

Townsville Port Expansion Project Team
Port of Townsville Limited
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Re: Submission on the Additional Environmental Impact Statement (AEIS) for the Proposed Townsville Port Expansion Project

North Queensland Conservation Council (NQCC) was a respondent to the March 2013 Environmental Impact Statement (EIS) on the proposed expansion (PEP) of the Port of Townsville (also referred to hereinafter as 'the Port' or PoTL). We now make this submission on the recently released Additional Environmental Impact Statement (AEIS).

As stated in our 2013 submission on the EIS, NQCC was established in 1974, and works to protect the environment of North Queensland through programs of education, and responding to requests for comment on proposed development and legislation. An independent incorporated body, NQCC is one of several regional Conservation Council's that work together and with the Queensland Conservation Council and other agencies working to protect the environment, as and when appropriate.

We have been informed by a senior officer of your department that the submission on the AEIS that we made to the Queensland Coordinator-General will be provided to and considered by you. Accordingly, I will not reproduce here the arguments made in our submission to the State but ask you to take them into consideration along with the following points.

1. Problems with communication with the community

The issue of the proposed expansion of the Port of Townsville in the Great Barrier Reef World Heritage Area is of enormous interest to many people – not the least of which are the thousands living in close proximity to the Port. What goes on at the Port affects the people of Townsville, as has been made very clear by the community concern in recent years in relation to the deposition of lead dust from the Port.

The interest in the proposed expansion of the Port was also evident in the outpouring of responses to the 2013 EIS.

Given this level of interest and concern, the standard of communication of the proponent and decision-makers with the community is much to be regretted. The inability to coordinate advertisements calling for responses to the AEIS to the State and Federal governments meant that the vast majority of interested parties

were unaware of the later date for submissions allowed by the Department of the Environment.

This lack of coordination bodes ill for the coordination between the two levels of government when it comes to decision-making. The fact that, as a result of the advertising confusion, the number of submissions to the Federal Department may be low, may also suggest to the Department that interest and concern is low. Nothing could be further from the truth.

The failure to make the community, especially those who had made submissions on the EIS, aware of the approved 'request to vary the proposal' in April this year is also highly regrettable.

'Publishing' the variation details only on the Departmental website, albeit that the Department may have been following the letter of the law, was not sufficient.

The failure of the proponent to provide information on this process (again, albeit legal) suggests an attempt to conceal from the community highly important information with respect to its activities. The issue was not even raised at the 'community consultation' event held by the Port in relation to the AEIS in October, nor to members of the ongoing Port Stakeholder Working Group (relating mainly to lead dust), of which NQCC is one. This seriously undermines trust in the Port.

NQCC hopes that better interactions with the community will be the way of the future.

Comments additional to those made in the NQCC submission to the State are made here on the understanding that our submission to the State will be provided by the State to your Department, and be taken into account by Departmental staff when assessing the AEIS. I have been led to understand that this will be the case by Departmental staff.

Nevertheless, in light of the inability of the two Departments to coordinate the advertising of the calls for submissions from the community, I have decided to include, as a precaution, a copy of NQCC's submission to the State with this submission.

I turn now to the AEIS itself.

2. The variation of the proposal

Section 156 of the EPBC Act allows for the variation of a proposal after it has been approved. But this is subject to a number of strict conditions. The Act states:

156(2) The Minister must not decide to accept the varied proposal unless the Minister is satisfied that the character of the varied proposal is substantially the same as the character of the original proposal,

156 (3) In considering, for the purposes of subsection (2), whether or not the character of the varied proposal is substantially the same as the character of the original proposal, the Minister must have regard to the change (if any) in:

- (a) the nature of the activities proposed to be carried out in taking the action; and
- (b) the nature and extent of the impacts (if any) the action:
 - (i) has or will have; or
 - (ii) is likely to have

on the matter protected by each provision of Part 3.

The April request (and approval by the Department) to vary the proposal to take action, as submitted by the proponent, is, NQCC contends, misleading in its claim (made three times in the two page letter) that the revised design has a “significantly smaller direct footprint and reduced overall impact”.

In fact, the ‘redefined’ project involves:

- a 15% increase in capital dredging
- a 52% (52 ha) increase in loss of megafauna habitat to reclaim
- a 236% increase in the duration of the dredging (from 4 to 10.5 years)
- a 14-17% increase over the average annual maintenance dredging
- an 8% increase in the length of the revetment wall
- a 58 hectare increase in the dredging footprint
- a massive increase in the use of mechanical (backhoe/grab) dredge equipment to the extent that it now accounts for 80% of all the dredging.¹

The extent of these increases was concealed in the request to vary the proposal by reason of the fact that not all relevant data for the EIS were included in the comparison tables.

Moreover, the claim that the revised design has a “significantly smaller direct footprint and reduced overall impact”, is based on an assumption that the original design would have been deemed compliant with all relevant legislation in place at the time the application was made, and approved.

When the AEIS was released in October this year, the widespread reaction from the community (unaware that any variation had been requested and approved) was that the AEIS is a completely different project from that outlined in the EIS and that the assessment process should have been re-commenced.

The need for the proponent to formally request approval to vary the proposal to the extent it did indicates that, indeed, the AEIS was indeed very substantially different from the EIS.

Finally, it is interesting to read in the AEIS (29.2) that, *The PEP EIS design was*

¹ It is acknowledged that the channel was shortened so that it would no longer intrude 1.7 km into the Great Barrier Reef Marine Park.

found to provide the best balance of environmental impacts, economic efficiency and safety'. If so, what does that say about the AEIS? If not, what does it say about the integrity of the EIS, and the extent to which the community can rely on the word of the Port? What has been changed in order to retain this balance?

3. Bilateral Assessment and Conflict of Interest

The Departmental website notes that:

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) recognises that environmental assessment under the Queensland SDPWO Act may be used for the purposes of the environmental assessment under the EPBC Act in accordance with the Bilateral Agreement between the Commonwealth and Queensland Governments. If such designation is granted, this will allow the Commonwealth Minister to rely on specified environmental impact assessment processes of the State of Queensland in assessing actions under the EPBC Act.

It is understood that such designation has been granted.

If this is indeed the case, it imposes on the State a severe conflict of interest as the Port of Townsville is a State government-owned corporation. As a result the State is effectively both the application and the assessor. This is untenable and NQCC, especially given its concerns about the reliability of much of the information provided in the assessment process, examples of which occur in this submission and that provided to the State, urges the Federal Department to reconsider any such designation.

4. Failure to consider the need for a Port Master Plan

According to the Queensland Department of State Development website, 'Port master planning for priority ports is a port-related action of [Reef 2050 Long-Term Sustainability Plan](#) and mandated under the [Sustainable Ports Development Act 2015](#).'

It would appear that no such Master Plan yet exists for the Port of Townsville, calling into question the legality of the proposed expansion. The draft Port Master Plan is expected to be available for community consultation in mid-2017. Given the unsubstantiated need for the expansion (see below and submission to the State), there is no apparent reason why any application for the expansion could not have been delayed until the Port Master Plan had been developed.

The same goes for the State's Maintenance Dredge Management Plan, on track to be released in early 2017.

5. Failure to adequately address climate change

The AEIS chapter on Climate Change and Natural Disasters (Section 10) extends to all of two pages.

Extraordinarily, it made no mention of the biggest-ever coral bleaching event in the world that killed and/or damaged much of the Great Barrier Reef in 2016 – especially in the area that, until then, was the healthiest.

And it ignored this 2016 unprecedented bleaching event, despite GBRMPA and thousands of other scientists long reporting that climate change is the biggest threat to the Reef, and it is essential that all other pressures on the Reef (such as port development) be minimised in order to increase the resilience of the Reef and enable it to fight the impacts of climate change.

The AEIS climate change ‘chapter’ refers back to the AEIS comment on Cumulative Impact Assessment (CIA) (section 25), stating, *‘The revised cumulative impact assessment in Section 25.0 of the AEIS has been updated to address the role of climate change directly influencing the condition of the Great Barrier Reef.’*

It is unclear from AEIS Appendix A5, just how this has been done.

Problems with the CIAs undertaken for the assessment are further discussed at (6) below.

AEIS (10) concludes that:

- *The near-shore environment of the GBR, including the sensitive ecological receptors in the study area, are routinely impacted by stressors, including cyclones, CoTS outbreaks and bleaching events.*
- *The impacts predicted by the PEP are generally considerably less than impacts occurring from other stressors.*

This statement demonstrates the lack of understanding of cumulative impacts, which are designed to avoid the very real problem of ‘death by 1000 cuts’. The size of the additional stressor is not important; any additional stress may be sufficient to tip an already stressed system into unrecoverable decline.

It is apparent that the Reef is increasingly suffering from climate change. As far back as 2009, in its Outlook Report for that year, GBRMPA stated,

Further building the resilience of the Great Barrier Reef by improving water quality, reducing the loss of coastal habitats and increasing knowledge about fishing and its effects, will give it the best chance of adapting to and recovering from the serious threats ahead, especially from climate change.

This concern was repeated with greater urgency in the 2014 Outlook Report,

Even with the recent management initiatives to reduce threats and improve resilience, the overall outlook for the Great Barrier Reef is poor, has worsened since 2009 and is expected to further deteriorate in the future. Greater reductions of all threats at all levels, Reef-wide, regional and local, are required to prevent the projected declines in the Great Barrier Reef and to improve its capacity to recover

There is a total disconnect between the understanding of how to save the Reef, as expressed by experts, and the proposed development.

6. Inadequacy of the Cumulative Impact Assessment

This issue is addressed in further detail at section 9 of the NQCC submission to the State.

NQCC finds it hard to accept that the revised cumulative impact assessment provided in the AEIS claims that, **despite the increased impacts listed at (2) above:**

- The risk of turbid plumes leading to temporary loss of nearshore seagrass around Magnetic Island and western Cleveland Bay has *decreased* from 'Low to Medium' in the EIS to 'Negligible to Low' in the AEIS.
- The risk of coral stress and/or mortality, and detectable changes to community structure has *decreased* from 'Medium' in the EIS to Negligible to Low in the AEIS
- The risk of dredge plumes leading to loss of seagrass, and subsequent reduction in the abundance of marine megafauna supported by the site has *decreased* from 'Low to Medium' in the EIS to 'Low' in the AEIS.

The important issues of turbid plumes leading to temporary loss of nearshore seagrass around eastern Cleveland Bay, and of direct loss of reef habitat due to construction and dredging (Assessed as 'Low' in the EIS) were not assessed at all in the AEIS.

There is little to no backup data for these claims, which appear to defy logic.

A tabular comparison of the CIAs of the EIS and AEIS, included in the NQCC submission to the State, is reproduced in this submission as Appendix A.

7. Use of mechanical dredge

As mentioned elsewhere in this submission, the AEIS (29.2) notes that the '*PEP EIS design was found to provide the best balance of environmental impacts, economic efficiency and safety*'.

While use of a backhoe or grab (mechanical) dredge was very limited in the PEP EIS design, now, 80% of the dredging will be done using a mechanical dredge.

According to MarineInsight, *'Mechanical dredgers ... are suited for working in confined areas and are useful for removing the hard-packed material or debris'*.²

Cleveland Bay is not confined and nor is its seabed 'hard-packed' or 'debris'.

The reason for using the mechanical dredge is usually given in the AEIS as *'to reduce the bulking factor for dredged material in order to reduce the size of the reclamation'*. Given that the amount of dredge material is the same regardless of what means of dredging is used, this makes little sense, unless one realises that TSHD dredges mix the material with water – and this would take longer to dry out in the 'reclamation' area. The real reason, it seems, is to make the process quicker and therefore cheaper.

The AEIS Summary (29) does, almost as an afterthought, add the explanation, *'This change to the dredge methodology [sic] will also help to minimise turbidity impacts during capital dredging...'* If that is the case, why was this method of dredging not used in the EIS design? If mechanical dredging was environmentally better, what can be made of the AEIS statement that the earlier EIS design provided *'the best balance of environmental impacts, economic efficiency and safety'*?

8. Impact on MNES

The AEIS acknowledges that Cleveland Bay, in which the port is located, is an ecologically and biologically rich area of the GBRWHA that is currently suffering as a result of a number of stresses.

Despite the major changes to the proposal (see (2) above), the overall conclusion drawn by the proponent (see AEIS 29) is that *'impacts associated with the design refinement to MNES or MSES are expected to be less than identified in the EIS...'*

However, a comparison of the cumulative impact assessments for the EIS and the AEIS show increases in risk for:

- *Turbid plumes and sedimentation leading to temporary, detectable changes to benthos*
- *Increase in noise leading to marine fauna temporarily avoiding affected area (displacement)*
- *Loss of fisheries habitat associated with reclamation (irreversible) and dredging activities (temporary) resulting in reduced fisheries production*
- *Displacement of economic species due to construction related disturbance resulting in reduced fisheries production*
- *Increased potential marine pest introductions*

² <http://www.marineinsight.com/types-of-ships/different-types-of-dredgers-used-in-the-maritime-industry/>

From Table 1 (appendix A) it can be seen that the majority of ratings for the risk criteria remain unchanged. Underwater noise was one of the main issues raised by NQCC in its submission on the EIS. The response in the AEIS has been to **increase** the level of underwater noise [emphasis added].

So, despite, *inter alia*, the increase in the amount and duration of dredging, the increase in maintenance dredging, and the increase in area of sea lost to 'reclaim' as a result of the new design, we are asked to believe that there is no change in the risk of:

- *Removal of habitat and fauna through reclamation (irreversible) and capital dredging temporary) resulting in detectable impacts to soft sediment communities in the wider Cleveland Bay area and/or significant effects to GBRWHA values*
- *Increase in rubbish production increasing the risk of entanglement and/or ingestion of marine debris by turtles and marine mammals*
- *Loss of food resources and habitat as a result of construction and port facility operation leading to displacement of marine megafauna*
- *Increased potential for hydrocarbon or other contaminant spill from vessels or on-site facilities, potentially leading to direct effects to marine megafauna or their prey (construction, operation)*
- *Increase in vessel traffic during construction phase potentially leading to an increase in vessel strike risk or habitat disturbance due to prop wash*
- *Increased potential for hydrocarbon or other contaminant spill from vessels or on-site facilities, potentially leading to direct effects to economic species or their prey (construction, operation)*
- *Dredge plumes leading to loss of seagrass, and subsequent reduction in the abundance of economic species supported by the FHA*
- *Significant changes to natural values supporting the outstanding universal value of the GBRWHA.*

The credibility of the EIS and the AEIS is, again, sorely tested.

The AEIS includes a commitment to avoid dredging during critical periods. It names specifically: periods of coral-spawning; seagrass growth; turtle hatching; and post extreme weather events. To this list should be added periods of strong wind and wave conditions, both of which increase sediment distribution; and peak tourism periods on Magnetic Island.

Given the long list of periods when it is agreed that dredging would be especially damaging and would be inappropriate, the appropriateness of expanding the port at all must be questioned.

9. Outstanding Universal Value (OUV) of the GBRWHA

The AEIS purports to provide significant benefit by complying with the law and dumping the capital dredge spoil not in GBRWHA waters at the Dredge Management Placement Area but in GBRWHA waters adjacent to existing

(reclaimed) land.

As was pointed out in the 2012 Mission Report of the UNESCO World Heritage Centre and the IUCN Reactive Monitoring Mission to the Great Barrier Reef, 'continued reclamation is a specific concern in relation to integrity' of the WHA.

Mere shifting of the dumpsite is not sufficient to maintain the OUV of the GBRWHA.

As noted in the AEIS (26, p. 308),

In it's [sic] 2014 decision, the World Heritage Committee requested that a long term plan be prepared that, 'results in concrete and consistent management measures that are sufficiently robust, effectively governed and adequately financed to ensure the overall long term conservation of the property and its OUV, including in view of addressing cumulative impacts and increasing reef resilience' (World Heritage Committee, 2014).

In response, the Reef 2050 plans include the following:

- *Objective WQ02 which states that, 'Over successive decades the quality of water in or entering the Reef from all sources including industrial, aquaculture, port (including dredging), urban waste and stormwater sources has no detrimental impact on the health and resilience of the Great Barrier Reef'*
- *Actions WQA 14 – 22 outline relevant to reducing the impact of ports and dredging on water quality.*

Notwithstanding, the 'redefined proposal' presented in the AEIS:

- *increases the amount of capital dredging (albeit that this is now dumped in the ocean adjacent to existing port land and turned into land); and,*
- *very significantly, increases maintenance dredging, which will continue in perpetuity. This increase in maintenance dredging – which is a **direct** impact of the expansion – will see an *additional* 56,000- 68,000 cubic metres of sediment dumped in the waters of the GBRWHA every year. This is on top of the 400,000 cubic metres dumped every year in the GBRWHA waters of Cleveland Bay.*

It cannot be denied that such a massive increase in dredging will have a detrimental impact on the health and resilience of the Great Barrier Reef – including the fringing coral reefs of Magnetic Island, a mere 4 km from the dump site.

10. Lack of demand for the Project

The issue is addressed in far greater detail in NQCC's submission to the State government.

The previous LNP Queensland government deemed Townsville to be one of four 'Priority Ports'. Given the fact that Cleveland Bay is shallow, unstable in terms of

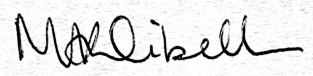
sediment movement, and a biological hotspot in the Great Barrier Reef World Heritage Area, this is deemed to be a poor decision.

Regardless, identification as a priority port does not mean that it *must* expand. As was made very clear in NQCC's submission to the State government, the proponent has failed to provide substantiated evidence to support an expansion, either now or in the far foreseeable future.

Given this, the deterioration in the health of the GBRWHA (something that is only likely to worsen as temperatures continue to rise) and, as acknowledged in the AEIS, the poor state of Cleveland Bay, expansion is unwarranted.

The requirement of Reef 2050 that proponents must demonstrate that their proposal is commercially viable before it can go ahead, is confused in this case by the fact that the proponent is a government-owned corporation. Nevertheless, it is essential that the test of commercial viability be applied to the proposal to expand the Port of Townsville.

Yours faithfully,



Maree Dibella
Coordinator

13 November 2016

Appendix A

Table 1: Comparison of Impact Assessment Summaries of the EIA and the AEIS

(Residual Risk is the risk after assessment of magnitude of impact, Likelihood of Impact and mitigation)

Element	Residual Risk (EIS)	Residual risk (AEIS)	Comment
Impacts on seagrass			
Temporary loss of ephemeral deepwater seagrass	Low	Not addressed (N/A?)	AEIS does not access DMPA where deepwater seagrass is assumed to be
Turbid plumes leading to temporary loss of nearshore seagrass around Magnetic Island and western Cleveland Bay	Low to medium	Negligible to Low	AEIS refers only to temp loss or stress along E and S of MI. Note: no change despite increase in amount and duration of dredging.
Turbid plumes leading to temporary loss of nearshore seagrass around eastern Cleveland Bay	Low	Not addressed	
Impacts on corals			
Coral stress and/or mortality, and detectable changes to community structure	Medium	Negligible to Low	AEIS does not refer to detectable changes to community structure Note: a decreases in risk despite increase in amount and duration of dredging.
Direct loss of reef habitat due to construction and dredging	Low	Not addressed	
Impacts on soft sediment habitats and invertebrate communities			
Turbid plumes and sedimentation leading to temporary, detectable changes to benthos	Low to Medium	Medium	Note: virtually no change despite increase in dredging amount & duration
Removal of habitat and fauna through reclamation (irreversible) and capital dredging temporary) resulting in detectable impacts to soft sediment communities in the wider Cleveland Bay area and/or significant effects to GBRWHA values	Medium	Medium	Note: no change despite increase irreversible reclamation and more dredging over a wider area and longer period.
General disturbance and degradation of benthic habitats in the harbour basin through day to day port operations (maintenance dredging, stormwater discharges, spills etc.) leading to changes in benthic communities in basin area and immediate surrounds	Medium	Medium	Note: no change despite increase in amount of maintenance dredging.
Changes to hydrodynamics and morphology due to operation of new harbour facilities and channels leading to changes in benthic communities in basin area and immediate surrounds	Medium	Medium	Note: no change despite increase in amount and capital and maintenance dredging.
Loss of benthic fauna due to dredged material placement in long-term changes to community structure in and directly adjacent to DMPA	Low	N/A	AEIS does not involve sea dumping
Impacts of hard substrate			
Expansion of rock wall habitat associated with the new harbour facilities	Positive benefit	Positive benefit	
Impacts to marine megafauna			
Light spill from construction plant and port facilities leading to disorientation of hatchlings or nesting adults	Low	Low	
Increase in rubbish production increasing the risk of entanglement and/or ingestion of marine debris by turtles and marine mammals	Low	Low	
Increase in noise leading to marine fauna temporarily avoiding affected area (displacement)	Low	Medium	
Injury/mortality to marine megafauna (turtles) resulting from the use of dredge plant	Low to Medium	Low	Note: no change despite increase in amount and duration of dredging.
Loss of food resources and habitat as a result of construction and port facility operation leading to displacement of marine megafauna	Medium	Medium	No change in residual risk despite the fact the an extra 52 ha of megafauna habitat would be removed
Increased potential for hydrocarbon or other contaminant spill from vessels or on-site facilities, potentially leading to direct effects to marine megafauna or their prey (construction, operation)	Medium	Medium	Note: no change despite huge increase in duration of dredging.
Increase in vessel traffic during construction phase potentially leading to an increase in vessel strike risk or habitat disturbance due to prop wash	Medium	Medium	Note: no change despite increase in duration of dredging.
Impacts on fisheries production			
Loss of fisheries habitat associated with reclamation (irreversible) and dredging activities (temporary) resulting in reduced fisheries production	Low	Medium	
Displacement of economic species due to construction related disturbance resulting in reduced fisheries production	Low	Medium (local) Low (regional)	
Increased potential for hydrocarbon or other contaminant spill from vessels or on-site facilities, potentially leading to direct effects to economic species or their prey (construction, operation)	Medium	Medium	Note: no change despite increase in amount and duration of dredging.
Marine pests			
Increased potential marine pest	Low to Medium	Medium	

Introductions

Impacts to GBR

Deepening of the portion of the Sea Channel in the GBRMP leading to detectable changes to benthic habitats and communities in the wider GBRMP

Medium

N/A

No extension into GBRMP

Dredge plume impacts to marine ecology in GBRMP

Low

Negligible to Low

Note: no change despite increase in amount and duration of dredging.

Impacts to FHA

Dredge plumes leading to loss of seagrass, and subsequent reduction in the abundance of economic species supported by the FHA

Low

Low

Note: no change despite increase in amount and duration of dredging.

Impacts to GBRWHA values (marine ecology)

Significant changes to natural values supporting the outstanding universal value of the GBRWHA.

Medium with offsets

Medium

Impacts on Ramsar site

Dredge plumes leading to loss of seagrass, and subsequent reduction in the abundance of marine megafauna supported by the site

Low to Medium

Low

Note: no change despite increase in amount and duration of dredging.