

To whom it may concern

Re: Submission on Abbot Point Port Development Proposal

Our Society for Conservation Biology (Oceania) has more than 300 members, including conservation scientists, policy-makers and managers. Our role is to provide scientific information for management and policy decisions about the long-term sustainability and future of ecosystems and their dependent organisms, recognizing the importance of ecosystem services for humanity.

We provide this submission, identifying some major concerns we have on the impacts of this development the Caley Wetlands and their organisms, including migratory shorebirds and the endangered Australian painted snipe, and the impacts of the Great Barrier Reef World Heritage Area.

Yours sincerely



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The two proposals, the Dredging project (Abbot Point dredging and onshore placement of dredged material EPBC ref 2014/7355) and the spoil disposal project (The Abbot Point Port and Wetland Project, EPBC ref 2014/7356) have considerable potential to impact on a range of nationally and internationally recognized ecosystems and species. These include a nationally important wetland, Caley wetlands, a significant community of migratory shorebirds, the endangered Australian painted snipe and the Great Barrier Reef World Heritage Area.

The Society for Conservation Biology Oceania Section makes two key recommendations to ensure that this project does not impact nationally important wetlands, migratory shorebirds or the Great Barrier Reef World Heritage area:

1. the dredge spoil be moved to a terrestrial area, preferably one that is already highly modified by human impact (e.g. agricultural or industrial land) where it is not connected to the wetland or Great Barrier Reef World Heritage Area and;
2. the Queensland Government implement best practice rehabilitation and mitigate the current proposed impacts of development on hydrological connectivity.

Specifically,

- a. hydrological connectivity of the wetlands should not be severely interrupted by the railway embankment and so there should be a bridge over the wetlands to avoid this and;
- b. rehabilitation as specified should progress involving the removal of the Western Bund and Causeway to improve flushing of the wetlands.

We provide best available knowledge that supports recommendation 1 relating specifically to the value of and impacts to Caley Wetlands and the Great Barrier Reef World Heritage area. We then provide evidence as to why the current process does not reflect best practice rehabilitation and the types of information and processes that should be invested in to achieve recommendation 2.

Evidence that the dredge spoils should not be disposed in the proposed location of Caley Wetlands include:

- The Caley wetlands are nationally important for their complex mixture of wetland vegetation, extensive area, support of up to nearly 50,000 waterbirds, an estimated 1709 migratory shorebirds, a significant population of the endangered painted snipe and 36 species of fish supported by a complex catchment system. They would qualify as a wetland of international importance under the Ramsar Convention.
- The proposals will destroy 159ha of the wetland.
- The proposals will fundamentally alter the hydrology through the building of bunds around the dredge spoil dump ('beneficial use area) and embankments for the railway which cuts through the wetland. This will significantly impact on the wetland ecosystem, its functioning and its waterbirds, including migratory shorebirds and other organisms (fish, frog species, turtles, invertebrates, native vegetation).

Evidence that disposing of the dredge spoils in the proposed location of Caley Wetlands will also result in negative impacts to the Great Barrier Reef World Heritage area include:

- The diversion of tailwater and stormwater directly into the wetland poses a considerable long-term risk given the potential mobilisation of acidity from acid sulfate soils and heavy metals, driven by extreme rainfall and wave action events, affecting the wetland ecosystem.
- These wetland areas receiving these pollutants directly connect to the Great Barrier Reef World Heritage Area, increasing the potential pollutant impacts on the GBRWHA.
- Dredging of the port in the Great Barrier Reef Marine Park will mobilise fine sediment which will affect marine ecosystems and their fauna and flora, including coral reefs.
- Operation of the port will increase accidents with marine fauna, including whales and turtles, as well as increasing pollution.

Furthermore, the current assessment by the Queensland Government is inadequate, providing little confidence to the community or the Australian Government that some of our most important environmental assets will not be fundamentally degraded. In particular

- The modelling of impacts to the wetland uses a two-dimensional hydrodynamic model for which there are few input data, no calibration and assumptions and extrapolations made about the bathymetry which considerably uncertain.
- The hydrological assessment is inadequate, given the poor availability of real input data for models attempting to model a highly complex environment;
- The absence of any detail of the structure of the embankment and particularly the connectivity of aquatic ecosystems severed by this structure through the wetland;
- The absence of any information on the impact of the railway on the hydrology of the local catchments providing water into this system;
- There is poor temporal and spatial data coverage on water quality, biotic organisms and ecological processes critical for the functioning of the Caley wetlands;
- There is clear evidence of the potential for pollutant impacts from acid sulfate soils and mobilisation of heavy metals but little evidence of how this will be controlled or mitigated, given its proliferation;
- There is poor evidence for groundwater and surface water interactions and yet these are well connected allowing for the flow of pollutants.

The environmental assessment and approvals process undertaken by the Queensland Government is not transparent and many of the claims and proposed offsets remain unsupported by evidence. In particular:

- The size of the project demands a fully developed, rigorous and transparent environmental assessment given its potential for significant impact to Matters of National Environmental Significance under the *Environment Protection and Biodiversity Conservation Act 1999*.
- There is no evidence that the project is an overall wetland enhancement, as claimed by the Queensland Government. On the contrary, the project has considerable potential to severely degrade the Caley wetlands and their values, including habitat for migratory shorebirds. The removal of a historic bund wall and causeway will not balance the deleterious impact of destruction of 159ha of wetland, the building of an embankment across the wetland and pollution of the wetland with tailwater, stormwater and leakage from the bund around the dredge material.
- The establishment of offsets will not adequately compensate for the loss of wetlands as there was insufficient demonstration of a net conservation benefit.
- The establishment of a nature reserve for the wetland may incur a long-term cost in terms of management for pollution and inadequate hydrological connectivity caused by the railway embankment and the bunds around the dredge spoil dump.

The Society for Conservation Biology Oceania section urges the Queensland Government to take into account the evidence provided in this submission and to act upon the two key recommendations.