From: Matt Landos
To: Committee, EC (SEN)

Cc: Waters, Larissa (Senator); Cameron, Doug (Senator)

Subject: Email 10: deficiencies in approval and monitoring Gladstone

**Date:** Thursday, 30 May 2013 6:24:42 PM

Attachments: Assessment monitoring deficiencies Gladstone Dr Landos 300513.docx

Please find attached a document which has been updated, since it was submitted to the Minister Burke, Gladstone Review.

It outlines numerous key deficiencies in the planning, approval, and monitoring of the gladstone project.

The email chain below, is another example of SEWPAC not responding to information provided which was demonstrating the presence of ongoing problems in Gladstone, associated with the dredge spoil ocean dumping site.

The fish in the image was caught by GAWB's former barramundi hatchery manager, Kurt Hutchby at the spoil dump ground earlier this year, when dumping was still active.

Regards

Matt

Dr Matt Landos BVSc(HonsI)MACVS Director, Future Fisheries Veterinary Service Pty Ltd Honorary lecturer, associate researcher, University of Sydney From: Matt Landos [mailto:matty.landos@gmail.com]

**Sent:** Sunday, 10 March 2013 11:11 PM **To:** 'Kynan.gowland@environment.gov.au'

**Cc:** 'tony.burke.mp@environment.gov.au'; 'senator.waters@aph.gov.au'

Subject: Issues for your consideration

Hi Kynan and Minister Burke and Senator Waters,

About the adequacy of responses to fish health problems- see attached document of matters which relate to the compliance of the Gladstone project to conditions.

Please acknowledge receipt of this information with a return email.

Minister Burke, I note that after my meeting with your advisors, and with yourself Kynan, that there is no demonstrable change to management of the project addressing the key issue of toxic sediment resuspension.

This matter was made abundantly clear, that it needed to be addressed to protect the remaining: disappearing seagrass meadows; sick fish; dying turtles; displaced and dead dolphins; and to stop further contamination of the local mudcrab population which is still being sold for human consumption.

Coincidentally, I was sent the attached image of a fish caught adjacent spoil dump grounds by a GPC employee last week.

Its a reef species-slatey bream.

It did not come over the Awoonga dam wall, and was caught ~ 5nm to sea- in full marine salinity. It looks the same as fish captured during my survey in January 2012, and documented in extensive pathology reports.

The problems in my report, are still occurring now.

I expect to making more data public in the short term.

The impacts are ongoing, without any acceptable mitigation measures in place, and are impacting the world heritage area values.

Please reconsider the adequacy of your non-response at this time.

There are options which include:

Using silt curtains on all dredges

Only dredging on low velocity tides

Preserving valuable areas

Moving shipping to other ports – eg Bundaberg where excess capacity is available.

Stopping dredging until flood turbidity has declined, to give stressed seagrass a chance.

Setting up another review- is not, a measure that controls the impacts which are actively occurring.



From: Matt Landos
To: Committee, EC (SEN)

Cc: Waters, Larissa (Senator); Cameron, Doug (Senator)

Subject: GPC repsonse to Dr Landos report: Email 11

Date: Thursday, 30 May 2013 7:10:07 PM

Attachments: 7 Jan 2013 Response to Dr Matt Landos Report.pdf

### Dear Senators.

Please find attached a media release by GPC released after my report was made public, that contains the following inaccuracies or distortions:

- 1) The report was not commissioned for a legal case, nor for Law Essentials, nor for commercial fishermen. It was commissioned for the Gladstone Fishing Research Fund, which received donations from the public. 7% of donations came from commercial fishers.
- 2) I am not involved in any legal action in association with Gladstone. I have not been retained nor commissioned by Shine Lawyers on behalf of the commercial fishermen of Gladstone.
- 3) The dredging project began officially when the construction dock work began. This was back in October 2010. Not as CEO for GPC Leo Zussino states in May 2011. Most of the dredge spoil reclamation area rock bund wall was constructed prior to May 2011. Construction of that wall began in January 2011. Its construction exposed acid sulfate sediments, and led to massive scouring of sediments, creating plumes of resuspended toxic sediments, prior to monitoring even being done, as seen in satellite images. It is grossly misleading to suggest the project began in May 2011.
- 4) There had been numerous exceedances of ANZECC guideline and of project trigger values which are known to cause harm, yet these are not mentioned by GPC.
- 5) As Prof Jon Brodie outlined, the monitoring program was far from world's best practice and would not have passed muster had it been open to international peer review. The lack of oyster bioassay monitoring is just one of the major flaws. Oysters were used in the Port of Melbourne dredging, but not Gladstone. Why?
- 6) DEHP had one of their water quality reviews scathingly attached by Professor Barry Hart, as lacking any scientific rigour. Subsequently they asked Prof Jon Brodie to review one before release- after review it was not released due to the problems identified in the work by Prof Brodie. Strangely DEHP lost samples for copper and zinc during the key fish sickness period in late 2011, and never sought to collect replacement samples.
- 7) CSIRO's study in December 2012 took place on the smallest tidal variation of the year, and took place when dredging activity was reduced. It was well after major problems in animals were reported in aquatic animals from April –November 2011. The harbour was shut in September. It is unsurprising they reported the water to be fine. They tested at the wrong time. And ignored the high levels in their own results, branding them outliers when they were adjacent the dredging in Grahams Creek.
- 8) Biosecurity Qld fish investigation was severely deficient- it largely had inexperienced non-veterinarians, attempting to declare a fish "healthy" or "sick" based only on examination of its skin by eye. No pathology testing, not microscopy, no bacterial testing, no metal toxicology testing. I was on board with them by chance to witness this sampling. They overlooked key lesions.

- 9) Biosecurity Queensland did not state all levels of metals in the Harbour were normal. They reported several over ANZECC guideline.
- 10) Qld Health did not get provided the toxic algae report which identified an outbreak of Lyngbya and other toxic algae which did explain the symptoms of many of the sick fishers and other members of the public who all had epidemiological links to the toxic waters of Gladstone Harbour at the time of the harbour development.
- 11) The Gladstone Scientific Advisory Panel had key information withheld from them, which did not enable them to reach a conclusion. They did NOT say, it was not due to dredging. Most of the 30,000 fish were caught before April and sold by commercial fishers. These fish had no lesions. It was not until the dredging/ bund wall construction and sediment resuspension ramped up in April that aquatic animals started getting sick. Those in the Boyne river were protected by freshwater flowing from the dam until July when this stopped. At that time, toxic marine water from the harbour penetrated the river and made resident barramundi sick.
- 12) Recreational fishers catch fish that are typically hungry. They do not catch the sick animals, and in so doing bias their samples. I used non-selective gill nets that catch sick and healthy animals. The results of a fishing competition where most anglers fished well outside of Gladstone Harbour are irrelevant.
- 13) The reduction in levels of disease (but not elimination of disease), is due to a change in location of the dredging away from areas of highest contamination. It is also due to reduced ocean dumping, and due to fixing the hole in the leaking bund wall. The fact that disease reduced is to be expected, as the factors which induced it all in the first place were no longer in play to the same extent. The floods played no role at all in my opinion. Had the harbour development project not occurred, there would have been no disease reported in gladstone harbour after the floods. Just like the rest of the Qld coast where no similar massive disease outbreaks occurred.

Dr Matt Landos BVSc(HonsI)MACVS
Director, Future Fisheries Veterinary Service Pty Ltd
Honorary lecturer, associate researcher, University of Sydney



## **Media Release**

# 4 January 2013

## **Comments on Dr Matt Landos Report**

The Gladstone Ports Corporation believes Dr Matt Landos final report titled 'Investigation of the causes of aquatic animal health problems in the Gladstone harbour and near-shore waters' is in direct conflict with the growing mountain of scientific and circumstantial evidence showing no links between dredging and disease in fish.

Gladstone Ports Corporation (GPC) Chief Executive Officer Leo Zussino said the GPC is committed to ensuring the Western Basin Dredging and Disposal Project (WBDDP) continues to be conducted within strict conditioning guidelines set by the project approval conditions to ensure minimum impact on the marine life in Gladstone harbour.

"The extensive independent environmental water quality monitoring program for the WBDDP shows no visible or scientific signs of any negative impact from changes in water quality to date," Mr Zussino said.

"Dr Matt Landos' report has been commissioned by the Gladstone Fishing Research Fund which has been financially supported by a small group of commercial fishers in the Gladstone harbour to support a compensation action represented by Shine Lawyers and Law Essentials.

"However, the first correspondence from Law Essentials noting wide scale fish health issues is dated 20 May 2011, the day the WBDDP began!!. This clearly shows even by their own records that the fish health issues started well before GPC's dredging project.

"The Water Quality Monitoring Program in the Gladstone harbour is world's best practice. Independent scientists from Vision Environment, University of Technology Sydney and Marine Ecology Group collect water quality samples and analyse the results. Their activity is overseen by the Dredge Technical Reference Panel appointed by the Federal Minister for Sustainability, Environment, Water, Population and Communities. To date all scientific evidence shows the WBDDP is not responsible for the fish health issues on a number of points."

- The Queensland Department of Environment and Heritage Protection (EHP) has conducted several reviews of water quality data to date. These updates have all concluded there are no changes in water quality attributed to dredging nor given rise to fish health issues experienced in Gladstone.
- The latest Queensland Department of Environment and Heritage Protection (EHP) report (September 2012) states monitoring of the Gladstone harbour has shown that the dredging is not a major source of dissolved metal concentrations.
- Fisheries Queensland investigation into fish health issues concluded in September 2012 that "fish health in Gladstone had much improved from 2011," which was at a time when dredging had significantly increased in the Gladstone harbour.
- CSIRO released a report in May 2012 on the results of sampling metal concentrations in the Gladstone harbour. The team of CSIRO scientists reported

they found no evidence of increased dissolved metal concentrations in the areas of Port Curtis that are being dredged and total metal concentrations in the seafloor sediment samples were below ANZECC guideline values for all metals. By that stage, 4.5 million cubic metres of dredging had occurred.

- Biosecurity Queensland reports have all stated the levels of metals detected in the Gladstone harbour were in a normal range and not considered to affect fish and/or human health.
- Queensland Health could not find any linkage between fish disease and human health concerns, and specifically symptoms identified in the sick fishers.
- The James Cook University (JCU) study by Drs. Caroline Petus and Michelle Devlin 'Using satellite maps to document the extent of sediment plumes associated with dredging activity in Gladstone Port's western basin,' was independently reviewed by the Australian Institute of Marine Science who concluded that JCU's approach had a number of significant limitations and is irrelevant because the dominant natural processes controlling natural variability of suspended sediment concentrations were either omitted or represented incorrectly. Further, the analysis which was intended to establish correlations between elevated sediments and dredging activities was almost entirely qualitative and did not possess the rigour of a thorough statistical analysis.
- In January 2012, the Gladstone Fish Health Scientific Advisory Panel reviewed all of the available data and reports for fish health and water quality from the Gladstone area and concluded that the data had been appropriately collected and analysed and made several recommendations regarding future water and fish sampling. It observed that "The addition of an estimated 30,000 large barramundi into an already stressed environment (floods) is likely to have caused a general environmental impact affecting barramundi and possibly other species as a result of increased competition for food, and increased harassment by predators. The panel noted the reports of disease from mud crabs and prawns concluded the incidence of bacterial infections and parasites observed were not unusual compared to previous studies in Gladstone Harbour and elsewhere."

"If Mr Landos' conclusions are correct, with the dredging project past its halfway point, why are there no recent reports of sick fish in Gladstone harbour."

"Indeed in June 2012, 2,700 anglers in Australia's largest fishing competition in Gladstone harbour could not find one diseased fish. All of the circumstantial evidence from some commercial fishers and from recreational fishers is that the seafood in Gladstone harbour is healthy. Several commercial fishers have reported sending significant tonnes of seafood from Gladstone harbour to Southern markets over the past six months," Mr Zussino concluded.

#### **ENDS**

For further information please contact: Kieran Moran GPC/WBDDP Media Advisor

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