

## **A process towards a settlement framework to mitigate debris flow risk – Awatarariki fanhead, Matata**



Subject: **A PROCESS TOWARDS A SETTLEMENT FRAMEWORK TO  
MITIGATE DEBRIS FLOW RISK – AWATARARIKI FANHEAD,  
MATATA**

To: **POLICY COMMITTEE**

Meeting Date: **THURSDAY, 2 JULY 2015**

Written by: **MANAGER STRATEGIC PROJECTS**

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### **1 REASON FOR THE REPORT**

To provide an update on the work from March 2015 to May 2015 of a consensus development group (CDG) to mitigate life safety risks from future debris flows from the Awatarariki Stream catchment.

To obtain authority to:

- (a) Progress the development of a settlement framework to mitigate debris flow risk to property owners on the Awatarariki fanhead
- (b) Investigate emergency escape routes, early warning systems, and rate relief for landowners

### **2 EXECUTIVE SUMMARY**

A severe rainfall event on 18 May 2005 triggered a debris flow in the Awatarariki Stream at Matata.

In 2012 Council determined there were no viable engineering solutions to manage the debris flow risk at Awatarariki and agreed to pursue planning based options, which include: information provision, rezoning and retreat from the site.

Councillors expressed concerns over the extent of the Council's legal and financial responsibilities for enforcing and funding the recommended retreat and rezoning options presented to Council at the end of 2013.

Since the beginning of 2015, Council officers have worked as part of a Consensus Development Group including five landowners to investigate all options.

An important point of agreement among the group was that a high risk of debris flow exists, while recognising that individual personal tolerance of this risk varies.

Doing nothing is not an option for Council given the loss of life risk at Awatarariki.

The Consensus Development Group agreed that regardless of the option Council might pursue in future, work was needed to immediately implement escape routes and investigate warning systems.

On-going uncertainty and risk of court action makes the status quo/do-minimum option unattractive to all parties.

The Consensus Development Group identified *a voluntary managed retreat option* as a possible way forward. Funding assistance from regional and central government is required as the Council cannot

afford to implement this solution alone. The details of property purchase arrangements are critical to gaining landowner support. Without 100% landowner support an approach to regional and central government is unlikely to be successful.

Options for the level of property purchase payment required to achieve landowner agreement to a voluntary retreat depend upon the mix of the objectives of the three levels of government and landowners' various circumstances.

Governments' aims can be seen in three potentially cumulative objectives comprising:

- (a) Life safety only at lowest cost
- (b) Creation of a passive reserve, and
- (c) Partial compensation for suffering and investment loss.

The cost to the three levels of government increases with the accumulation of these objectives.

Any property purchase proposal needs to be attractive to property owners. Homeowners with existing use rights may require a higher level of payment to encourage their relinquishing of those rights and relocate from the high-risk zone.

Further work is required before the end of October 2015 to enable the Council to make an informed decision on a way forward before the end of 2015. It is recommended that the Council:

- (a) Confirm the risk rationale and location of hazard lines at property boundary level.
- (b) Assess the 2015 market valuations of properties, which recognise all current regulatory constraints and future risks.
- (c) Start now on the investigation of: escape routes, early warning systems, and rates relief. This work is required regardless of the future option selected. Rates are a contentious issue with residents who feel they are paying very high rates for limited services, especially now that no practical and affordable engineering solution can mitigate the debris flow risk.
- (d) Initiate informal approaches to Bay of Plenty Regional Council and Central Government for funding of a managed voluntary retreat at Awatarariki.

### **3 BACKGROUND**

#### **3.1 2005 to 2012**

A severe rainfall event on 18 May 2005 in the catchments behind the coastal settlement of Matatā triggered debris flows, debris floods and flooding. The resulting deposition of large quantities of sediment and debris through parts of Matatā caused widespread damage. The largest and most destructive of the debris flows was generated within the catchment of the Awatarariki Stream, destroying road and rail links and houses.

The Council has undertaken debris flow and debris flood hazard mitigation works on the Waitepuru Stream, the Waimea Stream, and the Ohinekoao Stream. Flood mitigation improvement works have also been undertaken on the Awatarariki Stream downstream of the State Highway 2 road bridge. These works included installation of silt traps in a reconfigured Matata lagoon.

A debris detention structure was proposed for the Awatarariki catchment but this did not proceed due to design, construction, and financial constraints that were identified during the resource consent application preparation phase.

In December 2012 the Council resolved to not proceed with an engineering solution to manage the debris flow hazard for residential properties on the Awatarariki fanhead and to pursue a planning framework to manage the risks associated with the hazard.

The Council resolution formally recognised that the properties known to be at risk from the debris flow hazard from the Awatarariki Stream catchment would continue to be exposed to levels of risk associated with that hazard in the future.

For the purposes of this report, 47 properties on the Awatarariki fanhead with an annualised loss of life risk of  $1 \times 10^{-4}$  (1 in 10,000) or greater, as identified by Tonkin and Taylor Ltd<sup>1</sup>, are considered within the retreat zone. Note that this may change following the proposed review of the retreat zone delineation. Table 1 shows the breakdown in 2015 of these titles into 13 private homes, 29 private vacant sites and 5 sites owned by Council or government agencies. Attachment A provides a map of these sites. Some owners have multiple sites; therefore individual owners total around 30 persons or entities.

Table 1. Properties at Awatarariki currently identified as potentially affected by debris flows

Site summary	Private	Council & Govt	Total
<i>Pre 2005 house continuing</i>	9	0	9
<i>Pre 2005 house rebuilt</i>	4	0	4
<b>Total homes 2015</b>	<b>13</b>	<b>0</b>	<b>13</b>
<i>Pre 2005 house now vacant</i>	5	1	6
<i>Site vacant pre &amp; post 2005</i>	24	4	28
<b>Vacant sites 2015</b>	<b>29</b>	<b>5</b>	<b>34</b>
<b>TOTAL</b>	<b>42</b>	<b>5</b>	<b>47</b>

### 3.2 2013 – 2014 Council's approach shifted to planning based solutions

The 2012 resolution to investigate a planning solution for the Awatarariki fanhead properties resulted in the Council commissioning two pieces of work to better understand the levels of natural hazard risk that property owners were exposed to. This recognised the importance of robust planning and quality research to the successful implementation of policies aimed at reducing the financial and social impacts for our communities from future natural hazard events. Tonkin and Taylor delivered two reports that were independently peer reviewed:

- Quantitative Landslide Hazard Assessment, Matata Escarpment, Tonkin and Taylor Ltd, November 2013
- Draft Supplementary Risk Assessment, Debris Flow Hazard, Matata, Bay of Plenty, Tonkin & Taylor Ltd, September 2013

The reports conclude that the Awatarariki fanhead area is a high hazard zone and that loss of life risk estimates exceed commonly accepted values, while recognising that there are no established criteria for risk tolerance for New Zealand communities.

From July 2013 the Council engaged with Matatā residents through individual and group public consultation meetings held in Matatā.

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<sup>1</sup> Draft Supplementary Risk Assessment, Debris Flow Hazard, Matata, Bay of Plenty, Tonkin & Taylor Ltd, September 2013

Following the public consultation, the Council held workshop forums in December 2013 and March 2014 to discuss potential planning responses. Uncertainties identified during the discussions included:

- the lack of central or regional government guidance on acceptable levels of risk
- appeals to the natural hazards provisions of the BOPRC Regional Policy Statement
- the ability of landowners to obtain a building consent to construct a dwelling under the Building Act 2004
- the extent of the Council's legal responsibilities
- affordability of any retreat option
- enforceability of any retreat option

The need for funding assistance from other government agencies for a retreat option was very apparent.

An application for a determination under the Building Act was lodged with the Ministry of Business, Innovation and Employment in July 2014 for proposed construction of dwellings on two properties on the fanhead. A draft decision was released in November 2014 confirming the Council's decision that it was not reasonable to grant a waiver from the structural requirements of the building code under section 72 of the Act. A hearing was held in February 2015. Further information was provided to MBIE on 1 May 2015. At the time of preparing this report no decision had been received.

In August 2014 Council received advice on its legal responsibilities and potential liability in regard to the response it has taken and will need to take to manage debris flow risk for properties on the Awatarariki fanhead.

Many landowners do not accept Tonkin and Taylors assessment of the level of debris flow risk and either want to be allowed to build, or to be bought out at property prices around 2004 values. The Council's legal advice was that it had no obligation to compensate landowners for loss of property values.

In October 2014 Stimpson & Co were engaged to facilitate a consensus between landowners and Council on a business case to Government for a united way forward at the Awatarariki fanhead. This Consensus Development Group consisted of a Councillor (Councillor Orr) and a Council Officer (Jeff Farrell) working with six landowners able to communicate the range of landowner concerns and circumstances. These owners were: Greta Nicholson, Bob Martin, Marilyn Pearce, Neville Harris, Stephanie Stuart and Michelle Beach. The Group also had input from Ken Tarboton, a Regional Council Officer, Craig Batchelar a planner from Boffa Miskell, Professor Tim Davies a geotechnical expert from Canterbury University, and Glenda Hughes a strategic government communications advisor.

### **3.3 Consensus Development Group work in early 2015**

From March to May 2015 the Group looked at 8 options on a continuum from 'Stay' to 'Full retreat'. Options included: stay/accept risk and build; status quo/do minimum; various collective and site-by-site engineering solutions; and various forms of retreat.

An important point of agreement among the group was that a high loss of life risk from future debris flow exists for occupied properties on the fanhead. Also, resident representatives advised that those who have rebuilt since the 2005 event did so on the understanding that the Council would complete all of its identified regeneration projects. This included a debris detention structure in the Awatarariki catchment that would mitigate the debris flow hazard for downstream properties, notwithstanding that the design of the structure had not been finalised and required resource consents. Additionally, the group recognised that personal tolerance to the loss of life risk varies between individuals and that the Council has statutory responsibilities to manage natural hazard risk that individuals do not.

Concerns the landowners expressed included a high degree of frustration due to the 10 year time period that has elapsed since the event. During this time property owners on the fanhead have been left in a state of limbo uncertain of their future options, with many of the properties remaining in the debris strewn state they were in immediately after the 2005 event. It was identified that continuing with the status quo is likely to involve: on-going standoff between the Council and landowners, proposed hazard zoning, potential legal action, and informal development. This will guarantee ongoing frustration and conflict between the landowners and the Council with no resolution. As a consequence, the status quo option was rejected by the group as emotionally and financially expensive for all parties. Accepting the risks and allowing conventional construction was also recognised as unacceptable in terms of the Council fulfilling its statutory responsibilities. Collective engineering solutions were all rejected as unaffordable based on indicative cost estimates. Even if these costs were assumed to be significantly lower, the conclusion would have remained the same as the cost margin of engineering solutions over retreat was substantial.

Mitigation of risk on private sites is a form of engineering solution that remains a potential solution for at least some sites pending the determination decision from MBIE.

### **3.4 Initial work by the Consensus Development Group on a voluntary retreat option**

The Group identified a voluntary retreat option as a possible way forward. This option must be voluntary because Council has no powers to enforce a retreat in the absence of special empowering legislation of the type passed following the Christchurch earthquakes. This option also provides for on-site mitigation options – should these prove feasible.

The Council will need to decide whether or not a voluntary retreat option is contingent upon securing funding support across all three levels of government (including Whakatane District Council, Bay of Plenty Regional Council, and Central Government) and the level of support of landowners to a settlement agreement necessary before an approach to regional and central government can be considered. Governments are unlikely to provide funding support if there is a risk of becoming embroiled in an on-going dispute with even a small proportion of landowners. The process to secure this option is therefore likely to first require landowners to sign up to an agreed settlement process with the Council. With this agreement in hand, the Council would then be in a position to formally approach other levels of government for funding support.

### **3.5 Initial reaction by the Consensus Development Group on a voluntary retreat option**

The success of a voluntary retreat option largely rests upon the financial attractiveness of the property purchase details.

Initial property purchase proposals prepared for the Consensus Development Group were for all parties (landowners, Council, Regional Council and central government) to meet 25% of the costs of property purchase based on 2004 capital values. The group rejected this arrangement for a number of reasons that included:

- The 10 year period that has passed since the event
- An inability to purchase a comparable property within the district without incurring a substantial mortgage
- Age of current owners and their likely inability to service a mortgage
- The need to provide an attractive purchase package for both owners with land only, and homeowners with land and buildings holding existing use rights<sup>2</sup>.

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<sup>2</sup> Owners of existing houses would have existing use rights if the District Plan is changed to make residential activity a discretionary or non-complying activity status. At the moment, they are a permitted activity under both the Operative and Proposed Plan. Changing the activity status is the purpose of undertaking a plan change.

Homeowners are likely to require payment based on a full market valuation of around 2004 levels in order to be encouraged to move from their homes.

The Consensus Development Group completed its work by inviting Council to prepare further details, now contained in this report, of a settlement process with emphasis on the property purchase provisions.

## **4 DISCUSSION AND OPTIONS**

Following completion of the Consensus Development Group work in May 2015, the Group had identified three remaining options after the exclusion of engineering solutions because of cost:

- i) Do nothing
- ii) Status quo/do minimum
- iii) Various forms of a voluntary retreat.

The do nothing option is not supported by the legal advice received by the Council. The status quo was viewed unfavourably by the Group which left voluntary retreat with a range of variables as the preferred option by default.

### **4.1 Four actions the Council needs to take regardless of the option selected**

The Group also identified several other matters that require further work by the Council. These are:

#### **(e) Rating issues**

Rates are a contentious issue with Awatarariki fanhead residents who feel they are making high payments for limited services, especially now that no engineering solution will be provided to mitigate the natural hazard risk. The concern with perceived rating unfairness resurfaces upon receipt of each quarterly rates invoice. Also, individual property owners within the fanhead have been treated differently with some receiving rates relief and others not. Anger over rates is likely to be getting in the way of moving towards mitigation of the debris flow risk.

#### **(f) Confirm retreat zone boundaries**

Debris flows are highly uncertain in frequency and highly variable in scale and behaviour. Consequently, the ability to accurately differentiate a "safe" zone from an "unacceptably high risk" zone with a high degree of confidence is very difficult. Current and future landowners (and their insurers and mortgagors) will rely on the information provided by the Council in making decisions around property purchase, development and retreat. These decisions will be grounded in life safety risk analysis.

Further work is required to increase the level of confidence in the boundaries of any retreat zone. The Council needs to confirm the risk rationale and location of hazard lines at property boundary level. Whether a 1 in 10,000 ( $1 \times 10^{-4}$ ) or 1 in 100,000 ( $1 \times 10^{-5}$ ) probability is an appropriate risk level needs to be confirmed. The BOPRC Change 2 to their Regional Policy Statement may well assist in this regard. Discussions to date reflect international criteria of an annualised loss of life risk level of  $1 \times 10^{-4}$  or greater as an intolerable level of risk for society for existing development reduced by one order of magnitude for new development (i.e.  $10^{-5}$ ). A 1 in 100,000 risk level would bring another four properties on the eastern end of the risk zone and 10 properties at the western end of that zone into a retreat zone.

Any high-risk zone then needs to be drawn at a property boundary level to enable administrative decisions to be made. This work would be needed even under a "do minimum" option if this option was to include changes to the District Plan for this area. The final hazard zone boundary needs to be formalised by a District Plan change. A Plan Change will provide landowners with consultation and

submission rights. A Plan Change is important to any future approach to other agencies for funding support as they are likely to perceive this as a minimum level of local commitment to addressing the risk.

**(g) Investigate escape routes and early warning systems.**

Even in a best case, at least some people are likely to remain resident in the high-risk zone for some years to come. An escape pathway is a low cost minimum action identified by the group. A pathway for properties to the east of the Awatarariki Stream may need to be a walkway only though private land. An escape pathway to the west capable of accommodating a vehicle in an emergency could be easily formed.

Early warning systems are problematic for debris flows that occur in short steep erodible catchments, such as the ones behind Matatā. This is due to the minimal lead time between event initiation and arrival time of destructive debris at the fanhead. Despite these limitations it is recommended that further research be undertaken including potential enhancement of the regional council rain gauges in the Herepuru catchment by linking the existing telemetry to a community warning system.

**(h) Right turning bay from SH2**

Traffic turning right into Kaokaoroa Street from SH2 constitutes a hazard to vehicles approaching Matata from the north. The intersection is on a sweeping bend close to a 100km/hr zone and with limited visibility. The Group has requested the Council investigate with NZTA a resolution to the hazard from right turning traffic.

**4.2 Status quo/do minimum option**

The status quo/do minimum option is not attractive to either landowners or Council. However, in the absence of an agreed voluntary retreat alternative discussed below, regulatory actions in the do-minimum option are minimum reasonable steps by the Council to mitigate life safety risk at Awatarariki. This option would likely involve:

- Continuing habitation of 13 sites (see Attachment 1.) where owners of remaining houses have existing use rights.
- The Council continuing to issue notices of risk (on LIMS as already occurs, and possibly establishing onsite signage advising occupiers and visitors of the hazard and associated risks).
- Hazard zoning by the Council to make new subdivision, use and development a discretionary activity subject to acceptable mitigation by individual owners within the boundaries of their own site(s).
- Potential new regional plan provisions from the Bay of Plenty Regional Council that would have the effect of preventing further development and removing existing use rights under Section 10 of the RMA.
- 29 land owners of vacant land (see Attachment 1.), if unable to demonstrate building code compliance through on site mitigation, would be prevented from constructing new dwellings. Illegal development is likely on at least some of these sites.
- Potential for court action relating to Council's historic decision-making and/or LIMS, building consent refusals and rezoning proposals.

**4.3 Property purchase options under a voluntary retreat settlement agreement**

Options for the level of property purchase payment required to achieve voluntary retreat depend upon a mixture of both governments' objectives and landowners' various circumstances. Governments' objectives can be seen in three potentially cumulative objectives comprising:

- (a) Life safety only.

- (b) Life safety AND passive reserve creation.
- (c) Life safety AND passive reserve AND partial compensation for suffering and investment loss.

Landowners' circumstances need to distinguish between owners of land only, and owners of both land AND buildings – who have existing use rights.

These three options and the property purchase arrangements for council and landowners are discussed below, and summarised in Table 2.

For homeowners with both land AND buildings who have existing use rights, degrees of flexibility within the settlement agreement framework will be needed to reflect individual circumstances and be of sufficient scale to encourage participation.

#### **4.4 Cost sharing for all voluntary retreat options**

The voluntary retreat option is contingent upon securing funding support across all three levels of government – the Whakatane District Council, the Bay of Plenty Regional Council, and central Government. Development of a funding formula acceptable to all parties will be a collaborative and iterative process.

Property purchases in all cases would need to be fair and follow a defensible process. This would be achieved by following established Public Works Act procedures.

#### **4.5 Voluntary retreat funding option – if governments have a life safety objective only**

The cost to governments would be subject to further work on hazard zones and valuations.

Owners who are currently resident on their site could elect to defer settlement of purchase and retain ownership for the remainder of their life as part of the purchase agreement. This would require a caveat on the property title noting Council's interests. This provision recognises that for some landowners, the site itself has importance as a home with history and part of long established life plans. While this provision may not be preferable from a government life safety perspective, it may be an acceptable compromise if this provision facilitates complete retreat within current lifetimes.

For owners with land only, it would be possible to continue to use the Building Act tests to prevent further development where building code compliance cannot be attained. Under this option there would be no purchase of properties for owners with land only. These owners would be able to use their sites for temporary camping type uses only. It is likely however that informal construction would emerge with mobile homes and caravans growing into more permanent and illegal structures. Removing any illegal developments would be a significant test of Council's regulatory resolve.

A restrictive district plan zone would be developed. The current permitted residential uses would change to a discretionary or non-complying use zone. A discretionary activity status requiring applicants to prove feasible on-site mitigation would create a further district plan restriction upon new construction in addition to the current Building Act requirements. Careful sequencing of the settlement option with the timing of a plan change will be required so that the plan change process is not viewed as intimidatory during settlement negotiations. The plan change needs to be sufficiently advanced to clearly indicate the Council's intent to satisfy regional and central government funding partners.

This option would need to be agreed by the owners of 13 properties with both land and buildings. Owners of the 29 vacant sites are likely in many cases to be very negative, if not litigious, in response to this alternative.

**4.6 Voluntary retreat property purchase arrangements –if governments have a life safety objective AND objective to create a passive reserve**

This property purchase option recognises that if Council wants to prevent the potential for inappropriate land uses such as unconsented, substandard structures establishing on the currently vacant sites, an attractive offer would need to be made to owners of land only. This offer would need to be at least as good as owners’ next best alternative. This could be the land’s value for camping or other passive use if building code compliance cannot be established for new dwellings. The cost to governments is subject to further work on hazard lines and valuations. Assessing a market value for properties with land only that recognises the limited, but not necessarily fully extinguished, development rights could be a technically challenging valuation task.

A restrictive district plan zone would be implemented as outlined above.

BOPRC would also be asked to agree to not initiate new regional plan provisions that prevent further development and remove existing use rights under Section 10 of the RMA on the Awatarariki site until all landowners agreeing to a managed retreat have proceeded through the property purchase procedure.

The Council would establish on the area of retreat a revegetated passive reserve. It would be preferable for the Council to complete this work on each site within one year of the receipt of property title but economies of scale would need to be factored in. This development would be subject to obtaining any necessary resource consents. Plans would be developed to align with proposals for historic battlefield and urupa preservation plans on adjacent Māori owned land (see sites labelled “V” in attachment 1). Costs on Council reserve land and any purchased sites would be funded by the three levels of government on an equal contribution basis.

**4.7 Voluntary retreat property purchase arrangements - if governments have a life safety objective AND objective to create a passive reserve AND partial compensation for owners suffering and loss of investment.**

This property purchase option is similar, from the financial perspective of owners of land only, to the property purchase arrangement outlined to the Consensus Development Group on 5 May 2015. Council under this option would offer a solatium payment over and above a value of the land only. Notwithstanding the primary purpose of the solatium payment is to stimulate retreat, it also recognises some of the suffering property owners have endured over the last 10 years.

The cost to governments would be subject to further work on hazard lines and valuations. Costs are likely to rise significantly however relative to the other two funding options. Governments may however be reluctant to fund these investment losses by private individuals on land only sites. This contrasts with the argument for government purchase of homes with existing use rights. In this situation government is buying a retreat for reasons of life safety.

This third option assumes that government is unwilling to use its legislative powers to enforce a retreat at a cost that might be met more by the individual owner.

New restrictive district plan and regional rules by Whakatane District Council and BOPRC respectively would be implemented as for the other two options above.

Table 2. Summary of Council’s options and property purchase arrangements under various combinations of Council objectives and various landowner circumstances.

Landowner circumstances	Options and outcomes	
	Status Quo option	Voluntary retreat option

Description	# of private sites		A. Life safety	B. Life safety Passive park	C. Life safety Passive park Solatium
1. Pre-2005 <b>house continuing</b>	9	<ul style="list-style-type: none"> <li>• On-going inhabitation with existing use rights.</li> <li>• Restrictive rezoning + LIMS.</li> <li>• Property value decline.</li> <li>• Go to court.</li> </ul>	<ul style="list-style-type: none"> <li>• Landowner receives an agreed market value based on a process to be developed plus potential solatium payment.</li> <li>• Restrictive rezoning after the financial settlement is made, and Council gains control of sites anyway.</li> </ul>		
2. Pre-2005 <b>house rebuilt</b>	4				
3. Pre-2005 house – site now <b>vacant</b>	5	<ul style="list-style-type: none"> <li>• Restrictive rezoning.</li> <li>• Existing use rights for camping only unless a positive MBIE determination is received.</li> <li>• Property value decline.</li> <li>• Go to court.</li> </ul>		<ul style="list-style-type: none"> <li>• Landowner receives an agreed market value based on a process to be developed</li> <li>• Restrictive rezoning.</li> </ul>	<ul style="list-style-type: none"> <li>• Landowner receives an agreed market value based on a process to be developed.</li> <li>• Plus “solatium”.</li> <li>• Restrictive rezoning.</li> </ul>
4. Site <b>vacant pre &amp; post 2005</b>	24				

#### 4.8 The case for Regional and Central Government funding of a voluntary retreat

If landowner support can be secured, the case the Council would make for Regional and Central Government funding would use the following investment logic.

- The 2005 debris flow event was unanticipated and it was reasonable that risks now made apparent by post event research were not identified prior to the event.
- In 2005 central government acknowledged the level of loss of life risk to the community was unacceptable and agreed to join with the Council to invest in clean up and hazard mitigation. Retreat was rejected at that time being a more costly option in comparison to debris detention structural solutions.
- Debris dam and other engineering solutions have now been assessed and are not feasible. Therefore while substantial investment in clean up and mitigation solutions have been made by all levels of government, a complex and highly stressful situation continues for many landowners. Governments’ commitment to a solution remains uncompleted.
- Expert professional advice from Tonkin and Taylor in 2013 is that a high annualised loss of life risk exists at the Awatarariki debris flow site. This assessed level of risk is consistent with the level of risk assessed by Davies (2005)<sup>3</sup> shortly after the event.
- Individuals find this risk tolerable in many cases, but the individual and cumulative risk to society is intolerable to government at all levels.
- Homeowners have existing use rights. The Whakatane District Council, in the absence of further special empowering legislation as passed following the Christchurch earthquakes, does not have legal powers to force retreat from the site.

<sup>3</sup> Davies T (2005). The Matata debris flows of 2005–Inevitable events, predictable disaster. Natural Hazards Research Centre, Department of Geological Sciences, University of Canterbury.

- The Council is requiring building consent applicants to demonstrate compliance with the building code taking into account properties on the fanhead are subject to future debris flows. This has had the effect of constraining further construction. Under the proposed settlement, Council would implement a restrictive land use zone.
- A financial package of sufficient scale to attract landowners away from the site and to establish a passive reserve for debris flow protection purposes is needed.
- The minimum objective for Governments is to buy protection of public safety in the absence of specific empowering legislation that might enable a forced retreat from the sites.
- Whakatane District Council has insufficient financial resources to complete even the lowest cost funding option for a managed retreat. The financial support of both regional and central government is therefore essential to any retreat solution.
- The unacceptable status quo alternative is 13 occupied houses in a high-risk zone, and the risk of informal temporary substandard structures establishing across the 29 currently vacant sites.

#### 4.9 Timeline

The timeline in Table 3 below outlines a proposed process under funding options A, B and C for a managed voluntary retreat. Final cash pay-out could be as early as July 2016. It is assumed that any final agreement across all parties must be achieved by the next central government elections in late 2017.

Table 3. Timeline for proposed next steps under a voluntary managed retreat option

	May - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec
Council investigates early warning, escape routes & rates issues											
Council initiates work to precisely define the high risk area and conducts valuations											
Council initiates funding discussions with regional and central governments											
Report back to Council when cost data firmed up											
Council seeks formal response from landowners to the voluntary managed retreat option											
Council presents agreement to landowners for signature											
Council makes budget proposals to its own Annual Plan, BOPRC and central government											
District & Regional Council elections											
Deal agreed locally. Cash pay-out date subject to regional and central government approval											
Central government elections											

## **5 ASSESSMENT OF SIGNIFICANCE**

The decisions or matters of this report are part of a process to arrive at a decision that may be significant in accordance with section 3.3 of the Council's Significance and Engagement Policy. This states that a matter shall be determined to be significant if/when the impact or consequences of the proposal or decision on the affected persons (being a number of persons) will be substantial, or when the financial implications of the proposal or decision on the Council's overall resources are substantial.

## **6 COMMUNITY INPUT AND PUBLICITY**

The Council may wish to acknowledge the landowner members of the Consensus Development Group. These individuals were not representatives of all landowners but they passionately contributed a wide range of views reflective of the various landowner circumstances. They have displayed great commitment and open minds to the collaborative process to date. The progress that has been made would not have been possible without their valued collective and constructive input.

All landowners received progress reports during the Consensus Development Group process. It is proposed the Council continue to communicate regularly directly by mail and email to all landowners on progress with the recommended actions.

## **7 CONSIDERATIONS**

### **7.1 Financial/budget considerations**

The Council needs to consider budget provision for its potential share of retreat and project costs. Even under a "do minimum" option, costs of potential legal challenge and district plan rezoning could be significant. Financial implications of the settlement framework will be developed as part of the development of that framework. These will be reported to the Committee as the work progresses.

It is estimated that \$80,000 will be required to complete investigations into:

- Hazard line delineation;
- Definition of current market valuations of properties (13 dwellings, 29 vacant sites);
- Investigation of early warning systems and escape routes;
- A review of the rating circumstances for each property owner on the Awatarariki fanhead going back to 2005;
- Resolution of the hazard arising from right hand turning from SH2 into Kaokaoroa Street;
- And initiating informal approaches to Bay of Plenty Regional Council and central government for the funding of a managed voluntary retreat from the Awatarariki fanhead.

It is also estimated that a further \$90,000 will be required during the 2015/16 financial year to develop and progress a settlement framework and to prepare a business case to support formal approaches to central and regional government.

It was intended that this part of the project would be complete by the end of the 2014/15 financial year. There has not been any specific budget allocated to this project for the 2015/16 financial year. However, it is possible to bring forward funds from the 2016/17 year that were planned for Plan Changes to the District Plan (\$82,000) and from 2017/18 for natural hazard projects (\$88,000). This will incur interest costs that are unbudgeted.

## **7.2 Policy and planning implications**

District plan hazard zoning is a component of all options under consideration. Preparatory work has already been completed on this task. It will be important that a voluntary retreat option does not create precedent implications for future natural hazard events elsewhere in the district.

## **7.3 Risks**

Failure to secure widespread landowner agreement to a voluntary managed retreat is a high risk to the success of this project. Good communications and focused management effort can only mitigate this risk to a degree. Stakeholder buy in is essential. Ultimately however, Council has a “do minimum” option available to ensure it has taken all reasonable steps to address the high risk zone for debris flows from the Awatarariki Stream.

Landowner attitudes toward the Council are variable and therefore on-going negative publicity is possible. Maintenance of the current project momentum is an important mitigation of this risk.

Timeframe slippage is a risk in terms of delays continuing to build landowner frustration after ten years. It is important that the property valuation and hazard line identification work be undertaken promptly.

Serious health and safety issues arise from the on-going threat of a debris flow occurrence. Investigation of escape routes and warning systems may offer additional mitigation in the short term.

Financial risks to the Council, the Bay of Plenty Regional Council, and central government exist around the costs arising from property valuation and the number of sites finally determined as impacted.

Notwithstanding the Council has received positive legal advice on its liabilities for past and potential future actions concerning the Awatarariki Stream fanhead and debris flow risk, risks of legal challenge are high.

## **7.4 Authority**

The Council has the authority and financial delegation to commission the work recommended in this report.

## **8 CONCLUSION**

There is no easy engineering or planning solution to manage the debris flow risk to property owners from the Awatarariki Stream catchment. The Consensus Development Group has identified managed voluntary retreat as the possible way forward. This option requires further work on hazard line locations and property values before Council can make an informed decision. A do-minimum option, while not attractive to any party, is not a legally defensible backstop option to fulfil Council’s obligations to take all reasonable steps to respond to the high-risk from future debris flows from the Awatarariki Stream catchment.

### **RECOMMENDATIONS:**

1. That the report "A process towards a settlement framework to mitigate debris flow risks – Awatarariki fanhead, Matata" be received; and
2. That planning-based options continue as the focus of investigation; and
3. That a “do minimum” option is not the preferred outcome from the process; and

4. That staff progress the development of a voluntary managed retreat option; and
5. That a voluntary managed retreat option is contingent upon securing funding support across all three levels of government (including Whakatane District Council, Bay of Plenty Regional Council, and Central Government); and
6. That a threshold of 90% of landowners to a settlement agreement is necessary before any formal approach to regional and central government can be considered; and
7. That the following work be commissioned with a view to having the work completed by the end of October 2015:
  - i. Definition of hazard lines at Awatarariki at a property boundary level;
  - ii. Definition of current market valuations of properties potentially affected at Awatarariki;
  - iii. Investigation of early warning systems and escape routes;
  - iv. Initiate informal approaches to Bay of Plenty Regional Council and central government for the funding of a managed voluntary retreat at Awatarariki;
  - v. A review of the rating circumstances for each property owner on the Awatarariki fanhead going back to 2005;
  - vi. Investigation of solutions to the hazard of right hand turning traffic from SH2 into Kaokaoroa Street.
8. That \$88,000 budgeted in 2017/18, and \$82,000 budgeted in 2016/17, be brought forward for this project;
9. That the substantial unpaid work over the period from March to May 2015 by the six landowner representatives on the Consensus Development Group be formally recognised.

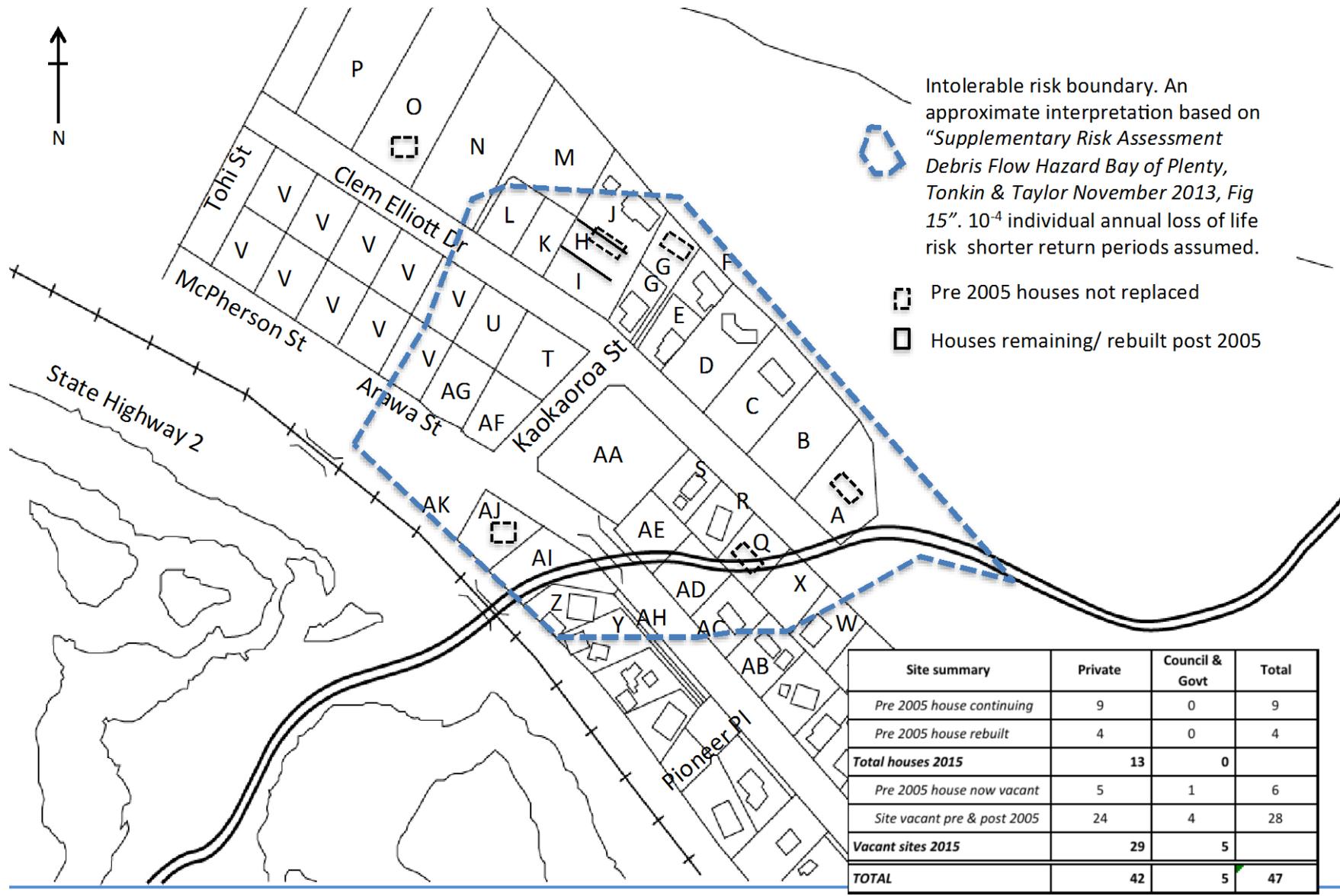
Attached to this report:

- Appendix A: Awatarariki Site Summary

#### Report Authorisation

Report writer:	Jeff Farrell	Manager Strategic Projects
First Approval:	David Bewley	General Manager Planning, Regulatory and Corporate Services
Final Approval:	Marty Grenfell	Chief Executive

# Appendix 1 - Awatarariki site summary



Landowner key & intolerable risk area

AWATARARIKI site and land owner details updated 10 June 2015