### 13. WATER SUPPLY STRATEGY

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#### **PURPOSE OF REPORT**

1. The purpose of this report is to seek Council approval for the adoption of the Water Supply Strategy for Christchurch 2009-39. (The Strategy has been **separately circulated**.)

### **EXECUTIVE SUMMARY**

- 2. Christchurch City Council currently abstracts approximately 54 million cubic metres of water from the groundwater aquifers underlying Christchurch and 1.4 million cubic metres abstracted from streams and wells from sources in Banks Peninsula each year.
- 3. The key objective of the Water Supply Strategy is the sustainable management of drinking water, both now and into the future. The need for a more sustainable approach to managing this resource is driven in part by a likely allocation limit for the pubic water supply in the order of 75 million cubic metres per year. An additional pressure exists in Banks Peninsula, where the availability of the major sources of public water supply tends to be lowest when demand is highest during the summer months.
- 4. The strategic vision for the water supply strategy is:
  - We value and protect our public water supply as a precious resource for current and future generations.
- 5. The strategic goals for the public water supply are:
  - We have clean, safe water.
  - The sources of our water are protected from harm.
  - The Council's water supplies meet the public's reasonable needs.
  - Water is used efficiently and sustainably.
- 6. The Council approved the release of the Draft Water Supply Strategy at its 27 November 2008 meeting.
- 7. The public consultation period formally began on 10 December 2008 and closed on 6 March 2009. One hundred and eleven submissions were received.
- 8. A Hearings Panel comprising Councillors Williams (Chair), Buck, Corbett, Cox, Reid, Sheriff and Wall met on 6 and 7 April 2009 to hear submissions on the draft strategy. Twenty-eight submitters were heard.
- 9. Major themes in the submissions included the following:
  - Living within existing limits vs. finding new sources
  - Challenges for a sustainable water supply
  - Initiatives to meet these challenges
  - Potable vs. non-potable water
  - Treatment of the public water supply
  - Funding the initiatives
  - Adequacy of the draft strategy

A report analysing submissions and summarising the consultation process is **attached** (Attachment 1).

- 10. The most significant changes made to the December 2008 draft strategy subsequent to the consultation and Hearings Panel processes include the following:
  - Strengthening references to Banks Peninsula supplies:
  - Adding three new options and expanding the description of the options, with timeframes, in the main body of the document. The three new options are rainwater systems subsidy for urban Christchurch (Option 4c), encouraging retention of existing rainwater systems (Option 4d) and providing water usage feedback to households (Option 9).
  - Completion of the Tangata Whenua section with text provided by Mahaanui Kurataiao Ltd (MKT):
  - New sections on benchmarking and international trends;
  - Clarification of targets;
  - Clarification with respect to volumetric charging.

Attachment 1 lists the major changes in the amended strategy.

### FINANCIAL IMPLICATIONS

- 11. One of the key planks of the strategy is to extend the life of current water supply allocations. The success of this will be gained in the deferment of significant capital expenditure (and associated increases in operating costs for water treatment plants).
- 12. The financial implications of not adopting the strategy and continuing with business as usual would be significant beyond 2030 due to the need to find new sources of water. Implementation of the strategy would delay the need to find alternative water supplies for Christchurch, potentially until the beginning of the 22nd Century. It is expected that the successful implementation of initiatives in the Water Supply Strategy will mean existing allocations continue to serve the city into the foreseeable future and avoid capital (and operational spending associated with new water sources) expenditure of \$200M.
- 13. The strategy identifies a range of short, medium, and long term interventions. A number of initiatives are capable of being introduced within existing budget in the 2009-19 LTCCP. Further initiatives will require new or additional funding, and will be dependent on future funding decisions in the 2012-22 LTCCP and beyond. It is not the purpose of this report to seek additional funding. The strategy sets the long term direction with which programmed expenditure can be better aligned in the short term, and identifies actions for implementing the strategy which may be funded in the 2012-2022 LTCCP.
- 14. Once the strategy is adopted an implementation plan will be finalised, which will become the basis for future planning and funding decision-making

# Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

15. Funding to support the development of the Water Supply Strategy aligns with the current LTCCP budget. However future LTCCPs may require additional funds above current levels to enable the full implementation of the strategy.

# **LEGAL CONSIDERATIONS**

16. The Local Government Act (LGA) 2002 requires that local authorities take a sustainable approach to managing the public water supply in a manner that promotes the four well-beings (social, environmental, economic and cultural). LGA 2002 Section 130 sets out the Council's obligation to maintain water services. Also the Resource Management Act 1991 has as its purpose to promote the sustainable management of natural and physical resources, including water

## Have you considered the legal implications of the issue under consideration?

17. As above.

## ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

18. Development of the Water Supply Strategy aligns with the current LTCCP and activity management plan budgets. The outcome of the development of the Water Supply Strategy may have an impact on the Council activities and level of service.

# Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

19. As above.

### **ALIGNMENT WITH STRATEGIES**

20. The recommendations align with other Council strategies and policies including the Greater Christchurch Urban Development Strategy, the Sustainability Policy, the Biodiversity and Surface Water Strategies.

# Do the recommendations align with the Council's strategies?

21. As above.

## **CONSULTATION FULFILMENT**

- 22. Formal public consultation was undertaken, with the consultation open from 10 December 2008 through 6 March 2009. Although the consultation on the draft strategy was a non-statutory process and did not require a special consultation process, a web page with the Have Your Say section of the Council website was created. A total of 111 submissions from individuals and organisations were received.
- 23. A Hearings Panel heard 28 submissions on 6 and 7 April 2009.
- 24. The consultation summary report (Attachment 1) provides greater detail about the extent of the consultation on this Strategy.

# STAFF RECOMMENDATION

It is recommended that the Council adopt the Water Supply Strategy 2009-2039.

## **BACKGROUND ON WATER SUPPLY STRATEGY**

- 25. Christchurch City Council provides drinking water to over 340,000 residents through a network of groundwater wells and surface water intakes, pumping stations, reservoirs, and related infrastructure including approximately 3000 km of piping. Approximately 54 million cubic metres of water is abstracted from the groundwater aquifers underlying Christchurch for the public water supply (including urban Christchurch and the Lyttelton Harbour Basin), along with approximately 1.4 million cubic metres abstracted from streams and wells for the public water supplies in Banks Peninsula.
- 26. Rules in the proposed Natural Resources Regional Plan indicate that an allocation limit will be set for the public water supply. Discussions with Environment Canterbury indicate that the total allocation limit for the Christchurch public water supply will be in the order of 75 million cubic metres per year.
- 27. An additional pressure exists in Banks Peninsula, where the availability of the major sources of public water supply, streams such as Takamatua and Balguerie, tend to have the lowest flows when demand is highest during the summer months.
- 28. In mid-2007, work on developing a strategy for sustainably managing the public water supply was initiated.
- 29. In August 2007 an external stakeholder workshop was held at which top level issues and options relevant to the public water supply were identified.
- 30. In April 2008 a seminar was held for councillors at which the general state of the aquifer system in Canterbury, and the Christchurch aquifer serving as the public drinking water source in particular, was discussed. The likelihood of an annual abstraction limit for Christchurch's public water supply was highlighted. Rules in the proposed Natural Resources Regional Plan indicate that an allocation cap is likely for the Christchurch Water Supply, in the order of 75 million cubic metres per year.
- 31. In September 2008 a workshop was held for key stakeholders, including representatives from regional government, business, community and non-profit organisations, iwi, New Zealand Fire service, and Community and Public Health. The feedback from this workshop, as well as the August 2007 stakeholder workshop, were integrated into an Issues and Options report prepared by the staff team.
- 32. On 25 September 2008 a seminar was held for Councillors to discuss the issues and options facing the sustainable management of the Christchurch public water supply, including the public water supplies in Banks Peninsula.
- 33. The Council considered the Draft Water Supply Strategy at its 27 November 2008 meeting and approved the release of the draft strategy for public consultation. The public consultation period opened 10 December 2008. Copies of the draft strategy, as well as a summary document, were distributed to Council service centres, libraries, Community Boards, and over 100 organisations. The public could make submissions:
  - through an online questionnaire on the Have Your Say web site;
  - by mailing or faxing a hard copy of the questionnaire, which was included in both a summary document and the full Draft Strategy; and
  - by emailing, mailing or faxing other written comments.

A summary of the consultation process is provided in Attachment 1.

- 34. The consultation period closed on 6 March 2009. One hundred and eleven submissions were received. Notable among the comments received were the following major themes:
  - Living within existing limits vs. finding new sources
  - Challenges for a sustainable water supply
  - Initiatives to meet these challenges
  - Potable vs. non-potable water
  - Treatment of the public water supply
- 35. A Hearings Panel was convened on 6 and 7 April 2009. The Panel comprised Councillors Williams (Chair), Corbett, Cox, Reid, Sheriff and Wall. Twenty-eight submitters were heard. The Hearings Panel directed staff to amend the December 2008 Draft Strategy, and a follow-up meeting of the hearings Panel was set for 4 May 2009. At the 4 May 2009 follow-up meeting, the Hearings Panel reviewed proposed changes made to the December 2008 Draft Strategy as a result of the public consultation and Hearings Panel processes.
- 36. Substantive changes made to the December 2008 Draft Water Supply Strategy, as a consequence of the public consultation process and the Hearings Panel, are summarised below.

Table 1. Substantive Changes to Water Supply Strategy

Section (Dec 2008 version)	Changes made
Executive Summary and section 1.3	Clarification of applicability of strategy to the whole of Christchurch.
Executive Summary and section 5.1	Reworked the vision statement.
1.1.1	Added clarification regarding Banks Peninsula supplies.
	Added bullet point for driver: retention of water onsite.
1.1.2	Inclusion of wastewater plan, addressed a future 3-waters strategy.
1.2x	Added in new section 1.2.1 that fluoridation is not included in the strategy.
1.3	Acknowledgement of Banks Peninsula as unique from urban Christchurch in terms of source and availability.
3.1.13	Updated to LTCCP 09-19.
	Added reference to assessment of sanitary services and public health risk management plans
3.2.7	Completion of Tangata Whenua section with text provided by MKT.
4x	New section (4.3) was added which briefly describes international trends for water reduction.
4.3.1.1	Clarification regarding ECan's potential abstraction limit of 75M cu m/yr and that this is likely to be a range of values. Addressed private takes as well.
4.3.1.2	Clarification of impact of climate change on Waimakariri River flows and how this could impact on groundwater flows and takes.
4.3.2	Provided stronger linkage to land use impacts over unconfined aquifers and variation 6 of the PNRRP.
	Clarification of drinking water standards and Ministry of Health source of supply grading.
4.3.2 and 7.3.1.3	Clarified wording with respect to WQL22.
4.3.3	Updated Fig 9 (Fig 11 in amended strategy) to include additional actual consumption data.
	Inclusion of benchmarking information along with new Fig 10.
	Deleted Fig. 10, which included a potential affect of H(DW)AA on future water demand, and addressed the possible impacts of the health (Drinking Water) Amendment Act in the text.
(new section)	Added new section addressing fire fighting requirements and pressure.

Section (Dec 2008 version)	Changes made
Section 6	Clarified targets by adding new Targets subsection.
7.3	Provided descriptions of each option, including timeframes, in text.
7.3.2.1 and 7.3.5.2 (Table 3)	Add new Option 4c, rainwater systems subsidy for urban Christchurch and new Option 4d, encouraging retention of rainwater systems.
7.3.2.2/7.2.3.4 and 7.3.5.2 (Table 3)	Separated "metering" from "volumetric charging". Provided a new Option 9 regarding feedback to households on water consumption.
	Clarification with respect to volumetric charging and Council intent. Also note intention to retain ownership of public water supply.
7.3.2.6	Expanded on leadership opportunities for the Council.
7.3.3.1	Added greywater as a part of the option in this section.
(new section)	Added a new section (8.3.3) to elaborate on land use controls and PNRRP Variation 6.
7.3.5.2 (Table 3)	Clarification of funding for Option 10, which will be funded as regular repair/replacement not requiring "new" funding.

- 37. An updated analysis of submissions report, which was prepared following the Hearings Panel (Attachment 1), contains a discussion of the outcomes of the Hearings Panel, including a more detailed listing of changes made to the December 2008 Draft Strategy.
- 38. The Water Supply Strategy represents the product of consultations with internal and external stakeholders and the public over the last two years. It is intended to provide the framework for long-term planning for the public water supply, and is intended to link with other Council policies, strategies and plans including, but not limited to the Biodiversity Strategy, the Sustainability Policy, the Surface Water Strategy (under development), the Climate Change Strategy (under development), the Energy Strategy, the Wastewater Management Plan 2004 and the Public Health Risk Management Plans for the Christchurch and Banks Peninsula water supplies.
- 39. The Council is in a good position to act proactively to sustainably manage the public water supply. The submissions on the Draft Water Supply Strategy indicated that the public have a strong preference for ensuring that the public water supply is given top priority by the Council. To paraphrase one of the submissions, the Council has the opportunity now to "be bold and get on with it." It is recommended that the Council adopt the Water Supply Strategy 2009-2039.