

1. Report: Whangarei District Council Briefing Tuesday 13 June 2017

Report of a Briefing to the Whangarei District Council held in the Council Chamber, Forum North on Tuesday 13 June 2017 at 9.00am

Present:

Crs Stu Bell, Crichton Christie, Vince Cocurullo, Tricia Cutforth, Shelley Deeming, Sue Glen, Jayne Golightly, Cherry Hermon, Phil Halse, Greg Innes, Greg Martin, Sharon Morgan and Anna Murphy

Apologies/Absent

Her Worship the Mayor Sheryl Mai

In Attendance:

Chief Executive (Rob Forlong), General Manager Infrastructure (Simon Weston), General Manager Corporate (Alan Adcock), General Manager Community (Sandra Boardman) General Manager Strategy and Democracy (Jill McPherson), Waste and Drainage Manager (Andrew Carvell), Water Services Manager (Andrew Venmore), Asset Engineer Water (Diana Staveley), Contractor Waste and Drainage (Jo Floyd), Senior Consultant Tonkin & Taylor (Chris Purchas) Senior Meeting Co-ordinator (Jennie Thomas)

Facilitators: Simon Weston
Andrew Venmore
Diana Staveley
Andrew Carvell
Jo Floyd
Chris Purchas

Cr Greg Martin convened the meeting and noted Her Worship the Mayor's apologies.

Assets and Operations – Water Supply Overview

Simon Weston introduced the presentation.

Andrew Venmore covered the content of the briefing as outlined in the agenda report and attached presentation on the Water Supply direction and funding requirements for the district as part of the development of the 2018-28 Long Term Plan.

Drinking Water Contaminants – Three Broad Categories are:

Microbiological – Most important as has the potential for wide spread illness (bacteria and viruses may in the future become a more of an issue).

Protozoa which is resistant to chlorine, removed by good filtration and UV. We test all our source for Protozoa.

Cyanobacteria (cross between bacteria and algae) as temperatures warm up we will get more incidences – clogs up the treatment process (filters and clarifiers) treated with activated carbon – not used currently but may do in the future.

Chemical and Physical – Effects usually occur over a long period of time. Can be caused by addition of chemicals to water.

Legislative Requirements

Must take all reasonable steps to:

- Protect the source of drinking water
- Provide a wholesome water supply

We are presently having discussions with NRC. We own most of the catchments for Whau and Wilson dams. There are some catchments we don't own or have control over. We have a duty there to protect the source. Need to provide wholesome (good quality) water supply.

Must take all practicable steps to:

- Comply with the Drinking-Water Standards of NZ

Must:

- Prepare and Implement Water Safety Plans

We monitor and to make sure we stay within those levels. The Drinking-Water were standards last reviewed in 2008 - probably will be revised again very soon. Very complex process. Based on World Health Organisation Standards. Under the Health Act we must prepare and implement Water Safety Plans. Must assess all our risks. Grade risks and put in place ways of reducing/managing those risks and have contingency plans. We work with the Health Board who do checks on our supplies.

Multi Barrier Approach – Surface Water

We are working with NRC to improve what we are doing (open water source). There is scope for us to improve managing catchment areas. Poroti struggles after very heavy rain. Dams not too much of a problem as water quality doesn't change much unlike rivers and streams which changes constantly. These are monitored continuously.

We have an automated process which can shut the plant down completely if not meeting the standards. If the plant shuts down, we filter water into our waste tanks. This has occurred a couple of times recently with algae blooms.

NRC catchment management process – in the early stages of process with NRC on catchment management. We need to understand the risks. Information held with NRC and we are working with them. Risk management process – we wouldn't reduce our barriers. We are always interested in what is going on in the catchment upstream from plants e.g. Goldpine a few years ago - expansion of plant near the Ruakaka River. We were very involved in the consent process.

Barriers on Groundwater/Spring Sources

Maunu Springs and Maungakaramea are monitored and automated and will shut down. (Havelock North didn't have the monitoring at all from spring water into the catchment).

Scada control system.

Every measure recorded and trended.

General Risks

Contaminated Water Supply

- Multi barriers approach should reduce the likelihood

Water outages

- More likely than contamination
- Equipment failure/power outages/drought
- Critical customers – Refinery 4000 cubic meters a day
- Increased storage vs water quality

We need storage in the system for when we do have outages. We need to balance between storage and keeping chlorine levels for water quality. Project - we are investigating providing more storage at Ruakaka.

Risk Management

Need to manage risk, can put in more barriers, but needs to be practicable /affordable. Important to understand the level of risk associated with supplies. Ministry of Health requires us to complete Water Safety Plans to standardise risk management.

Water Safety Plans

Risks need to be addressed by:
Eliminating – Other capital projects
Minimising – Process improvement
Response – Contingency planning

Havelock North

Water suppliers around the country are reassessing their risks. Improvements are recommended to ensure we maintain compliance with best practice and maintain risks at a reasonable level

Maungakaramea Bore Security (most like Havelock North)

Our bores are above ground unlike Havelock's. Need to keep monitoring and record.

New Projects

After reviewing water safety plans and considering Havelock North the following projects are recommended for inclusion in the first three years of the new LTP.

Ruddell's WTP Upgrade – Increased risk – Consultant has recommended that we may need to put in a filtration system. Need to do additional land package plant increase opex costs. Estimated \$1million.

SCADA upgrade – 12 years old – Recommend updated SCADA system and radio telemetry network. Estimated Cost \$1-\$2million between Capex and Opex. Would be sensible to do this at the same time as new water treatment plant.

Fairway Drive Pump Station upgrade - One pump failure - Upgrade all three pumps with new pumps of increased capacity. Estimated \$500,000.

Whau Valley New WTP Improvements. Risks – Algal blooms etc. Recommendation – Add new processes to treat these issues. We may in future need to use powder activated carbon and second stage filtration. Estimated Cost \$2 million.

Site Security Improvements (new Plant). Risks – vandalism theft and potentially sabotage of water supply. Recommendations - upgrade security system to modern electronic access. Align with Scada system to improve efficiency. Requirements - electronic access for individuals, alarm systems. Estimated cost - \$500,000.

Other Potential New LTP Projects

- Renewals in conjunction with Roothing.
- Marsden Point Trunk Main – cater for growth in the Ruakaka/One Tree Point area. Estimated cost \$1.6 million.

Operational Risks

- Electrical/Mechanical Failure
- Professional Support

Operational budgets to be reviewed. To include asset maintenance schedules and improved knowledge management. Knowledge management will become very critical – crucial to be able to manage the data. Continuous improvement and ongoing training.

Other Risks:

- Backflows
- Leak detection
- Quality control

One of the criticisms of Havelock North was there was no documentation on monitoring.

Existing LTP Projects

Whau Valley Dam Chimney drain upgrade – 2 metres short so does not comply with current standards. Will cost \$2.6m to raise level. Numerous discussions have been had with different consultants. There is a concern and risk of disturbing the dam but needs to be resolved as it is not reaching standards. It is a risk exercise; we must weigh up the risk of upgrading vs not doing it. Still has to have a peer review. These weather incidences don't occur very often but with climate change we may experience drier periods but with more intense rainfall incidences.

Watermains – break and performance issues

Need to be proactive in dealing with poor performing mains. Priority replacements for watermains that have had over five breaks in three years. The response to breaks by contractors is good. Priority of replacement mains based on number of breaks and performance of mains. Worst performance - first in order of priority no matter what area they are in.

The majority of breakages relate to asbestos concrete pipes degrading over time. There are asbestos guidelines for contractors taking away old pipes. No issues for customers.

Aging Assets

On average water assets are half way through their expected life.

Focus on performance. Some will last longer.

We look at risks levels in relation to our Water Safety Plan.

Dip Road Reservoir looking at removing and replacing with new reservoir of the same size.

Water Finances

Working with the Finance Department to investigate best approach.

Where should we be heading - over the next few years Elected Members will need to grapple with this.

Planning for Growth

- Make sure we have the capacity
- Hydraulic model recalibration
- Consent applications and plan changes
- Development Contributions
- Review of 30:50 projects and timing
- Water Master Plans
- Water demand forecasting and climate change

The question was asked is population growth going to be an issue?

A presentation to Council in the next few months will outline how we will deal with new water supply areas. Supply is being managed to deal with growing populations. It is a challenge - who will pay for it?

Climate Change

- Potential issues that might occur as a result of Climate Change
- Frequency of droughts – more severe
- Increase in demand (supply)
- More algal blooms
- More severe weather events causing flooding and damage to facilities
- Sea level rise – may impact existing sources

The most immediate concern is the increase in Algal blooms. Other impacts will need to be monitored and catered for in future LTPs.

If health board insist on fluoridation. Estimated cost \$1.5m to upgrade all WTP.

Discussion on referendum from the public not in favour of fluoridation. Council have made the decision not to fluoridate our water supply.

Central government would like to take the decision away from local government.

Summary

The focus of this LTP period for Water will be:

- Commitment to Protecting Public Health
- Ensuring compliance of all WTPs
- Reducing risk of failure
 - SCADA and security
 - Mechanical – pumps and WTP equipment
 - Reticulation – watermains and trunk mains
 - Whau Valley dam
- Allowing for Growth – planned projects
- Improved Management

General Discussion and Feedback

- Discussion on surplus in our water account. Once surplus goes into debt what comes then? This needs to be worked through with finance.

- Renewals expenditure will be spread in a more even manner over next 30 years. Majority of money spent is the new WTP in Whau Valley. A key document to look at is the 30-year strategy.
- When replacing poor performing watermains, the priority used to be based on the age of pipe but now with more information we know we can spread replacements over the next 30 years.
- Has the water at source quality improved or got worse over the last 10 years? Generally similar but we experience the odd spike, possibly caused by more intensive farming or industry in catchment. Also, the way we look at water quality data has evolved.
- Whau Valley Dam Chimney drain upgrade – disagreement regarding the need for this upgrade. Arguments against - hasn't been a problem in the past. \$2.6 million dollars large cost and disturbance to dam during the upgrade.

Solid Waste Activity Management Plan and Waste Management and Minimisation Plan

Andrew Carvell introduced Chris Purchas from Tonkin and Taylor, who with Jo Floyd, covered the content of the briefing as outlined in the agenda report and attached presentation on the Solid Waste Activity as part of the development of the 2018-28 Long Term Plan.

We need to tie the Activity Management Plan (AMP) to the Waste Management and Minimisation Plan (WMMP). What sets the relationship between the two? Need to make sure they work together.

Solid Waste's Contribution to LTP Outcomes

Clean, healthy and valued environment – High level of contribution

WMMP requirements come out of the Waste Minimisation Act 2008

Draft WMMP Vision for 2018 – *To deliver community benefits and reduce waste. Whangarei businesses and households will be provided with efficient and effective waste minimisation and management services.*

Draft WMMP Goals 2018:

- *Avoid and reduce waster where we can.*
- *Manage waste responsibly – make it easy to recycle and safely dispose of the materials that can't be recycled.*
- *Maximise community benefits – employment, multi-use facilities, cost effective services.*

Draft 2018 WMMP Objectives and Targets

1. To avoid creating waste
2. To make it easy to recycle
3. To ensure households and businesses have access to safe disposal of residual waste
4. To create opportunities for the Whangarei District
5. To reduce illegal dumping
6. To improve community understanding of issue and opportunities for waste management in the Whangarei District.

Discussion

There was a query of why the target of waste generation per person was still < 800kg per person per year and not lower?

Council was advised that 800kg per person each year is currently what is being produced (waste generation). The amount of waste per person has been increasing over the last 5-6 years. We want to maintain at the current level and look to reduce over a period of time.

Discussion on having an aspirational target rather than just maintaining. This is part of the draft plan which we are taking to the public. The public may like to make it a more aggressive target.

Elected Members asked for illegal dumping to be continued to be measured regarding responsiveness of council, but also measure the quantity of waste being picked up. A lot of incidences are low volume so a large dumping could distort this measure. It was decided to amend the measure to the number/quantity of incidences as well as satisfaction. Consultant to go back and look at the measures and how to quantify.

Majority of waste produced commercially. 50% or higher from commercial sources.

In the advocacy space, there may be some things we can do to reduce quantities of waste and to increase recycling. School level and communities – advice to community. Clean fill and demolition areas may be worth looking at.

Discussed the ability to recycle at Puwera. Recycling needs to be done before it gets to the landfill. There are points in the cycle we can do this.

Kerbside - 25% diversion. Recommend move to bag for refuse, wheelie bin and crate for recycling system. More contamination but trade-offs. There was a view that we will need to give an alternative to some areas - long driveways/rural. Need to manage contamination. If we move to wheelie bins will this reduce commercial waste? – Unlikely.

Kerbside recycling not complete agreement about wheelie bins. Some members would like to test the assumption that wheelie bins will mean more recycling.

Higher level of diversion with wheelie bins. Confident providing more capacity will increase percentages being recycled also increasing plastics to 3-7 for recycling.

Problem with the ability to recycle because of contamination. Two stream system of keeping glass separate. There are trade-offs - different options, needs balancing.

Our waste contractor is having Health and Safety issues with the handling of recycling crates. One of the options is keeping a crate and wheelie bin but there will be a cost trade off. Option favoured is a crate for glass, wheelie bin for other recycling, bag for refuse. Northland Waste would still provide a separate wheelie bin for refuse. Every second week system around the country.

There was a query around H & S reports related to recycling crates. Would like this information to be made available to Elected Members.

Discussion on colour mixed glass which is thrown out because the machine can't read the colour. Keep colour separated as much as possible. We are not getting paid at the other end at the moment for the recycling of the glass.

Query whether there are any companies looking at container deposits. This has started in parts of Australia. The drivers in Australia for this is about litter. Potentially could be problematic.

Commercial rubbish - some breweries / Fonterra looking at projects for recycling their containers. There are some supermarkets offering recycling for their soft plastic bags – more of an approach to stop mandatory requirements from government.

Key WMMP Challenges

- Achieving waste management performance targets through the partnership and contracts
- Maintaining market share to ensure long term security and affordability for all ratepayers
- Rising disposal costs
- Recyclables commodity prices - China tightening what kinds of plastic products it will take.

- Beneficial reuse of biosolids
- Increasing organic waste capture and reuse
- Managing fairness across the district
- Managing negative effects – fly tipping

Key issues will be identified as we go through process.

Key AMP Issues

- Ongoing monitoring and management of Pohe Island Closed Landfill
- Maintaining beneficial outcome for the Whangarei District through the partnership for Puwera and Resort
- Optimising services for rural communities (rural transfer stations vs rural collections)
- Optimising litter bins and locations

Discussion

- Locations and cost of emptying bins. Electronic bins that monitor when full and self-compacting a possibility.
- The partnership with Resort is working well. 44% that went into transfer centres was recoverable. 17% only for rural transfer stations.

How we will meet our waste reduction targets

- User pay continues
- Continue to use a mix of user pays and rates funding for rural transfer stations
- Double recycling capacity – replace crates with 240 litre wheelie bin (fortnightly collection)
- Investigate and put into place improved organic waste collection
- Investigate and optimise services for bulky household waste
- Investigate options to reduce commercial, industrial, demolitions and construction waste going directly to landfill
- Work with community to solve litter and bin issues
- Ensure quality data is gathered and improved upon to use for reducing waste and for communication / education (incl. Implement bylaw)
- Initiate a grant scheme to encourage waste minimisation initiatives
- Improved school education programme
- Provide waste minimisation facilities and education at events
- Provide funding for waste minimisation initiatives

Andrew Carvell continued the presentation on the Overview of Current Operation Expenditure and Revenue.

Proposed budget includes an anticipated cost for recycling of \$1million to service the cost of the bins.

Capex and Opex Programme changes / New projects

- Roadside recycling change to 240 litre recycling bins:
 - Option for council to own wheelie bins (Capex) or as assumed to be for full service contract (Opex)
 - Approx. cost increase in targeted rate \$21-\$27 per annum
 - Consider how costs may be offset by decreased refuse disposal costs
- Pohe Island managed under Activity Management plan now in Opex not Capex
- Green waste provision at all larger rural transfer stations
- Parua Bay Transfer station – current location may not be long term solution

Discussion

Parua Bay Transfer Station - proposed possible new site may not be suitable. Locals have asked for green waste disposal. There was a view expressed that this document needs more detail before it goes out to community – including looking at green waste at transfer station at Parua Bay. Rural transfer station could be used as information centres. Opportunities for communities to get involved in discussion on transfer station.

Discussion on optimising services for rural services. Great road side collection – subsidising. Room to have discussion with rural sector about what they need.

There was discussion around how we justify an increase in the cost of collection?

Our contractors have a H & S risk due to use the one crate for recycling at present. Costs will increase if we want to continue to provide a kerbside system costs.

There will be material in the agenda for next week regarding the consultation document.

We have a pretty good system now compared to other councils. This does come at a cost and subsidisation.

Potential Long Term Projects

- Review services and location for all rural transfer stations and implementation of the outcome.
- Review and consider change to wheelie bin service for roadside collections.

Funding Policy

- Continue to use “user pays” bags and stickers for roadside refuse collection
- Continue to use a mix of “user pays” and targeted rates funding for rural transfer stations
- Continue to fund roadside recycling through targeted rates

Summing up - key issues for Consultation

- Change to recycling service
- WMMP vision, goals and objectives
- Achieving new waste minimisation and LOS targets
- Increasing organic waste capture and reuse
- Optimising services for rural communities (rural transfer stations vs rural collections)
- Managing fairness across the district
- Managing negative effects – fly tipping
- Optimising litter bins and locations
- No change to funding policies

Council Direction requested

- Consideration of proposed new level of service measures
- Consideration of change to recycling service
- Consideration of proposed funding policy

General Discussion/Queries and Feedback:

What is happening with the direction on packaging nationally? Waste Minimisation Act - working on product stewardship to make the producer responsible for their packaging. The upside of packaging it is there to protect e.g. food – it is a complex argument.

Commercial vs public

The commercial sector is paying for their waste but are not reducing the amount.

One of the goals of the draft strategy is to reduce waste – look at commercial sector – how to reduce at source – education or incentives. Grant scheme could be used to help. Feasibility work needed.

Have we much information on what commercial is dumping - data on resort and landfill?

There was a request for a break down of costs on all transfer stations.

The meeting closed at 12.13 pm