

**BEFORE THE WEST COAST REGIONAL COUNCIL AND BULLER
DISTRICT COUNCIL**

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

Application for resource consents by Hydro Developments Ltd for a proposed Hydro Electric Power Scheme on the Stockton Plateau and tributaries of the Ngakawau River on the West Coast.

**ROBERT ANDREW McCLEAN FOR AND ON BEHALF OF THE NEW
ZEALAND HISTORIC PLACES TRUST POUHERE TAONGA (NZHPT)**

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Address for Service:

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Introduction

1. My name is Robert Andrew McClean. I am a Senior Heritage Policy Adviser for the New Zealand Historic Places Trust (NZHPT). I have held this position since July 2005. Prior to this position, I was a Heritage Adviser – Planner, for the Central Region of the NZHPT.
2. I hold a Bachelor of Resource Environmental Planning and a Masters in Historical Geography from Massey University. I have 12 years experience in heritage and resource management research and planning. I have presented evidence before the Waitangi Tribunal on a number of occasions and twice before the Environment Court. I am a graduate member of the New Zealand Planning Institute. During 2007-2008, I had a 9-month research sabbatical at Incisa Valdarno, Tuscany, Italy. While in Italy, I carried out a heritage landscape assessment of Loppiano, Incisa Valdarno, research at the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM).
3. I am the principal author and responsible for the NZHPT's primary national resource management guidance for local authorities: *Sustainable Management of Historic Heritage Guidance Series*, August 2007.
4. I have read, understood and will comply with the guidelines for an expert witness contained in the Environment Court's Consolidated Practice Note 2006. I confirm that I have considered all of the material facts that I am aware of that might alter or detract from the opinions expressed here.
5. I am providing planning evidence in support of the NZHPT's submission on the notified resource consent application for a proposed Stockton Hydro Electric Power Scheme (HEPS) at Ngakawau on the West Coast, by Hydro Developments Limited (HDL).
6. I have read and considered the Joint Section 42A Planning Officer's Report (the Officer's Report) prepared for the West Coast Regional Council and Buller District Council.
7. In the course of my evidence, I will provide information relating to the application under the Resource Management Act 1991 (the RMA) and examine the heritage-related planning matters relevant to this application, particularly the inundation of the former Electric Locomotive Line (the Electric Loco Line).

Activity Status

8. The proposal comprises forty nine resource consent applications with the West Coast Regional Council (WCRC) and Buller District Council (BDC) and landowner approvals from the Department of Conservation (DOC) for the construction, operation and maintenance of a hydro-electric power scheme on the tributaries of the Ngakawau River. The river flows to the Tasman Sea at Ngakawau, 31 km north of Westport within the Buller District of the South Island of New Zealand. The proposal involves:

- Mt William reservoir at the confluence of the Plover and Fly Streams on the St Patrick Stream to the east of Mt William. The storage reservoir will inundate an area of approximately 50 hectares.
 - Five streams will be captured and diverted into the Mt William storage reservoir being: T31, Fly, Plover, St Patrick and Darcy streams.
 - Weka reservoir at the confluence of Weka and Sandy Creeks near Tin Town corner and will inundate an area of approximately 28 hectares
 - Five streams will be captured and diverted into the Weka storage reservoir being: Weka, Sandy, Upper Mine, Mangatini and A.J. streams.
 - The Stockton tunnel, approximately 3850m long, will connect the Mt William reservoir and the Weka storage reservoir.
 - The Granity tunnel which connects the Weka reservoir to the ocean outfall at Granity.
 - An ocean outfall.
9. The project will involve major earthworks and areas of inundation. These activities will affect historic heritage in relation to:
- The inundation of a 460 metre long section of the Electric Loco Line by the Weka Dam.
 - Realignment of the haul road and associated earthworks which may destroy parts of the Electric Loco Line.
 - Inundation of a later branch of the Electric Loco Line at the Fly Creek Workings by the Mt William reservoir.
 - The inundation of part of the historic settlement of Tintown.
 - Construction at Granity of a micro-tunnel in close proximity to the registered Category II Granity Library and possibility other heritage buildings.

Statutory Framework

10. The site is in the Rural Zone of the Buller District Plan. Section 3.22 of the Officer's report notes that differing elements of the HEPS applied for have different status, with the dam and associated construction activities and destruction of the Electric Loco Line being non-complying (p13).
11. Section 3.2.3 of the Officer's report confirms that the consent status for non-complying activities must be decided in accordance with Sections 104B and 104D of the RMA: 'In terms of the latter, consent for a non-complying activity may only be granted by the Council if it is satisfied that the adverse effects will be minor or the application will not be contrary to the objectives and policies of the BDP...While it could be possible to address each consent individually in terms of their activity status, the proposal relies on the proposed

dam structures which are non-complying...It is therefore considered appropriate practice to 'bundle' the consents together, making the overall status of the applications to the District Council a non-complying activity and the overall status of the applications to the Regional Council a discretionary activity and in terms of the ocean outfall pipeline a Restricted Coastal Activity' (p13-14).

12. Section 9 of the RMA regulates the use of land by stating that no person may use any land in a manner that contravenes a rule in a district plan or proposed district plan unless the activity is allowed by resource consent or it is an existing use. The term 'use' includes the activities such as excavation, drilling, tunnelling and the deposit of any substance in, on or under the land.
13. The Officer's Report provides an overview of the relevant matters that must be considered in terms of sections 104, 105, 107 of the RMA. I concur with this assessment. I would also consider that the Historic Places Act 1993 is also a 'relevant matter' under section 104(1)(c) of the RMA.
14. In the remainder of my evidence, I will provide an assessment of the application according to the relevant heritage-related matters.

Part II of the RMA

15. Section 5 of the RMA is to promote the sustainable management of natural and physical resources. 'Sustainable management' means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –
 - (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.
16. The definition of 'environment' includes:
 - (a) Ecosystems and their constituent parts, including people and communities; and
 - (b) All natural and physical resources; and
 - (c) Amenity values; and
 - (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters.
17. The definition of 'natural and physical resources' includes land, water, air, soil, minerals, and energy, all forms of plant and animals (whether native to New Zealand or introduced), and all structures.

18. Section 6 of the RMA outlines a number of matters of national importance. The section states that ‘in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for... (e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga...(f) The protection of historic heritage from inappropriate subdivision, use and development.
19. Historic heritage (a) means those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities:
- (i) archaeological:
 - (ii) architectural:
 - (iii) cultural:
 - (iv) historic:
 - (v) scientific:
 - (vi) technological; and
- (b) Includes –
- (i) historic sites, structures, places, and areas:
 - (ii) archaeological sites: and
 - (iii) sites of significance to Maori, including wahi tapu; and surroundings associated with natural and physical resources.
20. With regards to the definition of historic heritage under the RMA, I consider the site has a number of places and areas of historic heritage values. These include:
- The historical, archaeological and technological values associated with the Electric Loco Line
 - The historical and archaeological values associated with settlements, such as Tintown.
 - The Fly Creek mine workings.
 - Historic buildings at Granity.
 - The Coke Oven at Granity.
21. The historic heritage values of the archaeological sites have been documented in the archaeological assessment by Katherine Watson (dated September 2008) and the heritage assessment prepared by Christine Whybrew with the assistance of the NZHPT Southern Regional Office (dated 25 June 2009).
22. On the basis of these assessments, I consider that the Electric Loco Line, the historic settlement of Tintown, the Fly Creek mine workings, the coke oven and the historic buildings at Granity are historic heritage within the meaning of the RMA.

Part II of the RMA assessment
Social, economic and cultural wellbeing

23. The application involves both a natural resource (the land) and a physical resource (archaeological sites and other physical buildings and structures). The

Electric Loco Line is an integral component connecting the network of historic features that relate to the history of coal mining on the Stockton Plateau and specifically the Westport-Stockton Coal Company.

24. Cultural wellbeing involves those aspects of culture that contribute towards the wellbeing and health of New Zealand society. Heritage values make a core and positive contribution towards cultural wellbeing and, in turn, to social and economic outcomes. On this basis, I consider that historic places and areas associated with the site make a contribution towards the cultural wellbeing of the Buller district and West Coast region.
25. As indicated in the Officer's Report, a complex range of well-beings are involved in the hydro project in relation to a wide range of values such as economic, ecological, cultural and historic heritage.
26. In terms of historic heritage, the construction of the Weka Dam, in particular, will have a negative impact on cultural wellbeing in relation to the inundation the Electric Loco Line.
27. The negative impact on the Electric Loco Line may be mitigated by the redesign of Weka Dam with the construction of an alternative 'Saddle Dam' as investigated in a preliminary manner by John Duder, Consultant for Tonkin & Taylor (see attached report, dated July 2009). John Duder gives an estimated cost of constructing a Saddle Dam as approximately \$1,700,000.00.
28. While, this investigation is very preliminary, it does show that it may be possible to avoid some damage to the Electric Loco Line and the associated costs to achieve avoidance which relate to the economic viability (and wellbeing) of the project. In other words, with careful design, the wider economic and social benefits of the hydro project can succeed while avoiding effects on historic heritage.

Matters of national importance

Section 6(f) RMA

29. The protection of historic heritage from inappropriate subdivision, use and development (Section 6(f)) is of primary relevance to the application. As indicated above, I consider the historic places and areas of the site to be historic heritage within the meaning of the RMA.
30. The heritage significance of the historic heritage has been documented by the archaeological assessment by Katherine Watson (dated September 2008) and the heritage assessment prepared by Christine Whybrew for the NZHPT (dated 25 June 2009).
31. On the basis of these assessments, I consider the Electric Loco Line to be historic heritage of national importance. This is because the Electric Loco Line has rare historic and technological values, and archaeological values. It was the first electric railway line in New Zealand and possibly the only industrial electric railway line in New Zealand. I would also consider the collection of historic buildings at Granity to be of national importance.

32. Section 6(f) requires an assessment of ‘appropriateness’ of any proposed subdivision, use and development in relation to identified historic heritage. I consider that determining appropriateness requires a comprehensive assessment that considers all the relevant matters, including the international best practice guidance, relevant provisions in the RMA, relevant provisions in the regional policy statement and district plan, and the particular circumstances of each case. I refer, in particular, to the NZHPT’s, *Sustainable Management of Historic Heritage Guidance Series* (August 2007), which provides guidance, based on international best practice, for determination of appropriate and inappropriate development for historic heritage.¹
33. As outlined in Appendix 1, the NZHPT’s *Sustainable Management of Historic Heritage Guidance Series* provides guidance principles for assessing appropriate or inappropriate subdivision, use and development on historic heritage values. The principles are based on the Historic Places Act 1993, the Resource Management Act 1991, the ICOMOS NZ Charter, and the Policy for Government Department’s Management of Historic Heritage 2004.
34. I consider that all the principles outlined in this guidance are relevant to this application. Clearly the significance of the Electric Loco Line is understood as outlined in the archaeological and heritage assessments. The heritage buildings of Granity are also well known. I do not consider that the construction of the Weka Dam, as proposed, does respect the physical material of the Electric Loco Line. The need to respect the physical material of historic heritage, however, requires considering community resources, especially owners. In this, there will be costs associated to avoid damage to the Electric Loco Line in relation to a possible alternative Saddle Dam proposal. These costs and the viability of the Saddle Dam needs to be explored in greater detail by the applicant.
35. In addition to these general principles, the NZHPT’s *Sustainable Management Guidance Series* provides specific principles and standards for the assessment of impacts on historic sites, including archaeological sites (Information Sheet No.19, see Appendix 2).
36. As outlined in this guidance, the first principle is to avoid damage to archaeological sites, including places of archaeological significance that post-date 1900. This standard has not been met by the applicant with regards to historic heritage. In fact, the NZHPT considers little attention has been given by the applicant to design the proposed hydro project to avoid damage to the Electric Loco Line or the historic buildings at Granity.
37. The applicant, however, did commission an archaeological assessment for the project. This archaeological assessment highlights the heritage importance of the Electric Loco Line and concludes that ‘of paramount importance that the main branch of the Electric Loco Line is protected from any damage’ (page 36). This primary recommendation has not been adopted by the applicant with regards to the construction of the Weka Dam.
38. The concept of greater or total conservation benefit applies with regards to complex historic or archaeological landscapes such as Stockton Plateau.

¹ http://www.historic.org.nz/publications/SustMgt_guidance_series.html

39. In relation to total conservation benefit, the Electric Loco Line is part of the historic coal mining landscape of the Stockton Plateau. The Electric Loco Line was the first electric locomotive line built in New Zealand specifically to haul coal. The formation is still intact and the section proposed for inundation is the best preserved section with physical remains and associated features such as the power poles still present. Currently, the Electric Loco Line is able to be read as a whole, and as noted in the archaeological assessment for the applicant "...it is possible to follow most of the length of the line and those sections that do remain are in good condition" (Watson, September, 2008, p27).
40. The Electric Loco Line however, is not a 'minor part' of the complex. Instead, the Electric Loco Line has been identified as a significant heritage feature. This importance has been recognised by scheduling of the Electric Loco Line in the Buller District Plan, and the NZHPT considers that the remains of the Electric Loco Line and its associated infrastructure is historic heritage of national importance.
41. While the proposed construction of Weka Dam will only affect a portion of the Electric Loco Line formation, it is one of the longer sections of intact line and a section where features are present that are not represented on the remainder of the line. The significance of the section of the line proposed for inundation cannot, therefore, be directly calculated by the percentage of line affected.
42. The NZHPT considers that greater or total conservation benefit are not achieved because the effects of the construction of the Weka Dam as proposed will have a major impact on the remaining Electric Loco Line formation.
43. The NZHPT guidance also states that the proposed activity should remedy or mitigate any damage to historic or archaeological sites. As stated, there are no mitigation actions proposed for the part of the Electric Loco Line to be inundated by the Weka Dam. The application also lacks detailed information about mitigation in respect of the Gravity Library building.
44. In the consent application in respect to mitigation, HDL proposes recording of features, the collection of any portable artefacts within the impact area, and the preparation of these for public display. Also, HDL has proposed that mitigation should focus on ensuring the remaining intact sections of the loco formation are preserved and public access to such areas is improved. HDL has proposed to work with the land owners and occupiers (DOC and SENZ) to develop a walking track from the Weka Reservoir to Mt William.
45. I agree with the technical evidence in support of the Officer's Report (Appendix 5, Technical Assessment of Historic Heritage Opus 2009, p2) that notes it is difficult to consider how successful this mitigation proposal would be as it is dependent on third parties who are not subject to this consenting process.
46. From the NZHPT perspective, the formation of the Electric Loco Line is visible and the section proposed for inundation is the best preserved section with physical remains and associated features such as the power poles still present. Currently it is possible to follow most of the length of the loco line from one end to the other.

47. In relation to the NZHPT's guidance, my conclusion is that inundation by the proposed Weka Dam is an inappropriate use and development of the Electric Loco Line. Further, I consider that the construction of a micro-tunnel in close proximity to the Granity Library may also be inappropriate if the earthworks involved will adversely impact on the structural integrity of the library building.
48. On the basis of this assessment, I consider that modification of the Electric Loco Line and, possibly, the Granity Library is an inappropriate use of historic heritage in relation to section 6(f) of the RMA.

The actual and potential effects on the environment

49. The environment is the Stockton Plateau, Granity and the coastal environment. The actual effect on the environment is the construction of the hydro scheme. In relation to historic heritage, the primary actual effect will be changes to the Electric Loco Line and inundation of part of the line and other historic features. In terms of section 104D of the RMA, I consider the effects of the construction of the Weka Dam on the Electric Loco Line are more than minor.
50. The actual loss of part of the Electric Loco Line will impact on the ability of present and future generations to maintain, restore and enjoy the full length of the historic rail line. It will have the potential effect on recreational opportunities.
51. There will potential effects at Granity relating to the tunnel, power station and ocean outfall. The impact of earthworks and tunnelling is a potential effect on the historic buildings at Granity. The probability of this potential effect is uncertain.

West Coast Regional Policy Statement and Buller District Plan

52. The Officer's Report provides a comprehensive evaluation of the relevant provisions of the regional policy statement, regional plans and district plan. I agree with the assessment of the relevant rules as outlined in the Officer's Report.
53. In terms of historic heritage, Objective 6 in Chapter 6 of the West Coast Regional Policy Statement (RPS) seeks 'to avoid, remedy or mitigate actual or potential adverse effects of resource use, development or protection on heritage and archaeological sites and values that contribute to the West Coast's distinctive character and sense of identity.'
54. Policy 6.1 of the RPS aims to promote the identification and protection of the region's heritage values including archaeological sites. Matters to be considered when assessing heritage places or sites include: the extent to which the place reflects representative aspects of New Zealand history; the level of technical accomplishment or design; and the extent to which the place forms a key part of the wider historical and cultural landscapes.'
55. Policy 6.3 of the RPS seeks to ensure an adequate assessment of effects on heritage values is provided with resource consent applications as required by clause 2(d) of the Fourth Schedule of the Act so that adverse effects of activities on heritage values are avoided, remedied or mitigated, where appropriate.

56. In relation to the district plan and historic heritage, of specific importance to this application is Objective 4.6.7.1 ‘to protect places and sites of historical and cultural value from the adverse effects of land use activities and to ensure where appropriate, access to historic and cultural sites is maintained and enhanced’, and Policy 4.6.8.2 ‘evaluate and protect heritage resources by identifying those resources of historic, cultural or architectural value or of special significance to the district.’
57. The district plan includes a Schedule of Historic Buildings and Sites at Part 15. The relevant items include:
- No. 109, Coal Tramway [Electric Loco Line].
 - No. 107, Coke Oven [Granity].
 - No. 262, Granity Public Library.
 - No. 276, Mines Survey Office, Granity.
 - No. 290, State Mine Store, Granity.
 - No. 294, War Memorial, Granity.
58. In relation to these listed places, Rule 7.9.7.1 of the district plan states that ‘no changes of use or subdivision of any historic/cultural item(s) listed in Part 15, which would adversely affect the heritage resource or detract from the values the item(s) are listed for will be allowed.’
59. Further, Rule 7.9.7.2 provides for destruction of any historic/cultural item listed in Part 15 as a discretionary activity.
60. The heritage-related provisions of the RPS and district plan provide a solid basis for consideration of historic heritage. I consider the Electric Loco Line and the historic buildings at Granity to be heritage and archaeological sites and values that contribute to the West Coast’s distinctive character and sense of identity in terms of the RPS. Also, the Electric Loco Line and the historic buildings at Granity are listed in the district plan and the rules of the plan clearly state that no changes of use which adversely affect the heritage resource or detract from the values will be allowed.
61. In terms of section 104D of the RMA, I consider the partial inundation of the Electric Loco Line is contrary to the heritage-related objectives and policies of the RPS and district plan.
62. It is my opinion that the partial inundation of the Electric Loco Line by the proposed Weka Dam will involve a change that will adversely affect the heritage resource and detract from its values. Also, I consider that any tunnelling or earthworks at Granity must take place to avoid damage to any of the listed historic buildings, especially the Granity Public Library.

Other matters – Registration under the Historic Places Act 1993

63. I consider that registration under the Historic Places Act 1993 is a relevant matter under section 104 of the RMA. The Granity Public Library, the War

Memorial, the State Mine Store and the Mines Survey Office are registered as Category II historic places under the Historic Places Act 1993.

64. The Register comprises of four parts: historic places, historic areas, wahi tapu and wahi tapu areas. In relation to historic places, there are two categories:

1. Category I: places of special or outstanding historical or cultural heritage significance or value.
2. Category II: places of historical or cultural heritage significance or value.²

65. In relation to historic places and areas, the Historic Places Act 1993 provides a set of criteria for registration. This criteria means that registered places and areas must possess aesthetic, archaeological, architectural, cultural, historical, scientific, social, spiritual, technological, or traditional significance or value.³ In addition, the NZHPT may assign Category I or II status to any historic place, having regard to additional criteria set out in section 23(2) of the Act. This classification relates to the following values:

- Important or representative aspects of New Zealand history.
- Association with events, persons or ideas of importance in New Zealand history.
- Potential to provide knowledge of New Zealand history.
- Importance to the tangata whenua.
- Community association with, or public esteem for, the place.
- Potential of the place for public education.
- Technical accomplishment or value, or design.
- Symbolic or commemorative value.
- Importance of identifying places known to date from early periods of New Zealand settlement.
- Importance of identifying rare types of historic places.
- Extent to which the place forms part of the wider historical and cultural complex or historical and cultural landscape.

66. Further to this list, the NZHPT may consider additional criteria for registration as may be prescribed in regulations made under the Act, including additional criteria relating to registration of wahi tapu, wahi tapu areas, historic places and historic areas of Maori interest.

67. In relation to registration, I would draw your attention to the review of registration procedures carried out by former Environment Court Judge, Prof Peter Skelton, in 2004.⁴ This review highlighted the importance of the Register:

If historic heritage is to be properly recognised and provided for as a matter of national importance under the Act, as one of those amendments now requires,

² Section 22(3) Historic Places Act 1993

³ Section 23(1), Historic Places Act 1993

⁴ Prof Peter Skelton, *Identifying Our Heritage, a review of registration procedures under the Historic Places Act 1993*, NZHPT, 2004

the Register under the HPA will be the single most important tool available for achieving this.⁵

68. Despite this importance, registration alone under the Historic Places Act 1993 'does not automatically require regional and district policy statements and plans to protect registered items.'⁶
69. In view of the need for the RMA plans and procedures to protect registered places, Prof Skelton commented:

In Part I of this report, I discussed the linkages between registration under the HPA and the various provisions in the RMA relating to the preparation of a New Zealand Coastal Policy Statement, regional policy statements, regional plans and district plans. I will not repeat those here. It is sufficient to say that there is ample authority in the RMA for the functionaries responsible for those instruments to recognise and provide for historic heritage in those instruments.

I have made the point elsewhere and indeed at the beginning of this discussion, that it is not just district plans that need to be considered. The Minister of Conservation has a role in respect of a New Zealand Coastal Policy Statement and regional coastal plans as does the Minister for the Environment in respect of national policy statements. Consequently, this discussion needs to be conducted in the context of all the statutory instruments that can be prepared under the RMA.⁷

70. In my opinion, the Skelton review adds weight to the argument that the Register is a national statutory mechanism which recognises places with significant conservation value. It is also to be noted that the Register has status in other legislation such as section 39 of the Building Act 1993 (in relation to project information memorandum) and section 17(2)(b) and Schedule 1 of the Overseas Investment Act 2005.
71. In my view, tunnelling or earthworks that may undermine the historic buildings at Granity is incompatible with registration status under the Historic Places Act 1993. Further, I consider the Electric Loco Line as meeting the criteria for registration under the Historic Places Act 1993. The inundation of the line by the proposed Weka Dam has the potential to compromise the heritage integrity and the future registration of the Electric Loco Line.

Avoidance of inundation of the Electric Loco Line

72. As stated in this evidence, the Electric Loco Line should be preserved for present and future generations. To achieve this, the applicant needs to consider alternative development options that are designed so as to avoid all known historic and archaeological sites.
73. In order to assist the Councils and the applicant in determining that changes in the design of the proposed hydro electric power scheme to avoid inundation of

⁵ *ibid*, p 28

⁶ *ibid*, p 18

⁷ *ibid*, p 39

the Electric Loco Line are possible, the NZHPT sought engineering expertise to provide advice on the location, size and length of a saddle dam along the alignment of the existing haul road that would enable the proposed height of the Weka Reservoir (see attached report of John Duder, Consultant for Tonkin & Taylor, dated July 2009).

74. The NZHPT understands the proposed level of the reservoir is 384m. The NZHPT believes that by building additional side dams adjacent to the existing haul road to a level that would enable the proposed reservoir level to be achieved is possible with only some minor loss in total storage capacity. The engineering advice of John Duder explored the possibilities and/or additional cost of building an additional dam adjacent to the existing haul road formation. The findings of the engineering report include the following:
- In order to protect the 500 m length of Electric Loco Line nominally within the reservoir area, a saddle dam along the line of the haul road would cost in the order of \$1.7 million.
 - There is insufficient detail available to determine whether a lesser length of the Electric Loco Line would be affected by a RL 384 m normal top water level.
 - Excluding part of the proposed reservoir by a dam along the haul road would reduce the area of the proposed Weka reservoir by some 60,000 m² (6 ha). The net loss of reservoir storage volume would be around 100,000 m³.
75. I consider that this engineering advice supports the NZHPT perspective that potential alternative design solutions exist to avoid the inundation of the Electric Loco Line, and that the cost should not be significant in relation to the potential total cost of this proposed hydro development.

Conclusions

76. The RMA promotes the sustainable management of natural and physical resources. To achieve this purpose, the RMA provides a framework to manage activities by local authorities using the regulation of regional and district plans. A core part of this framework is the management and protection of historic heritage. Local authorities are required to recognise and provide for the protection of historic heritage from inappropriate subdivision, use and development as a matter of national importance.
77. The Electric Loco Line and the collection of historic buildings at Granity are historic heritage of national importance. The application is to partially destroy this Electric Loco Line and inundate it with water. The Granity Library could also be undermined by tunnelling-related earthworks.
78. Section 104 provides the list of relevant matters that are to be considered under the RMA. My evidence has provided an overview of the list of matters that I consider to be relevant – Part II of the RMA, actual and potential effects on the environment, the West Coast Regional Policy Statement, and the Buller District Plan. I also submit that the Historic Places Act 1993 is a relevant matter for consideration under section 104.

79. In relation to the section 104 matters, I consider that inundation of the Electric Loco Line is an inappropriate use because:

- Inundation will impact upon cultural wellbeing. There will be loss of heritage values, and consequently, a contribution towards loss of value of heritage assets in the Buller district.
- Inundation is not an appropriate activity in relation to the protection of historic heritage of national importance.
- Inundation is an actual effect on the historic environment that is more than minor.
- Inundation is contrary to the heritage-related objectives and policies of the RPS and the Buller District Plan.
- Inundation will reduce the significance of the Electric Loco Line that has recognition as a scheduled historic feature under the Buller District Plan.

80. As an alternative to inundation of that portion of the Electric Loco Line, I consider that alternative designs for the Weka Dam should be explored and developed.

81. Excluding the outstanding matter on Maori heritage values and water, if the damage and inundation of the Electric Loco Line can be avoided and the heritage buildings at Granity safeguarded, I cannot see why the hydro project cannot proceed in terms of historic heritage-related matters.

Appendix 1. Principles for Assessing appropriate or inappropriate subdivision, use and development on historic heritage values
From: NZHPT, *Sustainable Management of Historic Heritage Guidance Series*, Information Sheet No.1, August 2007

The protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance under the RMA. Inappropriate subdivision, use and development will undermine the identification, appreciation, protection, preservation, and conservation of the historical and cultural heritage of New Zealand.

The following general principles should be used to guide any assessment of subdivision, use and development. The principles are based on the Historic Places Act 1993, the Resource Management Act 1991, the ICOMOS NZ Charter, and the Policy for Government Department's Management of Historic Heritage 2004.

1. Respect values

Recognising the lasting values of the place or area and evidence of the origins and development of New Zealand's distinct peoples and society.

2. Diversity and Community Resources

Recognising the diverse cultures of New Zealand and the diverse social and physical environments and communities. There is a need to work with communities and take into account the needs, abilities and resources of particular communities, including owners of historic heritage and other stakeholders.

3. Sustainability

Recognising the finite nature of historic heritage and the need to take a precautionary approach in order to safeguard the options for present and future generations. Promoting sustainability may include encouraging regular maintenance and finding compatible uses for places, including original and new adaptive uses.

4. Maori heritage

Recognising and providing for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga following the spirit and intent of the Treaty of Waitangi (Te Tiriti o Waitangi).

5. Research and documentation

Ensuring interventions are informed by sufficient research, documentation and recording, where culturally appropriate. All changes should be fully documented in drawings and photographs.

6. Respect for physical material

The degree to which interventions involve the least possible loss of heritage significance and the least loss of material of heritage value, including those arising from irreversible or cumulative effects. This may be achieved by promoting appropriate regular maintenance, repair (rather than replacement), repairing in compatible materials, respecting the patina of age, and making new work reversible.

7. Understanding significance

Whether the values of the place are clearly understood before decisions are taken that may result in change. Decision making, where change is being contemplated, should take into account all relevant values, cultural knowledge and disciplines. Understanding significance should be assisted by methods such as the preparation of heritage assessments and conservation plans.

8. Respect for contents, curtilage and setting

The extent to which interventions respect the contents and surroundings associated with the place. This may be achieved by ensuring, for example, that any alterations and additions to buildings, and new adjacent buildings, are compatible in terms of design, proportions, scale and materials.

Appendix 2. Assessing Impacts on Historic Sites, including Archaeological Sites

From: NZHPT, *Sustainable Management of Historic Heritage Guidance Series, Information Sheet No.19, August 2007*

Note: These standards apply to the RMA process and they do not relate to the archaeological authority procedures under the Historic Places Act 1993.

Principles

Historic sites are historic places that generally do not include buildings. They often mark an important event or person. They can include heritage trees, gardens, memorials, battle sites, or landing sites.

Wherever possible, the destruction, damage or modification of historic and archaeological sites should be avoided or minimised. In the context of the RMA, this may include places of archaeological significance that post-date 1900.

In the case of rural subdivision that may affect historic and archaeological sites, development needs to be planned to avoid sites with the location of any earthworks (driveways, services, fencing, building platforms, etc) determined at an early planning stage. The future physical management of archaeological sites is an important consideration of any subdivision proposal.

Avoiding effects on historic and archaeological sites will also be an important issue with regard to development within historic town centres, historic urban precincts, forestry development, and mining.

Obtaining professional archaeological advice is an important first step for any proposal that may affect archaeological sites.

Integration with archaeological authority processes under the Historic Places Act 1993 is essential and advice should be sought from the regional NZHPT archaeologist.

The applicant should be informed, as soon as possible if, on the basis of an archaeological assessment, an archaeological authority from the NZHPT is required.

The principles of the Treaty of Waitangi will be relevant where an historic or archaeological site is associated with Maori historical occupation and use.

Where an historic or archaeological site will be lost as a consequence of the development activity, the values of the site should be fully documented and investigated by a professionally qualified archaeologist.

The management of all large and complex historic and archaeological sites should be guided by a conservation plan prepared by a heritage professional. A conservation plan should guide the active management of the site and matters such as the control of vegetation, stock, soil erosion, vandalism, and public access and interpretation.

Checklist for assessing resource consent applications that have the potential to damage historic and archaeological sites

- The proposed activity should be designed and located in an area so as to avoid all known historic and archaeological sites. This can be achieved by encouraging the consideration of alternative development options and provision of protective buffer areas.
- The proposed activity should avoid affecting a place or area of significance to Maori as stated by tangata whenua.
- In relation to an archaeological site, the proposed activity or site should be the subject of an archaeological assessment prepared by a professional archaeologist according to the NZHPT's guidelines.
- In relation to a historic site that is not an archaeological site, the proposed activity should be subject to a heritage impact assessment.
- The concept of the greater or total conservation benefit of a proposal applies with regards to complex historic or archaeological landscapes. The loss of some minor parts may be justified for the place to continue to function or to accommodate a proposal which achieves the conservation of the greater portion of the complex as informed by a conservation plan.
- The proposed activity should achieve positive heritage outcomes by the provision for ongoing physical management including the use of a covenant. Historic and archaeological sites should not be abandoned but benefit from active management such as control of stock, vegetation, and soil erosion as guided by expert advice and a conservation plan.
- The proposed activity should remedy or mitigate any damage to a historic or archaeological site that has been partially destroyed as a result of damage from past earthworks, construction of structures and buildings or natural erosion.
- Any historic markers or plaques at historic sites should be retained and upgraded. Public access and interpretation should be provided as appropriate. The site should be protected from vandalism.
- Any heritage trees or other vegetation should be preserved on the basis of advice provided by a professional arboriculturalist.
- For archaeological sites dating before 1900, the proposed activity must be authorised by an archaeological authority issued by the NZHPT under the Historic Places Act 1993.