# BEFORE THE ENVIRONMENT COURT I MUA I TE KOOTI TAIAO O AOTEAROA

UNDER

the Resource Management 1991

IN THE MATTER

of appeals under Clause 14 of the First Schedule of the Act

**BETWEEN** 

TRANSPOWER NEW ZEALAND LIMITED

(ENV-2018-CHC-26)

**FONTERRA CO-OPERATIVE GROUP** 

(ENV-2018-CHC-27)

HORTICULTURE NEW ZEALAND

(ENV-2018-CHC-28)

**ARATIATIA LIVESTOCK LIMITED** 

(ENV-2018-CHC-29)

**WILKINS FARMING CO** 

(ENV-2018-CHC-30)

(Continued next page)

# STATEMENT OF EVIDENCE OF PETER HORRELL FOR THE WAIAU RIVERCARE GROUP INCORPORATED 22 March 2019

Judicial Officer: Judge Borthwick and Judge Hassan

# GORE DISTRICT COUNCIL, SOUTHLAND DISTRICT COUNCIL & INVERCARGILL DISTRICT COUNCIL

(ENV-2018-CHC-31)

#### **DAIRYNZ LIMITED**

(ENV-2018-CHC-32)

#### **H W RICHARDSON GROUP**

(ENV-2018-CHC-33)

#### **BEEF + LAMB NEW ZEALAND**

(ENV-2018-CHC-34 & 35)

#### **DIRECTOR-GENERAL OF CONSERVATION**

(ENV-2018-CHC-36)

#### SOUTHLAND FISH AND GAME COUNCIL

(ENV-2018-CHC-37)

#### **MERIDIAN ENERGY LIMITED**

(ENV-2018-CHC-38)

#### **ALLIANCE GROUP LIMITED**

(ENV-2018-CHC-39)

#### FEDERATED FARMERS OF NEW ZEALAND

(ENV-2018-CHC-40)

#### **HERITAGE NEW ZEALAND POUHERE TAONGA**

(ENV-2018-CHC-41)

### STONEY CREEK STATION LIMITED

(ENV-2018-CHC-42)

#### THE TERRACES LIMITED

(ENV-2018-CHC-43)

#### **CAMPBELL'S BLOCK LIMITED**

(ENV-2018-CHC-44)

#### **ROBERT GRANT**

(ENV-2018-CHC-45)

# SOUTHWOOD EXPORT LIMITED, SOUTHLAND PLANTATION FOREST COMPANY OF NZ.

SOUTHWOOD EXPORT LIMITED

(ENV-2018-CHC-46)

TE RUNANGA O NGAI TAHU, HOKONUI RUNAKA, WAIHOPAI RUNAKA, TE RUNANGA O AWARUA & TE RUNANGA O ORAKA APARIMA

(ENV-2018-CHC-47)

**PETER CHARTRES** 

(ENV-2018-CHC-48)

RAYONIER NEW ZEALAND LIMITED

(ENV-2018-CHC-49)

**ROYAL FOREST AND BIRD PROTECTION SOCIETY OF** 

**NEW ZEALAND** 

(ENV-2018-CHC-50)

**Appellants** 

AND SOUTHLAND REGIONAL COUNCIL

Respondent

#### Introduction

- 1 My name is Peter Horrell.
- 2 I am the Co-Chair of the Waiau Rivercare Group Incorporated (WRG).
- The WRG specifically represents the interests of the township of Tuatapere and landowners from the Mararoa Weir to Te Wae Wae Bay, and has as its focus the ecological health of the lower Waiau River.
- On 11 March 2019 a meeting of the WRG was held to discuss, amongst other matters, the presentation of evidence from the WRG at the Topic A hearing. At this meeting I was authorised to present evidence to the Court on behalf of the WRG.

#### My connection to the region

I have lived in the Tuatapere District my entire life. I was born in Tuatapere. My wife and I first farmed on our own account on a sheep property at Te Tua (south of Tuatapere), and from 1995 until 14 March 2019 farmed sheep on a property at Clifden.

### Scope of my evidence

6 My evidence has two parts:

#### Part A addresses:

- a Objective 10 of the proposed Southland Water and Land Plan (pSWLP).
- b The impact of the Manapouri Power Scheme (MPS) on the Tuatapere community.
- c The Southland Region Council's (SRC) consent compliance regime.

Part B addresses two aspects of the evidence presented by Mr Feierabend on behalf of Meridian Energy Limited (MEL), specifically:

- d The Mean Flow data at the MLC structure at Mararoa.
- e Community consultation.
  - i 1973 Waiau Agreement.
  - ii 1996 Waiau Agreement.
  - iii The position today.

#### Part A

#### Objective 10

7 Objective 10 in the pSWLP is worded:

The national importance of existing hydro-electric generation schemes, including the Manapōuri hydro-electric generation scheme in the Waiau catchment, is provided for, recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment.

- The WRG understands that by its inclusion in the "existing environment" any adverse effect of the MPS infrastructure cannot be considered during re-consenting. We believe the consenting authority should have the opportunity to consider all adverse effects stemming from the MPS. We oppose the current wording of Objective 10.
- In its appeal notice MEL seeks to have the MPS water take also included in the existing environment. The WRG also opposes the proposed inclusion of the MPS water take in the existing environment.
- Having considered Ms Whyte's planning evidence on behalf of MEL, I understand she is supportive of the term "existing environment" being removed. 

  It appears MEL are comfortable with removing the term "existing environment" from Objective 10 altogether. We welcome this change.
- MEL makes the case for the modification of Objective 10 to provide for "enhancement".
- As a community we have first-hand experience of two "enhancement" projects perused by MEL.
- The first is the second tail race tunnel (2MTT) which was submitted to the SRC for consenting just two years after the reconsenting of the entire MPS in 1996.
- My recollections from that time are that consenting of the 2MTT project proceeded smoothly. MEL produced scientific evidence which persuaded the Waiau Working Party that overall any negative environmental impacts would be negligible.
- Our members who are intimately familiar with Bluecliffs Beach (located immediately west of the Waiau Mouth) report a significant acceleration in the rate at which sand was stripped from the beach following the

See [56] – [59] of Ms White's statement of evidence dated 15 February 2019.

- commissioning of the second tail race tunnel in 2002.<sup>2</sup> No reference to that acceleration was made during that consenting process.
- The second instance of a recent "enhancement" project occurred in 2017/18 with MEL's "Waiau Enhancement Project".
- The project would have seen the minimum operating level of Lake Te Anau lowered a further 20cms, an increased rate at which Lake Manapouri could drop to its minimum operating level, and most importantly a significant reduction in the flow regime through the MLC structure into the lower Waiau.
- On that occasion, pressure from the Guardians of the Lakes, and lack of support from the Waiau Working Party persuaded MEL to put that project on hold. I attended the meeting of the Waiau Working Party that considered the Waiau Enhancement Project.
- The WRG is opposed to the relief sought by MEL for Objective 10 to provide for MPS's enhancement. Our experience is that however MEL pitches enhancement to the community, the outcome for the Lower Waiau River is further degradation.
- The WRG seeks that the wording of Objective 10 reflect this reality, and leaves enhancement out of it. That view is best represented by the wording of Objective 10 being as it was in the Notified Version of the pSWLP:

#### Objective 10

The national importance of the existing Manapōuri Power Scheme in the Waiau catchment is provided for, and recognised in any resulting flow and level regime

#### Impact of the MPS on the Tuatapere water supply

- The township's water supply has changed markedly over the lifetime of the MPS. Pre-control the town's water was drawn from the Waiau River, largely pristine alpine water. The diversion of at times 95% of the pre-control flow necessitated shifting that supply to bore water.
- A total of four bores have been drilled to supply the township. The first, third and fourth bores each contribute to the town's supply today. The second bore had a high proportion of sand in it and was eventually abandoned. Successive bores are moving further from the river.

See Beentjes, M.P. (2010). Toheroa survey of Oreti Beach, 2009, and review of historical surveys. New Zealand Fisheries Assessment Report 2010/6. 40 p, which reports the collapse of the Bluecliffs Beach toheroa fishery. The shellfish population dropped from 2.2 million in 1966, to 0.5 million in the mid 1970's, and by 2009 had dropped further to 34,000.

- Township residents complain that the water supply is at times cloudy and highly chlorinated. An elderly resident at the WRG public meeting on 28 January 2019 said that for herself and her husband the water was not fit to drink they buy bottled water.
- There is widespread concern within the WRG membership (particularly those who are resident of the township) about the security of potable water for the town. This is an example of the ongoing impact on the quality of life for the Tuatapere community from the MPS under the status quo. The last thing we want is further degradation under the auspices of enhancement.

#### SRC consent compliance regime

- Our community's experience with the operation of the MPS now stretches back 51 years (since 1968). That operation and the SRC compliance regime, with its oversight of the MPS, have together had a significant adverse impact on our community.
- While the regulatory regime the SRC, as the consenting authority, imposes on the MPS is set out in the relevant resource consents, the application of the actual compliance regime comes down to the SRC officials on the day.
- In Part B I describe in some detail how the actual operation of the compliance regime has exacerbated the adverse effects of the MPS on our community.

#### Part B

Mean Flow data from the MLC structure

The figure which follows is reproduced from Mr Feirabend's evidence:<sup>3</sup>

See figure 6 of Andrew Feierabend's statement of evidence dated 15 February 2019.

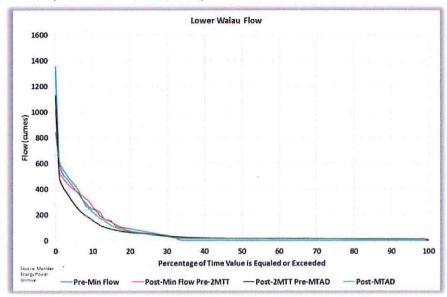


Figure 6 – Distribution Curve of the Lower Waiau River Flow 1977–2018 Comparison of Flows at Each Operational Phase of the MPS

#### 29 Mr Feierabend comments:4

The importance of this analysis is twofold. First it demonstrates the relative consistency in the hydrology associated with the catchment and the generation outcome associated with the MPS. Secondly, it demonstrates that even though there have been changes to the MPS operations through investment and optimisation that provide for improved generation outcomes, the long term mean flow to the Lower Waiau River has remained relatively consistent. The exception to that period is between 2002 and 2012. This coincides with a series of hydrologically dry years and an associated reduction in spill.

- I question whether the long-term arithmetic mean flow in the lower Waiau River adequately describes the impact of the MPS on the river. In my view there is a risk the data can appear skewed when multiple small readings offset a few very large readings. Simply adding everything up and dividing by the number of observations may not paint an accurate picture.<sup>5</sup>
- The figure below is the hydrograph at the MLC structure for the July 2005 year sourced from the SRC website:<sup>6</sup>

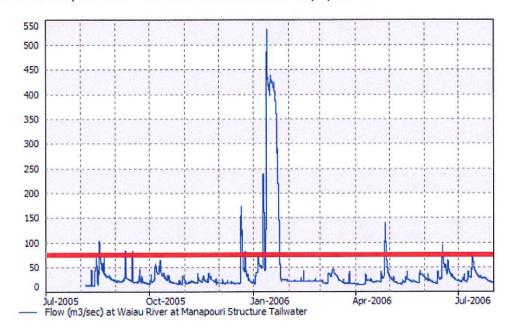
<sup>4</sup> At [28].

https://medium.com/@JLMC/understanding-three-simple-statistics-for-data-visualizations-2619dbb3677a

The SRC website data set commences August 2005. We have no publicly available flow data at the MLC structure prior to that date. For completeness we have reproduced as Appendix 1 the hydrographs of flows through the MLC 2005 -2013 to illustrate the degree of volatility that characterises the flow regime MEL allows to enter the lower Waiau River.

Waiau River at Manapouri Structure Tailwater ▼ Flow ▼ Fri Jul 01 2005 Mon Jul 31 2006 Specified

Select the site, measurement and timeframe then click the display button.



- The red overlay is the approximate position of the long term mean flow of 70 cubic metres per second suggested by MEL. By using the overlay it becomes apparent that not only is the flow regime very volatile, but the data set comprises many low flow observations and a few high flows.
- The arithmetic mean presented by Mr. Feierabend bears little resemblance to the flow regime in the river with which I am familiar. The graphical representation in the hydrograph better captures the highly volatile flow regime in the river which I have lived with, and experienced first-hand, since the MPS was commissioned.
- It is this volatility that has reduced river bank stability throughout the lower Waiau, as the banks (saturated under high flows) collapse when the flow is abruptly reduced by MEL closing the gates. Those who live beside the river know that bank slumping is a common sight following periods of high flow. That slumping contributes increased sediment and gravel to the river which the low (minimum consented) flows are unable to flush out to sea.
- This issue is further compounded by the role of the Mararoa River in the MPS operational guidelines. Crudely put, when the Mararoa is clean (sediment free) the gates at the MLC structure are closed to let the consented minimum flow through, and the waters are permitted to back up to allow the Mararoa to flow into Lake Manapouri. When the waters of the Mararoa are turbid, the gates at the MLC structure are opened to allow those highly sedimented waters to flow directly into the lower Waiau. Our members are acutely aware that the lower Waiau now carries precious

little alpine water. These are the reasons the lower Waiau is frequently discoloured.

- The WRG attempted to investigate whether there was an observable difference in the hydrograph of flow through the MLC structure in the period before 2002, as suggested by Mr. Feierabend. The hydrographic record is publicly available on the SRC web site from August 2005, but not before. When the WRG requested the hydrographic record pre-2005, the SRC variously advised that MEL owns the data, the data is commercially sensitive, and that MEL would need to authorise its release.
- 37 MEL advised that it was prepared to release the hydrograph to the WRG as raw data in 5-minute increments, but not for third party use. That, in the view of the WRG, would have precluded the data being used in the matter presently before the Court. Consequently, the WRG declined the offer on 12 March 2019.
- I note that 2002 was the year in which the second tail race tunnel was commissioned. In light of MEL's proposed "enhancement" amendment to Objective 10, it would be helpful to compare the hydrological record at the MLC structure, pre- and post- the second tail race tunnel being commissioned. This would aid our understanding of the impact "enhancement" has had on the Lower Waiau in the past.

#### **Community consultation**

- Mr Feierabend goes into some detail on the consultative pre-consent process funded by the then owner of the MPS (the Electricity Corporation of New Zealand Limited (ECNZ)) between 1990 and 1996, in the form of the Waiau Working Party. It was that process which culminated in the establishment of various Trusts to which Mr Feierabend refers in his description of the 1996 Waiau Agreement between the SRC, ECNZ and Federated Farmers Southland.
- 40 However, Mr Feierabend makes no mention of the 1973 Waiau Agreement. The 1973 Waiau Agreement is relevant to the matter before the Court as it establishes a causal relationship between the operation of the MPS and damage from erosion and flooding downstream of the MLC structure.

#### The 1973 Waiau Agreement<sup>7</sup>

The MLC structure at Mararoa was commissioned in 1972. The first instance of the owners of the MPS being held to account for damage from erosion arose in 1973 when the then Ministry of Works reached an out of Court settlement with the McCracken Family of Tuatapere. That settlement was to compensate the family for persistent flooding and

<sup>7</sup> The 1973 Waiau Agreement is reproduced as Appendix 2.

- erosion of 81ha of the McCracken farm due to the operation of the MLC structure at Mararoa.
- The 1973 settlement with the McCrackens led to the signing of the subsequent 1973 Waiau Agreement between the NZ Electricity Department (NZED) and the Southland Catchment Board.
- 43 That agreement provides the following:

... AND WHEREAS fluctuations of the river have caused and will cause changes in the riverbed which may still be called on to pass floods of the same volume as prior to the diversion AND WHEREAS river training and remedial works will accordingly be required to be undertaken and the general surveillance of the river maintained ....

NOW THEREFORE it is hereby agreed by and between the Department and the Board as follows:

- 1. In this agreement "training and remedial works" shall mean the protection of lands directly or indirectly affected from flooding and erosion and the preservation of the natural river channel in a size and condition to provide for the passing of flood waters when required....
- These clauses are important because they provide acknowledgement from the then owners of the MPS and the then regulator (the Southland Catchment Board) of the fundamental relationship between the operation of the MPS (and specifically the MLC structure) and:
  - a The damage from erosion that had occurred up until 1973.
  - b The on-going damage from erosion that would continue to occur as a result of the operation of the MPS.
  - c The need for on-going "training and remedial works" within the river bed.
- Essentially, this reflects the fact that every cubic metre of water which is permitted to flow through the MLC structure is the result of an explicit decision of the MPS operator.
- Between 1972 and 1991 various other settlements were made between riverside land owners whose land had been damaged by flooding and or erosion and the MPS owners. These included "training and remedial works" undertaken below Tuatapere on farm land and the construction of the extensive flood banks around the Tuatapere township following the 1984 flood.

47 Notwithstanding the 1996 consented minimum flow regime through the MLC structure, Mr Feierabend himself refers to "spill". 8 This is an acknowledgement of the highly modified nature of the lower Waiau flow regime and echoes the acknowledgements made to, and accepted by, our community in 1973.

#### 1996 Waiau Agreement

- Between 1990 and 1996 ECNZ, the then owners of the MPS, called together and funded the Waiau Working Party to resolve issues relating to the operation of the MPS prior to consenting by the SRC. Mr Feierabend's evidence deals with this process.<sup>9</sup>
- 49 Mr Feierabend describes: 10

[t]he provision of an annual funding stream from MEL to [the SRC] via an agreement with the Southland Branch of Federated Farmers to manage the Lower Waiau River fairway and flood management and erosion control associated with the operations of the MPS.

- I was a foundation member of the Waiau River Liaison Committee, which was formed as a committee of the SRC to govern the allocation of funds to the annual works programme. I stood down from the role of Chairman of that Committee at the Committee's 2019 AGM.
- An integral part of the 1996 Waiau Agreement was the requirement to form a Special Rating District in the lower Waiau Catchment. The intention was that a differential rate would be struck for Class E land (immediately adjacent to the Waiau River) and Class F land (immediately adjacent to the tributaries of the lower Waiau River). The formation of that Special Rating District triggered:
  - a The dollar-for-dollar matching of rates revenue by the consent holder, with the combined rate revenue contributed to the funding stream.
  - b The removal from the purview of the Liaison Committee responsibility for managing the damage from erosion.
  - c The inclusion, as conditions in the MPS resource consent, of the following:11

The Consent Holder shall:

(a) take such precautionary measures which the General Manager, Southland Regional Council may require to

<sup>8</sup> At [28], as set out above.

<sup>&</sup>lt;sup>9</sup> At [47] – [49].

<sup>&</sup>lt;sup>10</sup> At [49](i).

See resource consent 96022 - 1996 – schedule of conditions: condition 11

- prevent damage from erosion which is likely to occur as a result of the exercise of this permit; and
- (b) make such remedial repairs which the General Manager, Southland Regional Council may require to remedy damage from erosion which occurs as a result of the exercise of this permit.

#### The position today

- Any description of the consultation process between the owners of the MPS, the regulator (SRC) and our community would be incomplete without comment on the position today.
- Our community entered into the 1990-1996 pre-consenting negotiations with ECNZ and the SRC in good faith. The community had reasonable grounds for believing that the Crown-owned entity and the regulator would act in good faith in any subsequent agreement reached. When issues of erosion and or flooding arose, our expectation was that they would continue to be dealt with on the same basis as they had between 1973 and 1991. That has not been the case.
- Since 1991 I understand there have been no settlements between the owners of land damaged by erosion and the owners of the MPS. Further there is no management plan for the Tuatapere flood banks and in-stream training and remedial works paid for by the MPS. Owners themselves have been left to address issues. This position does not reflect a sudden cessation of damage from erosion.
- On 9 October 2017 the WRG wrote to the SRC<sup>12</sup> concerning on-going damage from erosion occurring in the lower Waiau. We pointed to the provisions set out in the 1996 Waiau Agreement concerning the damage from erosion. We presented that letter to the full Council at its meeting on 1 November 2017.
- On 28 November 2017 the WRC Steering Committee met with senior Council staff. We were given a copy of a legal opinion from BJ Slowley (legal counsel of the SRC) dated 23 November 2017. <sup>13</sup> The legal opinion considered the matters we had raised with the SRC on 1 November 2017.
- 57 The letter stated: 12

... "The one proposed condition that is directly relevant to the question of damage caused by erosion is the following:

'004.11 **Erosion** 

See Appendix 3, WRG to SRC – 9 October 2017. Please note although this is "cc'd" to the Minister for the Environment and Energy, the WRG's records show the letter was sent to the SRC only.

See Appendix 4, BJ Slowley – 23 November 2017.

#### The Consent Holder shall:

- (a) Take such precautionary measures which the General Manager, Council, may direct to prevent damage from erosion which is reasonably likely to occur as a result of the exercise of this permit.
- (b) Make such remedial repairs which the General Manager, Council may require to remedy damage from erosion which occurs as a result of the exercise of this permit.'

You advise that the condition was not incorporated into any of the Manapouri consents that were granted. I am not surprised. As drafted, the proposed condition is vague to the point that if adopted, there would be legal issues with the certainty of its requirements. Leaving aside the question of the validity of it, the proposed condition would have only imposed an obligation on the Council if it had been included as a condition in one of the Manapouri consents".

- The above clauses from the 1996 Waiau Agreement were in fact reproduced word-for-word in the schedule of conditions for resource consent 96022 for the MPS, as condition 11. Despite ongoing erosion to date no action has been taken by SRC with respect to condition 11 of the schedule of conditions to resource consent 96022.
- The farms affected by erosion and flooding in the lower Waiau are for the most part small family enterprises which individually lack the resources to actively pursue what appear to us to be the on-going breach of the conditions of resource consent 96022 for the MPS. I and the WRG are aware of at least four riverside land owners whose properties continue to suffer damage from erosion.
- One property in particular was the subject of a compensation offer from the then owners of the MPS in the 1970's. That offer was rejected at the time. Since 2013 changes in the course of the river have increased the frequency of flooding and erosion on the property.
- A claim for relief was made under the 1996 Waiau Agreement. MEL commissioned a report to investigate the claim. The report concluded:14

The riverbank erosion process and the old flood plain channels existed long prior to the establishment of the Manapouri Power Scheme. The natural bank erosion process has continued after the power scheme was developed as Meridian's flow regulation at

AECOM: "O'Brien Property Flooding and Erosion" Version 2. 4 September 2015, excerpt from the Executive Summary page 6.

MLC has very little effect on the characteristics of the floods that ultimately cause bank erosion.

- The WRG considers the conclusion in this report is contrary to the:
  - a Explicit causal relationships between the operation of the MPS and downstream erosion established under the 1973 Waiau Agreement
  - b Intent which underpins the 1996 Waiau Agreement
  - c Intent of condition 11 in the schedule of conditions for resource consent number 96022.
- What is clear to the WRG is that without good will and intent, it is difficult for disadvantaged community members to sheet home to the MPS the adverse impacts they experience downstream of the MLC structure.
- Further, it appears the safeguards which the community believed were in place to protect against those adverse effects (including those from "enhancements" of the MPS), are largely ineffectual. Together, these are two cogent reasons why the proposed amendment of Objective 10, to provide for MPS enhancements, should be rejected.

#### Summary and relief sought

- The members of the WRG have been significantly disadvantaged by operation of the MPS. Part of this relates to the WRG concern that the operation of the MPS has compromised the security of the Tuatapere water supply.
- The decision version of the pSWLP Objective 10 enshrines this disadvantage by incorporating within the "existing environment" the infrastructure of the MPS. As such the WRG supports the view that the term "existing environment" should be deleted from Objective 10.
- However, the WRG opposes the inclusion of "enhancement" in Objective 10.
- The effects experienced by our members, and our community more broadly, under the status quo are not insignificant, including the impact on the Tuatapere water supply. Further, the existing compliance regime the SRC has in place for resource consent 96022 appears to have been largely ineffective. The result has been to exacerbate the adverse effects of the MPS borne by our community.

We consider the wording of Objective 10 should revert to the wording of Objective 10 contained in the Notified Version of the pSWLP and should not provide for enhancement of the MPS.

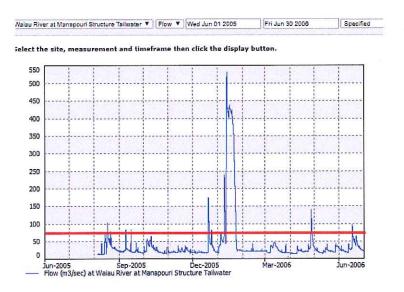
of Honell

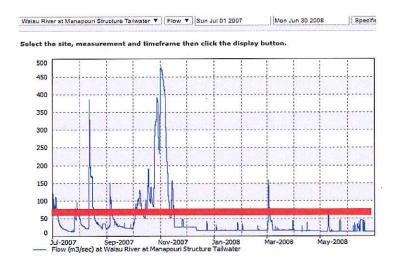
Peter Horrell

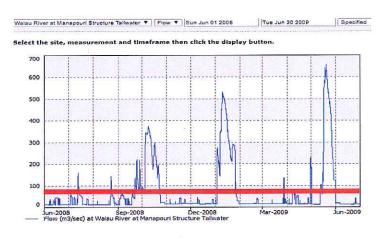
Co-Chair of the Waiau Rivercare Group Incorporated

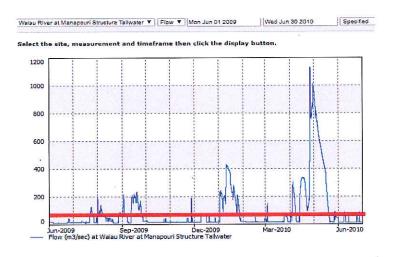
22 March 2019

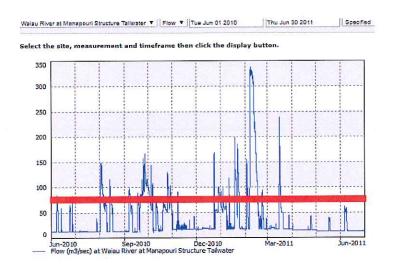
## Appendix 1 - Flow at MLC from August 2005

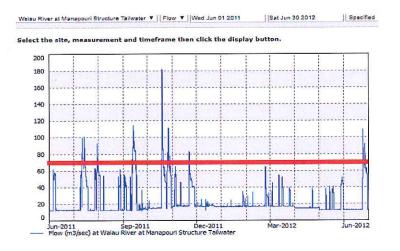


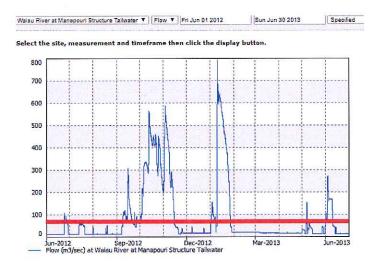












Waran Agramen

FIRAL FORM .2nd FEBRUARY 1973

AN AGREEMENT made this IIL day of March 1973 BETWEEN THE GENERAL MANAGER OF THE NEW ZEALAND ELECTRICITY DEPARTMENT acting for and on behalf of Her Majesty the Queen in exercise of the powers conferred upon him (hereinafter called "the Department") of the one part AND THE SOUTHLAND CATCHMENT BOARD a duly incorporated body under the Soil Conservation & Rivers Control Act 1941 and having its office at Invercargill (hereinafter called "the Board") of the other part WHEREAS pursuant to the Manapouri-Te Anau Development Act 1963 the headwaters of the Waiau River have been diverted from Lake Manapouri to Deep Cove and the flow of the Waiau River affected accordingly AND WHEREAS fluctuations of the river have caused and will cause changes in ' the riverbed which may still be called on to pass floods of the same volume as prior to the diversion AND WHEREAS river training and remedial works will accordingly be required to be undertaken and a general surveillance of the river maintained AND WHEREAS the Board at the request of the Department has agreed in the terms set forth to carry out works on behalf of the Department for the purposes of effecting the said river training and remedial works and mitigating the effects of such fluctuations but without prejudice to its powers and authority as contained in the Soil Conservation & Rivers Control Act 1941 and the Water & Soil Conservation Act 1967

NOW THEREFOR it is hereby agreed by and between the Department and the Board as follows :

1. In this Agreement "training and remedial works" shall mean the protection of lands directly or indirectly affected from flooding and erosion and the preservation of the natural river channel in a size and condition to provide for the

- 2 -

passing of flood waters when required.

- 2. To evaluate the training and remedial works required the Board will conduct surveys and cause aerial photographs to be taken at regular intervals of time so that channel alteration from the date of this Agreement can be identified and evaluated and where possible assessments made of alterations since the date of commencement of works under the Manapouri-Te Anau Development Act 1963.
- 3. The whole of the administration costs of compiling, negotiating, designing and supervising work shall be recorded in time sheets, vehicle running sheets, accommodation charge sheets and material purchase vouchers and these costs plus an allowance of 25% on-cost shall be met by the Department quarterly on invoices submitted by the Board irrespective of whether schemes prepared consequent upon such investigation actually result in works constructed. The above shall be accepted by the Board as the total payment due to it and there shall not be recoverable the usual further payment towards its administrative account of 10% on the total of construction costs.
- 4. The Board is hereby authorised to undertake preliminary investigation of any matter arising from the fluctuation of river flow whether on request from the Department, any land owner or local body or at its own instigation but as soon as a preliminary assessment of the problem investigated has been made, the problem, the suggested solution of the Board and

- 3 -

such estimate of costs as can be made at that time shall be submitted to the District Manager for the Department, and up to this stage the Department shall pay the whole of the costs incurred as defined in clause 3. Any further action by the Board thereon shall await approval from the District Manager and from this stage on the direct costs of construction and the whole of the administration costs of investigating, designing and supervising the construction (recorded in a manner similar to that defined in clause 3) shall be paid in total by the Department unless apportioned as provided for in clause 5. Where in the opinion of either party the cost of works to be carried out should be apportioned between the Department and any land owner or body having an interest in the affected land, negotiations thereon shall take place between the Board representing the land owners and affected interests and the District Manager representing the Department. If, following negotiations, the parties fail to agree or if there is any dispute, question or difference of opinion between the parties arising out of this Agreement, then the parties shall forthwith confer in an endeavour to settle it but if they fail to agree within 30 days after first conferring (or such extended time as may be mutually agreed) or if a party refuses to confer, then the dispute, question or difference of opinion shall be referred to a single arbitrator agreed by the parties but in default of agreement, to a single arbitrator appointed by the President (or person acting for the time being as President) of the New Zealand Institution of

-4 --

Engineers in accordance with the provisions of the Arbitration Act 1903 except in so far as provision is made in this clause. The said reference to arbitration shall be made by the parties but if either refuses to make or delays in making joint reference then the other may make the reference which will be binding on both parties. Fending the reference to arbitration and thereafter until the arbitrator publishes his award the parties shall continue to perform their obligations under the Agreement without prejudice to a final adjustment in accordance with the said award.

6. This Agreement shall remain in full force and effect until modified or rescinded by the parties. The parties will confer at the expiration of two years from the date of this Agreement with a view to negotiating any necessary modifications or extensions.

IN WITHESS WHEREOF these presents have been executed the day and year first hereinbefore written.

SIGNED on behalf of Her Majesty the Queen by the General Manager of the New Zealand Electricity. Department acting under and by the authority of powers conferred upon him by Sections 8 and 12 of the Electricity Act 1963, in the presence of 1 11 1

THE COLEMN SEAL of the Southland Catchment Board was hereunto affixed in the presence of :

Moons

Chairman

COMMON SEAL

Secretary

Page [2

In addition we highlight short comings in the management of flows introduced to the Lower Waiau River, by Meridian Energy Ltd, through its Manapouri Lake Control (MLC) structure at Mararoa. Those short comings have resulted in damage from erosion and downstream flooding, contrary to the operational requirements set out in the 1996 Waiau Agreement<sup>1</sup>. We alert Council to the apparent failure of its General Manager to <u>direct</u> Meridian Energy Ltd to

"take ... precautionary measures ... to prevent damage from erosion likely to occur as a result of the exercise of the consent".

We request your Council to implement a suite of four specific recommendation which will address the matters we have raised.

#### 000000000

#### The Lower Waiau Rivercare Group

As you are aware, on June 7, 2017, the Lower Waiau Community came together to form a catchment group called the Lower Waiau Rivercare Group. The primary focus of the group is to improve the health of the Lower Waiau River. Our Group draws its membership from not only the Tuatapere Township but also from the wider catchment stretching from the Manapouri Lake Control (MLC) structure at Mararoa to the Te Wae Wae Lagoon.

#### Preamble

Outside our Community, the adverse impact of the Manapouri Power Scheme on the Lower Waiau catchment is little known. Our Community has the sense that the Te Wae Wae Lagoon is close to collapse, Blue Cliffs Beach has been stripped of its sand, and the Tuatapere's once pristine alpine water supply drawn from the Waiau, is tainted and heavily chlorinated to the point where some of our elderly decline to drink it. These, together with erosion and flooding are some of the adverse impacts that stem from the Power Scheme's reduced flow regimes through the MLC structure.

We are very concerned that the implementation of the National Policy Statement on Freshwater Management (NPSFM) within the Waiau-Waiau Lagoon Freshwater Management Unit (FMU) will proceed without taking proper account of these (and other) adverse impacts of power generation. The resource consents for the Manapouri Power Station expire in 2031. Should the Waiau FMU process be completed by 2025, our Community alone will have borne the brunt of any limits imposed on land use.

### Proposed Southland Water and Land Plan (pSWLP)

On 16 August 2017, the Chairman of the pSWLP Hearing Panel ruled that a proposal that would have aligned (as far as possible) the NPSFM implementation timescale as it applies to the Waiau catchment, with any process concerning the renewal of resource consents governing the operation of the Manapouri Power Scheme beyond 2031, fell outside the scope of the Panel's brief. The Chairman, however, pointed out

<sup>&</sup>lt;sup>1</sup> 1996 Agreement ECNZ, SRC, SFF, 8 November 1996 – Background 10(a) & (b) (Page2)

that such a proposal properly fell within the purview of the Southland Regional Council, three Councillors of which were present as Panel Commissioners. We are grateful for his guidance.

That direction is the genesis for this submission to Council.

#### Over-allocation and Integrated Management

We accept that the Manapouri Power Scheme is of national significance, but are concerned that adequate account has not been taken of the costs that that generation has imposed on our Community and on the ecosystems in the Lower Waiau River. The minimum consented flow through the MLC structure is a mere 3% of the water that, pre-control, flowed from Lake Manapouri down the Lower Waiau River to the sea, and is now diverted through the Power Station at West Arm, with tail race discharge to Doubtful Sound.

The essential character of the Lower Waiau River has changed from a stable, single stem river to, in many areas, a braided river with an unstable meander pattern over a substantial flood plain. **The Lower Waiau River is Meridian's spill way.** As a spillway, the Lower Waiau is integral to the operation of the Power Scheme. It is used by Meridian Energy Ltd (a 49% privately-owned corporation) to divert heavily sedimented flood flows to the sea. Every cubic meter of water discharged through the MLC structure results from a decision taken by Meridian.

We submit that the Lower Waiau River is over-allocated, within the meaning of that phrase set out in the Interpretation section of the NPSFM 2014.<sup>2</sup> The life-supporting capacity of the river below the MLC structure has been materially and adversely impacted by the hydrostatic modification which results solely from the operation of the Power Station. Our Community believes that the operation of the Power Station with its diversion of water to Doubtful Sound, has caused catastrophic damage to Blue Cliffs Beach and with it the collapse of the coastal ecosystems it once supported.

The Southland Regional Council is required to:

"safeguard the life-supporting capacity, ...(and) ...eco system processes ... of fresh water"<sup>3</sup>

and to give effect to the NPSFM Objectives having regard to, among other things,

"... the connections between freshwater bodies and coastal water"4.

We strongly support the integrated management of freshwater enshrined in Objective C1 of the National Policy Statement on Freshwater Management (NPSFM). We believe that the NPSFM default implementation date of 31 December 2025 (NPSFM Policy E1a) will mean that the adverse impacts of the Power Scheme will not be

<sup>&</sup>lt;sup>2</sup> "Over-allocation" is the situation where the resource: a) has been allocated to users beyond a limit; or b) is being used to a point where a freshwater objective is no longer being met. This applies to both water quantity and quality.

<sup>&</sup>lt;sup>3</sup> RMA 1991, Section 69, and NPSFM Objective B1

<sup>4</sup> NPSFM Policy B1(c)

considered because the resource consent for the Power Scheme does not expire before 2031.

Integrated management brings together all systems and processes into one complete framework<sup>5</sup>. In the Waiau context, this requires management of the resource in its entirety and must therefore include the full impact of the Manapouri Power Scheme on the Lower Waiau catchment. In practical terms, if this timing mismatch is allowed to stand, it will defeat the integrated management of the catchment's freshwater resource.

Alignment of those timeframes could be achieved by the Consent Holder petitioning Council to bring forward the date of expiry of the resource consents for the Power Scheme to 31 December 2025. That would be a matter for Meridian Energy Ltd, as a good corporate citizen, to consider.

## Extension of the timeframe for catchment limit setting

The Southland Regional Council could achieve the alignment of timeframes by exercising the authority granted it under NPSFM itself:

NPSFM Policy E1 affords regional councils considerable latitude with respect to the setting of NPSFM timeframes for implementation. Specifically:

Policy E1(ba)

A regional council may extend the date in Policy E1 (b) to 31 December 2030 if it considers that:

- i. Meeting the (2025) date would result in lower quality planning; or
- ii. It would be impracticable for it to complete implementation of a policy by that date (2025)

The relevance of each part of Policy E1(ba) to the Waiau Catchment is discussed below:

#### Policy E1(ba)(i)

The quality of planning would be improved were the implementation date for the NPSFM within the Waiau Catchment to be extended to 31 December 2030, to allow matters pertaining to the Manapouri Power Station resource consents beyond their expiry in 2031, to be considered contemporaneously with the Waiau-Waiau Lagoon FMU process. The FMU process and the resource consent process are necessarily distinct, but much of the information required such as:

- Limit setting
- Allocation of the resource
- Flow regimes and their impact on eco systems within the Walau River and particularly the Lower Walau River

<sup>&</sup>lt;sup>5</sup>"A catchment management approach is envisaged by the policy to manage the interactions between land and water. Policy C1 emphasises the need for integration between the management of land and water, as well as the coastal environment. Regional councils are the lead agencies and should use all mechanisms available under the RMA to achieve this." A guide to the National Policy Statement for Freshwater Management 2014 Part 5.7

<sup>&</sup>lt;sup>6</sup> There are current 35 resource consents which govern the operation of the Manapouri Power Scheme

will be common to both.

The alignment of the timeframes would allow Council, Meridian <u>and</u> our Community to work towards a common future for the Waiau catchment, focussing Council's planning resources on integrated, higher quality planning outcomes rather than doing essentially the same work, twice.

#### Policy E1(ba)(ii)

The resource consent for the Power Scheme expires in 2031. The implementation of:

- NPSFM Objective C1
- NPSFM Policy C1
- pWLP Policy 39a

all require the <u>integrated management</u> of the freshwater resource. Should the 2025 default completion date stand, the implementation of these provisions in the Waiau-Waiau Lagoon FMU, will become difficult to the point of being impracticable.

Under the default date, the focus would be solely on the impact of land use on a greatly reduced freshwater resource. It makes no sense to embark on catchment limit setting, without being able to consider the allocation of the total freshwater resource within the catchment. The vast majority of that resource is represented by the consented diversion of flow from the Lower Waiau by Meridian.

As a Community, we are clear that the integrated management of the freshwater resource within the Waiau catchment, will be best served by Council exercising the authority it has to extend the date for implementation of the NPSFM as it applies to the Waiau Catchment, from 31 December 2025 to the 31 December 2030.

Progressive Implementation Programme (PIP)

Policy E(1)(f) of the NPSFM (August 2017) requires Council to review, revise as necessary, formally adopt and notify its PIP by 31 December 2018.

This presents Council with a timely opportunity to review and to revise the PIP as it applies to the Waiau-Waiau Lagoon FMU to allow the NPSFM implementation date to be 31 December 2030.

The 1996 Waiau Agreement

The likely adverse impacts of the operation of the Power Scheme on farmland were foreseen in an agreement signed by the then Consent Holder, ECNZ, the Southland Regional Council and Southland Federated Farmers on 8 November 1996<sup>7</sup>.

Specifically:

"10. Where the land of any farmer contiguous with the Waiau River or one of its tributaries or the profitability of the farm formed by such land is detrimentally affected by erosion caused by the exercise of resource

<sup>&</sup>lt;sup>7</sup> The 1996 Walau Agreement superseded the earlier "1973 Walau Agreement".

consents held by ECNZ then ECNZ undertakes to negotiate in good faith with the landowner to find measures to mitigate and compensate the effects of such erosion on that farm"<sup>8</sup>

The same agreement<sup>9</sup>, also requires the General Manager of the Southland Regional Council to <u>direct</u> the Consent Holder to:

- (a) take ... precautionary measures ... to prevent damage from erosion likely to occur as a result of the exercise of the consent;
- (b) make such remedial repairs which the General Manager, Council, may require, to remedy damage from erosion which occurs as a result of the exercise of this permit.

The flow regimes introduced by Meridian through the MLC structure, create artificially rapid rise and fall of river levels during and immediately following high rainfall. Rising river levels water-log the river's banks. The subsequent rapid fall of river levels when the MLC structure gates are closed, means those sodden banks are no longer supported. The sodden banks, unable to support their own weight, collapse, delivering sediment and gravel to the river. In the absence of sustained flushing flows, the increased sediment load has allowed to choke the Te Wae Wae Lagoon and the gravel load has raised parts of the riverbed. Looking from the Tuatapere Bridge downstream, the gravel build-up from systematic and longstanding erosion upstream, is easily seen. Downstream flooding is the inevitable result.

Recent media coverage<sup>10</sup> of flooding highlights one of many instances where we believe Meridian Energy Ltd (as the Consent Holder), has failed to meet its responsibilities under the 1996 agreement. That erosion has occurred (with resultant damage including downstream flooding) suggests that the Consent Holder may not have adopted sufficiently precautionary measures to prevent it. It also suggests that the General Manager of the Southland Regional Council has been remiss in not directing the Consent Holder to prevent damage from erosion.

Now that we have alerted Council to the provisions of the 1996 Waiau Agreement, our Community expects that Council's General Manager, will direct Meridian Energy Ltd, to adopt precautionary measures, henceforth.

#### **Recommendations**

The Lower Waiau Rivercare Group on behalf of our Community requests that the Southland Regional Council

- 1. notes our Community's view that the Lower Waiau River is overallocated.
- 2. exercises the authority granted to it under the NPSFM to align (so far as possible) the NPSFM implementation timetable in the Waiau-Waiau Lagoon FMU, with the timeframe for any consideration of renewal of resource consents associated with the Manapouri Power Scheme. This will require the:

<sup>&</sup>lt;sup>8</sup> 1996 Agreement ECNZ, SRC, SFF, 8 November 1996 – Further Agreements 10 (Page7)

<sup>9 1996</sup> Agreement ECNZ, SRC, SFF, 8 November 1996 – Background 10(a) & (b) (Page2)

 $<sup>^{10}</sup>$  Southland Times 25 September 2017 "Farmer Losing Land to Flooding" Page 1

- a. <u>extension</u> of the date for implementation of the NPSFM as it applies to the Waiau Catchment, from 31 December 2025 to the 31 December 2030 as permitted under Policy E1(ba).
- b. <u>amendment</u> of the Council's Progressive Implementation Plan for the NPSFM as it applies to the Waiau Catchment to be consistent with the revised timetable of 31 December 2030.
- 3. <u>notes</u> our Community's expectation that the General Manager, Council, shall henceforth <u>direct</u> Meridian Energy Ltd (as the consent holder) to take such precautionary measures to prevent damage from erosion (including flooding) and to conduct remedial repairs, in the Waiau River, pursuant to the 1996 Waiau Agreement.
- 4. <u>notes</u> our Community's intention to actively participate in the Waiau-Waiau Lagoon FMU catchment limit setting process.

Yours sincerely

Wather all

Paul Marshall<sup>11</sup>

Peter Horrell

Pf Hemil

Co-Chairs, Lower Waiau Rivercare Group

<sup>&</sup>lt;sup>11</sup> Address for correspondence: Paul Marshall, 983 Lillburn Monowai Road, RD1 Tuatapere 9691, Southland//paul.marshall@farmside.co.nz // c: +64273067737

#### Appendix 4 – Letter of 23 November 2017

# BARRY J SLOWLEY BARRISTER & SOLICITOR

23 November 2017

The Chief Executive Environment Southland Private Bag 90116 INVERCARGILL

Attention: Vin Smith

# Manapouri Power Scheme - Lower Waiau Rivercare Group

In a submission to the Council and Minister dated 9 October the Lower Waiau Rivercare Group has set out its concerns about what it considers to be ongoing adverse effects of the operation of the Manapouri Power Scheme on the lower Waiau River.

The submission contains a reference to what is described as the 1996 Waiau Agreement and notes the Group's expectation that the Council will direct Meridian Energy pursuant to the 1996 Agreement to take precautionary measures to prevent damage from erosion etc and to make repairs to the River.

You have asked me to consider the legal effect of the agreement referred to by the Group in imposing binding obligations on the Council and you have given me copies of:

- A heads of agreement dated 21 June 1996.
- An agreement dated 8 November 1996 between ECNZ, Federated Farmers and the Council.

I have checked each document to see what provisions, if any, place an obligation on the Council to do what the Group wishes it to do.

#### The Heads of Agreement

This document was attached as Schedule 3 to the joint submission of the Waiau Working Party about ECNZ's application for resource consents.

The agreement is between a number of parties who were interested in ECNZ's application to the Council. Unsurprisingly, the Council as the consent authority is not one of the parties.

It was not legally possible for the heads of agreement to bind the Council to impose any specific consent condition or undertake any particular course of action and it does not purport to do so. The following clauses from what is described as the "Operative Part" of the document are relevant.

"ii The parties therefore consent to the grant of all consents applied for in the Applications No's 001 to 007 inclusive, subject to the conditions set out in Schedule 1.

135 SPEY STREET PO BOX 744 INVERCARGILL 9840 NZ TELEPHONE 03 214 0042 FAX 03 214 0046 EMAIL barslov@ihug.co.nz GST No. 25-034-945 Trust Account 060925-0303011-02

lii That the parties jointly request the Southland Regional Council to adopt the conditions set out in Schedule 1, as the conditions to apply to Resource Consents No. 001 to 007 inclusive."

The one proposed condition that is directly relevant to the question of damage caused by erosion is the following:

#### "004.11 Erosion

The Consent Holder shall;

- (a) take such precautionery measures which the General Manager, Council, may direct to prevent damage from erosion which is reasonably likely to occur as a result of the exercise of this permit.
- (b) make such remedial repairs which the General Manager, Council may require to remedy damage from erosion which occurs as a result of the exercise of this permit."

You advise that the condition as proposed was not incorporated into any of the Manapouri consents that were granted. I am not surprised. As drafted, the proposed condition is vague to the point that if adopted, there would be legal issues with the certainty of its requirements. Leaving aside the question of the validity of it, the proposed condition would have only imposed an obligation on the Council if it had been included as a condition in one of the Manapouri consents.

#### Agreement of 8 November 1996

This agreement was intended as a replacement of the original Waiau Agreement of March 1973. The intention of the 1996 agreement is not completely clear. It seems that the parties thought it would have the effect of a side agreement to the Manapouri consents as the following clause suggests:

"12 There are some values, opportunities and concerns identified by Federated Farmers Southland Inc representing the adjoining landholders in the lower part of the Waiau River which the Farmers and ECNZ have agreed are better addressed by the provisions of this Agreement than by measures which could be incorporated formally as conditions of the resource consents. This agreement records those matters and the agreement reached between ECNZ and the Farmers. These agreements recognise the importance of the use of the Waiau catchment resource for the generation of electricity and the mitigation of effects arising from that use for farmers and other landowners in the Waiau catchment."

Apart from reference again to the proposed condition 004.11 - Erosion I have referred to earlier the agreement provides:

"10 Where the land of any farmer contiguous with the Waiau River or one of its tributaries or the profitability of the farm formed by such land is detrimentally affected by erosion caused by the exercise of resource consents held by ECNZ then ECNZ undertakes to negotiate in good faith with the landowners to find measures to mitigate and compensate the effects of such erosion on that farm." Clause 10 does not impose any legal obligation on the Council to undertake the sort of role that the Rivercare Group suggest. It is directed specifically at ECNZ and seems to be the outcome of a negotiated settlement between Federated Farmers and that organisation.

The agreement was clearly intended by the parties to be at least in part a form of side agreement in respect of the Manapouri consents. Given the history of the concerns about the Manapouri Scheme's effect on the Waiau catchment, I can understand why the Council may have thought it was appropriate that it be be a signatory to the agreement. I assume that it became a signatory because it is the catchment authority and because of its general role in environmental management. Consent authorities are not active parties to side agreements.

In addition to considering clause 10 above I have looked at the Council's possible responsibilities under the other provisions of the agreement. In my view, there is no provision in it that creates an obligation on the part of the Council of the type the Rivercare Group is suggesting.

Yours faithfully

BARRY SLOWLEY