

Date:	Thursday 28 March 2024
Time:	9:30 am
Meeting Room:	Tasman Council Chamber
Venue:	189 Queen Street, Richmond

Tasman District Council

Kaunihera Katoa

MINUTES ATTACHMENTS

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Welcoming C	ommunit	ies Advisory Group	
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Hugh Challies	s - Stop b	bank failure in the lower reaches of the Waimea River	
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Tasman District Council Welcoming Communities Advisory Group

Represented by Yuki Yoda, Motueka High School Sally Carlton, English Language Partners

https://www.immigration.govt.nz/about-us/what-we-do/welcoming-communities/ https://www.tasman.govt.nz/my-community/community-support/welcoming-communities/

Part I - Motueka High School

- Co-education, state secondary school
- 746 students between Year 9 and Year 13
- Only secondary school in Motueka area





Student Demographic at Motueka High School

Total number of students 2024 - 746

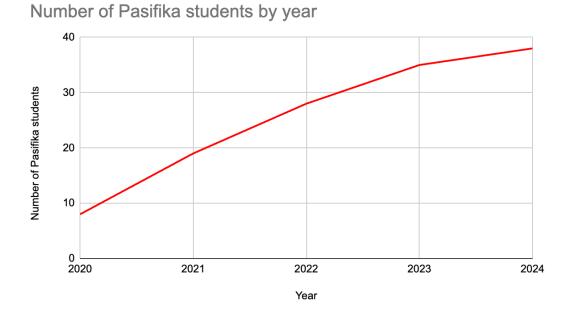
New Zealand European 548 (73.5%) Māori 125 (16.8%) Asian 44 (5.9%) Pasifika 38 (5.1%) MELAA 5 (0.7%) Others 1 (0.13%)

*The total number of statements does not match the current number of students, because some students state two or more ethnicities.



Trend - Rapid increase of Pasifika students

Numbers of Pasifika students between 2020 and 2024



2020 - 8 students 2021 - 19 students 2022 - 28 students 2023 - 35 students 2024 - 38 students



What we are doing?

Celebrating our diversity

- Pasifika Celebration Week 18 22 March 2024
- Pacific Language Weeks 2023 language quiz, etc
- International language week 2023 poster making
- Welcoming Week 2023 International breakfast



What kind of support is needed?

A student's voice (Immigrant from Asia)

"Our parents don't want to come to school because they are not confident about English".

Support for language(ESOL) and communication for immigrant families/whānau (adults) are required.



Part II - English language supp



English Language Partners

- National not-for-profit (22 centres around the country)
- Currently no dedicated presence in Tasman (West Coast is the only other region with no centre)
- Nelson ELP has a class in Stoke and has been planning to establish one in Richmond (when the number of former refugees resettled in the region allows)
- First former refugee family recently resettled in Richmond and Red Cross expects this to increase (housing dependent)
- ELP has been working with employers in the region who employ former refugee and migrant staff Tasman region is a large employer of newly resettled migrant workers

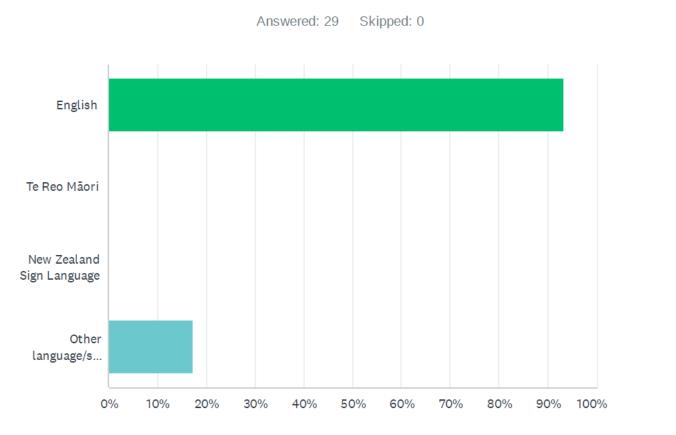
Other English language support in Tasman

- Conversation class at Richmond Library
 - Free
 - Weekly
 - Approx. 10 attendees every session
- Class at Richmond Baptist Church
 - Free
 - Weekly
 - Approx. 50 learners per week
- ESOL classes at Richmond and Motueka primary and high schools
- Other classes?

Part III - Primary school survey

- Survey of 3x Junior classes (Years 1 and 2)
- 29 responses
- Total of maybe 45-50 families
- i.e. Approx one-third of families participated

21 What language/s does your family speak at home? (Select all that apply)

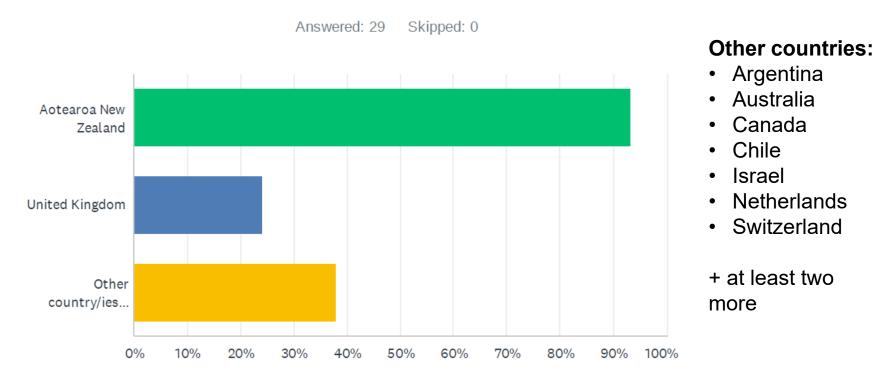


Other languages:

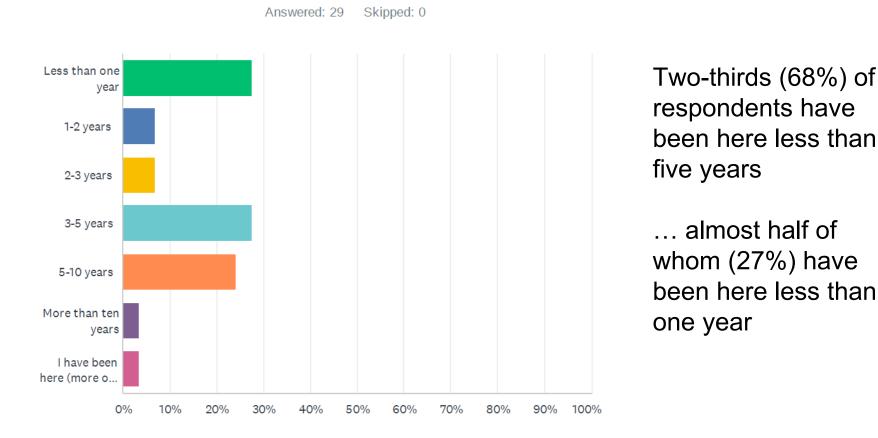
- Dutch
- French
- German
- Hebrew
- Spanish
- Swiss German

+ at least two more

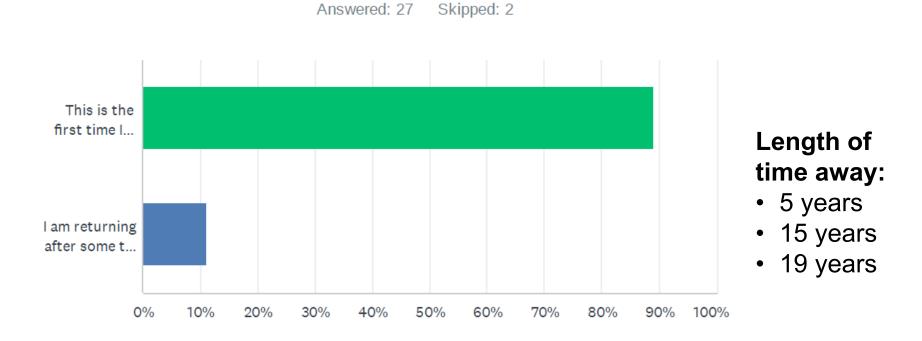
Q2 From which country/ies do members of your family have Citizenship or Permanent Residency? (Select all that apply)



Q3 How long have you been living within 15-20 minutes' drive from the school your child now attends?

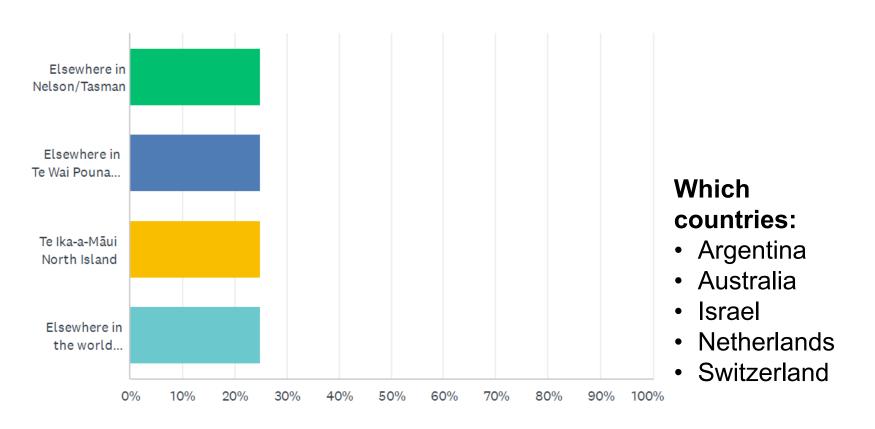


Q4 If you have moved to the area, is this the first time you have lived here, or are you returning after some time away?

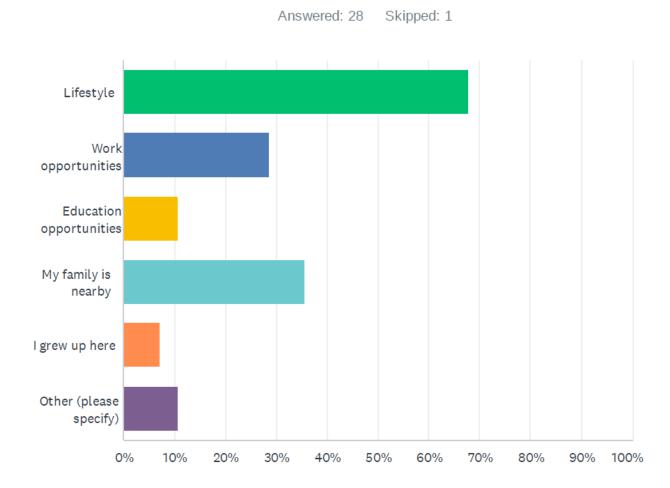


Q5 If you have moved to the area, where did you move from?

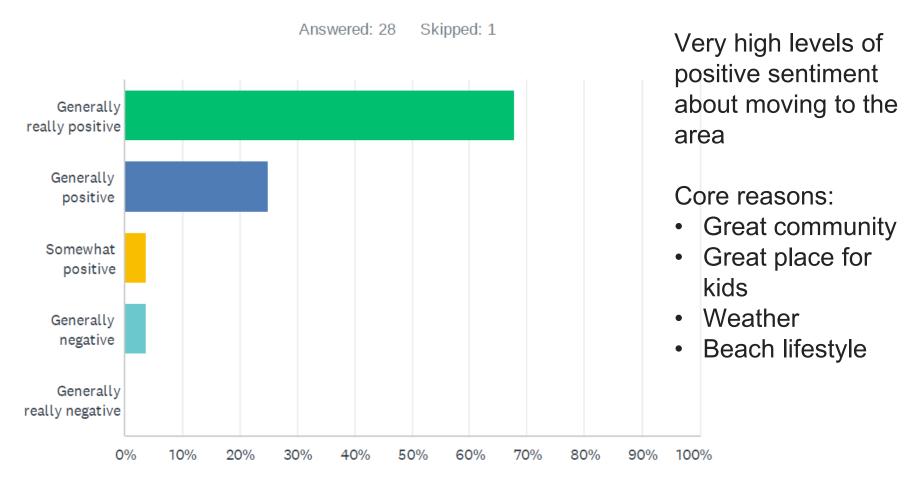




Q6 Why did you move to the area? (Select all that apply)



Q7 How do you feel about the move?



Q8 Reflections on moving to and settling in this area:What information / networks / etc. did you find helpful when you moved here? What information / networks / etc. might have helped you settle better, do you think?Any other comments or suggestions?

- Very few respondents seemed to receive any 'formal' information when they arrived
- Respondents have made their own communities and found out their own information through meeting others and attending local spaces to connect

Q9 Reflections on staying in this area: If you are thinking about (or in the future might think about) leaving the area, why? What might help you decide to stay? Any other comments or suggestions?

Reasons given for possibly leaving Tasman:

- No high school
- Lack of activities / community facilities for older children
- Cost of living / house prices
- Limited employment opportunities

Survey summary

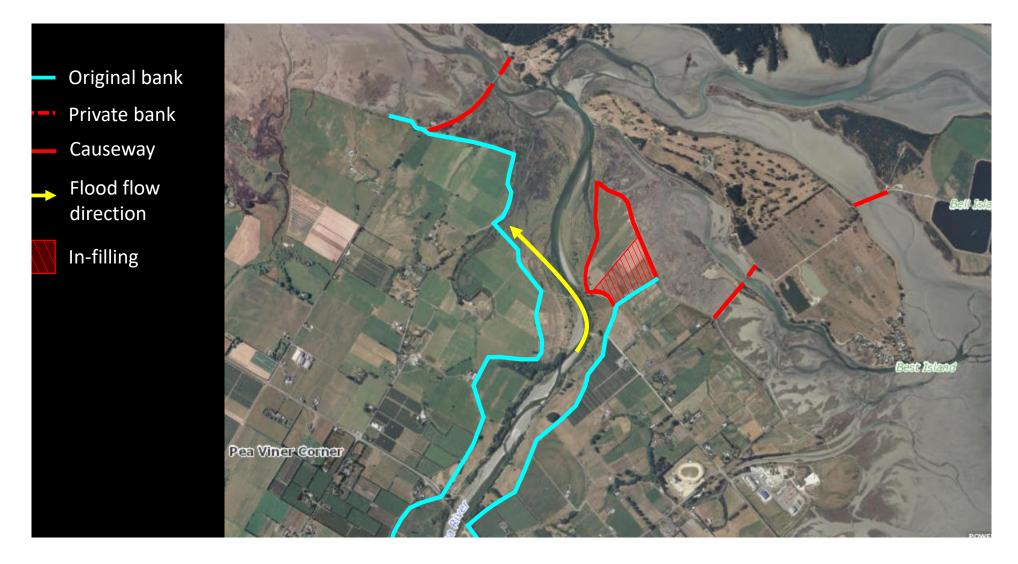
- There are lots of recent arrivals
- Most of these arrivals are of Western European descent
- They have arrived from all over the place (from within the region, from elsewhere in NZ and from overseas)
- Most of these new arrivals have moved here for the first time
- There is a relatively high level of linguistic diversity within this cohort primarily Western European languages
- ... and my hunch is that the newcomer / diversity results would be even higher if all families had responded to the survey

Part IV - What does this all mean?

- The numbers of migrants in Tasman is increasing
- Former refugees may increasingly be resettled into Richmond
- Newcomers to the region come from overseas but also within Aotearoa
- We have a great deal of diversity already here in Tasman, even if it is not readily 'visible' (large numbers of Western European migrants)
- The area is attracting people with young children
- We currently have only limited English language support in the region

Questions to ponder

- How much is migration changing the 'traditional' demographics of the region (ethnicity, language, age, employment)?
- How can we retain our newcomers especially with our ageing population?
- · How can we better celebrate and raise awareness of this diversity?
- How can we better support our diverse communities (e.g. to access information, improve their English, develop local networks, participate in community life)?
- How do we factor these demographic changes into TDC's planning processes?



March 2014

Report on developments near the mouth of the Waimea River over the last 50 years

Contents

pages 2-12

Copy of correspondence I have had with TDC regarding the above matter.

Pages 13-14

Brief history of flooding from 1960s, and map showing extent.

Pages 15-16

Effect of causeways.

Pages 17-18

Report on flood of 20/8/2022 with diagram.

Pages 19-21 Historical report on 1980s flooding and previous.

Page 22

Copy of address 28/3/24

From

G H Challies 139 Cotterell Rd Appleby, 23/6/11.

to

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Manager River-works Tasman District Council, Richmond.

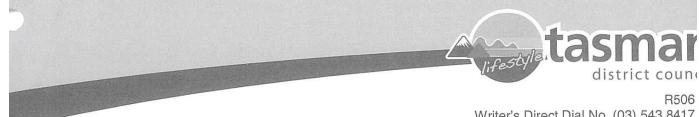
Dear Sir/Madam,

The following comments relate to River works from North of the Appleby River Bridge to Redwoods Rd (West side)

Regarding the recent May flood in the Waimea River. At peak I observed the water level at the stop-bank in the vicinity of the Pearl Creek Causeway. I would estimate it to have been approx 400mm from the crest. At the same time north of the Appleby bridge the river was covering the berm-lands, but two thirds of the river bank was above water level. Tides at the time were dead low and not an influence. I am convinced that if the flood peak had coincided with an 11 O'clock Tide the stop bank would have been over topped at the Pearl Creek causeway, In the way it was several times in the past before the bank was raised to its current level. I recall D Nottage the engineer who oversaw the last upgrading telling us we would have greater protection than people further up stream. This no longer appears to be the case. For the effectiveness of the scheme to be sustained it is necessary to maintain a static riverbed level North of the Appleby bridge. According to K Beck a past TDC engineer, a contributing factor to past failures was that the Riverbed had been allowed to rise 1m. (gravel build up) The bed was subsequently lowered. I understand that trig points are in place so trends in bed levels can be monitored. Could you advise me how often this profile information is upgraded, and whether a static riverbed level is being maintained North of the Appleby bridge.

Failures in the past have resulted in 90% of this property being inundated the house flooded, and livestock with nowhere to go, so I hope you can appreciate my grave concern in this matter, and I look forward to hearing from you.

Yours Faithfully,



Writer's Direct Dial No. (03) 543 8417 Writer's E-mail: eric.verstappen@tasman.govt.nz

28 June 2011

Mr G H Challies 139 Cotterell Road RD 1 Richmond 7081

Dear Mr Challies

WAIMEA RIVER WORKS

Thank you for your letter of 23 June 2011 that has been passed on to me to respond.

Council has maintained a river survey monitoring program for the Waimea River for several decades. The cross section network has historically been surveyed every 4-5 years, the last three occasions being 1997, 2001 and 2005. The survey period has been extended a little for a number of reasons that also include observations of bed level trends over recent surveys. The river is due for resurvey again this summer.

Council is trying to manage the riverbed level so that it is generally at a stable level. Since 1997, the mean bed level below the bridge has changed less than 0.2 metres and nearer the rivermouth has dropped a little. Landcare Research has undertaken an overview analysis of the survey records and this shows that the mean bed level below the bridge has experienced minor fluctuations at each cross section, as can be expected in an alluvial river, but with very little change overall in the rivermouth area below the bridge.

I can understand your concern about any potential increase in flooding risk to your property. The only explanation that I can offer for your recent observations is that the higher water level behind the Pearl Creek causeway in the recent flood event may be due to elevated groundwater levels resulting from unusually high rainfall this winter. With elevated groundwater levels on the plain, a flood event in the river would cause an increased flow response in Pearl Creek greater than for normal winter conditions.

I hope that I have answered your questions to your satisfaction. Please do not hesitate to call if you have any further queries or concerns.

Yours sincerely

EVentappen

Eric Verstappen **Resource Scientist, Rivers & Coast** Isman District Council Email info@tasman.govt.nz Website www.tasman.govt.nz 24 hour assistance

189 Queen Street, Private Bag 4, Richmond, Nelson 7050, New Zealand Phone 03 543 8400 Fax 03 543 9524 chmond 92 Fairfax Street, Murchison 7007, New Zealand urchison

Phone 03 523 1013 Fax 03 523 1012

Minutes Attachments

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11 July 2011

from G H Challies, 139 Cotterell Rd Appleby, R D 1 Richmond. 7081

to

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E Verstappen Resource Scientist, Rivers and Coast. Tasman District Council.

Dear Sir,

Thank you for your letter 28/6/11 regarding Riverbed levels North of the Appleby Bridge. From what you report there appears to be a fairly stable situation in that portion of the River in recent years. However as there must be some reason for the high flood level at the Pearl Creek Causeway at the time of the recent event, I am concerned that this is borne in mind when the next survey is carried out this Summer. Is there someway that this issue can be flagged, so that it is not forgotten or overlooked? A difference of 200mm could equate to a fill in within a few hours (if the bank was over topped over its length) as has occurred in the past.

In regard to the high water-table and spring flows this year, I can not see how this could have effected the flood level, because the Pearl Creek Floodgate was shut tight at the time, and although there was considerable build up of water upstream of the causeway as a result, it was no more than has occurred is similar situations in the past.

Yours faithfully

From

G H Challies, 139 Cotterell Rd Appleby R D 1 Richmond. 7081 5/10/12

to

E Verstappen Resource Scientist Tasman District Council.

Dear Sir,

In June July 2011 we exchanged letters (copy enclosed for your recall) regarding the mean bed level of the Waimea River North of the Appleby Bridge. In your response R506 28/6/11, you indicated that a cross section survey was due in the following Summer (2011/12). Could you please advise me the result of this survey, and confirm that a static bed level is being maintained. Several local people with historical knowledge of the river are convinced that the gravel is building up again.

Since our correspondence there has been another flood event and on this occasion there was only 200mm leeway on the stop bank at the Pearl Creek Causeway. I reiterate that bed level has been a critical factor in past river protection failures in this area. Past build-ups also resulted in a corresponding rise in water-table, and consequently I was unable to maintain pasture in some of the low-lying farmland.

Thank you.

Yours faithfully,

Copy to Chief Engineer River Works

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Writer's Direct Dial No. (03) 543 8417 Writer's E-mail: eric.verstappen@tasman.govt.nz

23 November 2012

Mr G H Challies 139 Cotterell Road RD 1 Richmond 7081

Dear Mr Challies

WAIMEA RIVER SURVEY

Firstly, I sincerely apologise for the delay in replying to your letter of 5 October 2012. This was not intentional but rather a result of my own forgetfulness combining with a rather hectic period of work in recent times.

Thank you for your observations of possible riverbed change and the effects this may have on the adjacent floodplain during a significant flood event. Thank you also for sharing some of your photos of the flooding in the lower Waimea area taken during the major event in January 1986. Council staff had mapped the extent of flooding caused by that event, but this is the first time I have seen photos taken during the event itself. They are guite an eye-opener and a valuable addition to our record.

In my last letter to you, I indicated that a survey of the Waimea River was due to be undertaken over the 2011/12 summer period. Unfortunately this did not eventuate. However, you may be pleased to know that the survey has been commissioned for this summer. The survey will be undertaken, in part, by utilising high resolution LIDAR aerial imagery which is about to be flown. This technology provides an enormous amount of high resolution level information of the riverbed above low flow level. Comparing this data with that captured in the 2008/09 LIDAR survey will give a much more detailed appreciation of bed level and beach volume change than the more traditional cross section survey method has been able to provide in the past. In addition, traditional survey of the bed below water level will also be undertaken, so as to complete the assessment of mean bed level change.

We have also observed and received comments that gravel deposition in the lower reaches of the river appears to have occurred. The survey will help confirm whether this has resulted in elevation in mean bed level or whether these observations reflect that the low flow channel bed level has decreased, exposing more "dry beach" during low flows. If bed levels have elevated in less than desirable locations, corrective action will be undertaken so as to maintain a stable bed level elevation and channel flow capacity.

sited an 11/9/13 still of marked plant sman District Council Email mogramman golding Website sub-standar golding 24 hour assistance

chmond 189 Queen Street, Private Bas 4, 8 cm² and Ne Str 7050, New Zealand, Phone 03 545 2400, Fax 03 543 9514

2 24 March 2014 LETTER TO: G H Challies

Aside from evidence preparation over the next 3-4 weeks for yet another Environment Court hearing, my main and most urgent project task is to press on with analysing bed change in the three river systems I mention above. I hope this to be well advanced if not completed for a report to Council in June. When I have some Waimea data to hand, I will be most happy to share it with you.

Yours sincerely

EVentappen

Eric Verstappen Resource Scientist, Rivers & Coast

Since the writing of my letter2/1/12 the approach to the cycleway bridge has been washed out twice (in this year). These failures have acted as a type of safety valve, which allows the floodwater to getaway, but now I notice that the replacement approach has been beefed up (presumably with the aim of preventing future failures) and regardless of whether the overall height is 800mm lower than the eastern stop-bank or not, this removes the safety valve effect and will direct a stronger current in a Westerly direction. I have noticed a fan of gravel has been scoured out partially blocking Pearl creek 90m north of the Pearl Creek causeway. This has never happened before to my knowledge, so what is the cause? I suggest it is a result of strengthening and leveling the approach to the cycle bridge approach on the east side.

I am concerned that there has only been approx 200mm of free-board on the stop-bank west of Pearl Creek near the causeway during recent floods where the tide has not been a major contributing factor. There is no doubt in my mind if a large flood coincides with a large tide we will be filled in again has we were in the past.

Report on developments near the mouth of the Waimea River over the last 50 years



Writer's Direct Dial No. (03) 543 8417 Writer's E-mail: eric.verstappen@tasman.govt.nz

24 March 2014

My First engine was

26/3/2011.

Mr G H Challies 139 Cotterell Road RD 1 Richmond 7081

Dear Hugh

LOWER WAIMEA RIVER BED CHANGE ASSESSMENT

Thank you for your recent letter regarding your concerns regarding the state of the Lower Waimea and issues that appear to be arising in the delta.

I have to say from the outset that thanks to some very time consuming Environment Court hearing evidence and other projects, I have completely "dropped the ball" on my analysis work with respect to bed change in the Lower Takaka, Motueka and Waimea - Wai-iti – Wairoa rivers. Only the Aorere has had a little attention, as a result of the December 2010 storm event and remedial works required there.

However, over the last year or so, when I had hoped to get into implementing new methods of analysis utilising LIDAR data, both consultants and Council itself has greatly improved its computer software ability to analyse these big datasets. I have just recently begun to refocus on this project and there is now quite some urgency for me to get on with it. When I have some results to hand, I will be able to better answer the bed level change question you have posed me.

Interestingly, we have observed significantly elevated water tables in the Waimea Plains area in the last year or two. Large tracts of Rabbit Island have been lying under water for some months last year and there have been similar reports of unusual surface flooding elsewhere. I am unaware of any particular explanation for this other than unusual wet weather patterns.

I can assure you that there is no deliberate policy within Council to cease gravel extraction from the Waimea for river management and other purposes, or with a view to enhancing well field water yield. If it transpires that there has been significant gravel deposition or bed level elevation occurring and that this is causing river or land management issues, mechanisms are in place to deal with this.

Isman District Council Email info@tasman.govt.nz Website www.tasman.govt.nz 24 hour assistance

chmond189 Queen Street, Private Bag 4, Richmond, Nelson 7050, New ZealandPhone 03 543 8400Fax 03 543 9524urchison92 Fairfax Street, Murchison 7007, New ZealandPhone 03 523 1013Fax 03 523 1012

Minutes Attachments

ail - Flood report

https://mail.google.com/mail/u/0/?ik=/110b6dd40&view=pt&se



Hugh C <macachallies@gmail.com>

Flood report

2 messages

Hugh <macachallies@gmail.com> To: Rick Lowe <rick.lowe@tasman.govt.nz> Mon, Aug 22, 2022 at 8:20 AM

Mon, Aug 22, 2022 at 8:55 AM

Good morning Rick. Busy time for you all.

Flooding 20/8/22.

On the night of 20th the Waimea river stop bank was over topped over 180 m of its length in the vicinity of the Pearl creek causeway.Starting At the East end of the causeway and continuing 120m North along the bank from the from the West end, resulting in some scouring, channeling, and potholing, and the flooding of properties on both sides of the creek (about 50 Ha in total). Apparently the bank here is lower than other parts which had hight to spare. I also noticed debray on the top of the bank by the old VOR.

Hugh <macachallies@gmail.com> To: Rick Lowe <rick.lowe@tasman.govt.nz>

----- Forwarded message ------From: Hugh <macachallies@gmail.com> Date: Mon, Aug 22, 2022 at 8:20 AM Subject: Flood report To: Rick Lowe <rick.lowe@tasman.govt.nz>

Good morning Rick. Busy time for you all.

(Apologies - previous email was incomplete)

Flooding 20/8/22.

On the night of August 20th the Waimea river stop bank was over topped over 180 m of its length in the vicinity of the Pearl creek causeway, starting at the East end of the causeway and continuing 120m North along the bank from the West end, resulting in some scouring, channeling, and pot-holing, and the flooding of properties on both sides of the creek (about 50 Ha in total). Apparently the bank here is lower than other parts, which had height to spare. I also noticed debris on the top of the bank by the old VOR.

I had a meeting with Giles on 14/8/19 where he showed me the result of a recent river profile survey. According to the model the scheme would protect us up to a 100 year flood. The Council website on river flows rated this flood as a 10 year event. Clearly the model is not fit for purpose.

I have been corresponding with Council staff since 2011 regarding my concerns about the stopbank at this point, and will drop in a copies for your information. Am happy to discuss this matter if required. Please see attached photos for detail.

Regards Hugh Challies

4 attachments

Minutes Attachments

ail - Flooding

https://mail.google.com/mail/u/0/?ik=/110b6dd40&view=pt&se

Gmail

Hugh C <macachallies@gmail.com>

Flooding 3 messages

Hugh <macachallies@gmail.com> To: Rick Lowe <rick.lowe@tasman.govt.nz> Fri, Sep 9, 2022 at 5:12 PM

Good afternoon Rick, further to our recent conversation on the stop bank failure, it has come to my notice that the owners of the land north of the cycleway bridge approach (east side of river) are intending to fill the land to a height of three meters. This seems unlikely but If it is true such work will place an unbreakable barrier across the flood channel of the river. Historically the approach has always blown out during decent floods, as it did recently. This took some of the pressure off our side. Since the cycle way approach was beefed up (2011) gravel has been scouring out into pearl creek. (this never occurred previously.) If the council has given a consent for such a reclamation, It is clear to me that the council will be liable to mitigate the negative effect by raising the bank on the west side to reinstate the protection of our X rated property. cheers Hugh Challies

Rick Lowe <rick.lowe@tasman.govt.nz>

To: Hugh <macachallies@gmail.com>

Cc: David Stephenson <David.Stephenson@tasman.govt.nz>

Fri, Sep 9, 2022 at 5:22 PM

Hi Hugh,

I have raised the same issues with our management team and understand your concerns.

At this stage I believe that our TDC projects Team will include this in the next round of Government assisted projects to lift the stopbank to at least a similar standard as the rest of the Waimea Stopbanks.

The filling of the area on the right bank needs further investigation and, in my view, should not be filled to a 3-metre additional height.

Cheers

Rick

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Rick Lowe Rivers and Coastal Engineer DDI +64 3 543 7255 | Mobile +64 27 220 2255 | rick.lowe@tasman.govt.nz Private Bag 4, Richmond 7050, NZ



Brief history of flooding which has occurred on the land adjacent to Waimea estuary between Pearl Creek And Eves valley Stream (O'Connor Creek). Since 1960s till present.

Pearl Creek Causeway built about 1969, with financial input from JC& GH Challies, R & F O'Connor and Nelson Catchment Board. At the same time the stop bank was improved (west side of Pearl creek to the Waimea Estuary.) Catchment Board Engineer Mr Green.

Bank not topped for 13 years, then failed 4 times June 1983; Dec 1984; Jan 1986; & March 1988. These events coincided with the construction of causeways to Rabbit Island ; Bests Island Deadmans Island, and a rise in the mean bed level of the river north of the Appleby bridge.

Area of farmland flooded west of Pearl Creek = approx 83 Ha, with bank breaches in two places, and one dwelling flooded.

The detrimental effect these causeway obstructions was obvious and acknowledged by Engineer Doug Nottage who witnessed the difference in water levels on each side of the Rabbit Island approach and Deadman Island Causeways during the flood on the 12 March 1988 accompanied by A J Bell. On this occasion the Tide was not an Influencing factor.

Meeting 3/3/86 at the approach to Rabbit Island Bridge, attended by Councilors, Land owners and engineers Mr Beck (council) Mr McBride (Catchment Board), and Mr Hughes (Nelson Harbor Board) We viewed and discussed the recent flood damage.

Meeting 10/8/88 11.00 AM 139 Cotterell Rd attended by Doug Nottage; David Blunt (engineers); Councilor Ian Fenimore; R O'Connor; F O'Connor and AJ Bell, G H Challies.

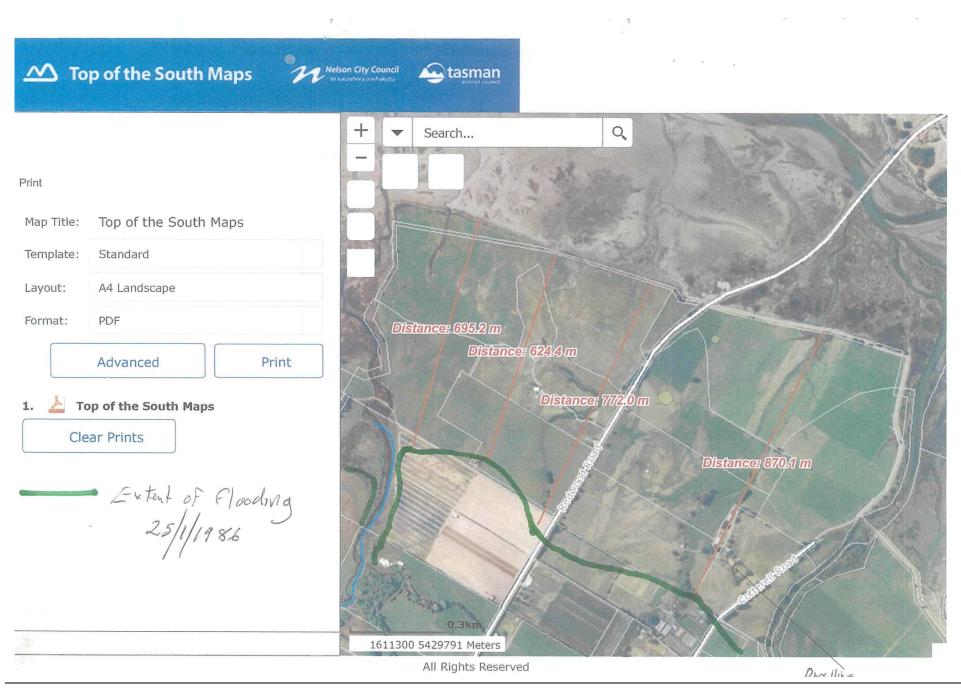
At this meeting Mr Nottage presented a scheme which involved the lifting of the stop bank from the VOR(Aircraft guidance beacon) to Redwoods Rd, at the expense of the Nelson Catchment board. Mr Blunt stated that this was to be regarded as a first stage to be followed by other improvements should these prove to be necessary.

This offer was accepted without prejudice, by the four land owners in attendance. (see Attached).

This work was subsequently carried out, and the bank was raised using gravel which had accumulated in the lower reaches of the river bed (an accumulation of 1m according to Mr Beck county engineer). Following this work there was a marked improvement in the productivity of the adjacent farm land, which had previously deteriorated with the lift in water table caused by the rise in mean bed level

This highlights the desirability of maintaining a static bed level in this reach of the river.

Attachment 2	2
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Impact of restrictions of river flow near the mouth of the Waimea river since the construction of the current flood protection scheme (1960s)

The stop banks' belled 'out (became further apart) and were reduced in height to give a flood **scope to blend** with high tides over a wide area. The distance between the two banks was 1235m.

I have calculated the lengths of causeway obstructions since built and estimate a total length of 999m. I have not included bridges or the 312m low level causeway to Bells Island.

If 999 is deducted from 1235 this only leaves 236m for the blending to take place.

The width between stop-banks at the Appleby river bridge is approx 291m),

As a consequence of this the lower banks near the mouth of the river proved to be inadequate.

The stop-banks have been lifted to a degree, but will still not cope with a flood and large tide.

Causeway effect study

26/1/86

A group of affected persons met Councillor Ian Fenwick at the approach of the Rabbit Island Bridge to view flooding. A difference in levels of 1.5m was observed from one side of the approach to the other.

27/1/86

Three of the group met Mr C Shuttleworth (Catchment Board) to discuss the situation. He suggested an on-site inspection and meeting of the Board.

1 /2/86

A letter was signed by 15 people and sent to the Board, as follows:

Dear Sir

It is our conviction that the approach to the Rabbit Island Bridge and various approaches and causeways in the Best Island region have seriously altered the normal outflow of flood waters from the mouth of the Waimea River by constricting it, and causing a build up which is overflowing the stop banks and causing widespread damage and flooding over about 625 acres (253 ha). Signed by: GH Challies; SM Challies; P Cook; AA Cook; DR Bowater; G Russ; TK Robinson; J Robinson; AJ Bell; M Bell; EA O'Connor; FJ O'Connor; JC Challies; RJ O'Connor; TJ Cook.

3/3/86

A meeting was subsequently held at the approach of the Rabbit Island Bridge, attended by:

The engineers from TDC (K Beck); Catchment Board (D McBride); Harbour Board (Mr Hughs), as well as councillors and affected landowners. At this meeting Mr Beck accused Mr McBride of allowing the gravel in the lower reaches of the river to build up by 1m (Mr Beck had however overseen the construction of the causeways).

[The build-up of gravel lifted the water table in the surrounding farmland causing a deterioration of land quality, which was later restored to production when gravel was removed to raise the banks]

Subsequently the following occurred:

Proposal to mitigate negative impacts of causeway obstructions in the mouth of the Waimea River, 8/8/88

Doug Nottage (Catchment Board engineer) phoned, suggesting the problem could be largely solved by lifting the stop-bank along Pearl Creek and also the Northern tide bank. He said the Pearl Creek stop-bank was 0.7m lower than the 1970 specification. He said the Board had funds for stop-banking and that the work would be done out of Board funds.

He asked for a meeting at my house, which took place on 10th August 1988 at 11am.

10/8/88

Met Doug Nottage; David Blunt (county engineer); Ian Fenwick (TDC Councillor) Roddy and Ferg O'Connor; A J Bell. Mr Nottage presented a proposal to lift the stop-banks from the VOR to Redwoods Road as a first step, at a cost of \$30,000.00, to be paid for by the Catchment Board.

11/8/88 We accepted without prejudice.

At all these deliberations it was unanimously agreed that a static river bed level should be maintained.

G H Challies

This report relates to the failure of the Waimea River stop-bank in the vicinity of the Pearl Creek causeway on 20/8/2022. Water overflowed the bank over 180m of its length and flooded 50ha of farm land. There was no tidal influence at the time.

The current Waimea River flood protection scheme was designed and its construction overseen by Mr Edgcumbe (Catchment Board engineer). To allow flood water scope to blend with high tides, the stop-banks 'belled out' (became further apart) to approx. 1,227 m apart, and reduced in height near the river mouth to give floodwater scope to blend with high tides.

He recommended that the Council purchase the private land inside the bank east of the river near the mouth, stating that it compromised the scheme. This never happened.

The scheme worked pretty well until 5 causeways were constructed:

- 1 Causeway between Rough Island and Rabbit Island
- 2 Approach to the Rabbit Island road bridge:
- 3 Mainland to Deadmans Island causeway:
- 4 Deadmans Island to Bests Island
- 5 A causeway between Bests Island and Bells Island was also planned, but after local

landowners raised concerns this was reduced in level to allow tides and floods to flow over it.

These obstructions in the flood plain resulted in regular failure of the stop-banks adjacent to Pearl Creek, until the negative impacts were mitigated to some extent by the raising of the stop-bank on the west side of the river from the VOR to Redwoods Rd, at a cost of \$30,000.00 in 1980. This work proved reasonably effective, but the protection afforded has since been systemically undermined by the further obstruction of the flood plain, in four ways:

- 1 The beefing up of the approach to the cycleway swing bridge (east side)
- 2 The dumping of a small mountain of earth beside the river north of the swing bridge.
- 3 Continued infilling of the flood channel (east side)
- 4 Build-up of gravel in the riverbed.

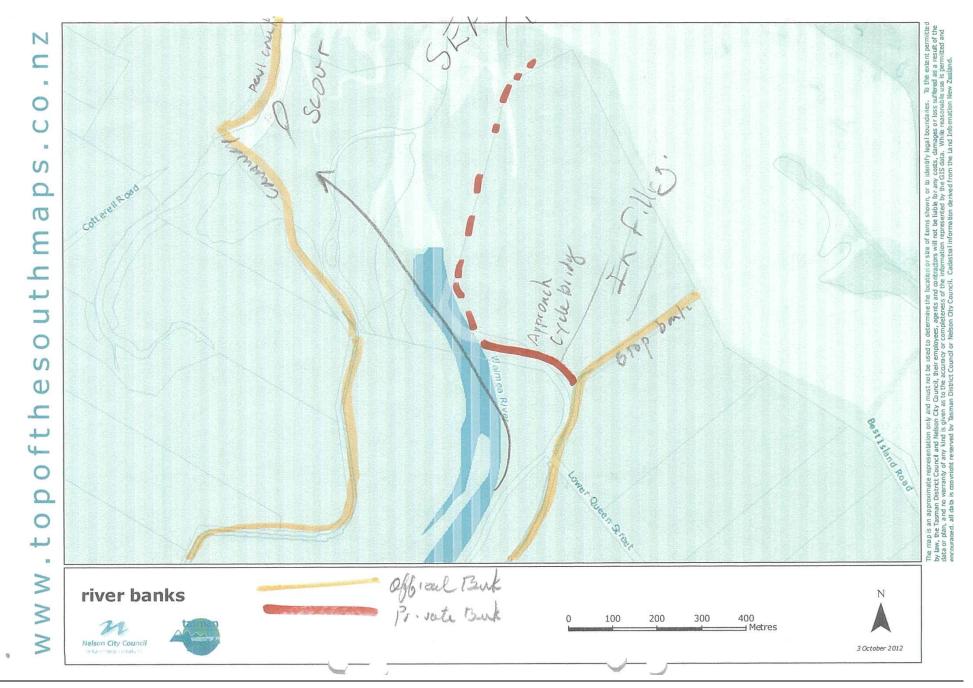
One of the effects has been to direct floodwater in a westerly direction towards the Pearl Creek causeway, resulting in a new and considerable gravel fan being scoured into Pearl Creek 100m down-stream of the causeway.

It was noted that although the flood of 20/8/22 overflowed the bank in the vicinity of the Pearl Creek causeway, flood water barley touched the base of the stop-bank up-stream of the Appleby Bridge.

Conclusion

It seems clear that the Waimea River flood protection scheme has been thoroughly compromised in the lower reaches and is no longer fit for purpose.

G H Challies 17/9/23



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FLOOD REPORT. G.H. Challies Property.

HISTORY.

The family has farmed this same land since 1854 and although my experience only goes back about 35 years I have been taught the history of flooding in previous years. Forbears had to contend with regular flooding by tide, Eves Valley Stream, the Waimea River and occasionally all at once.Largest floods came, and still do, with high tides, Repressions, strong Sea winds and rain. A wind from the Western entrance (Nth. West) tend to bring the Wairoa River down; from the Nth. East, the Eves Valley Stream; from the North the Wai-iti River.

Various small banks were built by individuals and groups over the years, but built by hand they proved inasequate and were often washed away. It was only with the advent of the bulldozer that real progress was made.

There have been occasions on which the house I now live in has had water through .908 - A large tide.

.939 - A great flood went through to a depth of about one foot.

.986 - 25th January. The corner of one room was covered by one inch of water and vater entered two other rooms.

In the 1950's my father was building up a reliable bank system mainly designed to seep out the tide. Whenever these banks were over topped he would add to their height and and strengthen the system till we were pretty safe.

The late Lew Kranmer, built a large sea wall for my brother and I in the 1960's o reclaim Harbour Board Lease Land, west or Redwood Road. This created a box into which lood water could flow by backing up Pearl Creek and overflowing behind. To cater for his eventuality we put a 2 foot culvert, one 18 inch and one 12 inch culvert through the ew reclamation bank, as the one 18 inch and two 12 inch culverts in the old reclamation east of Redwood Rd.) proved too slow emptying out.Unfortunately Redwood Rd. now prevents 1 1 water flowing through to these culverts- impeding drainage.

The Achilles heel in the system was Pearl Creek and so in conjunction with R. and . O'Conner and Catchment Board Engineer, Mr Green, the Pearl Creek causeway was built in he late1960's and the bank lifted.Soon after a large flood deposited driftwood high up ut never came over. The bank was never topped until 9-7-83. We thought it was a 40 year lood. It was topped again in December 1984 and on 25th January 1986 the bank was breached

Three 40 year floods in three years?

Something was wrong!

ETAILS OF FLOOD JULY 1983.

th July - 3pm. approx. rang Catchment Board re levels difference in Redwood Rd. Mr Barnes ame to inspect

th July - 11-30 pm. Water flowing over 2 chain of Redwood Rd. about 3 inches deep.

Water flowing over stopbank adjacant to Cotterill Rd. by and North E causeway about 4 inches deep. Sheep and deer were moved to Higher ground during the ight.

The North end about Gum trees.

Aid morning - rang Mr. Blunt re flooding. Redwood Rd. begins to retard flow of floodwater to the three culverts in J.C. Challies' property.

Morning, rang Mr. Blunt who said he had not seen the situation. He suggested th county digger take the the top off the bank in the corner of the reclamation to allow flood water out. I declined saying that the tides were building up and I doubted their ability to re build the bank in time to stop the tide.

Late morning - Mr. Blunt inspects areas and visits me to say he thinks the digger could to the job on the bank and guarantees to replace it in time for the tide. 2-00pm. - Photos taken of flood.

Digger removes bank and allows water toescape. L2th. July - Digger replaces bank before tide.

I AILS OF FLOOD

DECEMBER 1984

Water was flowing over the bank by Pearl Creek causeway in the early afternoon. The decision was made to move hinds and fawns.We had to comb the rushes for the small faw and put then into the yards ready for evacuation. It was necessary to comb the paddocks five times to find them all as they were going to ground. Six men were involved. By evening the water had ceased to flow in and hinds and fawns were re-united.

DETAILS OF FLOOD

JANUARY 1986

25th. January.

Water flowing in by Pearl Creek Causeway and along bank for about 8 yards. Began moving stock to higher ground. LO-45 am.

Water flowing in by Pearl Creek over bank about 6 inches deep for 4 chains. (d deer and combined all hides and fawns. Moved lambs.Ponding in lower paddocks about 10 acres.

L2-45 pm.

Water 1 metre deep in swamp behind house. One third of lower farm under vater. Moved rams into woodshed and evacuated sheep to neighbours property. Yarded year-Lings in 18 inches of water in deer yards.

L-30 pm.

Evacuated 30 yearlings and 3 stags to a Redwood Valley property. Called neighbours for help and arranged use of a neighbours deer paddock. Helpers built a 120 m. cace from our deer fence across a barley paddock to a neighbours deer paddock working in 2 feet of water.

2-15 pm.

Water surrounded house . Two youngest children moved out. Began lifting furniture and personal effects.

3-30 pm.

3 cont.

5-00pm.

Water upto 2 metres deep over 200 acres.

1,000 lambs confined to a two acre knob of dry land. Verandah covered in water. Water enters three rooms in house furniture uplifted.

7-00pm.

Flood reached it's peak at house

7-30 pm.

Noted levels at Bridge approach

11-0 pm.

Water level had dropped by five inches.

26th January.

Found stop Bank adjacant to Pearl Creek breached, and stop bank adjacant to Eves Valley Stream breached by water flowing out. MMARY.

It is clear that the constriction of the flooded river at its mouth by the approach to the Rabbit Island Bridge and various approaches and causeways in the Bells/ Best Island region are major contributing factors to flooding in the area. These cause a water build up of 1.5 metres greater than on the downstream side of the approach to Rabbit Island Bridge. Also in the event of flooding, Redwood Rd. becomes a barrier impeding the natural drainage from east to west of farm land within the stopbanks.

POSSIBLE SOLUTIONS.

a) Lower the level of constricting approaches $\text{e}^{\dagger}\text{c}$ to allow flood water to floover .

b) To lengthen bridges.

c) Place numerous large culverts through approaches.

Supplemenary Measures.

Lift and strengthen flood banks and causeways adjacent to Pearl Creek mudflat

Lift Redwood Rd. where it crosses bank, (as flood water now flows our over ro at this point)

Place large culvert diagonally through Redwood Rd. to mudflat on west side of Rabbit Island Bridge approach to facilitate quick drainage in event of fill in.

Yours faithfully.

28/3/24

Mr Mayor/ Councilors.

This address relates to a situation which has developed near the mouth of the Waimea River

The current Waimea river protection scheme designed and overseen by catchment-board engineer Edgcumbe incorporated a specific design feature to deal with the flood / tidal interface. Here the stop banks belled out and were reduced in height To provide **crucial scope for a flooded river to blend with a high tide.**(see blue on overhead) On completion the banks were 1235 m apart at the mouth compared to 291m at the Appleby bridge.

There is 20 ha of low lying private land between the two banks on the east side at the scheme mouth. (indicate) Mr Edgcumbe said that the council should acquire that land because it could compromise the scheme in the future. This was not done. For a time this land had a low impact because floods simply flowed over the top but over the years consecutive owners have constructed stop banks around it, and infilled a portion until today it is a major obstruction in the flood plane of the river. As time passed 4 constricting causeways (in red) were built, further reducing the vital blending scope from 1235 m to a mere 236m This resulted in multiple failures of the scheme in the 1980s and extensive flooding of 85 Ha farm land including my dwelling.

To mitigate the negative impact of the causeways the Catchment Board raised the stop banks with gravel removed from the lower river bed. This gravel had been allowed to build up 1m and was accentuating flooding . All parties agreed that it was vital to prevent future buildup of gravel, and that a static bed level should be maintained. There currently seems to be a an idea abroad that removal of gravel from the lower reaches of the river is in some way environmentally harmful and must be avoided. We have as a community historically chosen to manage our rivers and have established our lives infrastructure, and activities on that expectation. Are we now to abandon that policy and let the river run wild again? When the catchment Board removed gravel from here to raise the stop banks in the 1980s, there was no negative effect to my knowledge, and reduction of the water table restored the productivity of adjacent farm land.

Over the years these lessons seem to have been forgotten, for example a substantial beef up of the approach to the cycleway swing bridge has effectively formed a 200m dam jutting out at rightangles directly across the floodplain. The inevitable result of this is that floodwater is directed westwards to pearl creek (see yellow arrow) causing a scour of gravel there and a stop bank failure on 20/August/2022 over a length of 180m, flooding 50 Ha. with **no tidal influence**. Had this coincided with a large tide it would have resulted in a major 1980s type flooding event. During this recent flood, up stream of the Appleby bridge the flood waters were barely reaching the toe of the stop bank. **Here is the smoking gun which proves the schemes failure**. TDC recorders rated this flood as a 1 in 10 year flood. The river scheme is supposed to give 1 in 50 year protection. We are currently paying \$2674.00.00 per year in X rates for flood protection which we are no longer getting.

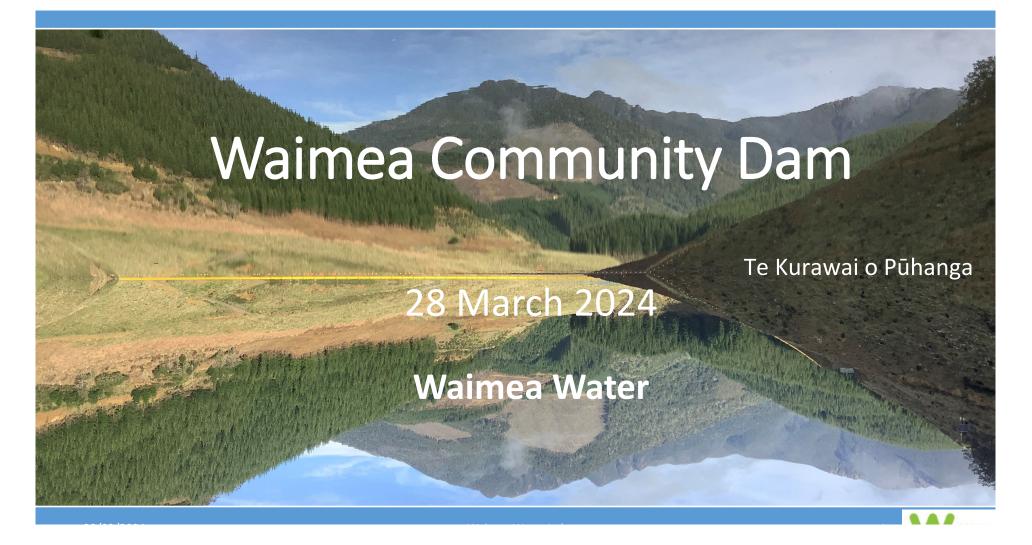
As a result of the recent flood the Council chief engineer recommended that the stop banks be lifted, but his advise was ignored.

In summery the scheme has been completely compromised in the lower reaches because of the major loss of the original scope to blend. Consequently the lower level stop banks of the original plan are no longer adequate

Surly it is the responsibility of Council to maintain the stop banks which have cost the community so much to establish in the past.

Finally I seek permission to table a more comprehensive report on this matter.

G H Challies.



DAGLAIGAN

WWL efficiently delivering a safe, reliable, resilient and fit for purpose Waimea Community Dam

- Construction: ~99% complete. Demobilising.
- Commissioning: Commissioned and operating smaller valve to mitigate drought restrictions
- Operating in full compliance with resource consent requirements. Sediment challenges dissipated
- ≈ No further change to **\$198.2M** project cost forecast. Dispute risk.
- Operating cost increase driven by inflation and more information. Will evolve during 2024.



pverview. JJ70 complete. Neservoir run ZI Jan ZOZ4



JULIETIC VVOLKS

- Completed transition from temporary pipe / facilities to permanent pipe in February 2024
- Commissioned and operating smaller of 3 cone valves from 2 March 2024. Water restrictions then eased
- Expect to commission two large cone valves 4 April 2024
- Contractor demobilising. Expect practical completion by 30 April 2024
- WWL to then complete ancillary works (turbine, access ways, valve chamber building) June / July 2024



vannea Dann. Donng what it is meant to do

- Reservoir filled 21 January 2024
- Released 11% of reservoir since 2 March 2024 in support of current dry conditions. Mitigated restrictions



LOST INTEGAST. INTERATING TO COST INTEGAST OF 7170.2101

- Project cost based on currently known costs and risks
 - Independent Engineer and Adjudicator decisions as they stand
- Residual risks now mainly commercial / contractual
 - Ongoing unexpected Contractor claims
 - Contractor initiated Adjudication: June / July 2024
 (Construction Contracts Act 2002)
 - Contractor initiated Arbitration (18): ~ March 2025 (contract, binding). Agreed and appointing arbitrator
 - Contractor disputing decisions of Adjudicator and Independent Engineer.
 - Contractor using LGOIMA to evidently prepare claims

	Plan at funding	Current Plan
Complete dam & close (SP1)	28 October 2021	26 May 2023 _{ACTUAL}
Commission dam (SP2)	23 January 2022	December 2023 30 April 2024

S-Curve: \$188M / \$198M spent



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Hank IOU. QQA



Mid-Year Report: 1 July – 31 December 2023

Waimea Water Limited Mid-Year Report: 31 December 2023

Issued: 28 February 2024







Page 1

Richmond Mall shopfront – March/April 2024



Context

- Increasing coastal erosion and inundation
- Public expectation to protect private assets
- Council Interim Policy Statement 2014:

The Council will maintain existing Council-owned coastal protection structures and generally not invest in new structures

- Set of policies now ready for adoption

A set of related policies

- The Interim Policy Statement 2014 is being formalised as the overarching position with more detailed policy/process documents for Reserves and Roads
- Coastal Erosion Protection Structures on Council Reserve Land policy document facilitates compliance with the *Reserves Act 1977* and existing Management Plans
- Roads policy document considers services and access issues and will be added to the next update of the TDC Transportation Policies and Procedures Manual



PowerPoint presentation

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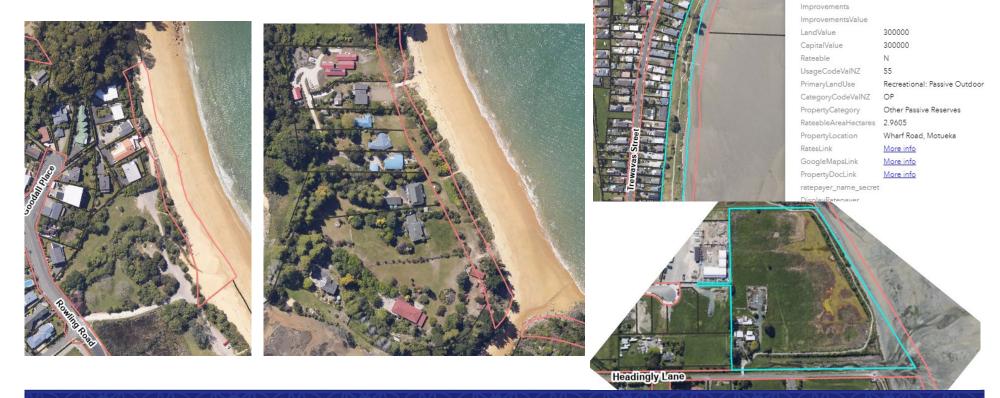
OBJECTID

1955042900: Wharf Road, Motueka

ValuationAssessment 1955042900

9705

Examples Of Coastal Road Reserves



Questions??