Planning to meet the forecast demand for drinking water in Auckland

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Part 1
Introduction

1.1 Before 1 November 2010, most Auckland city and district councils received water in bulk from Watercare Services Limited (Watercare). Rodney and Franklin district councils had their own water services. The councils distributed drinking water to homes and businesses in their area through their business units or subsidiary companies (local network operators). The councils also collected wastewater and, except for Waitakere, Auckland, Manukau, and Papakura districts, treated and disposed of wastewater. Watercare treated and disposed of wastewater for Waitakere, Auckland, Manukau, and Papakura.

1.2 On 1 November 2010, Auckland Council replaced the eight former councils serving the Auckland region.[1] Watercare became responsible for providing water and wastewater services to people throughout the Auckland region.[2] The ownership of all assets and liabilities relating to the water supply and wastewater services of each of the seven former Auckland local councils was transferred (or otherwise attached) to Watercare.

1.3 Watercare's responsibilities now cover:

- sourcing water, treating it, and delivering it to homes and businesses throughout the Auckland region;
- collecting, treating, and disposing of wastewater, including trade wastewater from industry;
- managing the contracts agreed to before amalgamation; and
- providing support and billing services to customers.

1.4 Watercare is going through a substantial transition in becoming the primary supplier of water and wastewater services to the Auckland region. The services Watercare provides affect everyone in the Auckland region, and we want to provide assurance that Watercare can deliver high-quality current and future services to the people of Auckland.

1.5 Because of the importance of the services Watercare provides, we have decided to report on its progress in taking up its expanded role now. In this report, we offer our preliminary views on the transition and note some matters for Watercare to consider.

1.6 Our areas of interest in the transition include Watercare's:

- standard of customer service;
- planning to meet future water demand;

1 The eight former councils are Auckland City Council, Manukau City Council, Waitakere City Council, North Shore City Council, Papakura District Council, Rodney District Council, Franklin District Council, and the Auckland Regional Council.

2 This was in keeping with the Local Government (Tamaki Makaurau Reorganisation) Act 2009.

- asset management planning; and
- funding and pricing arrangements for water and wastewater services.

1.7 This report represents our initial findings and notes some points for Watercare to consider when developing its long-term plans for asset management and for funding arrangements. We will review the progress that Watercare has made late in 2011 and report on that progress in 2012.

1.8 Overall, we are pleased with the progress that Watercare has made in managing its extended responsibilities. The transition appears to be going relatively smoothly for customers, and Watercare seems committed to improving its service to customers. Watercare is making solid progress in its long-term planning for managing future demand, asset management, and funding and pricing. It should complete all of these plans by 2012.

1.9 At the same time as completing this report, we considered aspects of the emerging governance arrangements between Auckland Council and Watercare. Our findings on these governance aspects are set out in our letter to the respective Chief Executives dated 11 August 2011.

Part 2
Customer service

2.1 Until the 1 November 2010 amalgamation, Watercare operated as a bulk supplier and did not directly supply water or wastewater services to retail customers. Since the amalgamation, Watercare has taken over billing, emergency repairs, and maintenance of local reticulation networks. Although Watercare receives customer requests for repairs, contractors under contracts pre-dating the amalgamation carry out the actual repairs to, and maintenance of, local reticulation networks.

2.2 Before amalgamation, all of the water delivered by Watercare met an “A” standard under the New Zealand Drinking Water Standards. Water delivered from those same systems will still meet that standard. However, Watercare has also taken over some rural systems that will need to be upgraded or replaced to meet the “A” standard. Watercare has told us that it plans to upgrade or replace these systems, and we will review its plans when we review its draft Asset Management Plan later in 2011.

2.3 When a problem with the reticulation network arose before amalgamation, different service standards from the different local network operators meant that the time it would take to resolve the problem varied. Contractors under contracts inherited by Watercare still provide the same services to local reticulation networks. Watercare wants to provide a uniform level of service for all urban areas. It has been successful in getting the contractors servicing local reticulation networks to voluntarily operate to common service levels. There are still some regional differences in service levels, but we expect these differences to lessen in coming months.

2.4 Watercare had to implement systems and procedures to service the new retail customers it acquired after amalgamation. Since amalgamation, it has operated a customer service centre that provides billing to customers, a call centre, complaints processes, staff to handle customer correspondence, and web-based tools for customers to manage their own accounts.

2.5 We spoke with staff involved with customer service. Their view was that, overall, customer service had improved since amalgamated operations began. However, they noted that more improvements were needed if they were going to meet all of their service performance goals. Staff appeared confident that those improvements would be made as operations continued and they were able to refine their processes.

2.6 We reviewed the monthly management reporting used to monitor customer service, the monthly reporting provided to the Board of Watercare, and the quarterly reporting provided to Auckland Council. We found that the reporting was consistent, with appropriate differences in the level of detail provided. The management reporting we reviewed provided a good overview of the customer service operations at Watercare and integrated well with the service performance information presented in the Annual Report. The annual audit tests the accuracy of the information in the Annual Report.

2.7 The management information Watercare collects shows that levels of customer satisfaction have generally improved since customer service operations began. In some cases where performance issues were identified, such as slowness in reading meters, action has been taken or is being planned to address those performance issues. These observations lead us to consider that Watercare is well placed to continue to improve its customer service operations.

2.8 Currently, some customers pay for wastewater through their council rates. From 1 July 2012, all customers will be directly charged for wastewater. Introducing new tariff levels and new bills to customers will present a significant customer service challenge for Watercare. This challenge is noted in its *Statement of Corporate Intent* for 2011-14.

2.9 Overall, we consider that Watercare has responded well to its new customer service role so far. We were pleased to note that customer services have been improving and that Watercare appeared to address problems quickly and make ongoing improvements when it identified performance issues.

Part 3
Planning for future demand

3.1 The *Three waters final 2008 strategic plan* provides projected demand forecasts for water, wastewater, and stormwater for the Auckland region. Water demand projections are based on historical usage information, projected population increases, and projected usage. The plan describes future needs for water supply and wastewater treatment, and discusses how to best address those needs.

3.2 The *Three waters* plan took a multifaceted approach to dealing with future water demand, proposing to reduce water usage while also creating new infrastructure when needed. The plan proposed that, by 2025, a stronger emphasis on reducing water usage could result in a 15% reduction in water demand from 2004 levels. The plan also noted that an additional 10% reduction in water use could be achieved during this period by using stormwater and treated wastewater for non-potable purposes. The plan was clear that, because of the levels of expected growth, reducing demand for water would only delay the need for new infrastructure and supplies.

3.3 The individual network operators that contributed to the *Three waters* plan have been merged into Watercare. Because of this, Watercare is updating its plans to reflect the integrated nature of the services that it now provides. Watercare has completed and provided to Council the Auckland Regional Water Demand Management Plan. We expect that the demand management plan will be important for developing Watercare's Asset Management Plan, which we discuss in Part 4.

3.4 Auckland Council has expressed a high degree of interest in demand management because of the environmental benefits in reducing water usage. Reductions in water use also allow for capital expenditure to be reduced or delayed, which helps to keep the price of water lower. Auckland Council has asked Watercare to show annual progress against the 15% reduction in water demand and the additional 10% reduction in water use targets in Watercare's *Statement of Corporate Intent* for 2011-14.

3.5 Because Watercare has previously developed a thorough and detailed strategic plan for demand management, we consider that it is well placed to create a more detailed plan using the *Three waters* plan as a starting point.

Part 4
Asset management planning

4.1 Before amalgamation, Watercare had prepared Asset Management Plans for the "wholesale" assets it owned and was responsible for that covered the next 20 years. These included dams, reservoirs, water and wastewater treatment plants, pumps, and bulk main reticulation that connected to the former network operators' "retail" reticulation networks. The Asset Management Plans were peer reviewed and critiqued by recognised engineering consultancies, and their short-form opinions were included in the published Asset Management Plans.

4.2 The Local Government (Auckland Transitional Provisions) Act 2010 requires Watercare to prepare a one-year Asset Management Plan and stipulates the type of information that the one-year plan must include. Watercare has prepared an Asset Management Plan for 2011/12 within the required timeframe and with the required information. Watercare's Board has approved the Asset Management Plan.

4.3 Watercare recognises that asset management planning should have a long-term focus and should bring together a comprehensive suite of engineering, financial, economic, environmental, risk, and growth information to provide a robust framework to promote optimal decisions on the types and timing of future asset interventions. Comprehensive asset planning goes well beyond the narrower requirements of the Auckland Transitional Provisions Act.

4.4 Watercare is currently preparing a 10-year Asset Management Plan. It expects to have finished a draft in September 2011. The challenges in preparing a long-term comprehensive plan at this juncture include:

- moving from an asset base of 60,000 items to an asset base of 2 million items;
- revaluing all assets as at 30 June 2011 and dealing with the complexities of calibrating the valuation information and assumptions of the former network operators;
- migrating to new asset management information systems;
- commissioning a detailed survey of all types of assets to get a clearer picture of their condition; and
- moving to uniform service standards.

4.5 Auckland Council has issued draft asset management plan guidelines that detail the extent and type of information it expects to see in Asset Management Plans its infrastructure-intensive departments prepare. Watercare has kept abreast of these requirements and attended meetings at which the draft guidelines have been discussed.

4.6 We reviewed the 2008 Asset Management Plan prepared by Watercare. The Asset Management Plan is well written and provides a detailed assessment of the profiles of future investment in renewals and new capital. From our overview of the 2008 Asset Management Plan, we suggest that Watercare may wish to consider, when preparing its Asset Management Plan later in 2011:

1. balancing descriptive information with "status" information (we noted, for example, that the 2008 Asset Management Plan did not contain any summary profile of the condition of assets, although there was extensive comment on the processes to establish that condition);
2. providing a rationale for different intervention strategies (for example, we understand that Watercare is now adopting a "run to failure" approach for much of the "retail" reticulation); and
3. summarising in the Asset Management Plan the major issues and challenges with the networks.

4.7 We recognise that consolidating assets is a significant task, and we support Watercare's development of a longer-term Asset Management Plan. Watercare's past experience in developing Asset Management Plans leaves it well placed to develop its new long-term Asset Management Plan. We will review this plan when a draft becomes available later in 2011.

4.8 There is a strong engagement between Council and Watercare about Watercare's asset management planning, as this contributes significantly to the Council's Long-term Plan and the framework for the Council's reporting of service performance.

Part 5
Observations about funding and pricing

5.1 Section 57(1) of the Local Government (Auckland Council) Act 2009 sets out Watercare's obligations to deliver water and wastewater services. One of the Act's requirements is that Watercare must manage its operations efficiently with a view to keeping the overall costs of water supply and wastewater services to the minimum level needed to effectively maintain the long-term integrity of its assets.

5.2 Several important decisions about Watercare's funding and pricing were made before integration. These were the new water price ($1.30 for each cubic metre of water, including GST, effective from 1 July 2011) for the Auckland metropolitan area and the infrastructure growth charge regime.

5.3 Under section 18(f) of the Local Government (Auckland Transitional Provisions) Act 2010, Watercare is required to prepare an indicative funding plan at least four months before the end of the financial year. The Act requires the funding plan to show how Watercare has calculated the proposed prices and charges, a summary of the comparative assessment of different funding options, an appropriate debt to equity ratio, and how any surplus or deficit from the previous year will be applied (for a surplus) or managed (for a deficit).

5.4 Watercare prepared its 2011/12 funding plan in February 2011. The funding plan includes funding principles, pricing principles, funding parameters, and funding assumptions. The funding plan was based on the preferred option (named "Scenario 91") that Watercare developed before amalgamation. A briefing workshop to the Watercare Board in February 2011 acknowledged that the funding plan did not present funding options largely because most of the pricing decisions had already been made.

5.5 Watercare is currently working on funding and pricing options for the longer term from 1 July 2012. Watercare is using a mixture of in-house resources and an external consultant to consider the pricing for its services and also to examine the balance between variable charging and fixed charging in tariff setting. In 2010, an external consultant also prepared reports on funding and pricing for the Auckland Transitional Authority. Watercare envisages that it will consult with the public on the tariff structure in early 2012.

5.6 We consider that Watercare should consider, when developing its longer-term funding and pricing principles:

1. specifying definitions and terminology;
2. ensuring that pricing structures are consistent with funding principles – in other words, that funding principles are overarching or pre-eminent and that

pricing structures flow from the funding principles;

3. clearly distinguishing between externally imposed funding constraints, policies, and parameters and those established internally;
4. indicating what funding tools finance particular aspects of Watercare operations and the approximate extent of the funding;
5. outlining the extent to which longer-term renewal of infrastructure will be funded in the more immediate future;
6. providing greater guidance on the consideration and funding scenario outcomes of the intergenerational equity principle; and
7. providing transparency in the funding of each of the water and wastewater operations.

5.7 With point 1, in the papers and reports we saw, there is reference to "no significant accounting loss" and "maintain price increases at a minimum" but no clarity about what this means.

5.8 With point 3, an external consultant's 2010 report to the Auckland Transitional Authority stated that there was a policy that water operations and wastewater operations could not, individually, incur an annual accounting loss of more than $1 million or $2 million collectively. We understand that this was an internal Watercare parameter initially built into the forecasting model to determine pricing options for 2011 and beyond. We are advised that this parameter has subsequently been relaxed.

5.9 With point 4, under the Local Government Act 2002, local authorities state in their Revenue and Financing Policies that, for example, operational expenditure is fully met from user charges, asset renewal expenditure is met from a specified combination of user charges and depreciation funds, and new growth capital is met from a specified combination of developer contributions and borrowing. In Watercare's indicative 2011/12 funding policy, it is difficult to ascertain this degree of detail.

5.10 With point 5, other planning reports we reviewed, such as the 2008 Asset Management Plan and the *Three waters* plan, point to assets reaching three-quarters of their expected life in the next few years. Consequently, the level of renewals is likely to rise, perhaps significantly. Watercare should outline how it will fund an increased renewal profile. The 2011/12 indicative funding plan noted that Watercare will fund 91% of depreciation from revenue. This appeared to be a reduction from the level of depreciation previously funded. However, the plan does not set out the rationale for this percentage or the rationale for depreciation funding over the intermediate and longer term.

5.11 With point 6, the indicative funding plan rightly notes (in section 5.3) the issues related to intergenerational equity and the need to seek an appropriate balance between debt and equity funding. However, the section does not provide any definitive answers. Future funding strategies should provide more detail on the issues and funding approaches.

5.12 With point 7, a future funding policy should show the degree to which each of the major business segments will be self-funding – that is, whether the operating revenue for water is set to meet operating expenditure for water and whether the operating revenue for wastewater is set to meet the operating expenditure for wastewater. The rationale for any deficit should be explained.

5.13 In late 2011, we will review the longer-term pricing and funding options that Watercare is currently creating.