# **Background Paper:**

# **Environmental issues associated with Transmission Gully**

### 1. **Background**

- 1.1 The issues involved in the Transmission Gully project are wide-ranging and complex. It is obviously important that Councillors are aware of these issues and have all the supporting information to understand the project implementation process.
- 1.2 Clearly, **environmental considerations** are one important area of information.
- 1.3 This report provides an account of the environmental issues as they have been expressed in the various reports presented to committees of the Regional Council during the last five years. It also describes the way in which those issues have been approached through the statutory resource management process.
- 1.4 The focus in this report is almost exclusively on environmental effects of the Transmission Gully route and associated issues. The transport policy aspects of the project are not discussed in any detail as they have been extensively debated and reported to councillors through other means in recent years (principally the Regional Land Transport Committee).

### 2. Progress on Transmission Gully, 1995-2000

#### In the beginning...

2.1 While the notion of an inland route as an alternative to State Highway 1 has been with us for many years, the current proposals stem from formal decisions made some 5 years ago. The Regional Land Transport Committee approved the following resolution on 23 March 1995:

"That the Regional Land Transport Committee reaffirms its position that the Transmission Gully project be commenced as soon as possible ahead of any improvement works other than those directed at safety issues on SH1 between Paremata roundabout and MacKay's Railway Crossing."

#### ...and since then

- 2.2 Since that time, the Regional Council has maintained a consistent line of argument, supporting the need for Transmission Gully but recognising that there will be significant environmental impacts as a result of construction (and use). In summary, those effects for the Regional Council have been about:
  - degradation of coastal water quality and coastal ecosystems from sediment resulting from road construction, particularly Pauatahanui Inlet, which is recognised for its national ecological values;
  - damage and loss of freshwater and other terrestrial habitats along the route, arising from the significant modification of small stream channels;
  - reduction in the quality of landscape, access and loss of recreational experiences in the Regional Parks; and

• impacts on the Council's water supply and exotic forestry management activities.

### Wheels begin to turn

- In order to build a road like Transmission Gully, Transit New Zealand needs to have the route of the proposed road "designated" for this use in the relevant district plan(s). Transit NZ is the "requiring authority". It puts in a Notice of Requirement to the territorial authority(ies) for the designation. The Notice is advertised, submissions made and a Hearing held. The territorial authority then makes a recommendation to the requiring authority, which can be accepted or rejected (in both cases, in full or in part). Parties that are unhappy with the requiring authority's decision can then appeal to the Environment Court. The appellants can include the territorial authority that heard the evidence, particularly if that authority's recommendations had not been accepted or modified by the requiring authority's decision.
- 2.4 Transit New Zealand notified the first Notice of Requirement for the designation for the Transmission Gully route on 28<sup>th</sup> February 1996. However, this Notice was later withdrawn (by letter dated 1<sup>st</sup> April 1996) because of procedural errors in the notification process.

### **The Second Notice of Requirement**

- 2.5 The second Notice of Requirement was notified by Transit New Zealand in July 1996, and was accompanied by almost exactly the same AEE as had been provided with the first Notice.
- 2.6 While it provided little quantitative data, the 1996 AEE was refreshingly open about the environmental effects of the highway. It's conclusions relating to ecological effects (page 168 of the AEE) were:
  - "cumulative ecological impacts could be severe, most notably on Pauatahanui Inlet ecology";
  - construction would have "substantial detrimental effects on the ecology of... Duck Creek, Ration Stream and Horokiri Stream";
  - "substantial quantities of sediment could enter Pauatahanui Inlet down these streams...unless proper measures are taken to prevent this";
  - "cumulative impacts of the construction of the route and associated links and any subsequent spread of urban and servicing developments will threaten the healthy functioning of the Pauatahanui Inlet ecosystem mainly from increased sediment load following earthworks in the Inlet's catchments"; and
  - "Prior to the construction of the motorway, resource consents from the WRC will be required ... These consents will fully address the concerns related to the "in-stream" ecological impacts raised here. However, in anticipation of the need of catchment protection the designation has been extended to include sensitive tributaries so that mitigation measures can be implemented by Transit NZ."

#### The Commissioners and the Peer Review

- 2.7 Because the route for Transmission Gully passes through four territorial authority areas: Wellington, Porirua, Kapiti Coast and a small part of Upper Hutt and because of the technical nature of the proposal, Commissioners were appointed by the four authorities to hear the Notice of Requirement.
- 2.8 As a first step, the Commissioners commissioned Connell Wagner to provide some "initial findings" on Transit NZ's designation proposal and AEE. The resulting report was critical of many aspects of the AEE. The report concluded that the AEE:
  - suffered from "the absence of an integrative ecological analysis [which] has lead to the AEE understating the environmental damage potential to ecosystems";
  - "has paid greater attention to mitigation measures rather than avoidance as a way of protecting the environment and minimising environmental effects"; and
  - was "deficient in ecological analysis, particularly in terms of the potential impact on the coastal marine area of Pauatahanui Inlet's significance".
- 2.9 The ecological section of the report was conducted by Dr Geoff Park and was less diplomatic in its comments. Dr Park described the AEE as "seriously deficient" in assessing ecosystem matters. He went on to say that the AEE "has ...grossly understat[ed] the potential environmental damage [to ecosystems] of the Transmission Gully Proposal". Dr Park noted that some of the most significant effects would be on Pauatahanui Inlet.

### Regional Council land already designated

- 2.10 In parallel to the Notice of Requirement, Transit NZ asked the Council to "approve in principle the designation of the motorway over WRC property" and the eventual "uplift" of underlying WRC designations (for water supply and Regional Parks). Under the Resource Management Act 1991, and earlier legislation, the first designation on a piece of land takes precedence, and if later designations on the same area of land are put in place, the underlying, or earlier, designations have to be formally removed, or "uplifted".
- 2.11 A Report went to Council on this request in August 1996 (Report 96.329) and the resolution was to prepare "an appropriate response", explaining that the WRC would not act unreasonably or withhold permission at the necessary time (but would not sign anything at that stage). The Report highlighted a number of impacts on the environment (and the Council's operational interests) that needed to be managed by way of "measures built into the project", including conditions attached to the designation, and resource consents needed from the Regional Council. By this means, the Regional Council was hoping to apply some controls to manage earthworks and water quality impacts.

### The Regional Council's submission

- 2.12 As with its submissions on other notified resource consents and designations, the Regional Council has to consider the policy aspects of a proposal, and impacts on its operations and land management functions. Transmission Gully, as the major road proposal for the Region, had significant policy and operational implications.
- 2.13 Officers therefore drafted a submission on the designation proposal that considered transport policy implications as well as the environmental impacts and operational effects (on three regional parks, the water main serving Wellington City from Kaitoke, and production forestry). A Report to Policy and Finance Committee on 5 September 1996 (Report 96.397) presented the draft submission for councillors' consideration. The Committee requested only minor additions, including acknowledgement of the wider environmental effects of the route, not just those on Council land. A suitably amended version was approved for submission and signed by the Chair and Deputy Chair of Council, on 11 September 1996.
- 2.14 The submission supported the route, but noted the scale of significant environmental impacts arising from construction and the need to manage them in ways that "effectively and comprehensively" addressed the range of concerns raised in the submission. In summary, the submission said that:
  - The route was consistent with the Regional Land Transport Strategy; but that
  - The AEE had been too selective in its consideration of relevant environmental policy matters and statutory documents (including the RPS);
  - There was no reference to Park Management Plans in the AEE, or to other relevant documents or studies (including the Earthquake and Geological Hazard Mitigation Strategy). In consequence, the effects on the Parks had been under-stated and responsibility for managing such effects omitted;
  - The Council's operational responsibilities meant there were also specific concerns about exotic forestry (access for management and harvesting) and bulk water provision (route crossing water main).

# The Hearing

- 2.15 The Hearing for the designation began on 28 April 1997 and lasted for two weeks. Connell Wagner were again used by the Commissioners to assess the proposal. They concluded that there was (still) insufficient information to confirm the designation.
- 2.16 More information was needed about amenity values, landscape and visual character, ecological values and natural character, and iwi consultation. Information shortfalls were also identified in the assessment of seismic risk, effects on the strategic transport network, and effects on the local economy.
- 2.17 During the Hearing, Transit New Zealand's evidence variably sought to fill these information gaps.

### Regional Council's evidence

- 2.18 Evidence from the Regional Council at the Hearing was in 3 parts:
  - overall council position on the proposal, relevant policy aspects, environmental impacts generally, and implications for Council's water supply facilities and forestry management activities;
  - regional park considerations; and
  - transport matters.
- 2.19 Council officers made reference to the Regional Policy Statement, Regional Plans, the Regional Land Transport Strategy, and the Regional Park Management Plans. In relation to the relevant RPS issues and associated policy provisions, a summary of issues was presented thus:
  - poor water quality from stormwater run-off from roads and sediment from road construction (Issue 1, Freshwater chapter);
  - loss of freshwater habitats arising from the modification of small stream channels (Issue 7, Freshwater chapter);
  - degradation of coastal water quality, including Pauatahanui Inlet which is recognised for its national significance (Issue 4, and Table 8 in the Coastal Environment chapter);
  - air pollution from vehicle exhausts and the contribution of transport related emissions to the Region's greenhouse gas emissions (Issues 2 and 6 in the Air chapter and Issue 5 in the Energy chapter);
  - damage to the viability of special ecosystems because of threats to the wider environment surrounding such ecosystems (Issue 7, Ecosystems chapter);
  - reduction in the quality of landscape as a result of development activity, including roads (Issue2, Landscape and Heritage chapter);
  - loss of recreational opportunities because of land use change (Issue 7, Landscape and Heritage chapter);
  - susceptibility of the Region to, and associated risks to major assets from, a range of natural hazards (Issue 1, Natural Hazards chapter); and
  - dependence of the transport sector a crucial link in the Region's social and economic well-being on non-renewable and environmentally damaging sources of energy (Issues 3 and 5, Energy chapter).

#### **Transit New Zealand's response**

- 2.20 Transit NZ responded by suggesting a range of conditions be attached to the designation to deal with environmental impacts. These suggestions were contained in a Memorandum of Understanding presented to the Hearing.
- 2.21 Some of these suggested conditions went part way towards dealing with the range of matters and specific outcomes sought by the Regional Council. On ecosystem matters, Transit NZ had employed Stephen Fuller to present evidence and develop the conditions aimed at avoiding or mitigating effects of the road on sensitive environments. Through evidence and in response to questioning by Commissioners, the Regional Council officers gave some support to several of the conditions suggested by Stephen in the Memorandum for dealing with biophysical issues. The idea of retiring land for eight years prior to construction and associated advance

vegetation planting to mitigate the effects of sediment on streams and Pauatahanui Inlet was specifically seen as a practical and essential element.

### The Commissioners' report and recommendations

- 2.22 The Report and recommendations of the Commissioners was released in August 1997 and made little, if any, amendments to the conditions suggested in the earlier Memorandum to better reflect the Regional Council's concerns about the regional parks, water main protection and access to production forestry.
- 2.23 Transit NZ endorsed the Commissioners' recommendations with minor modifications in its formal decision to confirm the designation, including the conditions to retire land and advance planting. As noted earlier, the Regional Council was supportive of Transit NZ's proposals to retire areas along the route, to enable re-vegetation as a biological buffer for the silt and sediment run-off anticipated from extensive earthworks needed during construction. This buffer was seen as a key to limiting further sedimentation in Pauatahanui Inlet.

### The Regional Council appeal

- 2.24 The Transit decision to confirm the designation led the Council to lodge an appeal on 17<sup>th</sup> October 1997.
- 2.25 Besides not dealing appropriately with the Council's operational responsibilities, a major concern was **how** the Regional Council got into the process of consultation on other relevant matters addressed in the conditions. The four territorial authorities were identified, separately and collectively, but the Regional Council was not recognised as a relevant party to whom staging plans, landscaping proposals, management plans etc. would be sent for "approval by a Council Officer".
- 2.26 The Regional Council appeal therefore sought 3 things:
  - greater and more certain input to key aspects of the proposal, consistent with the requirements in Regional Park Management Plans and the associated procedures for approval of works document;
  - assured access for on-going management and harvesting of the plantation forestry at Battle Hill; and
  - appropriate protection for the maintenance, repair and replacement of the Kaitoke-Wellington water main.
- 2.27 Negotiations on all these matters have been held intermittently over last two years with Transit's agents, Beca Carter. While agreements are yet to be reached, these concerns are likely to be resolved.

#### The Paremata Residents Association appeal

2.28 In 1997, the Paremata Residents Association also appealed Transit NZ's decision to confirm the designation. The Association wanted the road built urgently, and sought a

- reduction in the period of time for retiring land and advance planting work prior to construction from 8 years to two.
- 2.29 The Regional Council registered with the Environment Court as an interested party in this appeal. There is political and public desire for early construction but, as yet, no information about how run-off from earthworks will be effectively managed in the absence of advance planting and a vegetation buffer. Obtaining interested party status in the appeal gives an opportunity to be involved in the discussion of impacts on Pauatahanui Inlet.
- 2.30 During the last 12 months, WRC staff, along with DoC (also an interested party in the Residents Association appeal) have met with Transit and their consultants to discuss ways in which effects might be effectively managed if the advance planting and retirement period was reduced. These discussions continue, and are tied up with information needs for the resource consents that will be required from the Regional Council (see Section 5 below).

#### The Western Corridor Implementation Strategy

2.31 The Western Corridor Strategy concluded by recommending that to give effect to its findings, wording changes were needed for the Regional Land Transport Strategy. These changes have now been incorporated. While the Implementation Strategy assessed early construction of Transmission Gully in terms of its economic, travel performance and network benefits, it omitted any examination of the environmental implications of an early construction.

# 3. Environmental Policy Considerations

- 3.1 The Regional Policy Statement provides a very high level of protection for parts of the Inlet. Policy 1 of the Coastal Environment Chapter states that the Wildlife Refuge and Wildlife Management Reserve in the Inlet are to be protected from all actual or potential adverse effects. One interpretation of this policy (contained in the explanation to the policy) is that adverse effects are to be avoided rather than remedied or mitigated. This is a very high standard. The 1996 AEE focussed on mitigation an approach that would create a conflict with this policy. This position was stated at the Hearing.
- 3.2 The Regional Coastal Plan lists Pauatahanui Inlet as an Area of Significant Conservation Value (ASCV). The term Area of Significant Conservation Value is self-explanatory. The Minister of Conservation identifies ASCVs for inclusion in regional coastal plans. Policy 3.3.1.10 of the Proposed Regional Coastal Plan requires that the values of ASCV shall be protected from adverse effects.
- 3.3 The Regional Freshwater Plan identifies Duck Creek, Ration Stream, and Horokiri Stream as water bodies with a high degree of natural character, and as water bodies containing nationally threatened indigenous fish. Policy 5.2.1 of the Plan requires that the water quality of these streams be managed in its natural state (i.e. no significant change to the natural water quality), although there is provision (in Policy 5.2.10) to over-ride the classification in exceptional circumstances.

## 4 The Pauatahanui Inlet Project

- 4.1 Recognising that policies alone are unlikely to be sufficient to promote the careful management of the Pauatahanui Inlet and its associated significant ecosystem, we have been working with the local community and Porirua City Council to develop an action plan for management of the Inlet. This highly visible commitment to the Inlet and its catchment would be seriously compromised by any proposals that reduce the level of protection that has been consistently sought thus far in the Transmission Gully process.
- 4.2 Our focus on the Inlet as the number one priority ecosystem to protect in the Region is in direct conflict with our transport policy commitment to build Transmission Gully as early as possible, unless it can be demonstrated that an engineering solution (or something else) can effectively deal with the sediment run-off effects.

#### 5. Consent Issues

- 5.1 The resource consent process raises the following points:
  - 1. In terms of the resource consents needed from the Regional Council, the WRC will be at arms length from the decision. The Council has declared a position and may be a funder of the road. Consequently, the consents will need to be heard by Independent Commissioners.
  - 2. The granting of resource consents is not a foregone conclusion. While there is rarely a guarantee that consents will be granted, the acknowledged severe environmental effects, combined with the high level of protection the Pauatahanui Inlet receives in our planning documents, means that the chances of Commissioners declining the consents are higher than in most comparable projects.
  - 3. If granted, the consents may include strict environmental conditions (to protect ecosystems) which could force up the cost of the project.
  - 4. It is possible that the consents would be appealed to the Environment Court regardless of the decision. The appeal could easily take years to resolve. For example, in the case of the Paremata-Plimmerton section of the State Highway One upgrade, the appeals have not yet been resolved and the consents were originally applied for in August 1997, and granted in June 1998. Again, the Environment Court confirmed the Inner City By-Pass consents 2 years and 5 months after the Commissioners granted them. The most rapid resolution over an appeal for a major roading project was the Rural Section upgrade of State Highway One. In this instance, consents were granted in November 1997 and the appeals withdrawn in November 1998. The time taken to resolve appeals has obvious implications for the timing of the project.
  - 5. The Council has recently begun to invest considerable time and effort into reducing the amount of silt and other pollutants going into Pauatahanui Inlet. This work could be negated if the consents are granted, emphasising their economic and social benefits, leaving all involved in a difficult position.

#### 6. Where does all this leave the Council?

- 6.1 The following conclusions can be drawn from the available information:
  - 1. Throughout the last few years, the Regional Council has maintained a consistent line of argument, supporting the need for Transmission Gully but recognising that there will be significant environmental impacts as a result of construction (and use). The submission and evidence presented at the Hearing emphasised this message. Our appeal relates to the same concerns. There has been an acceptance that many of the impacts can be avoided or mitigated through conditions attached to the Designation, and by way of consents that will be required from the Regional Council. It will be important for the Regional Council to continue to do whatever it can to manage the effects of Transmission Gully on the surrounding environment. The Council has a statutory resource management responsibility to seek the best environmental outcome that it can. It is risking community support and image credibility if it accepts anything less.
  - 2. The decision to expedite the early construction of the road could be seen to be at odds with the Council's previous policy position (that we favour the road so long as there are environmental safeguards) because it seriously foreshortens the time available to implement mitigation measures. It is for this very reason that we have asked to be registered as a party in the Paremata Residents Association appeal on the designation.
  - 3. The effects on ecosystems (particularly on Pauatahanui Inlet and some of its feeder streams) were described in the AEE as the most significant environmental effects of the proposal.
  - 4. There has been no formal assessment of those effects through a consent process.
  - 5. The AEE only provided preliminary information on ecological effects on water quality and Pauatahanui Inlet.
  - 6. The Report for Commissioners prepared by Connell Wagner considers that the AEE is deficient and that it understates those ecological effects
  - 7. Even so, the AEE notes that the project may seriously damage Pauatahanui Inlet, two freshwater fisheries and three streams.
  - 8. The RPS, the Regional Freshwater Plan and Regional Coastal Plan provide a very high level of protection for Pauatahanui Inlet possibly requiring that adverse effects be avoided rather than remedied or mitigated.
  - 9. Consents could be hard to get.
  - 10. The potential problems are difficult and there are no easy answers. A key factor will be whether Transit New Zealand can ensure that the adverse effects on ecosystems (and Pauatahanui Inlet in particular) are minor. At present, we have no information (or confidence) about this in terms of an early construction.