

Form 5 Submission on notified proposal for policy statement or plan,  
change or variation

Clause 6 of Schedule 1, Resource Management Act 1991

To: Whakatāne District Council

Name of submitter: KEITH LESLIE SUTTON  
[full name]

This is a submission on the following change proposed to the plan:  
Whakatāne District Plan, Plan Change 1 – Awatarariki Fanhead, Matatā

**Trade Competition**

I ~~could~~/could not\* gain an advantage in trade competition through this submission.  
[\*Select one]

If you could gain an advantage in trade competition through this submission, please answer the following:

I am/am not\* directly affected by an effect of the subject matter of the submission that—

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition.

[\*Select one]

The specific provisions of the proposal that my submission relates to are [give details]:

THE COMPLETE PROPOSED PLAN CHANGE 1, ALL OF THE  
STRINGENT RULES, HAZARD (RISK) MAPS AND ZONING  
OVERLAYS

My submission is: [include whether you support or oppose the specific provisions or wish to have them amended; and reasons for your views]

I OPPOSE PLAN CHANGE 1  
IN ITS ENTIRETY, FUTURE INUNDATION OF MY MOTHERS  
SECTIONS IN CLEM ELLIOT DRIVE CAN BE MITIGATED,  
THE RULES IN THE PLAN CHANGE ARE FAR TO STRINGENT,  
THE HAZARD MAPS ARE BASED ON FLAWED INFORMATION,  
I PROVIDE EVIDENCE AND FURTHER REASONS ON  
SEPARATE SHEETS.



①

I seek the following decision from the local authority: [give precise details]

I SEEK THAT THE CONSENT AUTHORITY REMOVE THIS PLAN CHANGE 1 IN ITS ENTIRETY UNTIL SUCH TIME AS THE VOLUNTARY RETREAT PACKAGE HAS BEEN FULLY IMPLEMENTED, TO THE POINT THAT THIS PLAN CHANGE WOULD BECOME REDUNDANT ANYWAY.  
\* PLUS FURTHER DECISIONS REQUIRED SHOWN ON SEPARATE SHEETS

#### Hearing submissions

I wish/~~do not wish~~\* to be heard in support of my submission. [\*Select one]

If others make a similar submission, I ~~will~~/will not\* consider presenting a joint case with them at a hearing. [\*Select one]

Keith Sutton

Signature of submitter (or person authorised to sign on behalf of submitter)

Date: 11-9-18

#### Contact Details

Electronic address for service of submitter: rhyolitefarm@gmail.com

Telephone: 021 1413111

Postal address: 55 PRINCES ST, WAIKINDO  
R.D.2 WAIHI 3682

Contact person: KEITH SUTTON.

[name and designation, if applicable]

#### Note to person making submission

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least one of the following applies to the submission (or part of the submission):

- it is frivolous or vexatious:
- it discloses no reasonable or relevant case:
- it would be an abuse of the hearing process to allow the submission (or the part) to be taken further:
- it contains offensive language:

- it is supported only by material that purports to be independent expert evidence, but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.

11/9/18

## SUBMISSION ON PLAN CHANGE 1 TO THE WHAKATANE DISTRICT PLAN

When i told my mother what was in the proposed plan change she just said, i brought my sections as residential, if they want to change that, then they have to buy them of me, and that is exactly what is going to happen, she has signed up for the retreat package so move forward with that first , then this total abuse of peoples rights will not be necessary.

By neglecting their responsibilities council have already removed my mothers right to rebuild her home of 21 years (at time of May 2005 event).R/C conditions were put in place to enable that to happen but council ignored them (appendix A )and now through this plan change want to remove all other rights to the point she will not even be able to camp the night on her privately owned 2 acres, which under section 85/R.M.A i would have thought would pass as reasonable use .

I wish the consent authority to throw out the proposed plan change 1 in its entirety until after the voluntary retreat package has been worked through for all residents and land owners on the fanhead , the options in the plan change have been watered down to state council may only buy out houses leaving landowners with worthless C.P.Z land should the plan change happen , so stop it now , currently there is no C.P.Z in the district plan that totally covers every inch of someones private property leaving them with no rights . The plan change is full of new Awatarariki high risk debris flow policy area rules that go way past what is fair and reasonable, so i ask for the entire plan changes removal.

The proposed plan change also includes high risk area maps that are based on flawed reference material where it is believed that there had been previous debris flows as large as the May 2005 event , which is untrue , (appendix B)please read the evidence on the old river bed and i ask you to through out the plan change 1 and its risk maps in their entirety.

When you have finished reading the appendices you may wonder why this is only coming to light now , well in the past we were working alongside council to find an amicable solution to the problem but now council have brushed us aside and are going foward with a plan change that is in no way in my mothers best interests.

11/9/18

## THE CHAIN OF EVENTS

My mother Nola Neale owns number 28 and 32 Clem Elliot drive matata (lots 317 & 318 town of Richmond) she has been left handicapped by the Whakatane district councils inaction towards their resource consent of July 2009, 64647.

She was given hope that through its conditions she would be rebuilding her home ,but concil have avoided using it , but it was my understanding that because of the emergency works that had already filled in a large area of the railway lagoon that would cause flooding of my mothers properties , work should have started immediately on the condition 4.12 & 4.13 (copy in appendix A) to establish building platforms at 4.9 m .

Had that happened her postion in this submission would have been different, so this chain of events is included to show how council have let her down, where she now stands looking at the severity of this plan change 1 .

Feb 9th 2010 , lower retention dam proposed, i signed for extra 1.1m that was planned to be added to the 4.9m of the conditions , bringing it to 6m

Feb 2012, council dumps 4800m3 more than the 200m3 allowed for in its district plan,do not exercise R/C 64647

Mar 7th 2012, public excluded meeting , notes show council discussed need to change affected R/C conditions if retention dam not to proceed.

May 14th 2012 council informed by regional council not to dump anything further in railway lagoon before May 2013 unless they exercise R/C 64647.

Dec2012, council drop all engineering solutions (dams) in the catchment and do not ammend conditions of R/Cs as per the discussion in the closed to the public meeting of Mar 7th 2012 .Without a dam , the building platforms on my mothers sections would need to be over 6 m RL.This would more than mitigate the effects of future inundation of a residence or while camping , the May 2005 event only reached 5.14m RL at mums,(thats floor height of 3.64m RL plus the flood line through her paintings at 1.5m from the floor). These historical commitments need to be addressed before any further plan changes become effective.

yours faithfully-



DUE TO COUNCIL USING FLAWED REFERENCE MATERIAL TO GAUGE RISKS, SHOULD I NOT BE SUCCESSFUL IN HAVING THE ENTIRE PLAN CHANGE REMOVED, THEN DURING DISCUSSIONS ON THE WAY TO THE ENVIRONMENT COURT, THIS WILL BE MY SUGGESTION OF WHAT THE RISK MAP WILL LOOK LIKE, WITH NO C.P.2 OVERLAY.  
 THIS MAP LEAVES OUT THE THREE SECTIONS 24, 28, 32 TO BE RAISED BY COUNCIL IN THE NEAR FUTURE.  
 PLEASE NOTE: - THESE SECTIONS ARE NOT LISTED IN B.O.P.R.C PROPOSED PLAN CHANGE 17 TABLE N H3



# APPENDIX A

FROM THE CONDITIONS OF RESOURCE CONSENT  
64647. STARTING 4.12 APPLIES TO MY MOTHERS  
SECTIONS.

4.5 Any earth spillages onto the road reserve shall be cleared immediately to avoid runoff into drains or cesspits. Any damage to the road or Council services shall be remedied to the satisfaction of the Director Environment and Policy or Transit New Zealand as the case may be.

4.6 At all times earthworks are being carried out on site, the consent holder shall ensure compliance with rule 4.3.15(a) of the Proposed Whakatane District Plan by ensuring noise levels are kept in compliance with the performance standards specified under NZS 6803:1991, Acoustics, Construction Noise.

4.7 Earthworks and construction work on site shall be restricted to the hours of:

7.00 am to 6.00 pm—Monday to Friday; and  
8.00 am to 12.00 noon—Saturdays;

No work is to be undertaken on Sundays and public holidays.

The above hours of operation do not apply to any measures necessary for storm water/surface water and dust mitigation measures.

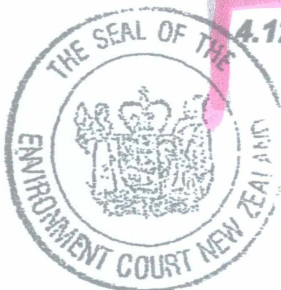
4.8 No inorganic materials that do not naturally occur in the immediate area shall be deposited on the site but shall be transported to an authorised waste disposal facility for disposal.

4.9 All machinery shall be re fuelled on site at a dedicated re fuelling site located no closer than 30m from the debris mound batter slopes or within lagoon wetland area. Control of accidental spillage and decontamination mitigation shall form part of the management plan for contaminated material.

4.10 Provision shall be made to the satisfaction of Ontrack and Transit New Zealand for the control of drainage from existing culverts in the railway embankment and for overland flow paths that may be affected by new areas of deposited debris.

4.11 A work permit shall be obtained from Ontrack prior to commencing any work within the railway premises.

4.12 Works shall be undertaken on Allotments 316, 317 and 318 Town of Richmond to ensure that the building platform within





THIS 4.9m WAS TO BECOME 6m (APPENDIX A) IF THE LESSER HEIGHT DAM GOT R/CONSENT, NOW WITH NO DAM THIS HEIGHT WILL BE?

each lot is constructed to a minimum platform level of RL 4.9m Moturiki Datum. The toe of the building platform shall not be closer than 60m from MHWS, and the building platform shall be certified by a suitably qualified person that the required height has been achieved.

For the avoidance of doubt the consent holder shall obtain the approval of the owners before commencing any works on the lots, and the cost of the works shall be met by the consent holder.

**4.13** Where filling is to be placed on sites which may be used for the construction of residential buildings the Consent Holder shall ensure:

- a. That the suitability of the fill material proposed to be used on the building platform shall be established in accordance with the relevant NZ Standard.
- b. That the consent holder shall ensure that the placement of fill on this property does not result in additional surface water runoff being shed onto adjoining properties.
- c. That any fill placed on the site shall be placed under the supervision of a suitably qualified person and certified by a Chartered Professional Engineer as being suitable for any subsequent building development. A certificate of compaction shall be provided to the Council.

## 11. Advisory Notes

1. Because of the nature of this consent and the land status as Recreation Reserve it is recommended to the Consent Holder that a specific reserve management plan for the site should be prepared. The plan should specify, amongst other things required of a reserve management plan, areas of the reserve to be excluded from public access on a temporary or permanent basis, the provision of temporary construction access, the relationship of debris disposal operations with public access within the reserve and to the beach, access to the reserve from the Highway and/or local roads, interpretation relating to the May 05 event, revegetation requirements, fencing requirements and future public use of areas subject to debris disposal.



**Awatarariki Catchment Debris Control System**

Clarification of Design Approach for Building Platforms to be formed on the following properties:

- Numbers 17, 19, 20, 22, 22a, 24, 28 and 32 Clem Elliott Drive
- Numbers 102 and 104 Arawa Street

Drawings

- General, Location Plan, T&T Drawing 22674.802-02, Rev 0
- Building Platforms, Location Plan, T&T Drawing 22674.802-90, Rev 2

Design Issues	Design Approach
<p><b>Height of the building platforms</b></p>	<ul style="list-style-type: none"> <li>• Set at nominal RL 6 m (Clem Elliott), RL 8 m and RL 9 m (Kaokaoroa Street) from the RAMMS modelling results.</li> <li>• 1.1 m higher than required for the Debris Disposal consents</li> <li>• These properties will still be exposed to some overflow during the design debris flow.</li> <li>• However, at these levels they will be protected from the larger more destructive debris, and it is expected that the flow across the properties will be more debris flood wash.</li> <li>• Even with this exposure to the hazard the properties will nonetheless have a significantly greater level of protection than currently exists, both in terms of frequency and nature of the hazard.</li> </ul>
<p><b>Stormwater runoff</b></p>	<ul style="list-style-type: none"> <li>• No change the amount of rain that will fall on the properties.</li> <li>• Given the nature of the soils to be used for the earthworks the runoff characteristics from the properties will be similar as for the existing situation.</li> <li>• However, runoff patterns will be altered slightly insofar as the landform will be changed.</li> <li>• As part of the detailed design, a fall across the properties will be detailed so that runoff is shed in a controlled manner.</li> <li>• The finished platform will be slightly higher at the Clem Elliott end than at the dune end. Thus runoff will flow generally towards the dunes – as it presently does anyway.</li> <li>• As part of reinstating the Clem Elliott Road carriageway there will be road-side drainage that directs runoff towards Tohi Street and the Reserve.</li> </ul>
<p><b>Earthworks</b></p>	<ul style="list-style-type: none"> <li>• Material placed will be engineered fill, i.e. suitable for building.</li> <li>• Some clearance of vegetation will be required prior to earthworks and placement of fill.</li> <li>• If there is unsuitable boggy material, this will need to be removed and replaced with "clean" fill.</li> <li>• Regarding any springs, under-drainage may need to be incorporated in the earthworks to manage this. Investigations as part of and at the time of design of the earthworks will confirm this and the need for any measures to manage this.</li> <li>• In terms of foundations, it is probable that only shallow footings will be required.</li> <li>• Noted that foundations will require specific design at the time and as part of building design. The type and nature of foundations will be dependent on the house or structure being considered.</li> </ul>

The proposed berms and raised building platforms will use all of the material excavated from the spillway.

The bunds and diversion channel will not affect the State Highway 2 Oversize Vehicle Bypass.

### 2.3.5 Restoration Earthworks

As noted above, the raising of building platforms in the Clem Elliot Drive and Kaokaoroa Street area is proposed in conjunction with a series of diversion berms. Part of the raised building platform No.3 is already required as a condition of resource consent for the use of the debris disposal area.

The restoration work will be undertaken on both Council and private property. Prior to entering the land, formal agreements will be entered into with land owners.

Consent is also sought to place fill material on the Maori Reserve to enable the restoration of this area to a condition suitable for passive use. The detail of how this would be undertaken has yet to be determined with the owners. The maximum extent of filling for this land would be no greater than the maximum height of the raised building platform No. 1. The proposed Trustees of this land have advised that it is their wish that Whakatane District Council tidy up the Kaokaoroa block as part of mitigation for potential impact of the proposed works on the site.

## 2.4 Construction Sequence

The construction sequence for the debris control system would involve the following major elements:

### Site Access

- Modification works to the existing quarry track to provide access for construction equipment.

### Flexible Net

- Drilling and installation of the anchorages;
- Installation of the support cable and hanger ropes;
- Site fabrication of the ring net;
- Attaching the ring net to the support cable and laying the base of the net into excavation in the stream bed;
- Reinstatement of the streambed over the horizontal section of net.

### Diversion Structures/Building Platforms

- Clearing and preparing the footprint of the diversion berms and building platforms;

9<sup>th</sup> FEB 2010  
KEITH LESLIE SUTTON  
PRINCES ST WAIKINO  
R.O-2  
WAIHI

WRITTEN CONSENT OF AFFECTED PERSONS.

UNDER THE WHAKATANE DISTRICT COUNCIL'S  
RESOURCE CONSENT APPLICATION FOR A  
AWATARARIKI STREAM DEBRIS FLOW CONTROL SYSTEM

THIS IS AGREEMENT TO THE PLACING OF AN  
ADDITIONAL 1.1 m OF FILL ON TOP OF THE  
FILL TO BE PLACED UNDER THE CONDITIONS  
OF THE DEBRIS DISPOSAL CONSENT TO RL 4.9m  
ON MY MOTHER'S SECTIONS 28 AND 32 CLEM  
ELLIOTT DRIVE MATATA, BRINGING THE TOTAL  
HEIGHT TO NOMINAL RL 6.0m

AS THE REPRESENTATIVE (SON) OF THE OWNER  
NOLA G. NEALE I HEREBY GIVE MY WRITTEN  
APPROVAL AND UNDERSTAND THAT THE FINAL  
DETAILS MAY VARY AS A RESULT OF  
CONDITIONS PLACED ON ANY CONSENT  
GRANTED BY THE REGIONAL COUNCIL.

Yours faithfully

K L Sutton 9-2-2010

WEDNESDAY, 7 MARCH 2012 132

**PUBLIC EXCLUDED**

Advice around the consideration of alternative solutions.

**Funding Commitments**

Commitments and conditions for funding already received and work (infrastructure) undertaken by other stakeholders in the knowledge that Council was planning to complete debris flow mitigation works.

**Financial Implications**

Accurate costings and funding impact for the proposed DDS if it is to proceed; Implications for costs already incurred (and not able to be capitalised) if the proposed DDS does not proceed; Continued costs vs. the currently provision through the draft LTP and existing budgets.

**Communications**

Communications Plan to keep the public and those directly affected property owners and stakeholders informed and to enable their concerns/input to be received.

**Council Plans**

Implications for the Councils LTP and District Plan if the DDS project was to change.

**Resourcing**

The establishment of a Project Control Group for the Debris Flow Mitigation works and staff/consultant resource required to support a review.

**Consenting**

Some works planned were reliant on the consent for the construction of the DDS (such as earthworks in the Clem Elliott Road area). Other consents also assumed the construction of the DDS and may contain conditions that will not be appropriate if the structure does not progress.

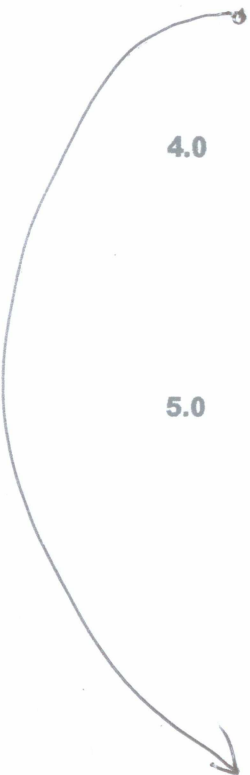
**4.0 ASSESSMENT OF SIGNIFICANCE**

This project was included in the 2009-2019 LTCCP due to its high significance. A decision not to proceed in the future is likely to be a decision of significance; both in terms of the financial implications and other criteria under the Policy for Determining Significance.

**5.0 OPTIONS**

The Council could continue working towards the completion of the DDS, by allowing the consent to be granted and by continuing to work with engineers to enable application of a building consent. However given the risks highlighted by Tonkin and Taylor and CPG Ltd, this is not considered prudent.

The Council can request further information on the implications of a change to the current Debris Flow Mitigation works project to enable future decisions on the future of the project to be made. This will entail further reporting to Council on the implications of a change to the current proposal.



THIS SHOWS COUNCIL WAS AWARE THEY NEEDED TO CHANGE CONDITIONS IF THE DAM DID NOT PROCEED. IN LATE DEC-EARLY JAN 2012 THERE WAS TO BE NO DAM BUILT (DDS)

**6.0 RISK**

**PUBLIC EXCLUDED**

Before the Council can consider the future of the project it **needs to understand the implications of a change to the project**. Staff will investigate those implications and report back to the Projects and Services Committee so decisions can be made regarding a future direction for Awatarariki Stream debris flow mitigations works.

**RESOLUTION:**

1. **THAT** the report "Matata Regeneration Awatarariki Stream - Debris Flow Mitigation Works" be received; and
2. **THAT** the Council request that further information be provided on the implications of a change to the Awatarariki Stream Debris Flow Mitigation Works (Debris Detention Structure) including
  - Legal advice
  - Existing Funding Commitments
  - Financial Implications
  - Communications Plan
  - Implications for the LTP and District Plan
  - Resourcing options
  - Project Control Group
  - **Consent commitments**
3. **THAT** the Council arrange a meeting of major stakeholders **and directly impacted property owners** to discuss a review of the Awatarariki Stream detention project.
4. **THAT** following the meeting of major stakeholders and directly impacted property owners the Council release these resolutions to the public.



Paula Chapman  
ACTING GENERAL MANAGER  
INFRASTRUCTURE



Marty Grenfell  
CHIEF EXECUTIVE

**Attached to this report:**

- Matata Debris Flow Mitigation Structure – Overview Review  
CPG Limited – March 2012

ISSUES RAISED WITH  
ALAN BICKERS

TO:- PROJECT REVIEW  
TEAM LEADER,  
ALAN BICKERS.  
(CONTAINS 8 PAGES)

KEITH SUTTON  
R-0-2  
WAIHI 3682  
29-5-12

DEAR SIR,

IT WAS ASKED AT THE MATATA MAIN LAGOON CLEAN UP R.C HEARINGS, WHY ARE WE NOT BUILDING THE DAM FIRST? TO PROTECT RATEPAYERS, THEIR PROPERTIES AND THE CLEANUP WORKS FROM ANOTHER EVENT, IT WAS NEVER RESOLVED.

NOW WE HAVE A NEW MAIN LAGOON AND NO DAM, THE DUCKS HAVE RETURNED HOME BEFORE AT LEAST ONE RATEPAYER WHO LIVED IN CLEM ELLIOTT DRIVE FOR 21 YEARS (PRIOR TO MAY 2005) HAS RETURNED TO HERS, THAT PERSON BEING MY MOTHER NOLA NEALE.

DUCKS DO NOT PAY RATES AND DID NOT ATTEND ANY HEARINGS DAY AFTER DAY LIKE I DID, SEVEN YEARS HAVE PASSED, SEVEN YEARS AND I'M BECOMING DISTRAUGHT OVER THE WHOLE AFFAIR, PARTICULARLY WHEN THERE IS NOTHING I CAN TELL YOU ABOUT RECENT MEETINGS AND WALKABOUTS BECAUSE WE WERE NOT CONTACTED TO ATTEND.

THIS IS AFTER PHONING COUNCIL ON THE 23 RD FEB 2012 TO CHECK THAT THEY HAD BARBARA DEMPSEY'S CONTACT LIST FOR AFFECTED PARTIES IN CLEM ELLIOTT DRIVE AND LEAVING MY PHONE NUMBERS IN CASE THERE WAS TO BE A MEETING, AND THERE WAS ON SAT-10 MARCH WITH NO CONTACT TO MYSELF OR MY MOTHER.

I HAVE SINCE REQUESTED AND RECEIVED MATERIAL TO UPDATE ME ON RECENT HAPPENINGS.

SO IT DOESN'T HELP WHEN I READ IN THE PUBLIC EXCLUDED REPORT OF WED 7<sup>TH</sup> MARCH MEETING (19.20.2.1) A HEADING:- COMMUNICATIONS- ABOUT KEEPING DIRECTLY AFFECTED PROPERTY OWNERS INFORMED

ALSO OF INTEREST WAS THE COST BENEFIT ANALYSIS AND W.O.C ASSET VALUATION OF THEIR AFFECTED PROPERTY IN THE FANHEAD, WHICH I WILL TOUCH ON LATER.

I HAD HOPED THE DAM WOULD HAVE BEEN STARTED LONG AGO TRIGGERING W.O.C R.C 64647 AND L.C 24.2.07.31 CONTAINING THE CONDITIONS FOR FILLING IN MY MOTHERS TWO, ONE ACRE SECTIONS AND A NEIGHBOURING SECTION TO R.L 4.9m, SO FILL COULD BE DUMPED IN THE FAR WESTERN LAGOON FROM THE CONSTRUCTION PHASE AND FUTURE CLEANOUTS

TO COMPLICATE MATTERS, EARLY THIS MONTH COUNCIL ILLEGALLY DUMPED 4800 m<sup>3</sup> OF FILL IN THE FAR WESTERN LAGOON WITHOUT PICKING UP THEIR R.C, 200 m<sup>3</sup> WAS LEGAL UNDER THE DISTRICT PLAN, MAKING A TOTAL OF 5000 m<sup>3</sup>.

THIS AREA IS THE WATER CATCHMENT/PONDING ZONE FOR RUNOFF/FLOODING FROM CLEM ELLIOTT DRIVE AND I FEEL IT WAS MORE AN AGREEMENT THAN A CONDITION OF ANY R.C TO RAISE THE BUILDING PLATFORMS ON THESE SECTIONS SO THE LAGOON AREA THAT WAS FILLED WITH DEBRIS AND SILT COULD BE LEFT AS IT IS, SAVING A LARGE AMOUNT OF FUNDS THAT WOULD HAVE BEEN NEEDED TO CLEAN IT OUT LIKE THE MAIN TOWN LAGOON.

HAD THESE SECTIONS BEEN RAISED ALREADY, THERE WOULD HAVE BEEN TWO MORE HOUSES TO COUNT TOWARDS THE COST BENEFIT ANALYSIS.

THIS FAR WESTERN LAGOON AREA WHICH IS A RECREATION RESERVE (W.O.C OWNERSHIP) HAS



(3)

ALSO DISAPPEARED FROM ANY W.D.C ASSET VALUATIONS IN THE C.P.G REPORTS, ITS CLEARLY PART OF THE FANHEAD LIKE THEIR LISTED ROADING ASSET \$94K, CLEANUP AFTER AN EVENT \$20K, BUT HAS NO LISTED VALUE OR CLEANUP COST ATTACHED TO IT.

IT IS 27 ha OF BEACH FRONT PROPERTY WHERE IN 2003/4 IT WAS EARMARKED FOR THE NEW SEWERAGE TREATMENT PLANT

FIND ALSO IN THE BACK PAGES INFO ON 10 MORE POSSIBLE SECTIONS OF LAND MISSING FROM THE COST BENEFIT COUNT UP OF EFFECTED PROPERTIES

IS THIS CREATIVE ACCOUNTING AT ITS BEST?

W.D.C ASSET REF:- C.P.G REPORT N° 705054 13 MAR/12  
PAGE 16 AND PARAGRAPH 7 ON PAGE 18  
AND C.P.G APPENDIX IV WDC: LAND PROPERTY AND ASSET VALUATION.

SEVEN YEARS AND COUNTING.

GOOD LUCK WITH THE REVIEW.

Yours Sincerely  
K J Sutton

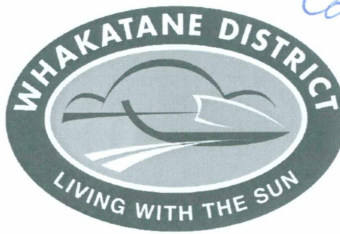
CONTACT :- 07 2128755  
021 1413111

(16)



Submitter's Name	Submission	Comment in Report
David Potter for Ngati Rangitahi Raupatu Trust	Submitting conceptual outline of direct channel to sea prepared by Joos Potter, Tangihia Consultants and Associates for Neville Harris and others.	Section 5.3.3
Lee & Earl Schlichting	Opposed to ring net and debris dam. Proposed upstream catchment work. Concern with restrictions on property.	Sections 1.3.5 to 1.3.10, 3.5.1, 5.2.3, 5.3.3 and 6.1.1 Section 2.3.16 Sections 4.5.1 to 4.5.5
Keith Sutton	Concerned with impact of remediation costs on ratepayers and delays. Concerned with breaches of resource consent conditions by WDC. Concern with restrictions on property.	Section 3.3.4 and 3.3.5 Not part of scope of review, WDC conducting audit of consent compliance. Section 4.5.1 to 4.5.5
Pam and Bill Whalley	Not in favour of debris dam. Concerns about risk from direct channel to sea. Frustrated with indecision and additional costs of rates and insurance.	Sections 1.3.5 to 1.3.10 Section 5.3.3 Section 3.3.4 and elsewhere.

REPORT, AS PART OF APPENDIX A.



Keith, This is not a complete compliance monitoring report, but rather one that addressed the issues raised with Alan Bickers.

24.2.06.195  
24.02.07.158  
24.2.08.71

## MEMORANDUM

Regals Pete McLaren

TO: Jeff Farrell, Manager Development and Compliance

FROM: Pete McLaren, Planning Monitoring Officer

SUBJECT: **COMPLIANCE INVESTIGATION – MATATA RESTORATION WORKS**

DATE: 7 May 2012

Matata residents have raised a number of concerns during a recent 'walking tour' of the flood protection and mitigation works. The walking tour involved the new Chief Executive, Marty Grenfell, and Mr Alan Bickers who acted as Commissioner representing Whakatane District Council for the joint hearings and decision of the resource consents in question. During the tour, in response to a number of claims that 'things had not been done right' by the consent holder (Whakatane District Council), Mr Bickers stated that the first thing to do was to see if the works completed to date complied with the conditions of the resource consent(s).

To this end the investigation has been limited to the main points raised during the walking tour, being:

1. The Waitepuru Stream channel through Matata was eroded during flood events in 2010, damaging private property despite flood protection works being completed. The flood protection works comprise of debris deflection bunds, a detention pond, a diversion culvert and a weir. In response to the 2010 floods modifications were made to the weir and culvert at the diversion structure south of Pakeha Street. Were the structures installed as per the resource consent and are any subsequent works covered by the consent?
2. The Waimea Stream also eroded during the same events, also damaging property. In one flood the stream overtopped its channel and flooded private property. Again, remedial work was done. Was the flood protection work installed to the design level required by the resource consent? Has subsequent work breached the consent conditions?
3. A swale drain was built to contain and convey storm water from the vicinity of Clem Elliott Drive to the top of the first sediment detention pond on the lower Awatarariki Stream. Residents complained it was not working; specifically that it had overtopped and also left impounded water for quite some time after rain events. Was it installed according to the design authorised by the consent?

Each of these works was covered by separate resource consents issued by the Bay of Plenty Regional Council and the Whakatane District Council. This investigation relates solely to the Whakatane District Council conditions. It is noted that the joint hearings committee did a good job in ensuring each agency's consent conditions complemented the others.

## 1 Waitepuru Stream works

The Whakatane District Council resource consent is 24.2.07.158 (also numbered LL2007-7676-00 as the file system changed at this time). The following extract from the decision describes the purpose of the consent:

**WHAKATANE DISTRICT COUNCIL**

**DECISION ON**  
**RESOURCE CONSENT APPLICATION 24.2.07.158**

Pursuant to sections 104, 104B and 108 of the Resource Management Act 1991, the Whakatane District Council hereby **grants consent** to Whakatane District Council for the application for land use consent for earthworks in the Rural 1, Rural 3 and Rural 4 zones, comprising;

- Construction of a debris and stream control structure at the point where the Waitepuru Stream exits from the adjacent escarpment;
- Controlled return of the Waitepuru Stream to its pre-May 2005 Channel through the Matata Township, with associated channel improvement and protection works and upgrading of the culvert under Wilson Street;
- Conveying flows that exceed the capacity of the town watercourse through a new culvert under the East Coast Main Trunk railway line (ECMT) and State Highway 2 to a drain and overflow swale leading to the Awarua Drain and the Tarawera River;
- Retrospective consent for a flood overflow culvert; and
- Realignment of Manawahe Road over the proposed bunds of the debris control structure.

Much of the consent related to the construction period (mitigation of nuisance effects, mitigation of traffic hazards, notification of works requirements, etc). This compliance review is limited to assessing conditions that provide outcome criteria, being an assessment of the works in place against the information referred to in Condition 1.1 and whether recent changes to the structures still fulfil the design criteria defined in Condition 4.11 (see text box below).

1. **General**

1.1 Unless otherwise modified by conditions of consent, the Consent Holder shall ensure that all activity undertaken under this consent shall be carried out in general accordance with the application and all supporting information received by the Whakatane District Council (WDC) and held on WDC file 2330/0005/000 including;

(i) *“Waitepuru Debris and Stream Management Works Awarua Drain Stop Banks. Resource Consent Applications”*.  
Boffa Miskell (September 2007).

(ii) *“Waitepuru Debris and Stream Management Works Awarua Drain Stop Banks Alterations to Proposals and Further Information”*.  
Boffa Miskell (February 2008).

...

4.11 The works shall be designed in general accordance with the application and the following design criteria:

- (i) diversion of a debris flow event up to the size of the 18 May 2005 event.
- (ii) Management of a 100 year return period flood event (peak flow 13.5 cubic metres per second), with a design flow of 8.9 cubic metres per second to be diverted to the town watercourse.
- (iii) Earthworks are to support the achievement of the design objectives of (i) and (ii).
- (iv) The earthworks shall also provide for:
  - A global stability factor of safety greater than 1.5 for normal conditions and greater than 1.2 for extreme conditions. Factors of safety for steep inner bund faces may be locally less than these values.
  - The bund is to remain intact after a 475 year return period earthquake with bund crest deformations no greater than 0.2m.
  - The bund elevation is to allow for construction and post earthquake settlements so as to maintain a minimum freeboard to achieve (i) above.
  - Erosion protection of channels is to provide for a flood event of at least once in 100 years probability.
  - The final shape of the debris control structure bunds shall wherever practicable provide a natural contour consistent with the adjacent foothill and escarpment landform.
  - The maximum slope gradient of the external bund faces shall be no steeper than 1:2.5 (vertical : horizontal), and wherever practicable 1:3, to ensure that proposed planting can establish without the need for slope stabilisation techniques.

## 1.1 Initial installation of works

A review of compliance monitoring field sheets from the time of construction, and of as-built plans provided post-construction, and interviews with Whakatane District Council project staff (Paul Smith) show that the works were installed as per the 2008 plans. A review of correspondence confirms the WDC Project Manager, the Design Engineer (Tonkin and Taylor), project engineers (Opus) and the principal contractor were all informed of resource consent requirements and the constraints that these placed on any changes to design or construction.

## 1.2 Subsequent modifications to works

### 1.2.1 Debris Flow Bund

The large bund walls planned to divert a debris flow were subject to a design review just prior to the resource consent hearing in 2008. The result was the need to raise the bund walls at the upstream end by five metres. There was not the same need to raise the height at the downstream end of the bund. The initial construction saw the bund height constructed to this higher level and tapering gradually toward the downstream end, but with excess capacity at the downstream end. The result immediately attracted complaints from residents, as the downstream end of the southern bund obscured views to the north from houses on Manawahe Road.

One of the complainants, Narelle Gordon of 15 Manawahe Road lives in the house closest to southern bund. Narelle alleges that in early explanations to her, and in early plans, she was lead to believe the bund height near her house was going to be a little over 2 metres above the existing ground level at that time. On this basis she decided to not make a submission on the application when it was publicly notified on 26 October 2007. There was a subsequent design review increasing the height of the bund and Narelle maintains that she did not receive sufficient opportunity to consider or comment on the increased height and it's any adverse effects it might hold for her.

A review of documentation appears to confirm this is a legitimate grievance – at least there is nothing I have found that contradicts her assertion. It is best shown in the following two plans. The first is the plan notified. From the north-eastern corner of Narelle's property the orange contour lines show an approximate 2.5 metre rise to the top of the bund. On the second plan, submitted in the report '*Alterations to Proposal and Further Information*' by Boffa Miskell, dated February 2008 (some 3-4 months after notification), the contour lines show a rise of between three and four metres. It is noteworthy that the plan used in notification is dated September 2007, while the revised plan used at the hearing is dated May 2007.

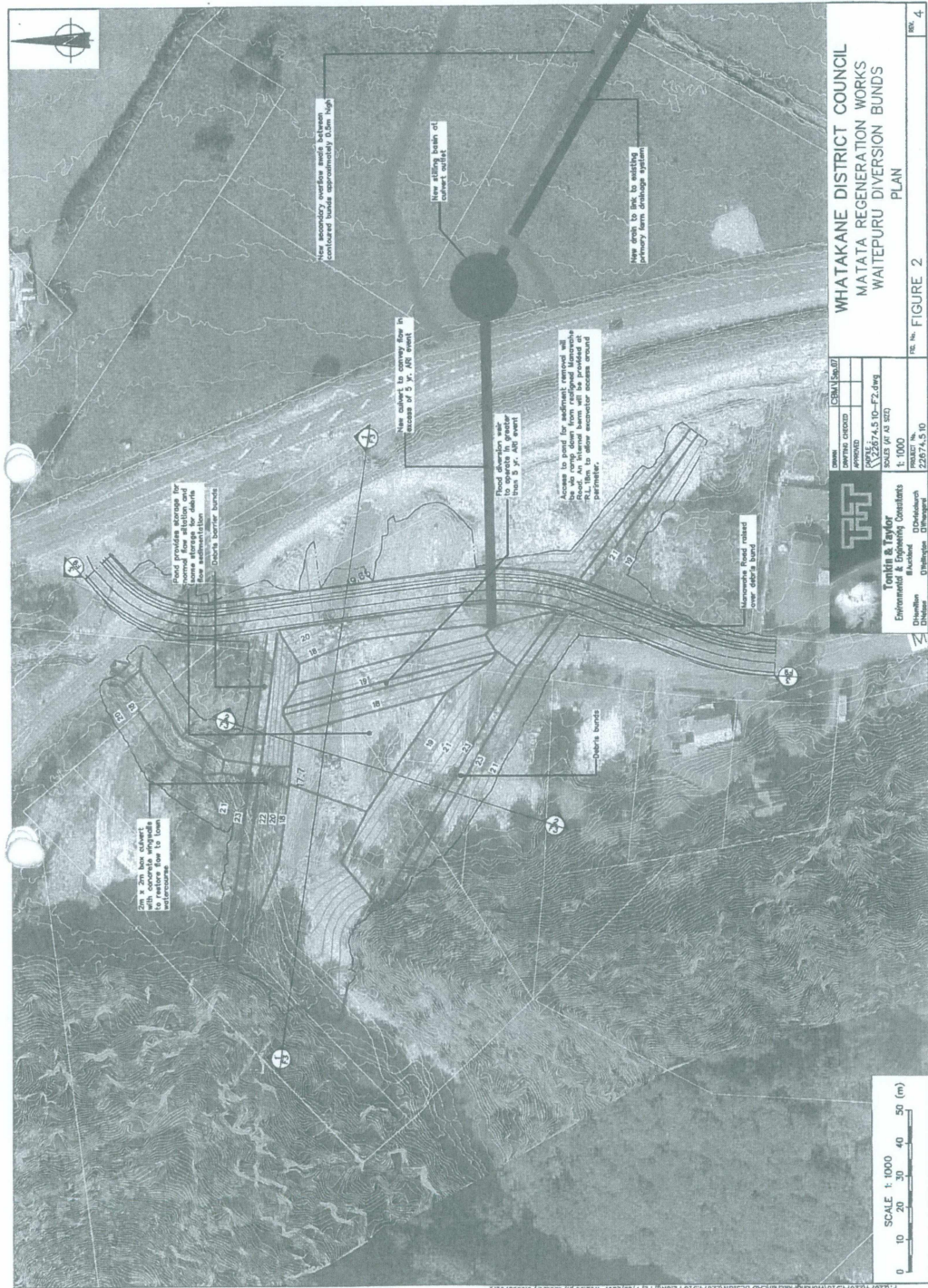


Figure 1 : The design plan for the Waitepuru Stream bunds as notified.

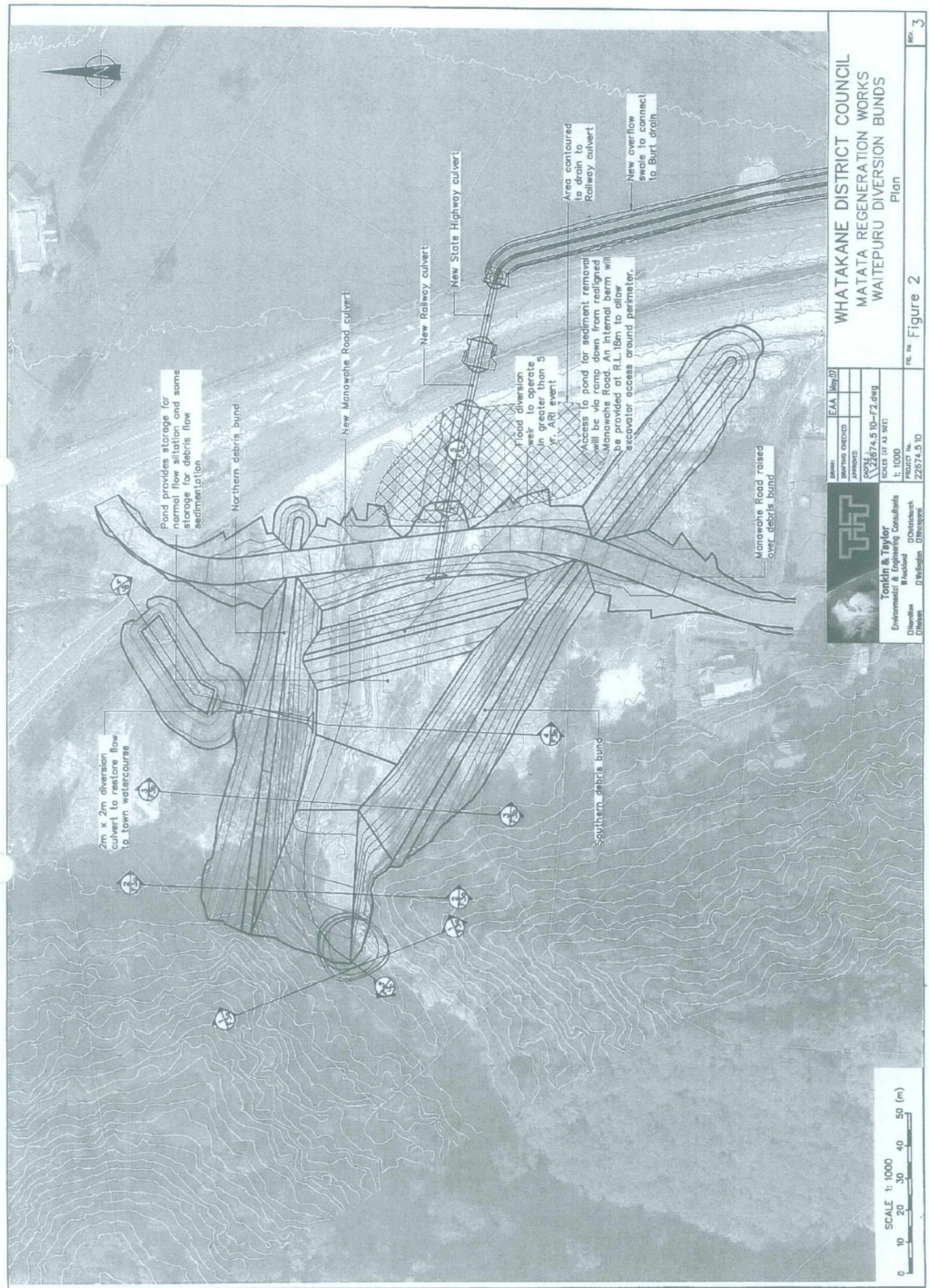


Figure 2: The design plan for the Waitepuru Stream bunds altered after notification and before the hearing.

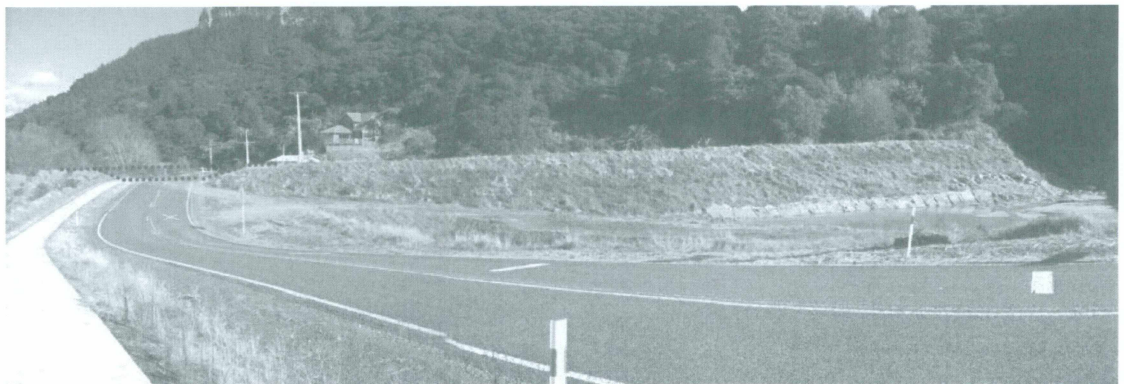


In the documentation submitted altering the application, the applicant's consultant states in relation to affected parties "*Subject to mitigation as suggested the alteration will not be noticeable*". Narelle Gordon disagrees and as the difference in height approaches an extra 50% at this point, I agree with her.

There is documentation on file discussing the need to re-notify the application. In the end it was decided that re-notification was not necessary as long as parties deemed to be affected by the change gave their approval. These parties were deemed to be: V & F Muller, H & G Burt, Transit NZ, and On Track.

WDC project staff maintain that Narelle Gordon was briefed about the changes but being so affected by the change it is reasonable for her to have expected to have been given another opportunity to make a submission if she so desired. There is no discussion on file as to why she was overlooked other than the comment given above and the comment that the alterations would not extend the footprint of the works on to any other property than originally planned.

After some negotiation a mitigation plan was arrived at to meet the concerns of the residents on Manawahe Road. Both the point at which Manawahe Road crosses the bund and the top of the bund downstream from there were lowered to afford the residents a view. I have sighted correspondence between the design engineers (Tonkin and Taylor) and the Whakatane District Council Project Manager that confirms the lowering did not compromise the initial design criteria to "*divert a debris flow event up to the size of the 18 May 2005 event*". In other words there was some overdesign initially that allowed a lowering to be negotiated with residents and still meet the resource consent condition.



*Image 1: The southern debris bund showing the notch cut where Manawahe Road crosses it.*

There is no doubt that the initial higher protection afforded by the overdesign has been reduced, but this seems to be a trade-off for views the residents were willing to make. I note that one of the residents (closest to the southern bund) has consistently requested the bund be lowered further, even though her house is most at risk from a debris flow but this has not been agreed to by the Whakatane District Council Project Manager specifically because it would not meet the design criteria and would therefore breach resource consent conditions.

The slope on the bund faces meets consent conditions and I note that the plantings have successfully established and are being maintained as per the landscape plan. However, some of the species chosen will grow 3-4 metres in height over the next four years and could obstruct the light plane on to Narelle Gordon's property. I recommend the species composition on the upper part of

the southern bund be reviewed as soon as possible in case changes are required.

In summary, the debris flow bunds were installed as per the granted consent. Subsequent modifications still meet the design criteria of the consent and I do not believe there has been any breach in compliance. However, there does appear to have been procedural inadequacy between the time of public notification and the hearing that lead to at least one person not being adequately informed and therefore not able to fully participate in formal consultation as prescribed by the Resource Management Act.

### **1.2.2 Diversion culvert and weir, railway and road culverts and Waitepuru Stream Channel Works**

After the 2010 floods widened the Waitepuru Stream bed through Matata it was estimated that the stream had carried more water than the 8.9 m<sup>3</sup>/s designed to pass through the culvert exiting the detention pond. An initial response was to bolt a steel plate over part of the inflow side of the culvert to substantially neck down the flow. This is still in place and has served as a temporary protective measure whilst the design calculations were checked to see why extra flow had gone through the town. These checks showed a combination of too much head on the culvert and too little flow retardation due to friction and turbulence through the culvert had caused the excess flows.

The following summary is extracted from a letter to the WDC Project Manager from Tonkin and Taylor.

*"The basis for the consented design for the Waitepuru stream management works, as incorporated with the debris flow mitigation measures, is that*

*"... all flows up to the 5 year event (7.7 m<sup>3</sup>/s) will be directed to and conveyed in the town watercourse. At the 5 year level water will begin to spill across the diversion bund and these flows will be conveyed away from the town through the new Manawahe Road, railway and State Highway culverts. In the 100 year water only event the flow split would be approximately 8.9 m<sup>3</sup>/s to the town watercourse and 4.6 m<sup>3</sup>/s to the Awarua Drain system to the east of the town. ... a flow of 8.9 m<sup>3</sup>/s corresponds to approximately a 9 year return period peak flow from the catchment through the town watercourse at the time of the 100 year return period event in the catchment." (ref. T Bassett Evidence to the Environment Court, July 2009).*

*Preliminary design of the diversion, stream and culvert works to support the resource consent application was carried out by T&T, with detailed design by Opus International. Construction of the works, supervised by WDC, was completed in May 2010. Works along the Awarua overflow bypass route were designed and completed by the Bay of Plenty Regional Council.*

*Since then, from observations made and analysis following high runoff from the catchment, it is apparent that more flow is being conveyed to the town watercourse than intended. The diversion weir upstream of Manawahe Road is too high, and the 2m by 2m diversion culvert is too "efficient" meaning overflow to the Awarua*

bypass does not commence soon enough.

Heavy rainfall in May and June 2010 led to significant flows down the town watercourse, with flooding of a garage in Heale Street, and erosion of the new channel between Pakeha and Wilson Streets. It is estimated that the peak flow in the town watercourse may have been as high as 12 m<sup>3</sup>/s."

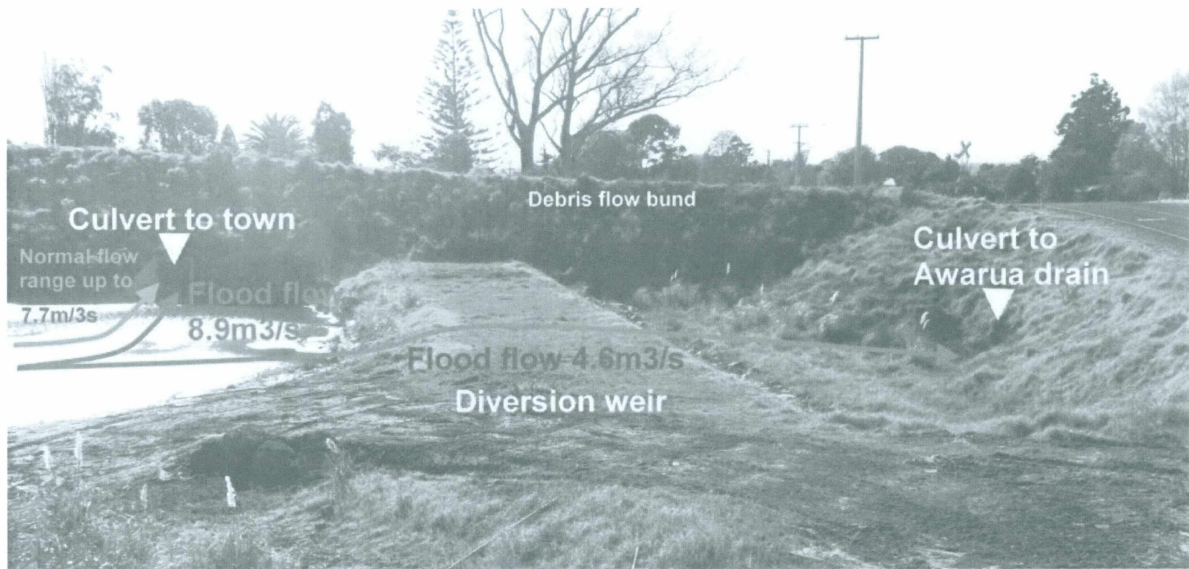


Image 2: The design intent of the Waitepuru diversion system



Image 3 : The culvert under the debris bund discharging to the Waitepuru watercourse that flows through the town - looking upstream to the temporary choke plate.

The solution was to lower the weir height by approximately 900mm over a portion of its length to reduce head at the culvert. Modifying the culvert to increase friction was also discussed, but this has not been done yet.

As the culvert and weir work together to simply divide flood flows two ways, a reduction of the weir height must increase the number of times the Awarua flood diversion channel is active. The question is “Is this in line with consent conditions?” I am satisfied that it is.

The system is designed on the basis of a flood flow of 8.9 m<sup>3</sup>/s being the target in the Waitepuru Stream channel through the town. All other flows are to go over the weir. The works lowering the weir and restricting the culvert are simply fine tuning to achieve the consented design. It was unfortunate that damaging flows occurred through town, but I am satisfied that the corrective action at the culvert and the weir was to meet the intention of the resource consent and was permitted by the consent conditions.

Repairs to the stream channel itself and the various structures therein were simply to repair damage and to reinstate the level of ongoing protection envisaged by the original design (i.e. to cope with 8.9 m<sup>3</sup>/s) and do not represent an increase or extension to that design.

### **1.2.3 Awarua flood diversion channel and Awarua Drain works.**

The overall design calls for the management of a peak flood flow of 13.5 m<sup>3</sup>/s with 8.9 m<sup>3</sup>/s going down the Waitepuru and the balance (4.6 m<sup>3</sup>/s) going down the Awarua flood bypass. Works have been installed as per the original design. The lowering of the weir should not impact on this design as it was to simply apportion the correct design flow down the Waitepuru Stream. That being the case, the balance flows to the diversion channel and down the Awarua drain as originally intended.

## **2 Waimea Stream works**

The Whakatane District Council resource consent is 24.2.08.71. The stream runs through many private properties and the location of remedial work was specified in the introduction to Condition 1 of the consent. The broad outline of works is detailed in Condition 1(a) by reference to the reports supplied with the application. These conditions are provided in the text box below.

On 4 August 2008, the Commissioner Russell De Luca, under delegated authority, resolved as follows:

- "1. *THAT pursuant to Sections 34A, 104 and 108 of the Resource Management Act 1991, and Rule 4.8 of the Proposed Whakatane District Plan, the Whakatane District Council grants consent as a discretionary activity to undertake Waimea Stream management works on land as follows:*

<i>Site address:</i>	26,28,30 Pakeha St; 29,31,39 Wilson St; 12,14,16 Division St; 3,6 Clarke St; 4,6 Grace St; 61,63 Arawa St. East Coast Railway, State Highway 2, Division St, Clarke St, Arawa St, DOC Reserve (Matata Lagoon).
<i>Legal Description of Site:</i>	Allotments 104,112,185,194,195,244,250,372 Town of Richmond; Lots 1,2 DPS 14501; Lot 2 DPS 14394; Lot 1 DPS 20449; Lots 1,2,3 DPS 23643. East Coast Railway, State Highway 2, Division St, Clarke St, Arawa St, Section 1 Block 1 Awaateatua Survey District (Recreation Reserve - DOC).

*subject to the following conditions:*

- (a) *The proposed activity shall be carried out in general accordance with the application numbered T06059 titled "Matata Regeneration Works, Waimea Stream Management Works" dated April 2008 prepared by Boffa Miskell Limited and all*

I have reviewed the plans referred to in 1 (a), inspected the works completed, and interviewed Council's supervising engineer, Paul Smith. With the exception of the culvert under Pakeha Street, the works specified in the consent have been completed as per the plans. Minor changes were made during construction but these were inconsequential and would not have decreased the performance of the works or beyond the scope of the consent (for example, installing a new culvert as per the design, but adding a small wing wall to match the existing culvert that remained in place).

Post-installation surveys have established the large culvert under Pakeha Street, installed by the NZTA, has been set slightly too low. The effect of this is to throttle the flow slightly. It is very unlikely that this has any bearing on the overflows from the stream channel downstream of Pakeha Street. However, if the flow has been throttled (say by a build up of bottom sediment) it might cause unintended overtopping of the stream channel upstream of the culvert which then could result in uncontrolled surface water flows outside of the stream channel.



*Image 4: The Waimea Stream culvert under Pakeha Street showing some silt build up - evidence the culvert has been set a little low.*

In 2011 after the works had been completed, a flood in the Waimea Stream saw the channel erode (deepening and widening it) and at least one instance of the stream leaving its channel. The main overflow occurred immediately downstream of Pakeha Street. This has been the subject of complaints. In response to this flood, further remedial work to the stream channel has been carried out. This work was not done under resource consent 24.2.08.71 and did not affect any of the works installed under this resource consent. The works installed under 24.2.08.71 coped well with the flood and, with the exception of the overflow; the damage was done in sections of the stream not subject to work under this consent. In terms of assessing compliance with 24.2.08.71 the additional works must be seen as additional to and separate from works authorised by 24.2.08.71 (in fact they were installed at a later date).

The overflow immediately downstream of Pakeha Street was in a section of the stream subject to works under this consent. The works were installed as per the approved plans. The conclusion must be that either the flows were greater than those designed for, or that the design authorised and constructed was inadequate to contain the target flood flow. In the case of the former, compliance with the resource consent conditions is not affected; and in the case of the latter the works still comply with the consent but do not fulfil the purpose for which the resource consent was obtained. There is no stream flow recording data available to clarify this point.

In summary however, it is possible to state the overflows from, and erosion in, the Waimea Stream channel that are the subject of complaint are not caused by non-compliance with the conditions of resource consent 24.2.08.71.

The drainage swale at Clem Elliott Drive referred to is to provide drainage of excess surface water. As such it has to provide means to collect, contain, and convey that water to the primary sediment basin. The swale was installed as per the design plans. The floods of 2010 and 2011 showed that the discharge point of the drain was subject to sediment build-up in the primary sediment basin. Essentially the flow of the Awatarariki Stream undergoes a sudden drop in velocity near this point and suspended sediment drops out of the water column at a rate and quantity that is not able to be moved by water flowing down the drainage swale. In effect the sediment carried by the Awatarariki dams the bottom of the drainage swale.

The effect was that the water in the swale was unable to get away and ponded behind the sediment dam. It is doubtful if the sediment impeded the efficiency of the swale to capture and contain surface water when the Awatarariki Stream was in flood as the lower swale is subject to the backup of water in flood events in any case. However high intensity rainfall of short duration flowing from Clem Elliott Drive into the swale may not have drained efficiently from the swale because of the sediment dam; and the impounded water itself presented a hazard.

The fix has been to raise the bottom of the swale so that an even gradient exists from the top end of the channel to the approximate level of the sediment build-up. This ensures the water does not pond. Capacity in the drain has reduced compared to the plans authorised by the consent. However, the intent of the swale was to collect, contain and convey water, not to store it. The changes can be viewed as fine-tuning to achieve the aims of the swale as outlined in the consent and to remove a water hazard that was inadvertently created.

I do not believe the problems experienced by the residents were caused by non-compliance (i.e. building a swale to a design other than that authorised), nor do I believe the subsequent changes are of a magnitude that require formal variation to the conditions of the consent. The consent holder will be asked to furnish the modified as-built plans along with an explanation of why the changes were made.

Pete McLaren  
PLANNING MONITORING OFFICER

### 3 Western Swale (Clem Elliot Drive)

The Whakatane District Council resource consent is 24.2.06.195 (also numbered LL2006-76662-00). The decision was appealed to the Environment Court. The following extract from the Environment Court's decision describes the purpose of the consent:

#### Decision

*Pursuant to sections 104, 104B and 108 of the Resource Management Act 1991, the Whakatane District Council grants consent to Whakatane District Council for the application for land use consent for earthworks, vegetation disturbance and site disturbance in the Rural 3, Rural 4 and Natural Hazard Zones, the Area Sensitive to Coastal Hazard, a riparian margin, and a scheduled Natural Heritage Feature, comprising;*

- *Excavation and deposition earthworks within the Western Matata Lagoon (Awa o te Atua Lagoon) involving reshaping of the lagoon to provide for sediment retention basins, open water, terrestrial habitat and wetland habitat,*
- *Excavation of the bed of the Awatarariki Stream and associated earthworks to increase the channel capacity,*
- *Armouring the banks of the Awatarariki Stream to prevent erosion,*
- *Earthworks associated with the excavation and removal of sediments and debris from the Clem Elliot Drive area only to the extent provided in Condition 2.2 of this consent.*
- *Construction of a drainage swale at Clem Elliot Drive to provide drainage from low-lying areas into the Western Matata Lagoon,*
- *On-going earthworks associated with the maintenance of the Awatarariki Stream drainage channels, removal of sediment from sediment basins in the Western Matata Lagoon and wetland enhancement work,*
- *Authorisation for emergency works undertaken to carry out earthworks and channel clearing operations associated with the clearing up of flood debris following the severe storm and debris flow event at Matata on 18 May 2005.*

*Consent is granted subject to the Conditions set out below.*

*The term of the Consent shall be 35 years.*





Your Ref:  
Our Ref: C2012 0586 & 64647



14 May 2012

Mr Keith Sutton  
R D 2  
Waihi 3682

**Telephone:** 0800 884 880  
**Facsimile:** 0800 884 882  
**Email:** info@boprc.govt.nz  
**Website:** www.boprc.govt.nz  
**Pollution Hotline:** 0800 884 883  
**International:** +64 7 922 3390

Dear Mr Sutton

### Placement of excavated material from the Matata Lagoon

This letter is a follow up from our conversation on Friday 11 May 2012 with regard to the deposition of excavated material from the Matatā Lagoon onto the south side of the Far Western Lagoon at the western end of McPherson Street, Matatā.

A site inspection was conducted by myself, my colleague Wiki Mooney and Paul Smith from Whakatāne District Council on 10 May 2012, to discuss the activity.

The site where material had been deposited has an existing resource consent 64647 issued for large scale earthworks in the area defined as the Far Western Lagoon (Railway Lagoon), which has not yet been exercised. The material was deposited at a previously used dump site along the southern boundary of the lagoon. At the site meeting we recommended that the exposed area should be revegetated as soon as possible. Once the exposed slopes are vegetated we have asked that the bund along the base of the slope is relocated closer to the toe to allow the potential ephemeral flow path behind it to be kept open.

I wish to confirm that the deposition of the material complies with Rule 1 of the Bay of Plenty Regional Water and Land Plan. The Rule states that it is a permitted activity to undertake earthworks of < 5000m<sup>3</sup> and < 1.0 hectare of exposed area at this site within any 12 month period. I am satisfied that the activity complies with the Rule.

I have sought advice from our lawyer to confirm whether or not the deposition of the material requires the resource consent to be exercised. His reply is as follows:

Under the Resource Management Act (RMA) Section 9(2) *No person may use the land in a manner that contravenes a regional rule.....* therefore it is permitted activity and there is no need to exercise the consent as the Rule is not contravened in this case.

If Whakatāne District Council were to place any additional fill on that site before May 2013 they would contravene the Rule and thus would be in breach of s9(2) unless they exercised the consent. The following would then apply: s9(2)(a) *No person may use the land in a manner that contravenes a regional rule unless the use is expressly allowed by a resource consent.*

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In addition, I have notified Whakatāne District Council in writing that they must not deposit any further fill at that site within 12 months without exercising the consent.

If you require any further information please don't hesitate to contact me.

Yours faithfully



Jessica Hunter-Smith  
**Pollution Prevention Officer**

**for Group Manager Water Management**

railway lagoon

Since May 2012 council have not placed any more fill in the railway lagoon area, even though they had a need to clean out the silt ponds that resource consent 64647 covers they trucked the Koiwi laden silt of site to Whakatane which i feel is very insensitive to local Matata iwi , the environment courts understanding was it would remain local , deposited in the railway lagoon with any remains found placed in the set aside reserve.

# Draft Awatarariki Fanhead Strategy

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## Risk Assessment

### Issues and Options Report

#### Consultation Meeting

Matata Tennis Club, Matata

21 January 2014

Name: Keith Sutton  
Property Address: 26/28 Clem Elliott Drive  
Postal Address: TBA  
Meeting With: Craig Batchelar  
Meeting Time: 3.00 pm

Mr Sutton felt that the entire area in the Clem Elliott Drive vicinity was in effect a "red zone" as a result of the Environment Court's decision to not allow any restoration or earthworks to be carried out in the area. He considers that the Council's hands are tied by this decision which in his view originates from central government and therefore requires central government intervention to resolve.

Mr Sutton is concerned that all of the options assume that there is the ability to undertake restoration earthworks to some degree. He feels that it is very important that the legal basis for undertaking these works is properly addressed before any further decisions are made.

Mr Sutton feels that much of the content in the risk assessment undertaken by Tonkin & Taylor is based on conjecture. He questions the conclusions on the return period for debris flow events of this magnitude. Evidence for this is that any debris flow within the last 100 – 200 years would have affected the course of the river that used to pass to the west along the coast to its mouth in the vicinity of Murphys Motor Camp. In his view, the risk assessment is an overstatement and the risks are actually minimal.

Mr Sutton referred to the resource consents that the Council holds for the deposition of debris material to the far western lagoon. He noted that this consent is likely to lapse in 2013 given that it has not been legally implemented. He referred to 4,800 cubic metres of material dumped in the far western lagoon and that Council had asserted it had undertaken this work as a permitted activity. Mr Sutton considered that the Council was not correct in its interpretation and that as a result of the dumping there were now obligations for Council to comply with the conditions of consent for the deposition area. These conditions include a requirement to raise building platforms on the land owned by his mother, Nola Neil.

Mr Sutton noted that part of his mother's site was restricted for development by coastal hazard lines.

Mr Sutton noted that he was advised by Council that there may be a connection to the proposed sewerage reticulation.

The suggestion made by Mr Bruce Stewart to use the debris material to raise building platforms in Clem Elliott Drive on his and Nola Neil's site was discussed. Mr Sutton was not opposed to this idea but reiterated concerns around the legality of undertaking restoration earthworks given the Environment Court decision. He confirmed earlier comments that Council needed to carefully check its ability to gain consent in the context of this decision.

Mr Sutton advised that his mother had become increasingly concerned about the lack of progress in resolving issues for the site given her advancing years. Mrs Neil was anxious about the lack of resolution of issues affecting her property. In this context, their preferred option would be for land to be purchased.

## Rhyolite Farm

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**From:** "Rhyolite Farm" <rhyolitefarm@gmail.com>

**To:** <info@boprc.govt.nz>

**Sent:** Wednesday, 13 December 2017 9:58 a.m.

**Subject:** state of resouce consents Matata lagoon, Awatarariki fanhead

good morning , this is a request for information regarding two resourse consents held buy the Whakatane district council , numbers- 64474 and 64647 , one of which has direct effect on family property in Clem Elliott drive Matata , could council please advise whether these are still running or have lapsed/expired and if so for how long ?

if they should need renewing are there more hearings and do the parties affected in the conditions get notification , and if being renewed can changes be made to conditions that have become more relevant after the passing of 10 years .

All information about these consents will be gratefully received ,

yous faithfully , Keith Sutton

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## Rhyolite Farm

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**From:** "Rhyolite Farm" <rhyolitefarm@gmail.com>

**To:** <info@boprc.govt.nz>

**Sent:** Friday, 9 February 2018 12:41 p.m.

**Subject:** QUERY of R/Cs

Good afternoon , back in Dec 2017 i made a query regarding two R/Cs taken out by the Whakatane District Council and got an automatic reply saying received , then what is meant to happen ?

Regards , Keith Sutton

(31)

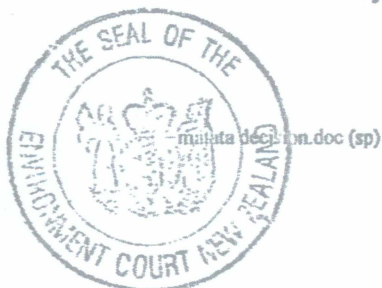
[10] Numerous battles were fought in the area contesting the gateway to the Rangitaiki Plains and we were told that many of the ancestral chiefs of Rangitihi had either died of their wounds in battle or gone to die in the dune swales on the foreshore of the harbour on the seaward side of Te Awa o te Atua.

[11] In addition the area was of considerable cultural importance for several reasons:

- (a) We understand that Ngati Rangitihi and other iwi recognised the domain of taniwha on the landward side of the Te Awa o te Atua outlet for several kilometres along the river's length which imposed certain constraints upon the type of activities that could be conducted there.
- (b) A number of significant battles between iwi were fought in this area, the most significant being a battle in 1863 or 1864 involving some 700 warriors including from Ngati Awa, and Ngati Rangitihi. The battle, we understand, raged in the area around the western side of the outlet to Te Awa o te Atua (Clem Elliott Drive area) and eventually warriors were driven upstream into the Awatarariki catchment with significant loss of life. This has made the area, (now known as the quarry area), of notable importance with respect to koiwi of Ngati Awa, and Ngati Rangitihi.

[12] In 1917 the Tarawera River was redirected through a cut of some 5km to the east of Matata and, since that time, the reach between the cut and Matata has become increasingly silted up. Until the 1950s the area was still open to the tidal influence and the effluent from the upstream industrial activities ponded in the lagoon area before the village and led to considerable concern. Eventually flapgates were installed and since then the water areas have re-established as lagoons.

[13] A 1939 debris flow down the Awatarariki catchment brought down koiwi, not only those of Ngati Rangitihi but also koiwi of other warriors in the major battles that have been fought in the area. Those koiwi were spread in the Clem Elliott Drive area particularly. The 2005 major debris flow brought down a much more significant flow and covered a far wider area. Nevertheless it is accepted that the debris includes koiwi of Ngati Rangitihi, Ngati Awa and Ngati Porou. Although not explicit, it appears that Tuwheratoa may also have koiwi in the area brought down by these debris flows.





### Te Awa o te Atua Proposals

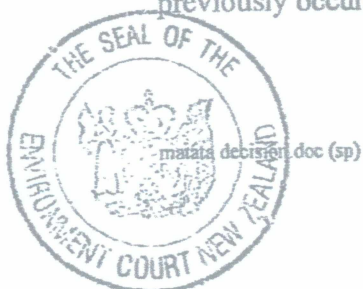
[36] The proposed Awatarariki stream works and the lagoon restoration works have been integrated so as to improve flow capacity through the stream system and provide increased flood protection. The use of floodbays to exclude flood flows and sediment from the lagoon are intended to facilitate the restoration and sustainability of the lagoon habitat.

[37] Flood Bay 1 is designed essentially to slow water down and provide an area for silt deposition to occur. It will need to be regularly maintained and Council estimates that it may have a life expectancy of up to 35 years with the removal of silt of around 100,000m<sup>3</sup> which is to be disposed of in the Railway lagoon area. Of course the length of time until the 100,000m<sup>3</sup> silt is deposited and removed is entirely dependent on the type of flood events which occur and the amounts of silts deposited in Flood Bay Area 1.

[38] The engineers were not able to give us an exact silt capacity of the Flood Bay 1 area but we understood it to be something in the vicinity of 20,000-30,000m<sup>3</sup>. There is also some capacity through the additional flood bays for silt deposition although only in the most major flood events would silt be deposited in the additional flood bays.

[39] In certain flow events, the flood bays would become full of water and, in most extreme scenarios, the floodwaters would overflow the central causeway to the eastern lagoon areas. In lower flows, the stream would be directed through Flood Bay 1 to Flood Bay 2 and thence into the restored lagoon areas. Water would flow through the restored lagoon areas into Flood Bay 5 and, thence, through the causeway culvert to the eastern Matata lagoons.

[40] The restored lagoons would be on the landward side of the Te Awa o te Atua lagoon where Council essentially seeks to recreate some open and shallow water areas by excavation. Further consideration by landscape architects and ecologists has led to an approach which would create varying water depths, enabling different indigenous plant species to be re-established in the area and, hopefully, re-establishing wildlife, particularly bird life, back into this area. A hope is that the depth of up to 2m of water would be able to be maintained by using the flood bay to avoid the siltation which has previously occurred. Although the lagoons are a relatively small area compared with the



preferable to reach appropriate accommodation to fill the Reserve Board land. It is nearly inevitable that any increase in the land height by using fill would significantly increase the usable area for the camp ground and enable the Board to consider an extension of the facilities on the site.

[139] In the end we have concluded that we should not assume that the Reserve Board will necessarily grant permission but note that the Council will not be able to implement the rehabilitation and flood bay aspects of the consents without such permission. If necessary they may be able to vary their consent to enable them to utilise the fill elsewhere (ie bunding around the camp ground) if they are not able to obtain consent.

[140] The Council considered they had reasonable prospects of gaining approval. Subsequent to the hearing, Mr Patterson as Chairman of the Reserve Board filed a memorandum advising that the Board by the casting vote of the Chairman (Mr Patterson) has rejected the Council's application to deposit fill. We note that DOC have given general approval and have control of the camp ground land (though delegated to the board). Although we cannot conclude that consent could not be obtained it would have been wise to ensure these approval prior to hearing rather than relying on further steps which may alter or delay the commencement of works.

### Maintenance

[141] It follows from our discussion that we consider that the maintenance of the flood bays and the other maintenance of the stream's lagoon works involved in these consents is generally appropriate and the best practicable option. Control of weed species and removal of silts serves hazard mitigation and amenity functions. In our view the use of the silt in the Railway Lagoon area will enable a proper completion of the debris fill areas and enable the rehabilitation to a much more natural contour and vegetation over coming years.

[142] The full benefit effect of the hazard mitigation will not be realised unless the area is maintained. To this end our view is that suitable access would need to be maintained so that the excavators and trucks could readily have access to Flood Bay 1 to remove silts and to enable ready transportation to the Railway Lagoon debris fill area. That of course follows as the best practicable option to achieve the objectives already outlined.



APPENDIX B.

## 4 A Review of Previous Debris Flow Events at Matatā

### 4.1 18 May 2005 Event

The 18 May 2005 event is moderately well documented, having being witnessed by a number of residents as well as being inspected by geologists and engineers from T&T and GNS Science<sup>1</sup> in the immediate aftermath of the disaster. A valuable record of observations was compiled by Dr the Hon Ian Shearer via a series of interviews conducted with residents who witnessed the event as it unfolded. Relevant extracts from Shearer (2005a) are presented in Appendix B.

Photographs of the aftermath of the 18 May 2005 event are presented in Appendix C to support the descriptions of the effects of the debris flows described within this report.

Based on aerial photograph interpretation, a debris distribution map has been prepared (Figure 5). From a consideration of the available information (provided in detail in previous T&T and GNS reports), we have assumed the following with respect to the 18 May 2005 event:

- The debris flow occurred in two main surges;
- The nature of the flow surges and the direction of travel of the debris was significantly affected by the blocking of the rail bridge by timber debris and by the presence of obstacles in the stream;
- The debris flows deposited some 250,000m<sup>3</sup> of debris on the fanhead with additional material lost to both the lagoon and ocean. A flow volume of 300,000m<sup>3</sup> has been assumed for the purposes of back analysis of the fanhead area;
- The rainfall that initiated the debris flows had a return period of between 200 to 500 years; and
- Flows across the upper fanhead reached depths in excess of 3m. Flows thinned rapidly as the debris moved away from the rail bridge.

A number of submissions from residents were received as a result of the draft version of this report being issued in November 2013. These reflected personal opinions on the extent of debris flow impact on a particular property during the 2005 event. These tended to be contradictory and of a small-enough scale that modifications the assessment were not justified.

### 4.2 Pre-2005 Events

Geomorphological evidence points to alluvial flood and debris flow events having formed the Awatarariki fanhead over the past several thousand years. Details supporting this, such as the presence of large boulders within the township as well as out at sea, have been presented in earlier T&T and GNS reports.

Shearer (2005b) undertook a review of historic flood events in and around Matatā. He lists 28 floods that have occurred in the eastern Bay of Plenty in the last 137 years, some of which are known to have affected Matatā. One event in 1869 destroyed a flour mill on what is presumed to be on the fan of Awatarariki Stream. It is thought that floods in 1906, 1939 and possibly 1950, may also have been associated with debris flows.

Mapping undertaken by both GNS and T&T indicates that low-angle alluvial/debris fans extend well out from the base of the Matatā Escarpment and beyond the area affected by the 18 May

<sup>1</sup> Then the Institute of Geological and Nuclear Sciences Limited

2005 event. The evidence for the presence of this material is subtle and may be related to lower-hazard alluvial processes rather than major debris flow events. Nevertheless, the presence of these deposits, together with other evidence, may suggest that debris flows larger than the 2005 event may have occurred in the distant past.

Based on the information available we conclude that:

- Large potentially destructive debris flows have previously occurred on the fanhead of the Awatarariki Stream, as well as other locations around Matatā;
- The 2005 debris flow event is expected to be classed as rare, with a return period of several hundred to a few thousand years rather than decades or many thousands of years;
- There is geomorphologic evidence of debris flows potentially much larger than the 18 May 2005 event having occurred previously; and
- There is some evidence for smaller debris flows and/or floods having affected the fanhead in approximately 50 year intervals.

IF I WANTED TO USE THIS TYPE OF TRANSCRIPT AS EVIDENCE SUPPORTING MY SUBMISSION, I COULD NOT, AS THE R.M.A STATES IT MUST STICK TO THE FACTS.

SO WHAT ABOUT THE EVIDENCE I AM SUBMITTING AGAINST?

# Draft Awatarariki Fanhead Strategy

## Risk Assessment

### Issues and Options Report

#### Consultation Meeting

Matata Tennis Club, Matata

21 January 2014

Name: Keith Sutton  
Property Address: 26/28 Clem Elliott Drive  
Postal Address: TBA  
Meeting With: Craig Batchelar  
Meeting Time: 3.00 pm

Mr Sutton felt that the entire area in the Clem Elliott Drive vicinity was in effect a "red zone" as a result of the Environment Court's decision to not allow any restoration or earthworks to be carried out in the area. He considers that the Council's hands are tied by this decision which in his view originates from central government and therefore requires central government intervention to resolve.

Mr Sutton is concerned that all of the options assume that there is the ability to undertake restoration earthworks to some degree. He feels that it is very important that the legal basis for undertaking these works is properly addressed before any further decisions are made.

Mr Sutton feels that much of the content in the risk assessment undertaken by Tonkin & Taylor is based on conjecture. He questions the conclusions on the return period for debris flow events of this magnitude. Evidence for this is that any debris flow within the last 100 – 200 years would have affected the course of the river that used to pass to the west along the coast to its mouth in the vicinity of Murphys Motor Camp. In his view, the risk assessment is an overstatement and the risks are actually minimal.

Mr Sutton referred to the resource consents that the Council holds for the deposition of debris material to the far western lagoon. He noted that this consent is likely to lapse in 2013 given that it has not been legally implemented. He referred to 4,800 cubic metres of material dumped in the far western lagoon and that Council had asserted it had undertaken this work as a permitted activity. Mr Sutton considered that the Council was not correct in its interpretation and that as a result of the dumping there were now obligations for Council to comply with the conditions of consent for the deposition area. These conditions include a requirement to raise building platforms on the land owned by his mother, Nola Neil.

Mr Sutton noted that part of his mother's site was restricted for development by coastal hazard lines.

Mr Sutton noted that he was advised by Council that there may be a connection to the proposed sewerage reticulation.

The suggestion made by Mr Bruce Stewart to use the debris material to raise building platforms in Clem Elliott Drive on his and Nola Neil's site was discussed. Mr Sutton was not opposed to this idea but reiterated concerns around the legality of undertaking restoration earthworks given the Environment Court decision. He confirmed earlier comments that Council needed to carefully check its ability to gain consent in the context of this decision.

Mr Sutton advised that his mother had become increasingly concerned about the lack of progress in resolving issues for the site given her advancing years. Mrs Neil was anxious about the lack of resolution of issues affecting her property. In this context, their preferred option would be for land to be purchased.

6/4/12

Copy Recd 29/10/02  
From EBOP Bldg

APPLICATION FOR RIGHT  
IN RESPECT OF NATURAL WATER

9/7/1990

MATATA

This application seeks permission to carry out certain works to minimise drainage and flooding problems in a residential area in Matata which is located between the Matata dump-site to the west and the Matata Wildlife Reserve to the east, as shown on the enclosed plan.

**Background**

The residential area north of Richmond Street forms part of a subdivision created in 1886. It lies partly in the old river-bed of the Tarawera River which in early times exited further west near Whitesands Motor Camp. Part of the river-bed is still occupied by the Matata Lagoon and remnant lagoons still exist, one on each side of the Matata refuse dump. Through most of the subdivision, the river-bed remains in a distinguishable form, but it has been modified by blowouts of the adjacent coastal foredune or by remoulding of the landscape within the subdivision. Of the ten lots in the area, only the two westernmost (Lots 316, 317) and the easternmost lot (Lot 4) are predominantly low-lying and subject to flooding but Council has recognised the potential for flooding or inundation by the sea and requires that the provisions of Section 641A of the Local Government Act 1974 apply over the total ten lots.

Some flooding of low-lying areas has occurred particularly over the last eighteen months which one of the residents in the subdivision contends is due solely to the dump operation. This is not accepted, but as the dump intrudes into the old river-bed its re-contouring forms part of the works proposed to alleviate flooding.

**Flooding Mechanisms**

The mechanisms causing flooding in the low-lying areas have been identified as being threefold - the first being the action of the sea during a combination of strong on-shore winds, coupled with high tides forcing the ground water table to rise substantially; the second being the overtopping of its banks by the Awatarariki Stream and reversing its flow away from the Matata Lagoon towards the dump-site, and the third, seepage from the stream flowing westwards raising the level of the remnant lagoons.

Considering each in turn:



6/4/13

1. The old river-bed is separated from the sea by the foredune only. At times of high tides coinciding with strong on-shore winds, ground-water is prevented from discharging to sea along the narrow coastal strip, forcing the water level in remnant lagoons to rise, flooding low-lying ground in Lots 316 and 317. The existing house on the second lot is well above any flood level from this source, its floor level being at RL 3.64 Moturiki Datum. When the wind and sea conditions abate somewhat the water levels rapidly drop.

2. **Awatarariki Stream.** This stream serves a catchment of 4 sq km located in the hills immediately south of the township. It flows through part of the residential area to discharge into the Matata Lagoon. Owing to the high silt load in the stream, the lower reaches have aggraded and this allows overtopping of low stop-banks during flood conditions. Water was able to flow westwards as well as eastwards, causing concern to the resident at the western end of the subdivision.

Regional and District Council staff agreed that training of the stream was the main requirement to a permanent solution but as an interim measure, obstructions such as trees and rocks were removed to improve channel flow. The main area of overflow was at the access into an old sand-pit area where the water would deposit its bed-load before flowing back into the Matata Lagoon or spill westwards. This overflow mechanism was favoured by Department of Conservation to help slow down the infilling of the wildlife reserve and it forms part of the overall control concept mentioned further on in this report.

To prevent westward flow of the flood-waters, a stop-bank was constructed running north-south from the access across the stream to the old sand-pit area.

3. **Stream Seepage.** During one period recently, the stream broke through the stop-bank at the access point to the sand-pit and continued to flow through the sand-pit and thence into the lagoon for several days. Weather conditions were good so it was puzzling to find the remnant lagoon levels to the west had risen quickly and remained at uncharacteristically high levels. When the overflow was blocked off, the lagoons dropped very quickly back to normal. This has happened several times and has established that a very open seepage path exists between the sand-pit area and areas to the west. Moreover it has been found that seepage is direct from the overflow stream and not the adjacent ponding area because water levels in the latter remain constant for days once the overflow has been cut off.

6/4/14

## Remedial Measures

Observations over the last two years have shown the sources of flooding to be varied, inter-related to a degree and quite complex.

Training of the stream is seen to be first priority and survey and calculations have been carried out to determine works required to contain fifty year, twenty year, and five year return period events. The cost of providing protection for fifty and twenty year events was \$100,000 and \$54,500 respectively, and in view of the very small area of benefit, Council has elected to provide protection against five year events which is the accepted standard in urban situations.

During a five year event, stream flow is calculated to be twelve cumecs. Restrictions downstream of the sand-pit crossing show the need to spill half this flow (6,000 l/s) into the sand-pit area by way of a weir built to a crest level of 3.8m Moturiki Datum, but this will be a maximum as Council is negotiating with Department of Conservation to have this portion of the channel cleared.

More channel clearing is also required immediately upstream of the proposed weir adjacent to Department of Conservation land and to the unoccupied easternmost section (Lot 4) to pass the design flow and the intention is to stage this as development takes place in the future.

To cater for seepage back through the subdivision in a westerly direction, it is intended to lay a 600mm diameter balancing culvert between the remnant lagoons either side of the dump-site. The invert level chosen is 1.0 Moturiki Datum which is the "normal" level of the largest of the remnant lagoons. As the name implies, the culvert will allow water levels to balance but will also allow passage of some flood-waters which may flow overland from the Awatarariki Stream down the old river-bed.

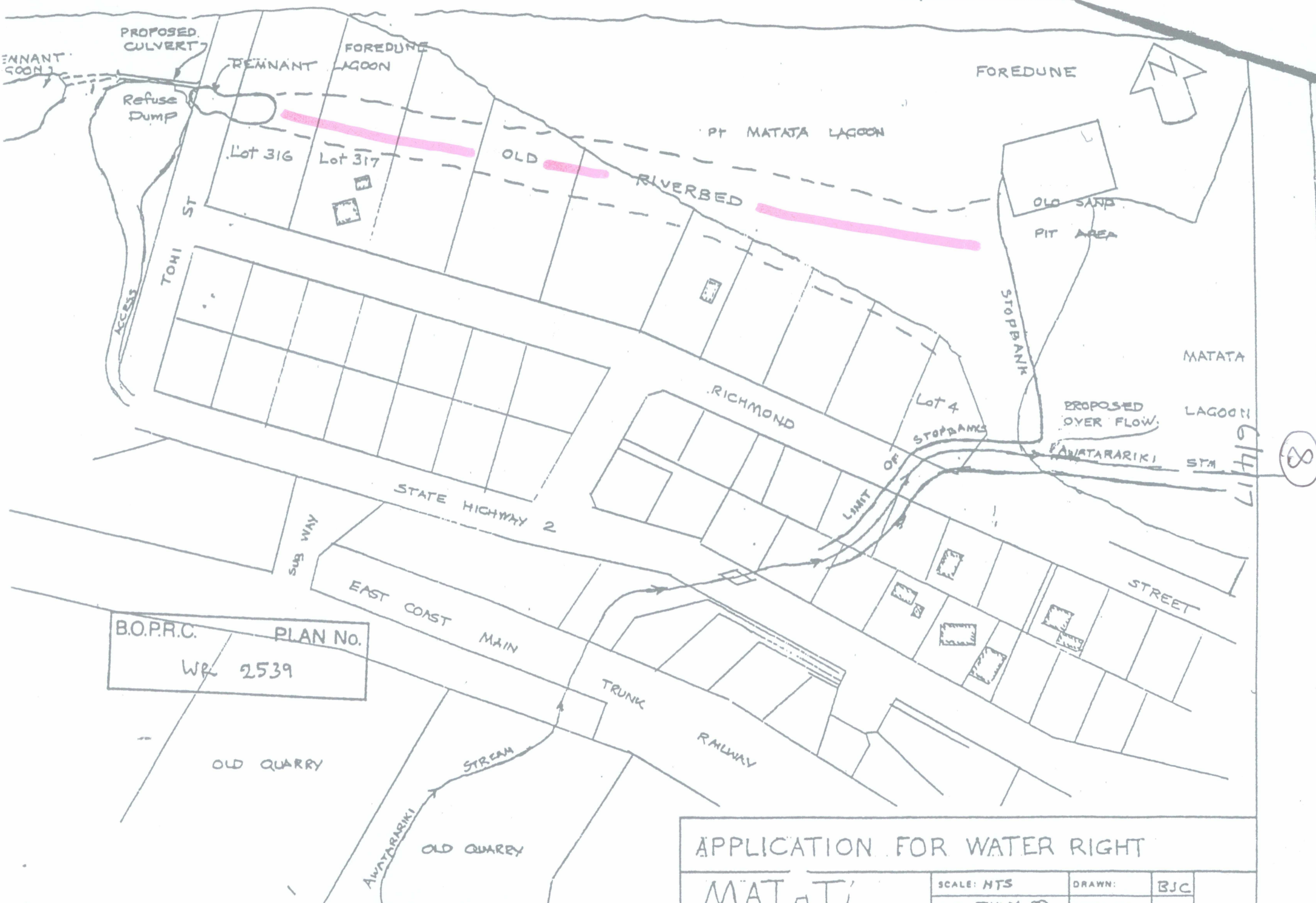
As mentioned earlier, the closed rubbish dump is to be re-contoured and used as recreation reserve. Forming part of the contouring will be the formation of a wide dished channel near the northern end of the dump having an invert level of 1.60 Moturiki Datum. This will take any flows in excess of those passing through the culvert and, in tandem with the culvert, will minimise section flooding of Lots 316 and 317.

## Conclusion

It has been difficult to quantify actual discharges because of the mechanisms involved. It is hoped that the proposed works will therefore be accepted as a practical solution to the problems outlined and a water right issued accordingly.

*B. J. Crossen*  
B J Crossen  
CHIEF ENGINEER

⑦



B.O.P.R.C. PLAN No.  
WR 2539

APPLICATION FOR WATER RIGHT  
MATATI

SCALE: MTS	DRAWN: BJC
DATE: JULY 89	APPROVED:

6/4/17



4/6/3

31/1

WORKS AND SERVICES COMMITTEE

WEDNESDAY, 28 MARCH 1990

MATATA REFUSE DUMP AND ENVIRONS - DRAINAGE

1. PREAMBLE

During the last term of Council, many meetings were held to try and resolve drainage and flooding problems between the Matata dump-site and the Matata Lagoon preparatory to the dump being re-contoured and turned into an area available for recreational use. Had the area adjacent to the dump been reserve the problem would not have arisen, but the remnant lagoon system is partially contained within a very old residential area. Council has tagged the residential area as requiring to abide by the provisions of Section 641a of the Local Government Act 1974, i.e. dwellings are required to be relocateable. As well as that, staff set minimum floor levels.

The mechanisms causing flooding in the low-lying areas have been identified as being two-fold - the first being the action of waves during a combination of high tides and strong on-shore winds forcing the ground water table to rise substantially; and the second, the Awatarariki Stream over-topping its banks and reversing its flow away from the Matata Lagoon towards the dump-site.

Council, specialist advisers and staff agreed that training of the stream was the main requirement to a permanent solution, and as a start, a stop-bank was constructed across an old sand-pit area (which is designed to be used as an overflow area but which allowed the stream initially to reverse its flow) pending detailed design and costing of a scheme.

Having removed that source of flooding, Council accepted that any flooding in the residential area owing to ground water rises could be adequately catered for by re-contouring the dump-site so that natural ground-level could be retained at the north end of the dump to allow for spill-over from one lagoon to the next. This was felt to be the lowest acceptable level to work to in view of the fragile nature of the fore-dune. The recommendation adopted by Council was:

*"THAT Council reinstate the ground north of the Matata Dump between the Neale and White-sands Lagoons by a wide dished channel having an invert level of 2.3m Moturiki Datum".*

This proposal has been strenuously resisted by Mrs Neale who claims that Council has blatantly blocked the waterway, thus causing flooding of her property.

4/6/4

## 2. NEW INFORMATION

Since resolving the problems in the manner above, the Awatarariki Stream has flooded in minor fashion and over-topped a low stop-bank along the access track to the sand-pit area and flowed into the pit in accordance with the design concept. On one occasion, portion of the stream continued to flow into this area for a number of days when ground water levels were reported rising in the total lagoon system to the west, even though sea conditions were stable; there were no spring tides nor any rain. After an inspection for probable cause, the flow into the sand-pit was re-directed back into the main stream. Almost immediately, the ground water levels dropped and reached normal after about 24 hours. This has happened twice over the last few months and can only be attributable to rapid seepage from the deviated flow. Thus, in promoting the concept of dividing flood flows to lessen back-water effects and minimise sedimentation in the main channel, Council has now to recognise there will be times of rapid underground water movement to the west.

Superimposed on this will be stormwater discharge into the Neale lagoon as and when development of Kaakaoroa Road and adjacent sections takes place. It is understood that the Community Board is keen to promote this in the near future.

## 3. AWATARARIKI STREAM TRAINING

Last year a report was presented outlining the work to be done to train the stream and provide protection against a one-in-fifty-year storm event. The work consisted mainly of widening the stream channel, building stop-banks and providing an overflow weir into the old sand-pit area. Cost of the project was \$100 000. Since the area of benefit was extremely small for such an outlay, Council asked staff to re-assess the design to provide protection for twenty-year and five-year return period storms (the latter being the normal design level for urban areas). Estimates for these works are \$54,500 and \$26,000 respectively. A significant factor is that no matter what option is looked at, the area of benefit remains very small as demonstrated on the plan enclosed.

## 4. WHERE DO WE GO FROM HERE?

Adopting the cheapest stream training scheme will only provide minimal protection to the lots affected and because of the peculiar nature of the flow-path to the west, will not relieve flash-flooding of the properties adjacent to the dump.

4/6/5

Taking all the observations above into account, the most practical and cost-effective solution in my view is to re-contour the dump-site to a level of 2.0m Moturiki which will provide an adequate waterway to pass any flood peaks into the White-sands Lagoon and in addition provide a culvert at a slightly lower level to control the residue. This can be achieved for a sum of \$9 000, being \$7 000 for culverting and \$2 000 to provide a permanent overflow weir on the Awatarariki Stream, and carry out minor stream-bed works. DOC is formulating a management plan for the lower reaches of the stream where it flows into the lagoon which should benefit the situation in time to come.

**RECOMMENDATION:**

THAT Council modify its earlier scheme by re-contouring the ground to the north of the dump-site to R.L.2.0m Moturiki Datum in conjunction with the installation of a 600mm culvert, to take off peak flows and carry out minor stream works (in the Awatarariki Stream for an estimated sum of \$9 000)

at a level below R.L.1.44m set  
by Ward Member and C.E.

B J Crossen  
CHIEF ENGINEER

C:\REPORTS\WORKS\WSMARMRD

6/4/9

# BAY OF PLENTY **REGIONAL** COUNCIL

**REPORT TO:** R B Gardner  
**Manager Environmental Regulation and Monitoring**

**FROM:** P D Dine  
**Manager Design**

**DATE:** 4 April 1991

**FILE REFERENCE:** 1370 02 2539

**SUBJECT:** WATER RIGHT APPLICATION NO 2539 -  
WHAKATANE DISTRICT COUNCIL

---

## 1.0 **INTRODUCTION**

My name is Peter Dine. I am employed as Manager Design by the Bay of Plenty Regional Council.

I will present evidence on:

- (a) Existing flooding within the Richmond Street North sub-division.
- (b) The effects of the works proposed by the Whakatane District Council.

## 2.0 **BACKGROUND**

The above application concerns works required to mitigate flooding of residential sections in the northern end of Richmond Street, Matata. Part of the sub-division lies in an old bed of the Tarawera River. Specifically the proposals will protect the area from flooding from the Awatarariki Stream, with a return period of 5 years. The proposal also sets out to reduce the effects of flooding with stream floods of a greater frequency than five years.

## 3.0 **FLOODING IN SUBDIVISION**

The Regional Council does not have any records of flooding in this area but some data has been obtained from the District Council. Specifically data at normal water levels, during Cyclone Bola, and the storm of 22 January 1989 have been studied. It would appear that overflows from the Awatarariki Stream, only in very large events directly enter the subdivided area. Most water enters the subdivision by way of percolation, direct from the stream, and ponding in the

6/4/10

sand pit. This percolation is understandably rapid in the porous sands in the area. It would be reasonable to assume that this is not the only groundwater entering the lagoon system, and there is also the possibility that elevated sea levels will induce seepage though I understand no evidence of salt water has been detected.

Drainage of the lagoon system is via seepage which must be directly controlled by sea levels. Clearly elevated sea levels will restrict drainage.

#### 4.0 DISTRICT COUNCIL PROPOSAL

The applicant wishes to train the lower portion of the stream and provide for a controlled overflow into the old sand-pit area. This will be a big improvement on the existing situation where flows as low as 1 cumec would spill into the sandpit area. The works will also prevent any direct flow to the sub-division. The controlled overflow will only come into operation when flows exceed 6 cumecs and during the design storm a total of 37,000m<sup>3</sup> of water will be spilt. This water then, can percolate directly to the sea, to Matata Lagoon or into the sub-division. Should as much as 50% of this water find its way into the remnant lagoons it will result in a rise in water level of slightly more than 1.0m. This situation would be an absolute extreme as it has assumed no drainage of the lagoon over a period of several hours, a condition which could only be reached should the whole area become sealed. There is however an unknown amount of additional seepage from other sources which elevate lagoon levels.

#### 5.0 CYCLONE BOLA EVENT

This event had relatively high sea levels but fairly insignificant rainfall. The house lagoon level rose to RL 1.7m but dropped rapidly. The White Sands lagoon rose to RF 1.3m but dropped more slowly.

#### 6.0 JANUARY 1989 EVENT

This event had very high rainfall (about 5 year return period over 24 hours) and resulted in levels of RL 2.16m and RL 1.90m in the House and White Sands Lagoons respectively. The conclusion drawn from these figures is that the small house lagoon responds more rapidly and severely to both sea and storm and rain storm events. Providing a direct connection between these two lagoons will clearly reduce the height to which the House Lagoon is currently subject to but will also increase the time elevated water levels occur. The lagoons were at one time naturally connected but the Matata dump has cut this connection and reduced the size of the House Lagoon.

#### 7.0 OBJECTIONS

Some of the objections to the application have been addressed in the text above but taking each in turn.

7.1 Flooding of the Residential sub-division is partly attributable to overflows from the Awatarariki Stream.



C)4/11

- 7.2 This flooding will undoubtedly cause hardship but to some extent will be unavoidable because of the very low lying old river bed area being subject to large seepage flows.
- 7.3 A degree of flooding could be expected with every major sea storm or rainfall event. Levels up to RL 1.5m could be expected perhaps annually.
- 7.4 Further development within the approved sub-division will not effect flooding as soils are so porous, water will find its way to the water table almost immediately, irrespective of the amount of development. The rate water runs off the area will not affect the water table. Further sub-division will be subject to planning approval and it is unlikely that such approvals would be given which could affect this area. There would appear to be little scope for subdivision anyway within the area.
- 7.5 The stream is not being diverted as such, but controlled to spill a certain volume of water, into an area where it currently spills naturally.

#### 8.0 CONCLUSIONS

The main conclusions to be drawn are:-

- (a) The District Council proposal is sound in that it will improve the current situation.
- (b) The proposed "balancing" culvert will reduce the level of flooding in the house lagoon and is of sufficient size and correct level.
- (c) The subdivision will always be subject to some degree of flooding.
- (d) The old Matata dump has aggravated the situation mainly in reducing the area available for ponding. Overall the effect is small.

*P D Dine*  
P D Dine  
**MANAGER DESIGN**

(41)

No 12539/3

**BAY OF PLENTY REGIONAL COUNCIL**

**RIGHT IN RESPECT OF NATURAL WATER**

Pursuant to Section 16(1)(d) of the Final Reorganisation Scheme for the Bay of Plenty Region and Section 21(3) of the Water and Soil Conservation Act 1967, **THE BAY OF PLENTY REGIONAL COUNCIL**, by a decision dated 16 May 1991, **HEREBY GRANTS** to:

WHAKATANE DISTRICT COUNCIL

Private Bag  
WHAKATANE

a right to **DIVERT AND DISCHARGE WATER FLOWS VIA A BALANCING CULVERT BETWEEN TWO EXISTING REMNANT LAGOONS** subject to the following conditions:

1. **PURPOSE**

For the purpose of balancing levels between two remnant lagoons (known as Neale Lagoon and White Sands Lagoon) in a former bed of the Tarawera River.

2. **LOCATION**

Balancing weir to be installed as shown on BOPRC Plan No WR2539 submitted with the application.

3. **MAP REFERENCE**

NZMS 260 V15:395620

4. **WORKS**

4.1 The balancing culvert shall be installed in accordance with the proposal set out in the report, "Application for Right in Respect of Natural Water - Matata", accompanying the application.

4.2 The invert level of the balancing culvert shall be set at 1.0m (Moturiki datum).

4.3 The Grantee shall, to the satisfaction of the General Manager of the Regional Council or his delegate, take every care during the works to minimise the discharge of sediment to natural water.

4.4 Protection measures, to the satisfaction of the General Manager of the Regional Council or his delegate, shall be installed by the Grantee at each end of the balancing culvert to minimise erosion.

(15)

- 4.5 The Grantee shall, to the satisfaction of the General Manager of the Regional Council or his delegate, install screens at each end of the balancing culvert to prevent blockage of the culvert.
- 4.6 The Grantee shall install a wide dished channel along the same alignment as the balancing culvert to convey flows in excess of those passing through the balancing culvert.
- 4.7 The invert level of the dished channel shall be 1.6m (Moturiki datum).
- 4.8 The Grantee shall to the satisfaction of the General Manager of the Regional Council or his delegate, maintain the dished channel in a condition which will ensure the free passage of excess surface water between the two lagoons.

5. **TERM OF RIGHT**

This Right shall terminate on 31 May 2002.

6. **THE RIGHT** hereby authorised is granted under the Water and Soil Conservation Act 1967 and does not constitute an authority under any other Act, Regulation or By-Law.
7. **THE REGIONAL COUNCIL** is to be excluded from any liability for loss or damage to the Grantee's structures or works in the event of flood, or for damage caused to any land in the event of flood water reaching such land due to any works or actions taken by the Grantee in respect of this Right.

DATED at Whakatane this 22nd day of July 1991

For and on behalf of  
The Bay of Plenty Regional Council

  
**J A JONES**  
**GENERAL MANAGER**

**Rhyolite Farm**

**From:** "Rhyolite Farm" <rhyolitefarm@gmail.com>  
**To:** <planning@whakatane.govt.nz>  
**Cc:** <fanhead@boprc.govt.nz>  
**Sent:** Friday, 18 May 2018 12:00 p.m.  
**Subject:** A.G.S Journal L.R.M , comment

Dear Councils , After 13 years to the day, you have found yet another good way to further irritate , frustrate and stress the victims of a disaster by giving them a scientific journal to read and pass comment on .

i had trouble with the abbreviations used with no legend to help , my intial reaction was W.T.F , which i can tell you is , Wonderful Truly Fantastic , which is more than i can say about the A.G.S chairmans column on page V talking about measuring and recording of C.P.D , which i still have no clue to the meaning of after reading the journal , i wonder if you can understand how that sets a layman up for trying to take in the next 260 pages that followed .

The journal falls short on purpose , as it is AUSTRALIAN , based on a sun baked country with long dry periods [ sometimes years ] and then cyclones to saturate the soils and activate the next landslide . It has no comparison with the land of the long white clouds climate .

Even their assessment of the Pittwater area falls flat. In that of the 193 landslides in 34 years only 7 were natural slope failures , 25 where rockfalls from coastal cliffs and the other 161 , thats 161 where cut and fills from building of houses , thats building of houses on slopes , no one is building houses up in the Awatarariki catchment behind Matata causing slips , so a non applicable report in an irrelevant journal to Matata's geology .

There is one 10 lettered word we use a lot here in New Zealand with relation to landslide disasters , and i did not see one mention of it in the 269 pages , so that proves just how dissimilar our countries are , and how using this journal for anything in NZ would not pass scrutiny, in say the environment court .

In conclusion , council may have purchased the wrong journal , find the one that outlines when the next rainfall event , like the one 13 years ago is likely to hit Matata , that journal will prove what the state of risk on the fanhead is , because to date council have only written the word HIGH and could just as easily have written LOW , without a rainfall journal council are left with no proof the risk is HIGH , landslides and log dams have been coming and going in the Awatarariki catchment for hundreds of years, it was very high rainfall that caused the problem, so please, find a rainfall journal and swap it for this one on landslides.

Yours faithfully,

Keith Sutton ,

for myself and on behalf of my

mother Nola Neale

And a challenge to anyone with time to spare -  
 find the meaning of C.P.D on page v , using only the journal  
 because i will ask what page it was on  
 and if you find the 10 lettered word earthquake  
 what page that was on , good luck

## MATATA

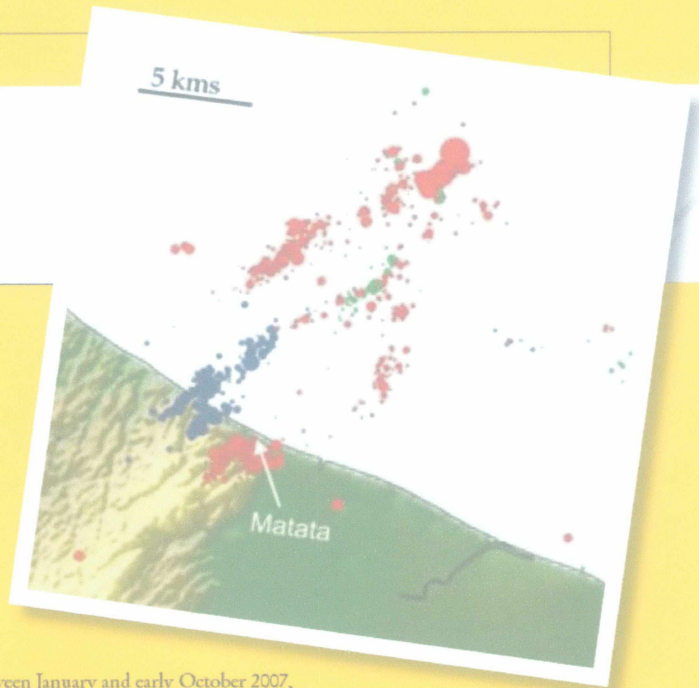
# EARTHQUAKE SWARM

The central North Island is well known for its active volcanoes, but it also experiences lots of relatively small, very shallow earthquakes. Many of these earthquakes occur in swarms, sequences of many tens or even hundreds of events in a small area without a clear largest event.

What distinguishes earthquakes in the central North Island is that they are very shallow, usually less than 10 km deep. This means that even relatively small earthquakes can be felt quite strongly close to their source.

In January 2005 an earthquake swarm started just a few kilometres west of the small Bay of Plenty coastal settlement of Matata. At first GNS Science seismologists thought it would follow the pattern of most swarms, quite intense activity for a few days after which it would die away. However the swarm steadily grew and peaked in April when GeoNet located more than 10 earthquakes a day in the area with the largest earthquake being magnitude 4.1. In August the swarm started to settle down and by December the earthquakes had almost stopped. By the end of 2005, GeoNet had located more than a thousand earthquakes in the Matata area.

Through most of 2006 Matata was quiet, but in December the earthquakes started again. This time about half were near Matata and the rest beneath the sea about 10 km to the north. The number of earthquakes peaked in April and May, the largest being magnitude 4.2 on April 3. The earthquakes then followed the same pattern as 2005 and started to slowly die away. Seismologists were surprised when the swarm suddenly picked up again in September with four earthquakes above magnitude 4, including two shakes of magnitude 4.7 and 4.5 early on the morning of September 30. The largest of these was felt along the Bay of Plenty coast from Waihi to Opotiki and as far south as Rotorua. GeoNet received more than 400 felt reports via its web-based felt reporting system. The magnitude 4.7 earthquake was felt most strongly in Matata and Edgecumbe where some reported it strong enough to do minor damage.



Between January and early October 2007, GeoNet located another thousand earthquakes in the Matata area, with two new permanent sites close to Matata helping collect additional data on the swarm.

By using the detailed recordings of the earthquake waves recorded by nearby GeoNet seismographs, Stephen Bannister from GNS Science has been able to show that the earthquakes are occurring in several distinct groups, both close to Matata and out to sea in a north-easterly direction. The area around Matata has many distinct north-easterly trending active fault lines, so it is likely that the earthquakes are produced by movement on some of these faults. Fellow GNS scientist Tony Hurst has shown that the style of faulting that caused the 2005 earthquakes is consistent with these north-easterly trending active fault lines and possibly a result of crustal extension in a northwest-southeast direction. For these reasons seismologists think it is unlikely that some kind of volcanic activity is going on beneath the Bay of Plenty.

One of the great difficulties in dealing with earthquake swarms is the fact that they often don't follow the mainshock-aftershock pattern. For this reason seismologists don't know how long a swarm will continue and the size of the largest earthquake that might be expected. Victoria University seismologist Euan Smith and international collaborators are now planning to use the GeoNet earthquake database to look for patterns in other central North Island earthquake swarms and try to answer some of these questions.

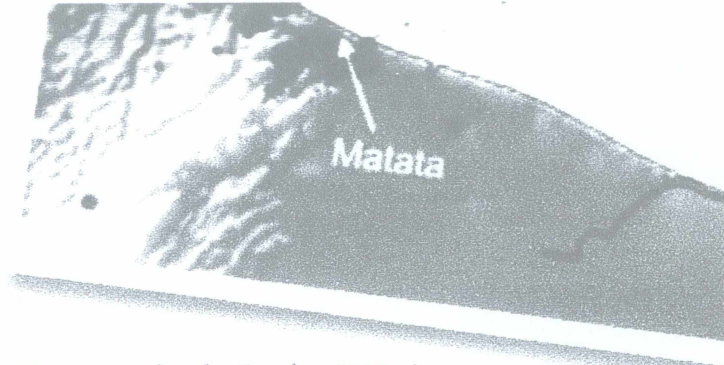
In the meantime the GeoNet seismographs continue to keep a close watch on the Matata area and you can follow the bigger shakes on the GeoNet website.

Contact: Steve Sherburn  
Email: s.sherburn@gns.cri.nz

### Above:

The complex, changing pattern of where the Matata earthquakes have actually occurred. 2005 earthquakes are shown in blue, 2006 in green, and red circles show the 2007 activity. The burst of large earthquakes in late September 2007 is shown by the largest red circles. The lineations suggest that the earthquakes are occurring on active fault lines.

GeoNet - 7



Above:  
The complex, changing of where the Matata earthquakes have actually occurred 2005 earthquakes are shown in green, and red the 2007 activity. The largest earthquakes in late September is shown by the largest circles. The lineations suggest earthquakes are occurring on active fault lines.

What distinguishes earthquakes in the central North Island is that they are very shallow, usually less than 10 km deep. This means that even relatively small earthquakes can be felt quite strongly close to their source.

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→ THEN ON THE 18<sup>TH</sup> MAY 2005 YOU KNOW WHAT HAPPENED.

NORFOLK PINE ON MY MOTHERS  
SECTIONS 28, 32

CLEM ELLIOT DRIVE



20

SILT POND 1, RECENTLY EMPTIED  
PHOTO 7/9/18

