

Before the Board of Inquiry
Waterview Connection Project

in the matter of: the Resource Management Act 1991

and

in the matter of: a Board of Inquiry appointed under s 149J of the Resource Management Act 1991 to decide notices of requirement and resource consent applications by the NZ Transport Agency for the Waterview Connection Project

Expert Caucusing Joint Report to the Board of Inquiry – Marine Ecology

Dated: 10 February 2011

Due: 7 February 2011

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EXPERT CAUCUSING JOINT REPORT TO THE BOARD OF INQUIRY

INTRODUCTION

- 1 This joint signed report is written in response to the Board of Inquiry's Minute and Directions dated 23 December 2010, and subsequent request on 2nd February 2011 from the Chairman of the Board of Inquiry, via Kim Morgan of the EPA, for the marine ecology experts involved in caucusing to reconvene in order to document their reasons for disagreement. The Directions require the experts, following caucusing, to provide a report "that includes:
 - Areas that have been resolved and how (e.g. by agreement about conditions)
 - Areas that are not resolved, and succinctly why."
- 2 This report relates to the caucusing topic of Marine Ecology.
- 3 Caucusing meeting(s) were held on 28th January 2011 and 10th February 2011.
- 4 Attendees at the first meeting (28/01/2011) were:
 - Dr Sharon De Luca, Marine Ecologist, Representing NZTA.
 - Mr Rob Bell, Coastal Scientist, Representing NZTA.
 - Dr Tim Fisher, Stormwater Engineer, Representing NZTA.
 - Mr David Slaven, Botanical Ecologist, Representing NZTA.
 - Dr Brian Stewart, Marine Scientist, Representing the Board of Inquiry.
 - Dr Greg Ryder, Freshwater Scientist, Representing the Board of Inquiry.
 - Dr Mark Bellingham, NZ Forest and Bird Motu Manawa Restoration.
 - Mr Michael Coote, NZ Forest and Bird Motu Manawa Restoration.
 - Dr Andrea Julian, Ecologist, Auckland Council.
 - Mr David Havill, Conservation Botanist, Department of Conservation.
 - Ms Shona Myers, Ecologist, Living Communities & Friends of Oakley Creek.

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Attendees at the second meeting (10/02/2011) were:

- Dr Sharon De Luca, Marine Ecologist, Representing NZTA.
 - Dr Brian Stewart, Marine Scientist, Representing the Board of Inquiry (via video-conference link).
 - Dr Mark Bellingham, NZ Forest and Bird Motu Manawa Restoration.
 - Mr Michael Coote, NZ Forest and Bird Motu Manawa Restoration.
 - Ms Shona Myers, Ecologist, Living Communities & Friends of Oakley Creek.
- 5 The joint caucusing statement dated 28th January 2011 reported the areas of disagreement to be points 9-12 below. Succinct reasons for disagreement have been added beneath each of these points. The following paragraphs 6-8 are the same as those included in the caucusing statement of 28 January 2011.

AREAS THAT HAVE BEEN RESOLVED

Loss of Mangrove Habitat

- 6 We agree that the permanent loss of 2.79 ha of mangrove habitat is not significant in isolation of other ecological effects.

Marine Monitoring Conditions

- 7 We agree that the marine monitoring conditions proposed are sufficient.

Mitigation to offset permanent marine habitat loss

- 8 We agree that there is limited capacity for further onsite mitigation within the adjacent Coastal Marine Area affected by the Project.

AREAS THAT HAVE NOT BEEN RESOLVED

Marine Reserve status consideration

- 9 *We have not reached agreement that there has been sufficient recognition of the status of the Marine Reserve under the RMA process.*

Dr Sharon De Luca: I consider that I clearly and sufficiently recognised the status of the Marine Reserve in my Assessment of Effects (Report G11) and In my Evidence In Chief.

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Dr Brian Stewart: From a marine scientist's point of view I believe that there has been sufficient recognition of the status of the Marine Reserve in the marine ecology report. Whether or not the Marine Reserve is recognised adequately under the statutory considerations of the AEE is a moot point and best left to the planners.

Dr Mark Bellingham and Mr Michael Coote: Mark Bellingham and Michael Coote were not satisfied that NZTA reports on marine ecology affected by the Waterview Connection Project have given sufficient weight and consideration to the status of the Marine Reserves Act 1971 (the "Act") and the implications of that Act upon the Waterview Connection Project, and most especially obligations, constraints and limitations imposed by the Act on NZTA's proposals for mitigation, remediation, and compensation (on site and off site) with respect to the Motu Manawa (Pollen Island) Marine Reserve. In particular, the marine reserve is referred in NZTA marine ecology reports merely to identify a physical area as if no more recognition of the status and significance of the marine reserve are required.

Not acknowledged in these reports, for example, are Section 3 and its subsections 1 and 2 (a), (b), (c) and (d) that relate to the national significance of marine reserves, the obligations under law to preserve their natural state and the marine life within them, and the right of the public to free access. Not only Section 3 of the Act but also the strict liability offences under the Act in Sections such as Section 18I, subsections (2), (4)(c), (5)(a), or Section 18J, subsections (1) and (2) are not noticeably taken into account by NZTA marine ecology reports with respect to past or future degradation of the Motu Manawa (Pollen Island) Marine Reserve by the State Highway 16 motorway causeway running through the marine reserve when these reports make proposals concerning mitigation, remediation, and compensation under Resource Management Act consent applications.

Moreover, the NZTA marine ecology reports list as a mitigation removal of litter cast from the State Highway 16 motorway causeway through the marine reserve as part of the Waterview Connection Project when it is clear from the Act's Section 18I, subsection (5)(a) on littering that this action of litter removal simply amounts to compliance with the Act. It is potentially misleading to describe compliance with the Act as a mitigation action undertaken by the Waterview Connection Project.

Mark Bellingham and Michael Coote were of the view that the Act must be taken into account as directly relevant to any mitigation, remediation, and compensation (on site and off site) proposals incorporated in Resource Management Act consents applied for by NZTA for the Waterview Connection Project.

Moreover, Mark Bellingham and Michael Coote were of the view that the other experts had not given sufficient consideration to the fact

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that the southern area of Waterview Bay impounded by the State Highway 16 motorway causeway was also part of the Motu Manawa (Pollen Island) Marine Reserve. That area was recognised as having marine values of national significance, along with the marine area to the north of the motorway that includes Pollen Island.

Ms Shona Myers: The Marine Reserve is of national importance and there has not been sufficient recognition of its status with respect to mitigation of effects on these values.

Mitigation to offset permanent marine habitat loss

- 10 *We are unable to agree that the mitigation proposed to offset permanent habitat loss from the widened Causeway is sufficient.*

Dr Sharon De Luca: It is my opinion that the mitigation proposed directly benefits marine ecological values and sufficiently offsets the significant adverse effects of permanent marine habitat loss due to the Project.

Dr Brian Stewart: In terms of the wider Waitemata Harbour, the permanent loss of habitat within the CMA from the widened Causeway is probably not significant. However, I believe that the fact that 5.87ha is to be lost from within a Marine Reserve is significant. I do not believe that the proposed measures go far enough to fully mitigate this loss.

Dr Mark Bellingham and Mr Michael Coote: Mark Bellingham's and Michael Coote's view is that the mitigation proposed by NZTA with respect to the Waterview Connection Project as it pertains to the Motu Manawa (Pollen Island) Marine Reserve can largely be summarised as compliance with existing standards of road design and construction and thus that these concessions are not adequate or sufficient in and of themselves to amount to genuine mitigation, remediation and compensation (on site and off site) for past and future degradation of the marine reserve attributable to the State Highway 16 causeway running through it.

Mark Bellingham and Michael Coote are further of the view that the additional mitigations and compensations sought in the original Forest & Bird submission and subsequent briefs of evidence tendered to the Board of Inquiry should be regarded as a fair and reasonable starting point for what should be considered as conditions in granting NZTA consents for the Waterview Connection Project, in particular as these mitigations and compensations have been framed with reference to the Marine Reserves Act 1971 (the "Act"), and in particular the Act's Section 3 and subsections 1 and 2 (a), (b), (c) and (d), Section 18I and subsections (2), (4)(c), (5)(a), and Section 18J and subsections (1) and (2), and the Act and these various sections thereof govern the Motu Manawa (Pollen Island)

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Marine Reserve, which surrounds the State Highway 16 motorway causeway.

Ms Shona Myers: The permanent habitat loss is significant and the mitigation needs to include additional protection of existing habitats in the Marine Reserve (e.g. Traherne Island) and/or offsite including expanding the Reserve to compensate.

- 11 *We are unable to agree whether or not ongoing contamination attributable to stormwater discharge from the Project contributes to a significant permanent degradation of habitat in the Marine Reserve.*

Dr Sharon De Luca: The discharge of operational phase stormwater arising from the Causeway, which will be treated to remove >80% total suspended sediment and associated contaminants, into the Marine Reserve, as stated in my assessment and Evidence in Chief, will contribute to the long term accumulation of contaminants in marine sediment, but at a much lower rate than that which is currently occurring. However, given the high level of stormwater treatment which is to be provided, it is my opinion that the effect of the discharge of treated stormwater from the Causeway on the existing marine ecological values is negligible.

Dr Brian Stewart: I accept that there will be ongoing contamination of the CMA attributable to stormwater discharge from the Project. I also accept that, due to the proposed mitigation measures, this contamination will continue at a diminished rate when compared with the current regime. This is an improvement over the status quo, but will ultimately, still permanently degrade habitat within the CMA.

Dr Mark Bellingham and Mr Michael Coote: Mark Bellingham's and Michael Coote's view from assessing the reports and evidence is that the NZTA mitigation proposed would allow the impounded southern part of Waterview Bay to continue to accumulate stormwater contaminants and additional sediment. The likely permanent effects would be that the impounded part of the bay would progressively fill in and marine biodiversity decline as fewer organisms will be able to survive in the progressively higher levels of contaminants in this tidal area.

In addition it is Mark Bellingham's and Michael Coote's view that the approximately 250 tonnes of zinc, 25 tonnes of copper (extrapolated from Dr Fisher's reports) and other contaminants that have come from untreated stormwater from the motorway since 2001 (when transitional general authorities to discharge under NWSC Act applied) into the Motu Manawa (Pollen Island) Marine Reserve have not been taken into account.

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Mark Bellingham's and Michael Coote's view that on-going stormwater discharge from the project will contribute to significant degradation of the Marine Reserve is based on Dr Tim Fisher's estimate that it will contribute 33% of the zinc and 30% of the copper entering Waterview Bay.

Mark Bellingham and Michael Coote do not consider that the compliance work in treating the stormwater will mitigate for the contamination of southern part of the Marine Reserve (albeit at a slower rate than at present when there is no stormwater treatment).

The additional 5% of stormwater treatment (75% to 80%) on the causeway alone is insignificant when additional contaminants from the 75% treatment from the other parts of State Highways 16 and 20 that drain into Oakley Creek come into Waterview Bay and the impounded part of the Motu Manawa (Pollen Island) Marine Reserve.

Ms Shona Myers: Whilst I support the 80% efficiency of the stormwater treatment within the coastal sector of the Project, the ongoing stormwater discharge from the Project into the Marine Reserve will have long term and significant effects on the marine environment.

12. We were unable to agree whether additional mitigation (including offsite) for permanent habitat loss and ongoing degradation from contaminants is required.

Dr Sharon De Luca: As stated above, it is my opinion that the mitigation proposed directly benefits marine ecological values and sufficiently offsets the significant adverse effects of permanent marine habitat loss from the widened Causeway. In my opinion, further mitigation, either onsite or offsite, is not required.

Dr Brian Stewart: I believe that the mitigation proposed to offset habitat loss especially within the Motu Manawa (Pollen Island) Marine Reserve is inadequate. I accept that habitat remediation, improved treatment of stormwater, restoration of coastal fringe habitat, removal of litter and debris, and ongoing monitoring go some way towards mitigating this loss. However, I believe further mitigation is necessary. I appreciate that expansion of the Marine Reserve would be difficult due to the need to follow the guidelines for establishing a Marine Reserve laid out under the Marine Reserves Act (1971), but I would be disappointed if this alternative was discarded as being unworkable without some further exploration. Another mitigation option that could be explored is for NZTA/LINZ to pass Traherne Island (excluding the portion used by SH16) into DOC ownership for conservation purposes.

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I find the concept of offsite mitigation unappealing for a number of reasons:

- The Marine Reserve will be diminished in "value".
- It would be difficult to set a dollar value on the habitat lost from within the Marine Reserve.
- Any benefits derived from offsite mitigation may not be appreciated or felt by those most affected by the initial loss.

This being said however, offsite mitigation would be preferable to no further mitigation at all.

Dr Mark Bellingham: Mark Bellingham's and Michael Coote's view is that it may not be possible to treat the contaminated stormwater from the motorway to a sufficiently high standard to ensure that either there is not additional accumulation of contaminants in either the northern or the southern parts of the Motu Manawa (Pollen Island) Marine Reserve.

Considering the quantum of contaminants to be discharged and that traffic will increase, so will the volume of contaminants, and therefore it is highly likely that this cannot be mitigated within the general CMA area of the project. This leaves offsite mitigation as a further option. That option could be undertaken through some works, but as the adverse effects of the motorway on the Motu Manawa (Pollen Island) Marine Reserve and the CMA will be on-going, in Mark Bellingham's and Michael Coote's view it would be more appropriate that the roading agency (NZTA at the moment) contribute an annual sum for a coastal remediation fund to offset the adverse effects.

Ms Shona Myers: I support the mitigation proposed, but do not agree that it is sufficient for habitat loss and effects on the Marine Reserve. I support the recommendation that the Marine Reserve should be expanded in size as mitigation for the effects of the Project. I note that the proposal to expand the size of the Marine Reserve will be outside the jurisdiction of the Board of Inquiry. However, the Board may be able to make recommendations to other agencies, including the Department of Conservation, to pursue this option.

Date: 10 February 2011

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Mr Michael Coote

Ms Shona Myers
