



MANAGING ASSUMPTIONS - a case study with templates

“Don’t assume!” is an impossible prescription. Without making assumptions we would be unable to get out of bed in the morning or, indeed, to do anything at all!

We cannot ‘not make’ assumptions. But we can make them advisedly. It is simply good asset management to do so. And, in New Zealand, it is also a legal requirement.

In this issue, Hugh Blake-Manson looks at why we need to manage assumptions and describes the process recently undertaken in Selwyn District Council in the Canterbury Region of the South Island of New Zealand.

He describes the discovery process and the communication process, with illustrations and templates of its application to the 5 Waters Activity Plan (Community Water Supplies, Wastewater, Water races, Land Drainage and Storm water)

Also in this issue:

- Is ‘Spending More’ a viable AM proposition? Page 2.
- You are invited to join the AM History Project Forum where we discuss themes of importance in the development of AM. Page 7.
- Who won the “Keywords” Jan-Feb Competition? And what is the new March-April Competition? Find out on Page 8.

Enjoy! Penny

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View from the Coffee Shop (or random thoughts)

In the last issue I brought you a request for dialogue by Wally Wells on the subject of the words we use to express the infrastructure deficit. Wally, you will remember, had suggested we define the problem as one of under-spending.

This was my response. (What was yours?)

Is Spending More a Viable Option?



Response to Wally Wells (cf Issue 310)

The words we use determine the way we think! And the way we think determines the solutions we are prepared to consider. If we define the problem as being that - as you say - 'we spend less than we should, or we **UNDERSPEND**', then the solution will appear obvious - Spend More! But is 'spend more' a viable option? I don't think so.

Even with the best asset management - timely maintenance, excellent data for making renewal decisions, etc - we are scratching to get the cost of renewal down under 2% of the replacement cost of our portfolios. (in other words, the average economic life of our asset portfolios is about 50 years and with the demand for constantly higher standards average life is declining all the time!). Work out what this means for you in terms of sums to be set aside each year for renewal. And don't forget that we also need to take into account maybe 1% or more for maintenance and operations.

Do the maths! Work out what it means in terms of ratepayer increases to fund your existing infrastructure. And then calculate how much you will need to increase annual rates each time you accept a grant from the Provincial or Federal Government if that increase in the size of your portfolio is to be financially sustainable.

When you do this, you might well stop and think that a better definition of the infrastructure problem is "can we afford to sustain the infrastructure we already have and still add more - doing things the way, and at the cost, that we do now?" When THAT is the question, you have a very different set of solution options to consider.



MANAGING ASSUMPTIONS

by Hugh Blake-Manson, Selwyn District Council

Pt 1: WHY?

Five good reasons

Determines Reporting and Funding Levels Confirming assumptions determines the scale of reporting and funding allocated to achieve the communities desired levels of service and their strategic objectives.

Avoids Rework Failure to review incorrect individual or collective assumptions could result in rework; including rates forecasts and rewriting of the activity plans

Supports value of Community Consultation Inappropriate assumptions would reduce the value of community consultation on the Long Term and Activity Management Plans.

Meeting Time Frames Meeting the time frames of the LT and Activity Management Plans will require that a number of key matters are agreed. Ensuring assumptions are confirmed based on the best available information is one of these key matters.

Consistency of Assumptions Some assumptions are common to all Strategic Activity Plans.

and, in New Zealand, it is a **legislative requirement** for councils.

Significant forecasting assumptions

- A long-term plan must clearly identify—
- (a) all the significant forecasting assumptions and risks underlying the financial estimates:
- (b) without limiting the generality of paragraph (a), the following assumptions on which the financial estimates are based:
 - (i) the assumptions of the local authority concerning the useful life of significant assets; and
 - (ii) the assumptions of the local authority concerning sources of funds for the future replacement of significant assets:
- (c) in any case where significant forecasting assumptions involve a high level of uncertainty,—
 - (i) the fact of that uncertainty; and
 - (ii) an estimate of the potential effects of that uncertainty on the financial estimates provided.

(Local Government Act 2002, Schedule 10 Long-term plans, annual plans and annual reports, Part 1, Information to be included in long-term plans.)

Whether or not it is a legislative requirement for you the benefits at the top of the page still apply. So what is the value to you, your organization and customers of identifying, documenting and reaching organizational agreement on **Key Assumptions and Uncertainties**?



Pt 2 - HOW

Setting 10 year budgets

The 5 Waters Activity Plan was prepared in 2008. These plans set the 10 year budgets, having assessed the demand profiles and risks related to capital, operations and renewal work for the activity.

Recognition of need to involve elected members - early!

It was not until the end of the 18 month plan review process that staff realised how the extent and impact of the changes in Council's operating environment fundamentally changed the significant body of work in the plans. The conclusion to arrest this problem was involvement of elected members 9 months before the plans were prepared for consultation. Publicly discussing and agreeing on the **Key Assumptions and Uncertainties** sets a clearer pathway in ownership is shared and the boundaries of project and budget discussions may occur.

Previous plans did not involve elected members

In previous iterations of the plan, staff had determined a set of **Key Assumptions and Uncertainties** without any direct involvement of its elected members. The world in which council operates has changed markedly in the past three years. Its borrowing position and appetite for risk have reduced further, while its planning approach has widened to better account for cultural and environmental matters, including earthquakes!.

Some drivers we face

Selwyn has been identified as a major growth area in Canterbury, and already has the highest year on year growth rate in New Zealand. This has pushed demand for investment in water, sewage and stormwater services very hard. While planning for this growth Council also needs to be aware of the implications if that growth is not sustained. With predicted growth comes the need to invest in a new sewerage treatment plant (\$58 M). Substantial land use intensification is also mooted over 60,000 hectares of the district driven by the Central Plains Water Trust's irrigation initiative

These issues, along with a range of others, has the potential to tip an activity plan revision process upside down as they attempt to react to potential issues.

The Process

With support from Financial Reporting Standard 42, the Office of the Auditor General, and review of previous basic assumptions made in the Council wide “community plan”, the Asset Manager Utilities undertook a bottom up **Key Assumptions and Uncertainties** process.

A division of assumptions was made into 5 categories:

- Financial
- Asset Lifecycle
- Levels of Service (LoS)
- Sustainability and
- Growth

An uncertainty level was assigned to each assumption i.e. High, Medium and Low, and an assessment was made as to the consequences of getting the assumption wrong. (See examples on pages 5-6)

Assistance from specialised asset management consultants was also sought, as their wider client base meant that they were aware of issues that could face Council but were not yet apparent. Discussion with Councils accountants, and with colleagues in Land Transport and Open Space Management also occurred to ensure a consistent and coordinated approach is used when presenting information and reports to councillors eg. No silo approach

The Council Meeting

The Manager of the Strategic group (5Waters sits under this) and her team had previously hosted a workshop identifying the high level issues in their plans with Council. An information pack was left with them, along with a clear message that as better information came to hand it would be presented and that as activity plans were updated with new assumptions that these would first be checked with elected members.

Good Communication starts with the discovery process

Introducing the **Key Assumptions and Uncertainties** was made much simpler, with a high level of trust that the staff knew what they were doing and why. Councillors saw this report as a natural progression from earlier discussions and recognised they were being requested to take joint ownership and responsibility. Questions were limited to points of clarification, taken as a very positive sign. The triggers for inclusion were agreed i.e. only when legislation demands it or the Engineering Manager approves it. The **Key Assumptions and Uncertainties** were adopted.

From Here – where next?

Assumptions and uncertainties are just that – agreeing on a ‘working position’ provides a mechanism to proceed where every question cannot be answered. There will be changes and staff need to adapt these into the Activity Planning process recognizing the thresholds. Every 5Waters report will now include reference to the relevant assumptions Council adopted.

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EXAMPLES OF TEMPLATE AND ASSUMPTIONS

Asset Management Area	#	Link with 2009-2010 LTCCP	Assumption area	Stated Assumption	Uncertainty Level	Consequence if Assumption Wrong
Financial	F1	Direct link Minor update to LTP wording if required	Inflation (Utilities Maintenance and Operation)	Costs for goods and services will not increase above estimated relevant cost price index	Medium	Rates will or may not cover costs in long term
Financial	F2	Direct link Minor update to LTP wording if required	Government Funding	Our communities will not qualify for central government funding to improve sewer or water scheme works eg. water quality upgrades	Very Low	Schemes will have covered cost of improvements directly
Asset Management Area	#	Link with 09-19 LTCCP	Assumption area	Stated Assumption	Uncertainty Level	Consequence if Assumption Wrong
LoS	LoS 1	Direct link Minor update to LTP wording if required	Legislation and Central Government agencies	There will be no further changes to legislation or agencies which impact on 5Waters e.g. Environmental Protection Agency, Purpose of Local Government review, Land and Water Forum, Urban Infrastructure reform	Very High	Significant changes to funding levels and the AcMP Significant changes to Utilities contract and staff arrangements
LoS	LoS 2	Direct link Minor update to LTP wording if required	Health (Amendment) Act 2008	Central Government will not legislate to set dates for compliance with Drinking Water Standards, including backflow prevention at point of use.	High	Unbudgeted capital works will result eg. retrofitting costs, including upgraded pumps and higher pumping costs will result in increased water rates and amendments to the AcMP
Asset Management Area	#	Link with 09-19 LTCCP	Assumption area	Stated Assumption	Uncertainty Level	Consequence if Assumption Wrong
Sustainability	S1	Operational assumption	Criticality (consequence of failure)	Staff will target resources to scheme operation and maintenance based on the level of criticality (highest to lowest)	Low	Consent non-compliance, enforcement cost, capital (remedial) works may result from incorrect targeting
Sustainability	S3	Not in current LTP Consider combining with other 5Waters assumptions for LTP purposes	Durfield/Kawee Wastewater disposal	Council and the community will decide on the most sustainable wastewater management options within 3 years (2012-2015) based on appropriate consultation and data eg. costs, sampling, modelling	Medium	The absence of wastewater derived contaminants and the communities unwillingness to act may delay or stop this work
Sustainability	S4	Not in current LTP. Consider combining with other 5Waters assumptions for LTP purposes	Te Waikato Water Conservation Order (Stormwater, Land Drainage and Wastewater)	Changes to the WCO will occur, requiring improvements in (drainage) water quality to be made eg. drain cleaning practices and classified drain management	High	Changes to network cleaning may be undertaken sooner than appropriate Upper Selwyn Hut's wastewater disposal cost will increase significantly



INVITATION TO JOIN THE AM History Project FORUM!

In discussing critical themes with colleagues two things happened. 1. So many interesting themes were suggested that simply cried out for further exploration and 2. Helena Alegre, of the International Water Association, suggested that the AM story could be told in many different ways. She is, of course, entirely right. So to address both of these findings, I have created a forum where we can (a) discuss important themes and (b) produce information for general use by others interested in developing their own AM stories.

Although all ideas and comments are sought and welcomed, we will - in addition - focus each month on one 'featured theme'. All comments on this theme will be written up at the end of the month in a 2 page paper which will be circulated to each contributor for approval and then placed on the AM History Project Site on www.amqi.com. Open Source rules apply: Take and use but (a) acknowledge the HP site and (b) contribute your paper back to the site for others to use in the same way.

The March Theme is: **From Maintenance to Asset Management?**

Short Version: Maintenance has a long and venerable history. It definitely pre-dates asset management. At some stage maintenance began to morph and join forces with other disciplines and become AM. When, why, how?

Elaboration: Evidence of maintenance predating AM can be seen clearly in the excellent time line produced by the Westin Company that looks at the history of maintenance and asset management in utilities and the military. (See the AMHP at www.amqi.com) Today AM is a multi-disciplinary field with a focus on customer service. As maintenance has adopted new techniques (e.g. risk management) and technology (e.g. computerised maintenance management) and is adopting affordable, desired, customer service as its measure of asset function, maintenance and asset management are coming closer together.

Question for discussion is WHEN did this happen in the asset area with which you are familiar, WHY, and HOW?

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WHERE DO YOU FIND THE FORUM?

I have created this forum on LinkedIn, a networking site for professionals. WHY? Each comment is linked to a personal profile so that you can 'see where somebody is coming from' - important for understanding! It also serves to introduce you to everybody.

If you are not already a member of LinkedIn and would like to be in order to take part in this Forum (and the many other AM forums also available) just write to me and I will invite you - this will make your joining easier. Or you can go directly to LinkedIn and follow the instructions. They are not difficult. Allow 30 minutes or so.

I look forward to seeing you on the Forum. Penny

WIN-A-FREE-SUBSCRIPTION-TO-SAM COMPETITION JANUARY/FEBRUARY "KEYWORDS" COMPETITION

WINNER: JANAKA SENEVIRATNE
BANKSTOWN CITY COUNCIL, NSW

JANAKA identified over 50 additional potential keywords, with explanation and is a worthy winner of the Jan/Feb Competition. Kudos to runner-up **Prayog Pradhan** and my thanks to everyone who entered.

MARCH-APRIL ASSET MANAGEMENT COMPETITION

Asset Management as a Religion

This competition is the suggestion of Marcus Lee, Devonport City Council.

Consider the following scenario:

AM is a new religion and you are its prophet.

You have to give your disciples 4 words to use to spread the religion and make sure that the important aspects of its teaching are not lost into the future.

They will use these 4 words as prompts to remember all that they have learnt from you. These will be the only written scripture the religion is allowed to have.

WHAT ARE YOUR 4 WORDS (and why)
most useful wins!

Due date is **FRIDAY, APRIL 29TH** Email your suggestions to info@amqi.com

Entries are already coming in - so make sure that yours is one of them!