.
9.3.1 Baseline Data And 9.3.2 Impacts for Listed threatened species, ecological communities & listed migratory species.	<p>We note that section 9.3.1 of the draft ToR includes a requirement to undertake “A study of the habitat use, behaviour and movement of marine turtles and dugongs within the region.”, however we are concerned specifically about the impacts that increased shipping (resulting from the proposed Balaclava Island Coal Export facility operations) will have on Flatback turtles in the Peak Island area of the GBR Marine Park.</p> <p>Peak Island is located in a Preservation (Pink) Zone and is a major nesting site for Flatback turtles, and forms one of the two largest nesting populations in eastern Australia (Limpus, 1983). Flatback turtles, listed as vulnerable under the EPBC Act 1999, are recognised internationally as species of conservation concern and are listed in the 2000 IUCN (World Conservation Union) Red List of Threatened Animals. One of their principal feeding areas are the shallow bays of the Keppels, particularly south of Peak Island. We are particularly concerned about:</p> <ol style="list-style-type: none"> 1. The impacts of increased shipping on turtle nesting and shallow feeding areas close to Peak Island as the shipping channel comes within 6km of this protected site; 2. The impacts of increased noise and lighting on Flatback turtle nesting and hatching cycles; 3. The impacts of increased vibration from shipping on Flatback turtles and marine cetaceans in the mouth of the Fitzroy River; and 4. The possibility of a major oil or coal spill so close to Keppel Bay Islands. 	<p>Amend and improve the dot point in section 9.3.1 regarding the study of habitats for turtles and dugong within the region to include specific mention of Peak Island and surrounds. For example, we suggest:</p> <ul style="list-style-type: none"> • “A study of the habitat use, behaviour and movement of marine turtles and dugongs within the region, specifically including but not limited to the Peak Island Preservation (Pink) Zone, other zoned areas of the GBRMP and other areas of Keppel Bay <p>Amend and improve the two impacts listed in section 9.3.2 of the draft ToR to ensure the consideration of increased shipping on turtle nesting & feeding For example, we suggest:</p> <ul style="list-style-type: none"> • <i>habitat removal, fragmentation and modification affecting food availability or other resources/requirements of threatened and migratory species, including but not limited to the impacts of removing wetland, shoreline and mangroves, modifying wetland tidal flows, increased noise, vibration & lighting from increased vessel traffic in shipping lanes and adjoining areas (specifically surrounding Peak Island; and</i> • <i>Increase in vessel traffic, which may result in increased ship strike, groundings, increased risk of chemical and oil spill and noise/disturbance to marine cetaceans, turtles, dugongs and other species in their nesting and feeding areas and areas of movement.</i> • <i>Also Of concern:- Eucalyptus populnea, E. tereticornis; the Pacific Ridley/Olive Ridley Turtle (Endangered), Loggerhead</i>



	<p>In relation to our concerns outlined above, section 9.3.2 of the draft ToR has listed two impacts which need to be improved to address our concerns for the Flatback Turtle and marine cetaceans. These two impacts are:</p> <ul style="list-style-type: none">• <i>“habitat removal, fragmentation and modification affecting food availability or other resources/requirements of threatened and migratory species, including but not limited to the impacts of removing wetland, shoreline and mangroves and modifying wetland tidal flows;”</i> and• <i>“Increase in vessel traffic, which may result in increased ship strike, groundings, increased risk of chemical and oil spill and noise/disturbance.”</i>• 	<p><i>Turtle (Endangered) and Green Turtle (Vulnerable), as well as the Critically Endangered Eastern Yellow Chat.</i></p>
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Dated 11 April 2011

Signature:

Submissions must be received by **5 pm , Monday 11 April** and be addressed to:

The Coordinator-General
C/- EIS project manager—Balaclava Island Coal Export Terminal project
Significant Projects Coordination
Department of Infrastructure and Planning
PO Box 15009 City East QLD 4002
fax +61 7 3225 8282
bicet@dip.qld.gov.au

This form is the preferred format for a submission. Submissions will be treated as public documents and copies will be provided to the project's proponent. For further information, please contact the Department of Infrastructure and Planning on (07) 3227 8548.

**CAPRICORN
CONSERVATION
COUNCIL**



A voice for the environment

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3 November, 2009

Referral Business Entry Point, EIA Policy Section (EPBC Act)

Approvals and Wildlife Division
Department of the Environment, Water, Heritage and the Arts
GPO Box 787
Canberra ACT 2601

Dear Sir/Madam,

Re: Reference No. 2009/5158 Balaclava Island Coal Export Terminal Project

Capricorn Conservation Council (CCC) wishes to submit comments related to the referral of the above project under the *Environmental Protection Biodiversity Conservation Act, (EPBC) 1999*.

It is the opinion of CCC that the proposed placement of this coal terminal and its site investigation area is extremely ill-founded. Balaclava Island is not only located in a World Heritage Area, but is listed on the Queensland Heritage Register and the Register of National Estate. It is located adjacent to the Great Barrier Reef Marine Park (Qld) and The Narrows, an Important Wetland (Directory of Important Wetlands).

Location and site investigation area

Balaclava Island is grossly unsuitable for a coal terminal due to its geomorphology as predominantly low-lying tidal mud flats which receive inundation twice a day to a depth of up to five metres. The island is situated at the mouth of the Fitzroy River and is in close proximity to The Fitzroy River Fish Habitat Area – an area protected from coastal development. The island is also a ‘Greenfield’ area under Department Infrastructure and Planning state laws and should not be considered suitable for any type of industrial development.

Water requirements for the facility appear doubtful through the Gladstone Area Water Board, in which case groundwater resources would be used, necessitating a substantial water treatment facility. The proponent proposes several options for the remaining brine solution, none of which seem particularly suitable. CCC suggests more consideration should go into this critical area of management.

Environmental impacts

The high environmental values of Balaclava Island and surrounding islands will not support train unloading facilities, coal stockpile, overland conveyor, ship-loading and berthing facilities, access roads and other infrastructure. Furthermore, it is difficult to envisage how fringing mangroves, saltmarshes, marine swamps, and estuaries, which support a vibrant fish nursery and habitats, will escape serious degradation from dredging and the dumping of spoil.

As a result of dredging, changes to the area's hydrology will have the potential to impact breeding, nesting and feeding sites of marine species (e.g. endangered turtle species) and terrestrial fauna including wetland and migratory birds. Marine plant species will also be impacted. Sedimentation from dredging will potentially reduce water quality in this sensitive area.

The area is likely to support the critically-endangered Yellow Chat, and whether any are 'located' at the time environmental studies are undertaken, is irrelevant. The clearing of 240 ha will disturb and/or remove their habitat or their potential to find habitat in the area. The same may be said for many species; offsetting measures cannot recover such localised loss.

CCC is concerned about the three Threatened Ecological Communities nominated by the proponent and the potential that this project has to impact them. (It is noted that ecological community, 'Littoral Rainforest and Coastal Vine Thickets of Eastern Australia' is critically endangered.) Every attempt should be made by the proponent to change or re-route site infrastructure so that these communities are preserved and fragmentation is minimised. Once again, offsetting measures, while of paramount importance, do not account for localised loss to species and connecting ecosystems.

Conclusion

CCC has grave concerns for the sensitive environment of Balaclava Island, its surrounding islands, marine ecosystems, and its world and national heritage values if such a project should get approval. Furthermore, Australia's reliance on coal and the export of this resource is not assisting the planet to lower greenhouse gas emissions; in fact while this addiction to coal continues, the window of opportunity is quickly closing.

We thank you for this opportunity to submit to the EPBC Act referral process and have our concerns heard.

Yours sincerely,

Janet Barrett
Coordinator