

GUARDIANS OF PAUATAHANUI INLET

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Mana

Porirua

30 September 2011

To: Environmental Protection Authority

Submission by the Guardians of Pauatahanui Inlet on the application for resource consents for the Transmission Gully Project.

Reasons for submission

Our submission relates to all applications for Notices of Requirement and Resource Consents or parts thereof that are relevant to the issues of sedimentation or contamination of the Porirua Harbour, particularly the Pauatahanui Inlet.

Our background

The Guardians of Pauatahanui Inlet (GOPI) is a community-based incorporated society, with about 190 financial members.

GOPI was established in 1991 to “consistently with its ecological values, encourage, promote, protect, maintain and foster the natural, historic and cultural values of the Pauatahanui Inlet”

In support of these aims we have conducted triennial surveys of the intertidal cockle population since 1992, we carry out quarterly monitoring surveys of the basic health of the major input streams and we instigate and take part in revegetation programmes within the Inlet catchment. We make submissions on behalf of the Inlet in planning processes and have produced an education kit and website tools for use in schools. The website also features general information on the history, natural history and ecology of the Inlet. GOPI was instrumental in initiating, promoting and supporting the development of the Pauatahanui Inlet Action Plan and the Porirua Harbour Strategy and Action Plan.

Pauatahanui Inlet is identified in the Regional Coastal Plan as an *Area of Significant Conservation Value* and is registered by the Department of Conservation as a *Site of National Significance* in the Sites of Special Wildlife Interest database.

Potential concerns with this application

As indicated above, our sole concern in assessing developments in the catchment is to argue that they must have a negligible adverse effect on the ecological health of the Inlet.

Two major sources of pollutants from human activities within the catchment threaten its ecological health and its value as a recreational resource. One threat is the uncontrolled input of sediment from rural erosion and urban development. The other is the input of toxic chemicals, much of which derives from vehicles using roads in the catchment, especially SH 1, SH 58 and Grays Road, which ring the shores of the Inlet.

When the construction of a motorway through Transmission Gully began to be considered seriously about a decade ago, it appeared to be to the advantage of Inlet ecology. The motorway's relative remoteness from the Inlet shoreline, coupled with the reduction of traffic on the roads directly around the Inlet seemed to offer a potential for a radical reduction in the direct impact of vehicle-sourced pollutants, even though more vehicles would be travelling through the catchment.

We understood that strict controls (Transit NZ called them "advanced ecological mitigation") on sediment outflow during construction and on chemical contaminants in stormwater afterwards would effectively reduce the direct impact of these pollutants on the Inlet to zero.

On this basis we adopted in 2000 a policy of strongly supporting the construction of the Transmission Gully Motorway.

We continue to support TGM. However, these current applications reveal that we were naïve in our assumption. The AEE and Technical Reports clearly show that even the very best current onsite and near-site methods of controlling sediment and contaminants will not be able to prevent them having an adverse cumulative affect on the Inlet over and above the current situation.

In this submission we ask that NZTA be required to consider the possibility of additional mitigation and offsetting measures to address our concerns.

Why are we concerned?

The Assessment of Environmental Effects Report (AEE) predicts that despite taking excellent precautionary measures the project will still deliver sediment and result in an increase in contaminant loads in the Pauatahanui Inlet.

According to the AEE, the predicted effects of **sediment** on the harbour **during construction** are as follows.

- A Q2 rainfall event could add 200 tonnes of sediment to the harbour (5% above that expected if road not built), likely to be deposited in isolated pockets up to 5mm deep in already heavily impacted sub-tidal locations.
- A Q10 event could add 270-650 tonnes (4-9% above that expected if road not built) deposited mostly in "less ecologically sensitive" sub-tidal areas.
- An event at the upper end of the Q10 range (accompanied with wind at 35-40 kph) could induce deposition of up to 10mm, and affect inter-tidal areas adjacent to Kakaho stream mouth and the eastern end of the Inlet. There is a 4-23% chance that such a top-end Q10 event will occur during "peak construction".

The predicted **longer term** cumulative **sediment** effects of the works are as follows.

- An additional 3,000 tonnes of sediment will enter the harbour, an increase of around 2% over a 20-year period. The majority will be deposited in the central sub-tidal basins of the Pauatahanui Inlet and in the southern sub-tidal area of the Onepoto Arm.
- Up to 50mm of the sediment deposited in the sub-tidal basin areas could be attributable to the project, a maximum deposition of 2.5mm per year on average.

- Overall, the area that will accumulate more than 100mm of sediment in 20 years' time will increase from 61 to 62 hectares in the Onepoto Arm and from 204 to 207 hectares in the Pauatahanui Inlet (0.79% and 1.6% increases respectively).

In the **longer term**, the project is expected to result in reductions in **contaminant levels** for the Onepoto Arm due to a reduction in traffic along SH 1. For the Pauatahanui Inlet, however, TGM will result in a net increase in traffic volume through the Inlet catchment.

Because current stormwater treatment technologies (wetlands and proprietary devices) can remove only 77% or fewer of the contaminants (Technical Report 11, page 123; AEE, page 348) the project is predicted to result in increased levels of Zinc, Copper and Total Petroleum Hydrocarbons in the Inlet (2%, 1% and 20% respectively; AEE, Table 20.9, page 355) by 2031 and cumulative increases thereafter.

The reduction in traffic along SH 1 is predicted to reduce the flow of contaminants into the Onepoto Arm (AEE, Table 20.9) but this should not be allowed to be regarded as offsetting the increases in the Pauatahanui Inlet. While both are arms of the Porirua Harbour, all evidence suggests that there is no significant interchange of water or sediment between them.

We are very concerned that NZTA seems to regard these results as reasonable and unavoidable.

We had hoped that the days were over when developers could argue that small increments to sediment and contaminant loads are not harmful, and long-term cumulative effects were ignored. Our belief is especially relevant when there are means available to offset these deficiencies by action elsewhere in the Inlet catchment.

The case for increased mitigation

GOPI accepts that with existing treatment methods and technology it is not possible to avoid all the adverse effects of the proposal directly. It is inevitable that storm events during or after construction and the limited effectiveness of the proposed contaminant treatments will mean increased sedimentation and contamination of the harbour attributable to the project.

We argue, however, that mitigating and/or offsetting measures sufficient to ensure that there is no overall adverse impact on the harbour in the long term should be taken.

While the AEE (Chapter 28) outlines measures that will be taken to mitigate sediment and contaminant problems, it is clear elsewhere in the AEE that these measures will be only partially effective during construction and do not address the longer-term situation (see above).

The only reference we could find in the AEE to any form of *compensatory* mitigation for sedimentation and contaminant effects on the Inlet is a proposed condition to provide "specialist funding in the case of a significant [extreme weather] event" which could involve "Funding for a community project in the event of a notable event occurring" (page 481).

Possible measures

Sediment: A condition of consent should be to require NZTA to contribute to plans contained in the Porirua Harbour Strategy aimed at

- reducing sediment entering the harbour from sources other than the Transmission Gully project

- restoring the tidal prism or increasing the flushing ability of the harbour.

Contaminants: A condition of consent should be that NZTA be required in mitigation to

- continuously update TGM stormwater treatment methods
- install treatment devices on stormwater run-off outlets from other roads in the Inlet catchment to offset the adverse effects from TGM.

DECISION SOUGHT

That the Board of Inquiry approve the applications subject to the inclusion of conditions that require the applicants to undertake additional mitigating and/or offsetting measures sufficient to ensure that any increases in sediment or contaminants entering the Pauatahanui Inlet as a result of the proposal are completely offset by equivalent reductions elsewhere in the Inlet catchment.

John Wells Chairperson

Guardians of Pauatahanui Inlet Inc.

30 October 2011
