

Tasman District Council

Takaka Fire Fighting Options Evaluation

21 April 2008

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Tasman District Council

Takaka Fire Fighting Options Evaluation

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1 Introduction

The Takaka community, the Tasman District Council and the New Zealand Fire Service have identified that the Takaka community has inadequate fire fighting infrastructure to adequately protect the community from fire. In order to determine the most appropriate new fire fighting infrastructure, the Tasman District Council, the Golden Bay Community Board, the New Zealand Fire Service and an interested party from the community met in a workshop environment to identify potential options. They have adopted the goal:

“To select and construct the most appropriate, cost effective and affordable fire fighting infrastructure to serve Takaka”

This report documents some of the discussions and findings from the first workshop, and lists and evaluates options identified.

This report has been prepared co-operatively with the New Zealand Fire Service. It is intended that it be circulated to the parties of the first meeting to be reviewed and amended as necessary to record the groups views. Ultimately it is intended that this is put before the Tasman District Council for them to decide.

2 Takaka Fire Fighting Workshop

Venue: Takaka Fire Station

Date: 22nd February 2008

Attendees:

Tasman District Council

Cr Noel Riley (Chair)

Cr Trevor Norriss

Robyn Scherer (Minute Secretary)

Cr Stuart Borlase

Jeff Cuthbertson

MWH

Richard Lester

David Burn

NZ Fire Service

Graeme Daikee (Nelson)

Alf Reed (Takaka)

James Firestone (Wellington)

Kevin Heberd (Takaka)

Greg Fellowes (Takaka)

Golden Bay Community Board

Joe Bell

Carolyn McLellan

Leigh Gamby

Karen Brookes

Tony Sandall

Apologies: Philip Woolf (NZ Fire Service, Takaka)

Action items: MWH with assistance of the Fire Service to review all options and provide report on them.

For the complete minutes see **Appendix A**

3 Current Fire Fighting Capability

During the 1st workshop the Council and the Fire Service were invited to comment on the capability of the existing fire fighting infrastructure. The following are salient points that arose:

- Recent testing of the fire wells revealed many were in-operable, of limited or unsuitable flow for fire fighting or simply weren't found.
- Council would consider cutting off and abandoning fire wells which are found to be in-operable on the basis that it is better if they are not there, than being there and giving a false sense of security and possibly causing damage to fire fighting equipment in an emergency.
- Council has repeatedly experienced problems with the fire wells including vandalism, theft of well caps and dumping of rubbish inside the well pipes.
- The Fire Service do not consider the fire wells reliable or effective for fire fighting and they will not use any fire wells in Takaka in an emergency to fight a fire. They have experienced problems using the fire wells including not being able to draw any water, not being able to draw enough water, wells being rendered un-useable through vandalism/tampering, with significant equipment damage through entrainment of gravel from the wells. The service will not connect their trucks to the wells due to the potential damage to front line equipment.
- Pumps are required to suck water from the aquifers, and due to the spacing of the wells, there is a significant set-up process required before water can be deployed on a fire. Even if the wells were reliable and in perfect condition, the set-up delays and man-power demands mean that they are ineffective for fire fighters to control fires with. Typically the fire service have about 15 minutes before a fire in a building will be uncontrollable, and the fire service have to move into a defensive operation to stop the fire spreading to surrounding buildings.
- In Takaka CBD, the risk of fire spread is high due to the close proximity of old style buildings. In a significant building fire, they would need several water sources available to adequately control the spread of the fire to neighbouring buildings, including buildings behind and across the street. The distribution and effectiveness

of fire wells will make controlling any sizeable fire very difficult, and there is a significant risk that any fire may take-out a large part of the CBD.

4 Extent of Fire Fighting Coverage

Ideally the entire Takaka community would be provided with a high level of fire fighting infrastructure, however, the cost of providing full coverage is high. Feedback from the Community Board Members in workshop 1, backed up by submissions in previous Annual Plan consultation periods, is that while the need for improved fire fighting is recognised, the cost-benefit has to be considered and upgrades staged to service the highest risk areas first.

Clearly the highest risk area is the Central Business District (CBD), as defined in the workshop and shown in Figure 4-1. The group at the workshop agreed that this area is where the highest fire risk lies and where the highest priority for upgrade is needed.



Figure 4-1 : Takaka CBD as Defined in Workshop

Beyond the CBD, the workshop considered other priority areas. The schools area as shown in Figure 4-2 was discussed. The schools were recognised as an important community asset that if significantly damaged would have a high consequence for the community due to the lack of close alternative facilities. However, the schools have pools that could be used as water sources in an emergency and Councillor Borlase had received feedback from representatives of the school that they considered they had acceptable fire fighting coverage. The acceptability, reliability and security of these measures have not been confirmed at this stage, and this does potentially need to be considered further in the future. It was concluded that the main area of fire risk is the CBD and that the remainder of the area would be considered together with no further separation.

Figure 4-2 shows the area of Takaka that is being considered for some form of fire fighting coverage.

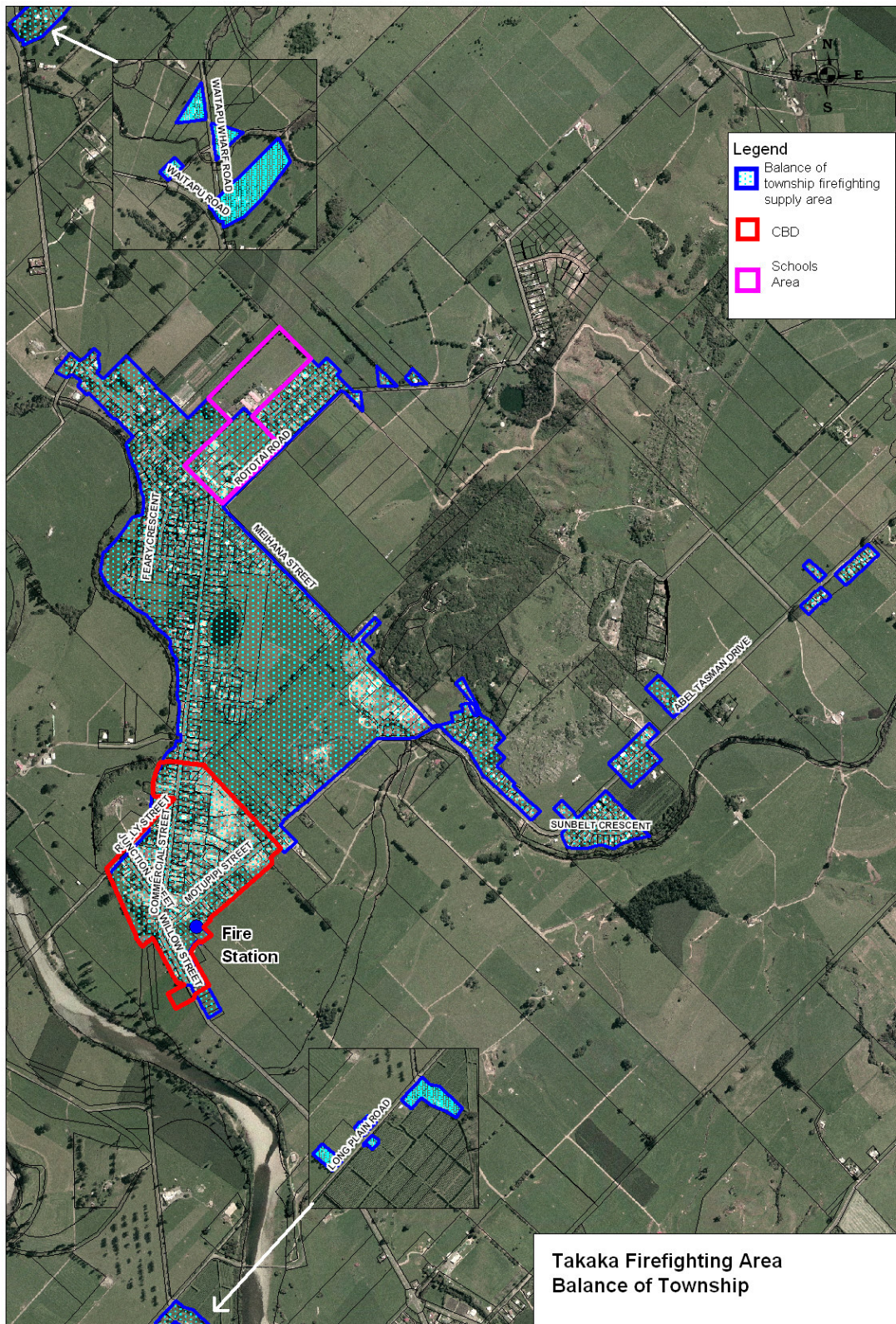


Figure 4-2 : Other Fire Coverage Areas in Takaka

5 Identification of Options and Coarse Screening

5.1 Option Identification

The options to be considered were identified through the workshop. These have been sorted and listed in the Coarse Screening Evaluation Matrix included in Appendix B in accordance with the methodology outlined in section 5.2.

5.2 Coarse Screening

In consultation with the Fire Service, we have prepared a set of coarse screening criteria to assess each option against. These are as follows:

Table 5-1 : Coarse Screening Criteria




| Criteria | | Description |
|----------------------------------|----------------------------|--|
| Feasibility | | Is the option practical to construct, use and manage. |
| Maintainability | | Is the option practical to operate and maintain on a day to day basis between fires. |
| Effectiveness for Fighting Fires | Meets Fire Code | Does the option meet the fire fighting code of practice – to at least a W3 standard – considered to be the minimum accepted standard for a community like Takaka. While it is not a legal requirement to meet the fire fighting code of practice, the code documents what the Fire Service consider minimum standards and can be accepted as industry practice. |
| | Water Supply | Does the option provide water at sufficient flow rates and storage volumes to allow the Fire Service to effectively fight fires. |
| | Ease of Connection | How quickly and easily can the Fire Service connect to the system and have water to fight the fire with. Hydrants are generally considered the fastest, so options are graded against this. |
| | Security | How safe and secure is the system from tampering or vandalism. The Fire Service needs to be able to rely on the system function when needed and if a system is easily tampered with then that reliability is not there. |
| | Visibility / Accessibility | How visible and accessible are the connection points. Bearing in mind that the Fire Service often have to respond in the middle of the night when it is dark, trying to find or get access to the connection point is time lost to the fire. Preferably all sources, especially hydrants should be located in the road carriage way so they are visible to drivers and unlikely to be obstructed. Connection points off the road can be obstructed, difficult to find, covered over, blocked up with foliage, etc. |
| | Robustness / Reliability | Will the option reliably provide water and will it be robust enough to operate through the emergency operating conditions that can be experienced during a fire. To be reliable, there has to be water ready to use 24 hours a day 7 days a week. |

| | | |
|--|------------|--|
| | | To be robust, it has to be able to provide the water flows at day one and after 20 years of operation without the risk of flow rates dwindling or performance declining. |
| | Resourcing | How many resources in terms of staff and equipment are needed to effectively operate in a fire. The Fire Service needs a simple system that can be operated by the minimum of fire fighters. The Takaka Fire Service is a volunteer brigade, with significant staffing limitations. They don't always get a full complement of fire fighters responding to emergency calls and they do not always have the highly trained and experienced pump operators to operate complex or unreliable systems. This requires consideration of skill levels required to "make water" for any option, compared to the basic skill of all fire fighters to "sink a stand pipe on to a hydrant". |

At this stage no affordability criteria have been included because it is considered that in the first instance, any option that is carried further needs to pass the basic requirement of being practical to build and operate and be effective at fighting fires. If it doesn't pass these criteria, it is not worth pursuing no matter how affordable it is. Affordability will come into the assessment in later stages.

The evaluation of each option against the criteria in Table 5-1 is included in Appendix B.

The evaluation process was to assess each option against of the criteria and judge against the following scale:

-  Would perform well against this criteria
-  Will perform to some degree against this criteria but has some known problems or drawbacks
-  Performs poorly against this criteria

From this assessment, a judgement was made on which options should be short-listed for further consideration and which should be dropped. There was no formula driven determination of which option should be short-listed and which not, but rather a subjective judgement of the performance against the multiple criteria. It is intended that this judgement be reviewed by the workshop participants to get a general consensus as to the short-listed options for further consideration.

5.3 Short-listed Options

From the coarse screening exercise, it is considered that the following options be short-listed for evaluation in further detail – including costing:

For the CBD:

- Pumped Fire Wells
- Pressurised Fire Main
- Pressurised Fire Main with Reservoir Storage

Outside CBD:

- Tankering to Fire
- Pressurised Fire Main

- Pressurised Fire Main with Reservoir Storage

6 Evaluation of Short-listed Options

Evaluation has been based on some basic assumptions and parameters and not on detailed design for each option.

The cost estimates have been developed from comparative rates for similar work. It assumes that a simple system without high quality finish will be preferred. All of the electrical, control and delivery infrastructure has been based on simple but robust equipment and materials, however only the minimum provisions have been made for housing control equipment, site works generator housing etc.

The cost estimate should be considered a concept design estimate only to +/- 30%. A contingency figure has been included for unknowns.

Allowances have been made to get water abstraction consents and for design costs.

No provision has been made for land acquisition or easement costs.

The systems using a pressurised main are based on fire fighting use only and would not be suitable for a potable water supply. If it were to be used for a reticulated potable water supply then other considerations would need to be taken into account.

6.1 Pressurised Fire Main: CBD or outside the CBD

6.1.1 Scope Description

The system consists of a 150mm diameter fire main and hydrant system using pumps and control system to ensure that pressure is continuously maintained with a suitable supply to each hydrant point. As there is no volume storage, it relies on electro/mechanical equipment and control systems at all times to meet demand.

The system could supply water to both the CBD and / or all of Takaka.

Required components are a suitable water source, pump/s, electrical supply and back up generator, pressure control system, fire main and hydrant system. It has been assumed that:

- The existing well behind the fire station will be able to be used and that another well will be drilled and plumbed to provide 100% backup of the water source
- A generator will be included to provide power in the event of a power cut, this will be sited outdoors. There may be a noise issue associated with this.
- An allowance has been made for a pressure vessel but the sizing or even the need for this has to be considered in more detail if this option is selected.

6.1.2 Cost Estimate

CBD

| | |
|----------------|--------------|
| Estimated Cost | \$ 861,000 |
| Contingency | \$ 204,000 |
| Total cost | \$ 1,065,000 |

Outside CBD

| | |
|----------------|--------------|
| Estimated Cost | \$ 2,045,000 |
| Contingency | \$ 517,000 |
| Total cost | \$ 2,562,000 |

6.1.3 Feasibility and Practicality

This option is feasible and practical to install, operate and maintain excepting that a sophisticated control system will be required. It is similar to a normal storage and main system. The system will require a regular planned maintenance programme to ensure that the pump, generator and controls are operational. The pipelines will need to be flushed on a regular basis as the water will not be chlorinated and over time algae will form.

The challenge will be the control systems required for the pumps and possible pressure cylinder to manage full flow during a fire and lesser flows to ensure the system is kept at operating pressure. Variable speed drive and soft starting will be required to manage the operation of the pump.

The life cycle costs for the piping and hydrant system is low but the pump and generator an control system will require regular maintenance and probably replacement over a 50 year period.

6.1.4 Effectiveness for Fire Fighting

The system will supply and meet all the needs for fighting a fire but will involve a delay with the supply of water to the hydrant as the pumping system ramps up to full speed. There will be some flow variability as the system moves from a static state to full flow with this type of system. The major issue will be a delay in achieving full flow this is likely to be in the order of 1 minute and will become familiar to fire-fighters with use.

The system fails to meet the fire fighting code of practice as no water storage is provided. Inclusion of the standby generator and second production well will provide some security of supply at all times.

6.1.5 Risks and Uncertainties

The risks associated with this methodology are the requirement for the control and pumping system to be continuously operative to provide security of supply and the need for ongoing maintenance and checking to ensure system is operative.

There will be a delay in supply of water at full flow to the hydrant.

It is assumed that the fire service grounds can be used for the wells and pump controls system at no cost.

It is also assumed that a fire main can be laid through 2 areas of private property.

It is assumed that Transit will allow a fire main in Commercial Street with no extraordinary constraints or requirements.

Noise control may be an issue with generator

6.2 Pressurised Main with Reservoir Storage: CBD or Outside CBD

6.2.1 Scope Description

The system is similar to the option (6.1) above without the pressure control system and with the addition of an elevated storage reservoir. It consists of a fire main and hydrants which are supplied from an elevated storage reservoir. Water is pumped from a well to storage tanks using either separate rising and falling mains or a combined rising /falling main. The advantage of this system is its capacity to supply a minimum quantity of water even if the pumping system fails. It also gives an immediate supply of water at full flow rates. This system complies with the Code of Practice for Fire Fighting. In general plastic tanks would not be used for storage in a reticulated system but as the system is for fire fighting only it requires only a small reservoir and plastic tanks are less expensive and easier to install.

As with Option 6.1 above the following assumptions have been made:

- The existing well behind the fire station will be able to be used and that another well will be drilled and plumbed to provide 100% backup of the water source.
- A generator will be included to provide power in the event of a power cut. This will be sited outdoors and. There may be noise issue associated with this.
- That land will be valuable to site the storage tanks and provide access.

6.2.2 Cost Estimate

CBD

| | |
|----------------|--------------|
| Estimated Cost | \$ 1,158,000 |
| Contingency | \$ 281,000 |
| Total cost | \$ 1,439,000 |

Outside CBD

| | |
|----------------|--------------|
| Estimated Cost | \$ 2,324,000 |
| Contingency | \$ 547,000 |
| Total cost | \$ 2,871,000 |

6.2.3 Feasibility and Practicality

This system is feasible and practical to install, operate and maintain. Takaka is on a flood plain and so an elevated storage location is some distance from the CBD which will require a considerable length of pipe to connect to the storage system.. As with Option 6.1 above, a planned maintenance programme will be required for the pumps, generator and control system but also the storage tanks and associated piping and valves. Also pipelines will need to be regularly flushed.

The system has a reasonable life cycle cost as most of the system will last for a 50 year cycle. The tanks may have to be replaced and only have a 25 year guarantee

6.2.4 Effectiveness for Fire Fighting

This system meets all the requirements of the fire service and the code of practice for fighting fire and is considered to be “the best” system.

6.2.5 Risks and Uncertainties

There is little operational risk with this option as there will always be a minimum supply of water (90m³) available to fight a fire even if the pumping system is not working.

Availability of land for the reservoir and access is available

The system will still rely on the pumping system if the initial storage capacity is used up.

It is assumed that the fire service grounds can be used for the wells and pump controls system at no cost.

It is also assumed that a fire main can be laid through 2 areas of private property.

It is assumed that Transit will allow a fire main in Commercial Street with no extraordinary constraints or requirements.

Noise control may be an issue with generator.

6.3 High Capacity wells (Texco wells) CBD or Outside CBD

6.3.1 Scope Description

Replace the existing fire wells with higher quality wells that are deeper, more adequately screened and provided at suitable spacing to meet fire service requirements. Each well would be securely closed off and teed off to an adjacent hydrant which the Fire Service would connect to and then pump water out of the well.

It appears from data held for 2 sites (Fire Station and TDC Office) in the Takaka CBD area that in general water level does not fall below a level at which it would be possible to extract water using a suction pump. The lowest levels are approximately 3.5m below ground level. There is still though the possibility that at any one time or place levels may be too low to enable a suction pump to operate.

6.3.2 Cost Estimate

CBD

| | |
|----------------|------------|
| Estimated Cost | \$ 248,000 |
| Contingency | \$ 78,000 |
| Total cost | \$ 326,000 |

Outside CBD

| | |
|----------------|------------|
| Estimated Cost | \$ 675,000 |
| Contingency | \$ 236,000 |
| Total cost | \$ 911,000 |

6.3.3 Feasibility and Practicality

Wells will need to be drilled in roadways and will present some disturbance during installation. An ongoing programme of operation and testing of each well will be required to ensure that they do not degrade due to lack of use.

6.3.4 Effectiveness for Fire Fighting

The wells should be able to supply a suitable flow of water assuming that they are regularly used and that water levels do not drop to far below ground level. This system requires a higher level of resource and skill from the fire service to operate.

6.3.5 Risks and Uncertainties

Assumptions have been made that water can be found at all the locations where wells are required.

There is always a risk that at any one time water may not be available from one or more wells due to fluctuations in water level. If this does occur then it will place pressure on resources and time to connect to another well further away or have to provide an alternative supply.

It is assumed that Transit will allow wells in Commercial Street with no extraordinary constraints or requirements.

6.4 Pumped Fire Wells CBD Only

6.4.1 Scope Description

Replace the existing fire wells with higher quality wells that are deeper, more adequately screened and have submersible pumps and control system to provide a suitable fire fighting water supply. The fire service will connect to a hydrant (that is connected to the well) and then to their fire vehicle for distribution. This is the same as Option 6.3 above but includes a pumping system at each well to supply water.

Each well will have its own power supply, pump/control system and would be activated by the fire service at each location. Assumptions have been made about availability of power within a reasonable distance from each well and that wells can be placed close to the position required for each hydrant point. Each well will have a pump capable of 12.5l/s. Controls include metering of power, variable speed drive and controls for start up including a lockable override start switch for non emergency use. It is envisaged that the emergency start switch will be provided inside a box similar to an alarm box which requires glass or similar to be broken to activate the switch but which does not require keys to access.

6.4.2 Cost Estimate

| | |
|----------------|------------|
| Estimated Cost | \$ 769,000 |
| Contingency | \$ 211,000 |
| Total cost | \$ 980,000 |

6.4.3 Feasibility and Practicality

Requires considerable work to install each well with associated costs for a pump and control system at each well. Could be subject to vandalism and will not work if there is a power failure. Wells will be required to be tested and used at regular intervals to prevent the degradation of the well and ensure that all equipment is operational.

Life cycle costs over a 50 year period will be high due to costs of power supply, system maintenance and equipment replacement.

6.4.4 Effectiveness for Fire Fighting

This system should provide a suitable source of water on all occasions subject to power being available.

6.4.5 Risks and Uncertainties

The system could be subject to vandalism and interference.

During a power failure the system will not be operational.

The system relies on significant electro-mechanical equipment at each well which could be subject to failure.

All the wells need to be tested and utilised on a regular basis to maintain their capacity and ensure they are operational.

It is assumed that Transit will allow wells in Commercial Street with no extraordinary constraints or requirements.

6.5 Water Tanker outside CBD only

6.5.1 Scope Description

TDC to provide a dedicated water tanker for the fire service to provide a minimum supply capability that meets fire fighting needs outside the CBD. The cost also includes for approximately 20000-30000 litre capacity, a hard stand area and filling facility near the well at the fire service premises.

It has been assumed that a fairly basic truck and tanker unit will be sufficient for this use. It also assumed that water can be provided from the well at the fire station and that loading and unloading will be done through the same fittings.

At present the Fire Service Trust in Takaka has a smaller 12000 litre tanker which it is in the process of trying to sell.

6.5.2 Cost Estimate

| New Equipment | | Use Equipment | |
|----------------------|------------------|----------------------|------------------|
| Estimate | \$225,000 | | \$105,000 |
| Contingency | \$ 10,000 | | \$ 10,000 |
| Total | \$235,000 | | \$115,000 |

6.5.3 Feasibility and Practicality

A tanker is relatively easy to provide and maintain but does have ongoing costs associated with a road vehicle. Life cycle costs over a 50 year period would be reasonably high with potentially 1-2 replacements required during that time period.

6.5.4 Effectiveness for Fire Fighting

Provides a source of water for the preventing the spread of a fire in residential areas. The need for sufficient staff to drive the tanker is a potential problem especially in a volunteer service which has limited resources available at any one time.

6.5.5 Risks and Uncertainties

A tanker will only provide water for containing a fire not to fighting one. It also only provides a limited quantity before it requires refilling.

A tanker does meet the overall needs of the Fire Service and should at best only be seen as a short term measure for residential areas of Takaka.

A tanker requires extra resources to drive to and from fire and fill during fire.

6.6 Evaluation of Preferred Option

Prior to the working group meeting the MWH recommendation was for the adoption of a pressurised main system with storage for the combined CBD/Outside CBD areas.

At the Working Party meeting of 11th April 2008, the various options outlined in Section 6 above were reviewed and it was decided by the group that the following options be adopted:

- A pressurised fire main system (without a storage reservoir) for the CBD. Estimated cost of this option is \$1,0650,000 based on the assumptions outlined in section 6 above
- A tanker for the area outside the CBD. The Fire Service Trust has indicated that it wishes to sell the second tanker they own and that they would be willing to offer it to TDC for this purpose. Based on preliminary information from the Fire Service Trust at the meeting about the value of the tanker and information from the Fire Service personnel about the cost of setting up the tanker to a similar standard as the existing smaller tanker, the estimated cost is approximately \$70,000.

The fire service were in agreement with this recommendation with the caveat that the option for a tanker was seen as a short term measure (10 years maximum) and that improvements to the area outside the CBD needed to be allowed for in the future planning for Takaka.

It was noted that pressurised system for the CBD would also allow businesses to connect to this for installation of sprinkler systems in their premises. The capital outlay by the property owners to do this may be in some way offset by reduced insurance premiums.

6.7 Maintenance Costs

The annual Maintenance costs for the Pressurised Main System and the tanker has been assessed at:

- \$20,000 pa for the pressurised main made up of fees for administration, professional services, maintenance and electricity.
- \$3,000 pa for the tanker made up of CoF and registration, general servicing and minor repairs.

If this was spread over the 465 properties in the CBD and Takaka township area, the cost per property on an annualised basis would be \$50 (excluding GST).

7 Funding

At the Working Party meeting of 11th April 2008, funding options were reviewed. A very high level funding model was used to assess the order of magnitude of funding requirements for various scenarios. Since then more refinement has been provided with the input of Council Corporate Services staff, however all figures should be taken as draft. More work needs to be done to determine accurate property counts and decisions need to be made on the rating structure before accurate forecasts can be made.

However, the financial models used provided a tool to help participants understand the impact of the funding decisions on individual properties so the group could make an informed recommendation to Council on what they feel is an appropriate funding proposal.

The Working Party propose that the project is funded by 4 groups for the following reasons:

- **Commercial CBD** – all commercial and light industrial properties in the Takaka CBD on the basis that this group receives the primary benefit of the major component of the project – the reticulated, pressurised fire main around the CBD. This will provide these properties with direct fire fighting coverage and an opportunity to connect to the main to supply sprinkler systems.
- **Takaka Residential** - all residential properties within the area currently defined as the Takaka Fire Well Area and commercial/industrial properties outside the CBD on the basis that this area will receive the primary benefit of the NZ Fire Service having a tanker, and because people in this area need to have a strong, vibrant CBD and their lives would be significantly affected if it were burnt down.
- **Golden Bay Ward** – all rateable properties within the Golden Bay ward not included in the above groups on the basis that the entire Golden Bay benefits from having a strong, vibrant CBD and their lives would be significantly affected if it were burnt down.

- **Tasman District** – A contribution from the entire district on the basis that there is a district wide benefit from having strong and vibrant CBD in Takaka and were it to burn down, the District would be poorer for it.

The working group considered a variety of funding splits, and have resolved on the following that they consider represents the most equitable:

| Funding Source | Contribution | | Recovery Mechanism |
|--------------------|--------------|---------|--|
| Tasman District | 10% | 113,500 | General rate |
| Golden Bay Ward | 20% | 227,000 | Targeted Rate - \$ 8 per property per annum for 20 years |
| Takaka Residential | 20% | 227,000 | Targeted Rate - \$ 60 per property per annum for 20 years |
| Commercial CBD | 50% | 567,500 | Targeted Rate - \$ 965 per property per annum for 20 years |

The working party felt that commercial and industrial properties on the CBD area should fund the bulk of the cost since they receive the most benefit from the reticulated system. However there was also consideration of:

- Whether residential properties within the CBD area (of which there are 15-25) should pay on the same basis as the commercial/industrial properties and whether they could afford to, or whether they should pay at the same rate as residential properties outside the CBD or some separate amount in between.
- Whether the commercial/industrial properties in the CBD should pay on either capital value or improvement value, rather than a flat rate per property. It was concluded that the most equitable approach would be improvement value given it is the improvements on the property that are at risk from fire.

The working party also discussed the financial impact of this project on the community and considered opportunities to make the funding package more affordable. These included:

- Reviewing the current Takaka Firewells Area to determine whether it should be expanded to incorporate a larger area. Currently the firewells area is limited to areas where there are firewells. Some places developed areas quite close to Takaka are not included – including Rototai Road and Park Avenue. Given the proposed option of providing a tanker would equally serve these areas as residential Takaka, it could be appropriate to include them in a “Takaka Fire Protection Area”.
- Considering how the operating and maintenance costs are funded. In Section 6.7, the maintenance costs were assessed over the properties in the Takaka Fire Well Area. It may be more appropriate to spread these costs on the same basis as the capital costs between the commercial CBD and the Takaka residential funding groups.
- Determining whether Takaka residential properties could make lump sum contributions instead of paying by targeted rate. The financial model assumes all will pay by targeted rate but some may prefer to pay a lump sum up front.

There was not the information available to the working group to make firm recommendations on these matters, so the working group recommends that the Council consider these opportunities, investigate them in more detail

if necessary, and include for them in any proposal that goes to public consultation. As a minimum it would be expected that answers can be given on these matters if raised during consultation.

8 The Ongoing Role of the Working Party

The working party have reached a consensus and made a recommendation to the Council on the issue of Takaka Fire Fighting as it was charged to do. The working party understand that there is a process to follow and that decisions now need to be made by Council.

The working party discussed their on-going involvement from this point on and have agreed that if there is a Special Consultative Procedure to be followed, then:

- the members of the working party are prepared to be involved in the process to explain their role to date and their rationale for the proposal developed
- the NZ Fire Service would be prepared to present at public meetings information on the fire risk in Takaka and manner in which fires develop
- can provide feedback and input to the Council on any matter that Council requires

9 Recommendation

It is the recommendation of the Working Party on Takaka Fire Fighting that:

- The Council construct as soon as practical a pressurised reticulated fire system in Takaka CBD (estimated cost \$1,065,000) and purchase a water tanker to be used by the NZ Fire Service to fight fires outside the CBD area (estimated cost \$70,000).
- The Council provides a district wide contribution of 10% to the construction of the above scheme because of the importance to the district of having a strong vibrant CBD in Takaka.
- That the remainder of the project is funded:
 - 20% from a targeted rate on rateable properties in the Golden Bay ward, excluding those properties who are included in the following 2 groups
 - 20% from a targeted rate on residential properties within the present Takaka Fire Wells Area, as well as commercial and industrial properties that are outside the CBD area but within the Takaka Fire Wells Area
 - 50% form a targeted rate on commercial and industrial properties within the CBD area of Takaka, based on a rate per dollar of property improvement value.
- If a consultative process is followed, the Council involve the working group and the NZ Fire Service to assist explain the fire risks, and the processes and the rationale behind the decisions that have been made

- That Council include in their Activity Management Plan (Water) to review the fire fighting capabilities within Takaka within 10 years and with the input of the NZ Fire Service and representatives of the Takaka community.
- that the Council consider prior to any consultative procedure the following issues with a view to reducing the financial impact on the community:
 - what rate residential properties inside the CBD pay
 - changing the Takaka Firewells Area to include areas such as Rototai Road and Park Ave
 - whether “Opex” costs should be split on the same basis as capital costs
 - whether properties can elect to make lump sum payments instead of paying through rates
 - whether any balance of funds in the Takaka Fire Protection closed account could be used toward the capital costs of the project

Appendix A Minutes of Meetings

Takaka Firewells Meeting Held at the Takaka Fire Station Friday 22 February 2008

Present:**Tasman District Council**

Cr Noel Riley (Chair)

Cr Trevor Norriss

Robyn Scherer (Minute Secretary)

Cr Stuart Borlase

Jeff Cuthbertson

MWH

Richard Lester

David Burn

NZ Fire Service

Graeme Daikee (Nelson)

Alf Reed (Takaka)

James Firestone (Wellington)

Kevin Heberd (Takaka)

Greg Fellowes (Takaka)

Golden Bay Community Board

Joe Bell

Carolyn McLellan

Leigh Gamby

Karen Brookes

Tony Sandall

Apologies: Philip Woolf (NZ Fire Service, Takaka)

The meeting commenced at 9.30am

In his capacity as Chairperson, Noel Riley welcomed everyone to the meeting and introduced the participants. He also summarised the agenda and timing for the day and outlined the protocols for the meeting. In particular he noted the goal for the group was:

To select and construct the most appropriate, cost-effective and affordable fire-fighting infrastructure to serve Takaka.

Council Assessment - Jeff Cuthbertson summarised the situation to date for the Takaka firewells from the Council perspective. He emphasised that the present firewells either do not function or do not provide adequate water. A plan "Takaka Fire Wells Performance Review" was distributed to the attendees indicating the firewells in Takaka and their operational state. Jeff noted that the CBD area is not protected at all and only some parts of the town have operational firewells.

Fire Service Assessment – James Firestone stated that the current firewells are not usable and do not meet the Fire Service' needs for reliable and immediate water supplies. He noted that the local volunteer fire brigade had already seized a pump trying to flow test a firewell causing \$16,000 worth of damage. He also stated that the present firewells do not provide a minimum flow of water. James said that the Fire Service want to get a workable solution to Takaka's water supplies for firefighting as soon as possible.

In terms of level of risk, Kevin Heberd, on behalf of the local volunteer fire brigade, stated that the brigade believe they can manage "normal" household fires through using tankers but in respect to the CBD they have absolutely no capability.

In response to Richard Lester, James used the whiteboard to demonstrate a scenario of events following a fire event in the CBD.

James also demonstrated a comparison showing the results from the Fire Service using a reticulated system to respond to a fire versus a non-reticulated response.

Graeme Fellows suggested that what the local population identifies as a hydrant is completely different to what the Takaka volunteer fire brigade see as a hydrant. It is normal for the local fire crews to work in two locations – one at the fire and one at the hydrant. He also noted that the Takaka brigade only has 18 volunteer firefighters and not everyone can turn up to every callout.

Using the whiteboard James demonstrated a time scale diagram which moved from notification of the fire, travel time of the firefighting crew, set up time, and fighting the fire. The diagram emphasised the exponential curve between the intensity/spread of the fire and the water needed to fight it (less water at first, then more).

Jeff noted that although some of the bores may be fully functional, water may not necessarily be available from them. This is often the case when groundwater levels may not be sufficient to get water - summer versus winter. He also noted that the Council has an issue with firewells becoming filled with junk and that he has to get a septic tank truck to clean them out every year.

In response to Trevor Norris, Kevin Heberd suggested that 75% of the buildings in the Takaka CBD are at risk because of the inability to draw water from the present firewells. Kevin stressed that in his opinion, a pressurised water main is the best option to allow the volunteer fire brigade to fight fires.

Joe Bell stated that the principle of a pressurised firefighting main was well understood by the community but that it came down to a cost-benefit ratio. He suggested that the group needs to look at the cost-benefit of other options to provide water for firefighting.

In response to Joe Bell, Jeff Cuthbertson stated that the proposed high capacity firewell in the car park hasn't been installed because he was directed by Council that his reduced budget \$90,000 was only to be used for consultation / a feasibility study.

Jeff Cuthbertson also reported that Council cannot make people join a potable water supply. Government departments, schools, food outlets etc are required to use a potable water supply (through the Ministry of Health regulations) and to be metered for the water they take.

In response to Leigh Gamby who stated that the Takaka Primary School has a perfectly adequate potable water supply, Jeff said that Council can require the school to join the reticulated supply. Furthermore Jeff noted that the water would not be chlorinated just as Richmond's water supply is not chlorinated.

In response to Greg Fellowes, Jeff said that a community water scheme would be required to qualify for subsidy from the Government. He said that the original intention was to reticulate the township and Council believed they would get a 60% subsidy (conservative estimated) for that reticulation scheme.

In response to Karen Brookes, Jeff said that ratepayers would not have to join the scheme but they would still be required to contribute to the capital cost.

Joe Bell reiterated his belief that provision of a full reticulation was well understood by the community but the resulting cost to each property was rejected. In his opinion, full reticulation would be ideal but the cost-benefit has to stack up for the people who are paying for it.

Carolyn McLellan noted that school pools could be available to supply firefighting water supplies as they are generally always full except when they are being painted. She suggested that the community could have a policy requiring that both pools should never be empty at the same time.

Stuart Borlase noted that the secondary school principal had stated that the school has ample water to fight fires.

Graeme Daikee stressed the need for the group to look at access of water in the future as any new buildings sited near a firewell can render it useless.

The meeting adjourned for morning tea and reconvened at 11am

With the use of town maps the meeting discussed options for water supply for firefighting purposes in Takaka (see attached).

Option 1 - CBD

Everyone agreed that protecting the CBD was a priority. Jeff noted that he will need to check what actually forms the CBD compared with what is noted in the TRMP.

In response to Leigh Gamby, Jeff said that any extension as far as Fonterra would put the issue back to the reticulation scheme that was originally proposed.

In response to Stuart Borlase and Noel Riley, Jeff said that Council could put a well-head within the Fire Service property to provide a pressurised reticulated system for the CBD and operate it via a portable generator (cost \$33,000-\$34,000). However, Council would need to gain agreement with the Fire Service to maintain the well so that it was always available.

He noted that a generator would provide an added incentive in that it could provide power for Civil Defence headquarters. Jeff Also stated that Council would need to put another bore down for security in cases where the other bore was not available.

In response to Joe Bell, Richard Lester said that a water tower is an option but it needs to be located on solid ground and that option can be expensive. He noted that water tanks are best sited on a hill.

Carolyn McLellan suggested that any options need to incorporate future Takaka planning including the proposed hospital site. Noel Riley added that the Park Avenue area is earmarked for future development and suggested that the group should also include that area as part of the investigation.

In response to Joe Bell, Jeff Cuthbertson agreed that other options to reticulate the CBD included high capacity firewells at strategic locations, (90metre intervals)

Greg Fellowes said that storage tanks would create huge problems for the Fire Service.

In response to Stuart Borlase, Greg Fellowes said that the Fire Service did use foam but they also need water as well. Foam is another tool in the Fire Service toolbox but it only works on smaller fires to help smother them.

Joe Bell suggested that the group look at a private/public partnership with the Junction Hotel for the use of their water supply.

In response to Stuart Borlase' suggestion to investigate the option of a tank on high ground south of Takaka, Richard Lester said that any tank had to be higher than the houses it would supply and that there are also water pressure effects for those downstream.

In response to Trevor Norriss' request Graeme Daikee said that the Fire Service would not use any of the existing firewells as they have the potential to cause excessive damage to Fire Service equipment.

In response to Noel Riley. James Firestone said the Fire Service goes into protective mode to fight fires in areas that don't have firewells.

Joe Bell raised the option of providing additional tanker capacity, however it was noted that this would be a staffing issue as the Fire Service do not have the numbers of people to drive the tankers.

Greg Fellowes said that the Fire Brigade Trust owns two tankers with one based in Collingwood. However, the larger tanker is for sale as it is too costly to maintain.

In response to Tony Sandall Jeff Cuthbertson said that if the CBD was reticulated with extension to the school (triangle) then the some pipes would have to be bigger to take future capacity. This would require a staged development.

Tony Sandall voiced his concerns about the time that it has taken to resolve this issue. He constantly hears that the CBD has no protection and it appears that everyone agrees the CBD should be reticulated. He questioned how long it would take to get it up and running. He also suggested that the Council could put a well down now to provide some degree of coverage for the central part of town.

Tony also stated that funding was an important part of the issue. The people of Takaka want to support the Fire Service and want a good outcome, but part of that outcome is the question of who is going to pay for it. He suggested that people want to see the cost spread over the district as he believes that the CBD is an integral part of Golden Bay and therefore all ratepayers in Golden Bay should pay for it. He stated that any costings for the options selected should include the benefit to the whole of Golden Bay.

Trevor Norriss suggested it would be a good idea to include a range of payment scenarios in the proposed options.

Joe Bell said that the Community Board also felt a reticulated supply was a benefit across the whole district, ie Tasman District under the "Think District" scenario and the public good element which should include visitors to the Bay.

Kevin Hebbard left the meeting.

Jeff Cuthbertson noted that the project had now become a timing issue as money can only be allocated through the Annual Plan process. He has already provided a financial sum for what this process will cost in the upcoming annual plan but he has had to make some assumptions. He said that if agreement is gained from this group to do something in the required time, it will be added to the annual plan. If Council approves the project the funding will become available on 1 July 2008 and the project could be completed before Christmas this year. He believed that any resource consents could be obtained within the proposed timeframe.

In response to Tony Sandall and Joe Bell, Graeme Daikee said that the Fire Service would prefer not to use a new firewell as it would be subject to the same problems encountered with the present firewells. He added that the Fire Service had based their recommendation to Council on a number of variables and that wells require extra manpower that takes them away from fire-fighting duties.

Jeff Cuthbertson said that the present well at the Fire Station is screened and is a commercial production well yielding 40 litres per second. The pump is in water at depth and there are no silting issues.

In response to Trevor Norriss, Graeme Fellows said that a short term emergency connection to Graeme Drummond's supply would be a better option than doing nothing.

Leigh Gamby said that DoC also have a well in their car park which they say is high capacity.

In response to Stuart Borlase, Jeff Cuthbertson said that because of resource consent timing and drilling company availability it would take more than six months to get any supply from a new water source. We will talk to Graeme Drummond regarding the potential to use his supply.

Joe Bell suggested that these reasons should be explained in the options paper.

The two options and the issues relating to them are noted below:

Option 1 (CBD):

- Lease agreement with Fire Service for generator/bores on their site.
- Best solution is to have water at storage at elevation.
- Alternative – slightly lower level of service with generator/power.
- Water tower on site in CBD.
- Larger capacity firewells at 90m intervals.
- Storage tanks.
- Private public partnership with the Junction Hotel.
- Funding.
- Options for pricing must include storage and pumping.

Option 2 CBD and remainder of town

- Future – tank on Hoddies Hill for future development – Park Avenue
- What happens with the existing firewells – those that function well leave, remove others.
- Wells cause risk to Fire Service so they will not be using any existing wells.
- Additional tanker capacity.
- Fire tanker – Ratepayers for new tanker
- Build potential capacity for the future development of Takaka
- Application for resource consent.
- District ward funding (differentials).
- Emergency connection to Graeme Drummond’s system.
- Talk to DoC re their high capacity wells.
- Mass water wells versus good yield wells.
- High capacity wells.

Before he left the meeting Tony Sandall urged the group to focus on the CBD and to clarify all the options so that community can really understand what is available.

Tony Sandall and Leigh Gamby left the meeting at 12 noon.

James Firestone noted that the Fire Service endeavour to use technology to get the best response to a fire as soon as possible.

In response to Joe Bell, Jeff Cuthbertson said that he had talked to the Chief Executive of the Insurance Council who told him that they are not interested in supporting any funding options that could help mitigate their risk.

Similarly, Graeme Daikee said that the Fire Service would not contribute to the water supply as their role is to provide fire stations, fire equipment, and personnel etc.

In response to Jeff Cuthbertson’s question, the group agreed that any existing functioning firewells should remain in place and be maintained. Those that are not functioning will be removed.

The meeting adjourned for lunch and reconvened at 12.57pm. Caroyne McLellan left the meeting at 12.57pm.

Noel Riley summarised the morning’s discussion and suggested that the options and the issues relating to them should be retained so that the public can understand that all avenues were explored. He also suggested that some suggestions could be combined.

James Firestone suggested that the group should provide measurable criteria including reliability, availability, affordability, maintenance requirements, life expectancy etc against each option.

The meeting agreed that “do nothing” was not an option for Takaka. However, Jeff Cuthbertson advised that he will be required to report and justify that option to Council. He said that a pressurised system around the CBD is the preferred option and probably the only option. Firewells are not an option.

James Firestone noted that there is a type of firewell that the Fire Service would use but it's a properly designed well that meets the local criteria and would cost in the vicinity of \$40,000. He noted that there is no standard specification for firewells to provide firefighting water.

Joe Bell repeated that the drilling team who worked on dewatering wells in Takaka had told him that firewells were a real option. He offered to get more information from the company concerned.

Jeff Cuthbertson stated in terms of funding options, this group area able to make a recommendation to Council. Jeff's options to recommend are either loan funding or cash funding or subsidy and the community or person of benefit would pay.

In response to Stuart Borlase, Noel Riley said that consultation with the CBD business owners and the public would be part of the annual plan submission process.

Jeff Cuthbertson suggested that a presentation would also be made at a Community Board meeting where the public forum would provide an opportunity for the community to make comment.

Noel Riley suggested that there was a tight timeframe for the annual plan process and the group need to progress the issue to meet that timeframe.

Joe Bell stated that the other community concern was to see something real for the \$90,000 already provided in the Council budget.

Jeff Cuthbertson noted that very little of the budget had been spent to date but items such as attendance at today's meeting and travel time would be paid for from the budget.

Richard suggested that screening and eliminating items on the options list will help with the issues around the budget.

In response to Richard Lester, James Firestone said that the Fire Service would be happy to provide statements and an evaluation of the options in their quest to provide the best fire fighting capability for Takaka.

Jeff Cuthbertson said that the use of the logos of both organisations would add credibility to the group's work.

Joe Bell suggested that report should consider each option on its own merits and should not discount reasons that won't stand scrutiny. He noted that a lot of water "experts" will examine the report with a fine tooth comb.

Richard Lester suggested that the each member of the firewell's group should use their knowledge and ownership of the issue to influence the community.

Noel Riley said that he would follow up with the Corporate Services Manager to ensure the issue is included in the annual plan.

Graeme Daikee stated that the Fire Service appreciated the opportunity to be involved in this discussion group and to work within the required timeframes.

In closing, Noel Riley said he would provide a resume outlining progress with the issue to made available for the local community.

The Chairman thanked all who attended and advised that he hoped to reconvene the group within six weeks.

The meeting closed at 1.35pm

Actions Arising

Action Responsibility

Check TRMP for definition of what forms the Takaka CBD Jeff Cuthbertson

Include range of payment scenarios as part of final options Jeff Cuthbertson

Talk to Graeme Drummond regarding potential to use his supply Jeff Cuthbertson

Leave functioning firewells in place, remove those that are not functioning Jeff Cuthbertson

Include measurable criteria for chosen options including reliability, availability, affordability, maintenance requirements, life expectancy etc. Jeff Cuthbertson

Gain more information from drilling team who worked on dewatering wells Joe Bell

Present final options to Community Board meeting Jeff Cuthbertson

Ensure this item is included in Council's Annual Plan Noel Riley

Short article outlining progress of this issue to be made available for the local community Noel Riley

Reconvene group within 6 weeks Noel Riley

**Discussion Notes - Takaka Firewells Meeting
Held at the Takaka Fire Station
Friday 11 April 2008**

Present:**Tasman District Council**

Cr Noel Riley (Chair)
Peter Thomson

Jeff Cuthbertson
Robyn Scherer (Minute Secretary)

MWH

Richard Lester

David Burn

NZ Fire Service

Graeme Daikee (Nelson)

Philip Woolf (NZ Fire Service, Takaka)

Golden Bay Community Board

Joe Bell

Karen Brookes

Tony Sandall

Apologies:

Cr Stuart Borlase; Cr Trevor Norriss; James Firestone; Carolyn McLellan; Leigh Gamby; Kevin Heberd; Alf Reid and Greg Fellowes

The meeting commenced at 1.00pm. Cr Riley invited the members to stand for a minute's silence in recognition of the recent Fire Service tragedy at Tamahere.

Cr Riley reminded the attendees of the Group Protocols

Apologies as noted above were accepted - Joe Bell/David Burn
CARRIED

The minutes of the meeting held on 22 February 2008 were accepted as a true and correct record – Tony Sandall/Jeff Cuthbertson
CARRIED

Richard Lester presented the "Evaluation of coarse screening" report which outlined a range of options for firefighting inside the CBD and outside the CBD as two distinct areas.

Jeff Cuthbertson noted that the Takaka firewell rating area included Rototai from the hotel toward the Takaka river mouth and advised that this area may need to be included in the options.

Richard Lester said the assessment process used a simple ranking scale. No formula based weighting system between criteria was used, judgement was used to select the options carried through to more detailed assessment. Both James Firestone from the NZ Fire Service and Jeff Cuthbertson provided their input taking into account:

- Is it feasible?
- Is it easily maintained?
- Does it meet the firefighting code of practice?
- Is there sufficient water supply?
- Ease of connection
- Security
- Visibility/Accessibility
- Robustness/Reliability
- Resourcing (Fire Service)

The options presented were:

For the CBD

- Existing firewells
- High capacity firewells
- Pumped firewells
- Distributed storage
- Tankering to fire
- Building sprinkler systems – commercial
- Low-pressure fire main (pipeline)
- Water tower and fire main (pipeline)
- Pressurised fire main (pipeline)
- Pressurised fire main (pipeline) with reservoir storage

For outside the CBD

- Existing firewells
- High capacity fire wells
- Pumped fire wells
- Building sprinkler systems – dwellings
- Distributed storage
- Tankering to fire
- Low-pressure fire main
- Water tower and fire main
- Pressurised fire main
- Pressurised fire main with reservoir storage

Three main options were identified for the CBD – pumped firewells, a pressurised main system and a pressurised main system with storage.

The information from Texco on high pressure firewells was received late and was considered at the end of the evaluation process.

In response to Philip Woolf, Richard Lester said that the pressurised fire main (pipeline) would not meet the fire code because of the storage factor. He also noted that the tanker option was included for consideration for the options outside the CBD.

There was some discussion about the time taken for adequate water pressure to be available from the pressurised fire main but this was not considered an issue. Graeme Daikee agreed and noted that the Fire Service would use tank water supply first and therefore any pressure drop would not be noticeable. He stated that the pressurised system without a storage reservoir would be satisfactory for the fire service.

The options were reviewed as follows:

Pressurised fire main – Richard Lester said that MWH had assumed that the existing well behind the fire station could be used for this option. He noted that some issues will need to be resolved, ie generator noise, detailed design for the pressure vessel, the need to lay some of the water main pipe through private property and the question of whether or not Transit will allow a fire main to be sited in Commercial Street.

Pressurised main with reservoir storage - same system as above but with the added reservoir storage.

High capacity (Texco) wells – This option is similar to the existing firewells and complies with the current standards. Graeme Daikee signalled the Fire Service's concern for this option. He stressed that the Fire Service would not contemplate the use of wells and that they require certainty in water supplies.

Richard Lester tabled a paper which considered the cost per property for each option based on 445 properties in Takaka for discussion.

Jeff Cuthbertson stated that the pressurised fire main with reservoir option had previously been considered. He suggested that this option could be considered for government subsidy as a pressurised water supply, ie drinking water supply.

Richard Lester noted that the government considered 3 factors for providing a subsidy level of deprivation, size of community and public health risk. He also suggested that on deprivation and size of community Takaka could qualify for 80-90% subsidy, but whether they were successful would depend on public health risk. The Ministry of Health had a scale that did not anticipate communities like Takaka so how they would evaluate it would need to be determined. Informal MOH feedback was that it may only get a low rating in which case it may not get any subsidy. The only way to be sure was to submit it and force a determination to be made.

In response to Karen Brookes and Joe Bell, Richard Lester said that any subsidy would only be provided for a drinking water scheme for the whole community and people would have to contribute to it whether or not they were connected.

Joe Bell suggested that the group needed to get surety of any subsidy before that option was presented to the public.

Richard Lester said that there was a required process to get any subsidy including a risk management plan, agreement from the Ministry of Health etc and once a subsidy application is made the community is committed to carrying out the scheme applied for.

Karen Brookes suggested that the people of Takaka were happy with the water supply they have now. She noted her preference for a pressurised fire main within the CBD and did not agree with the option of applying for a subsidy.

Richard Lester circulated a document outlining the various funding options. Jeff Cuthbertson noted that the figures used were a guide only as Murray Staite had not been involved in their development.

Joe Bell said that a “district value” should be considered in the funding options. He suggested as a starting point that the ratio could be 10% for the district, 20% for the Golden Bay contribution with costs to property owners scaling up depending on those who gain immediate value.

Philip Woolf suggested that the pressurised mains for firefighting would also allow property owners to gain water supply for sprinklers, toilet flow etc. They could then benefit further with a discount on their insurance premiums. This advantage could be used as leverage to get the CBD property owners on board.

Philip Woolf undertook to talk to his local contact regarding the question of savings (if any) that can be made on insurance costs where properties are fitted with sprinklers.

Karen Brookes suggested that an article could be included in the Golden Bay News outlining the information on the critical timing of firefighting such as provided at the last meeting. She noted that the information she had received during discussion of this issue had been revealing and would be equally good for the general public to hear.

Richard Lester noted that the numbers used in the options assumed no growth for the area and therefore every new house would contribute and costs would come down quicker. He also noted that there would be a maintenance cost on top of the targeted rates forecast for each property.

There was some discussion on how businesses could be charged for the scheme, eg size of business, capital value, or square metre being protected.

Graeme Daikee noted that the Fire Service has always wanted reticulated water to protect the CBD. He believed that the residential surrounding areas can be adequately managed with the two fire appliances, the water tanker, the Fire Service education programme, and smoke alarms. The major issue is protecting the CBD and a reticulated water supply is the simple answer.

Philip Woolf agreed that if he had a wish list it would be for reticulated water for the whole CBD and town. He also noted the issue with the time it takes to refill tankers.

There was discussion about the use of a fire tanker as part of the options. Graeme Daikee suggested that in terms of managing future risk, the option of using tanker water could not be seen as the final solution. This would make it difficult for the Fire Service to negotiate further improvements for the long-term. However he agreed that a tanker would provide a stop-gap measure and could be part of a staged improvement.

Richard Lester noted that Council works on a 10-year planning cycle so future management options for firefighting in Takaka could be included as part of that process.

In response to Joe Bell, Philip Woolf said that the Fire Service Trust would definitely consider selling the present tanker to any scheme approved by Council.

There was some discussion on the tanker required – new tanker or use the present tanker owned by the Fire Service Trust. Tony Sandall suggested that a change of ownership of the present tanker would have real merit. In response to Peter Thomson, Philip Woolf said that the present tanker is not used very often and he expected

it would serve its purpose for another 7 years. He said that the indicative price to buy the tanker was \$50,000. It was agreed that the ownership of the tanker could be transferred to Council. Graeme Daikee stated that the Fire Service has a template for a Memorandum of Understanding for use of a tanker in partnership with a local authority.

The percentage split between residential and commercial rates for the various options was discussed at length. Cr Noel Riley suggested that only one proposal should be offered for public consideration as if two or more are provided the public will agree with the cheapest which may not be the right one.

In response to Tony Sandall, Richard Lester said that he could provide a print-out of the various options for consideration. Tony Sandall noted that he did not believe a “district” contribution should be included.

Jeff Cuthbertson reported that the opportunity to include this issue in the draft annual plan had been missed. It could be included as a submission to the annual plan but he suggested that a separate Golden Bay consultation process was required so that agreement can be gained and Council can get on with the job.

Philip Woolf left the meeting at 2.30pm.

Peter Thomson reiterated that the cost split between residential and commercial ratepayers is key to the issue. He asked the local community representatives to think about the options and to consider if the residential ratepayers want to take on the cost of the benefit to the CBD.

Joe Bell agreed and suggested a public forum would be best to answer that question.

Cr Riley suggested that if the ward could fund its own problem he doubted there would be a problem with consultation. He maintained that 90% of the ward would provide their support and be happy to pay for it. He also noted that this option would reflect the true principle of user pays.

Joe Bell suggested that ratepayers are resistant to targeted rates.

In summary, Richard Lester noted that the meeting agreed to carry on with further consideration of the CBD option with the fire tanker as a short term measure for outside the CBD. In looking to the future he asked what measure could be included in the Council’s Long Term Community Plan.

In response Graeme Daikee said that the tanker option could not be used as sole solution for future expansion. He suggested that the tanker option should be given a defined time of ten years and the situation reviewed at that time. He suggested that the population of Takaka may become so significant in the future that reticulation for the town would be the only option.

In response to Joe Bell, Richard Lester noted that the proposed system would be for firefighting provision only and the infrastructure needed for a reticulated water supply would be different.

In response to Joe Bell, Peter Thomson said that there are precedents where the Council contribution could be provided as part of public good without it having to be rated from general properties.

Peter Thomson suggested that a consensus view from the firewells group on the preferred option should be forwarded to the Engineering Services Committee who will then make a recommendation.

It was agreed that one more meeting of this group was required to finalise the preferred option to be sent to the Engineering Services Committee. The meeting will be held on 18 April 2008 in Motueka starting at 9.30am. Robyn will advise participants as soon as possible.

Richard Lester undertook to have the information regarding the range of cost options to Robyn by Tuesday/Wednesday (15th/16th April) and she will immediately forward these to the members. It was agreed that any email comments about the options should use the “reply to all” function to ensure that everyone is kept informed.

The meeting closed at 2.47pm

Actions Arising

| Action | Responsibility |
|--|---|
| Arrange meeting room in Motueka and advise all | Robyn Scherer Actioned – meeting invitation sent – 9.30am start time at TDC Motueka Service Centre |
| Insurance Council advice | Philip Woolf |
| Talk to Murray Staite about consultation process | Noel Riley, Jeff Cuthbertson |
| Provide range of cost options to Robyn to circulate | Richard Lester |
| Provide estimated costs regarding ongoing maintenance costs for preferred option | Jeff Cuthbertson |
| Information for next ESC meeting by 21 April | Richard and Jeff |
| Discuss funding model with Murray Staite | Richard and Jeff |

**Meeting Notes of the Takaka Firewells Working Group
Held at the Motueka Service Centre
Friday 18 April 2008**

Present:**Tasman District Council**

Cr Noel Riley (Chair)
Peter Thomson

Cr Stuart Borlase
Robyn Scherer (Minute Secretary)

MWH

Richard Lester

David Burn

NZ Fire Service

Graeme Daikee (Nelson)

Golden Bay Community Board

Joe Bell
Karen Brookes

Carolyn McLellan

Tony Sandall

The meeting commenced at 9.33am

Apologies were received from Cr Trevor Norriss, Jeff Cuthbertson, James Firestone, Leigh Gamby and Philip Woolf.

MOVED Joe Bell/Stuart Borlase

The minutes of the last meeting were approved as true and correct.

MOVED Karen Brookes/David Burn

CARRIED

MWH Options Evaluation Report

Richard Lester reported that the discussions from the 11 May meeting had been included in the revised report and it is intended that it is presented to the Engineering Services Committee after working party review and endorsement.

Richard Lester noted that Council Corporate Services staff had been involved in providing input into the funding options and that the funding had been modelled on a table mortgage with flat repayments over a 20-year period.

He said that the proposals allow for different percentage splits between commercial and residential properties. The full cost of the scheme is \$1,135,000 which equates to repayments of \$115,600 per year over a 20-year period. After a 10% contribution from the district, this leaves an amount of \$104,040 to be funded from the Golden Bay Ward.

Richard said that the group now had to decide how the preferred option should be funded by properties in the CBD and by residential properties. While he noted that the figures are still estimates, the key issue is to decide on which option provides for the most equitable split.

In response to Carolyn McLellan, Richard said that the group had made a decision to cap the district-wide contribution at 10%. Carolyn noted that she would have preferred to see this contribution at a higher rate.

In response to Stuart Borlase, Richard said that MWH recognised that there were some residential properties located within the CBD area but they had attempted to include only commercial properties as part of the CBD funding option.

Tony Sandall suggested that the map was reasonably out of date and asked if the CBD area would include properties such as Waitapu Engineering. Noel Riley agreed and suggested that these businesses may need to be included in the final option.

In response to Tony Sandall, Richard said that Fonterra and RSC would not be covered by the reticulated pipeline.

Graeme Daikee reported that he had recently met with Fonterra representatives and they are already doing a significant upgrade of their firefighting capability.

In response to Stuart Borlase, Graeme agreed that it was a likely possibility that RSC could utilise Fonterra's water supplies if the event that they had a large fire.

Peter Thomson suggested that the contribution from property owners could be based on a different assessment such as land value or capital value and that this would provide some relief for the residential property owners.

Tony Sandall said that he wants the public of Golden Bay to see that the group has gone to some lengths to try and make things fair for everybody. He suggested that if the ratepayers can see that the issue has been considered fairly, they will accept it more easily.

Robyn Scherer reported that Philip Woolf had not been able to contact his insurance agent with regard to insurance relief for premises that have fire sprinklers installed.

Noel Riley said that he would like the working group to recommend a preferred option for presentation to the Engineering Services Committee and which can then be used as the basis for community consultation.

In response to Carolyn McLellan, Richard Lester said that the maintenance costs were extra to the targeted rate but these figures are based on Takaka only and are not spread across the district.

Stuart Borlase suggested that the debt servicing and maintenance costs should be spread over the whole area.

Richard Lester said that the funding split had been apportioned over four groups:

Commercial CBD
Takaka residential
Golden Bay Ward
Tasman District

Stuart Borlase suggested a category for residential properties within the CBD is required. He agreed that while these properties would benefit from the scheme he didn't believe they should pay the full rate. He suggested there could be two categories – commercial CBD and residential CBD.

Carolyn McLellan agreed that some sort of differential should be available as in many cases it would be unsustainable for some of the businesses to pay the rate. She suggested that capital value would be a fair way to apportion the costs.

Joe Bell suggested that the costs should be based on improvements as they will be the tangible assets that are threatened by the fire. The group agreed this was a good option.

In response to Richard Lester, Noel Riley noted his preference for a range of options to be included in the final report so that ratepayers can see that the group have looked at several options and understand the reasons where they have been discounted. He felt that this would be more acceptable to the public.

In response to discussion between Noel Riley and Joe Bell, Graeme Daikee said there are three tankers in Takaka and Collingwood. All three tankers belong to the Fire Service Trust.. The second larger Fire Service Trust tanker at Takaka is the one being considered for purchase by Tasman District Council as part of this scheme.

Joe Bell noted that the purchase price of the tanker estimated by Philip Woolf (\$50,000) had increased to \$70,000 in the report. In response, David Burn said that he had separate discussions with Kevin Hebbard regarding extra equipment required to ensure the tanker is properly set up. This included a small pump set and piping similar to what is available on the smaller tanker and the extra \$20,000 had been included to provide for that and other minor works.

In respect of public consultation, Noel Riley suggested that an information package could be prepared and its availability advertised in the Golden Bay News.

Carolyn McLellan said her preference was for a letter to be sent to every ratepayer to ensure everyone received the appropriate information.

Stuart Borlase suggested that this was not good stewardship as it would add extra costs and he did not see the need for a letter to every ratepayer.

Peter Thomson said that the most likely outcome would be a separate consultation procedure. He noted that Council has statutory requirements regarding consultation which is a cost of democracy.

Richard Lester said that the recommendation included in the MWH report needs to be endorsed by this group and then presented to the Engineering Services Committee for their deliberation. He noted that the group protocols allowed for anyone who disagreed with the recommendation to have their points noted. It was agreed that the following recommendation be presented to the Engineering Services Committee:

RECOMMENDATION

It is the recommendation of the Working Party on Takaka Firefighting that:

- Council constructs as soon as practical a pressurised reticulated fire system in the Takaka CBD (estimated cost \$1,065,000) and purchase a water tanker to be used by the NZ Fire Service to fight fires outside the CBD area (estimated cost \$70,000).
- Council provides a contribution of 10% to the construction of the above scheme because of the importance to the district of having a strong vibrant CBD in Takaka.
- That the remainder of the project is funded:
 - 20% from a targeted rate on rateable properties in the Golden Bay ward excluding those properties who are included in the following two groups;
 - 20% from a targeted rate on residential properties within the present Takaka Firewells Area, as well as commercial and industrial properties that are outside the CBD are but within the Takaka Firewells Area;
 - 50% from a targeted rate on commercial and industrial properties within the CBD area of Takaka based on a rate per dollar improved value.
- That Council prepare and distribute an information package about this option to the community of Takaka with the involvement of the NZ Fire Service to advise why the scheme is needed.
- That Council include in their Activity Management Plan to review the firefighting capabilities within Takaka within 10 years and with the input of the NZ Fire Service and representatives of the Takaka community.

MOVED Cr Stuart Borlase/Joe Bell

CARRIED

In response to Joe Bell, Peter Thomson said that there had been other projects in the district that have benefited from a district-wide contribution. However, he noted that none had been similar to this one. He said that it is now up to Council to decide on what is the best option which will benefit the wider community and he suggested that it would be worthwhile for the group to include a district-wide contribution of 10% in the recommendation.

Joe Bell said that while he was mindful the district-wide contribution would be cost-sensitive to all participants a higher percentage would help sell the final option to the public. He asked if 12.5% or 15% district-wide support would be acceptable.

Noel Riley suggested that the 12.5% and 15% for the district-wide contribution could be included in the report so that Council can understand that these options were considered.

There was some discussion on extending the mortgage term to 30-years but David Burn noted that any difference on the term of a table mortgage would be insignificant.

Carolyn McLellan suggested that the annual maintenance costs could be met by Council but this option was quashed because of Council's clear policy of user pays.

Tony Sandall noted that when this issue was first raised ratepayers were looking at costs of \$400-\$500 per household per annum. He suggested that the preferred option which would mean less than \$100 per annum will be well received and that it was more important to have the scheme operational as soon as possible.

CONSULTATION PROCESS

Recommendation

It was agreed that a full consultation process be undertaken with the residents of Golden Bay on the option as set out.

Moved Carolyn McLellan/Karen Brookes

CARRIED

LUMP SUM PAYMENTS

In response to Joe Bell, Peter Thomson agreed that the option for ratepayers to make a bulk contribution should be included in the option.

Carolyn McLellan suggested that if enough ratepayers made a bulk contribution it could make a difference to the mortgage costs.

Recommendation

That the working group asks that a lump sum payment arrangement is included in the proposal and that the percentage contributions be considered in the way to best make the project affordable for all those that are required to participate.

Moved Joe Bell/ Carolyn McLellan

CARRIED

Morning tea was taken at 10.40am and the meeting resumed at 11am.

Cr Noel Riley noted that the actions arising from the meeting held on 11 April 2008 should be completed.

- Insurance advice – Philip Woolf to provide feedback to the working group.
- Consultation – Peter Thomson said that in discussion with Murray Staite it was agreed that Council will gain legal clarification regarding the consultation process. He reported that it was most likely that Council will carry out a separate consultative process mid-year and then finalise the funding instruments for the project once Council has agreed for it to proceed. He suggested that the worst–case scenario may be the ability for Council to strike the new rates until 1 July 2009. However, he felt that it was still possible for Council to provide capital funding to move the project forward. He noted that while the consultation process will be separate from the annual plan consultation period, he believed that Council will recognise the urgency that is required.
- In response to Stuart Borlase, Richard Lester said that no discussions with other affected parties such as Transit can be held until the Engineering Services Committee has made their decision.
- Richard Lester said that MWH will revise the maps to ensure that all affected properties are included.
- Richard Lester said that there will be capacity in the pipelines to enable future extension to be made in the wider Takaka area. He also reported that the pipelines such as the one envisaged for the reticulated option would have an 80-year life, and mechanical/electrical components a 15-year life.
- It was agreed that the working group did not need to meet again unless the Engineering Services Committee made any significant changes to the recommendation
- Peter Thomson agreed that the final report to the Engineering Services Committee will be circulated to the working group members. He congratulated the group on their effective discussions and their final recommendation and asked that they continue to provide their feedback for consideration and to be involved in the consultation process.
- Tony Sandall suggested that a Grey Power meeting would provide a good opportunity for the working group to present their recommendation.
- It was agreed that any enquiries should be addressed through the Chairman Noel Riley.
- There was some discussion on the status of Park Avenue as it is the area of suggested growth and where a new Takaka hospital may be sited. It was agreed that firefighting capability for this area might require the system to be expanded but this would be part of the development costs. Graeme Daikee also noted that a hospital building would require stringent firefighting capability under the code for public buildings.

- In response to the Chairman's invitation, Graeme Daikee thanked the working group for including the Fire Service in their process and said that he was very supportive of the work that had been completed. He noted that there were a number of aspects during the discussions that the Fire Service were not aware of.

The group agreed that the Fire Service should be involved in public meetings during the consultation process. Graeme said that he would invite James Firestone to participate and that the Fire Service can provide visual presentations to assist with the process.

- In response to Joe Bell, Peter Thomson said that the one-off rate for the feasibility may continue for the 2008/2009 financial year. He also agreed to provide a summary of the feasibility study budget and the status of the firewells closed account to the working group members.
- It was agreed that a list of Frequently Asked Questions would be helpful as part of the consultation package. The working group members were asked to send any FAQs to Cr Riley.
- Cr Riley said that he will consider how many consultation meetings might be required.

In closing the meeting, Cr Riley thanked the group for their efforts and their willingness to participate in the public consultation process. He noted that he believed that the community will appreciate the work that has been done.

The meeting closed at 11.40am

Appendix B Coarse Screening Evaluation Matrix

Appendix C Final Options Evaluation Matrix