

Notice of Meeting:

I hereby give notice that an ordinary Meeting of the Strategic Growth Committee will be held on:

Date: Tuesday 30 March 2021

Time: 9.30am

Meeting Room: Council Chamber and Audio Visual link

Venue: Municipal Building, Garden Place, Hamilton

Richard Briggs Chief Executive

Strategic Growth Committee Komiti Rautaki OPEN LATE AGENDA

Membership

Chairperson *Heamana*

Cr D Macpherson

Deputy Chairperson

Heamana Tuarua

Cr R Hamilton

Members Mayor P Southgate Cr R Pascoe

Deputy Mayor G Taylor Cr S Thomson
Cr M Bunting Cr M van Oosten
Cr M Forsyth Cr E Wilson
Cr M Gallagher Maangai J Whetu
Cr K Naidoo-Rauf Maangai O Te Ua

Cr A O'Leary

Quorum: A majority of members (including vacancies)

Meeting Frequency: Six weekly

Becca Brooke Governance Manager Menetia Mana Whakahaere

25 March 2021

Telephone: 07 838 6727 Becca.Brooke@hcc.govt.nz www.hamilton.govt.nz

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Item 6

Council Report

Committee: Strategic Growth Committee **Date:** 30 March 2021

Author: Tyler Gaukrodger **Authoriser:** Becca Brooke

Position: Governance Advisor **Position:** Governance Manager

Report Name: Chair's Report (Declaration of Conflict of Interest)

Report Status	Open

Recommendation - Tuutohu

That the Strategic Growth Committee:

- a) accepts the memoranda titled 'Declaration of Conflict of Interest' from Mr Bowcott and Mr Allen to the CE, Mayor and Chair of the Strategic Growth Committee, dated 24 March 2021 into the formal record of this meeting of the committee, and are formally acknowledged by the members of this committee; and
- b) notes that Mr Bowcott and Mr Allen may continue to participate in Council's review of its Urban Growth Strategy on the basis that they and the Chief Executive keep the potential conflicts under constant review and report back to the committee if the circumstances relating to the potential conflicts evolve as the review of the Urban Growth Strategy progresses.

Attachments - Ngaa taapirihanga

Attachment 1 - Chair's Report (Declaration of Conflict of Interest)

Attachment 2 - Blair Bowcott - Declaration of Conflict of Interest

Attachment 3 - Chris Allen - Declaration of Conflict of Interest



Chair's Report

Declaration of potential conflicts of interest

Council's review of its urban growth strategy brings into consideration a range of growth related issues, including how to manage growth pressures at and immediately beyond the current city boundary. In this context Council may need to consider boundary adjustment and zoning issues relating to that land. In that context Council's Executive Director of Special Projects, Blair Bowcott, and General Manager Development, Chris Allen, have each identified a potential conflict of interest affecting them. **Attached** to my report are two memoranda from Blair and Chris to the CE, Mayor, and myself dated 24 March 2021 titled 'Declaration of Conflict Interest.' The content of the declarations speak for themselves and I do not repeat it here. Instead, I ask that the declarations be tabled at this meeting and that all members of the committee read and consider the declarations. At the meeting I intend to table a resolution that the declarations be accepted into the formal record of the meeting and that the committee acknowledges the declaration of the potential conflict and confirms it will continue to pursue its review of the urban growth strategy with Mr Bowcott and Mr Allen's ongoing participation on the basis that they will perform their responsibilities diligently and keep the potential conflict under review. I am advised that the CE supports this approach.

Recommendation:

That the Strategic Growth Committee:

- a) accepts the memoranda titled 'Declaration of Conflict of Interest' from Mr Bowcott and Mr Allen to the CE, Mayor and Chair of the Strategic Growth Committee, dated 24 March 2021 into the formal record of this meeting of the committee, and are formally acknowledged by the members of this committee; and
- b) notes that Mr Bowcott and Mr Allen may continue to participate in Council's review of its Urban Growth Strategy on the basis that they and the Chief Executive keep the potential conflicts under constant review and report back to the committee if the circumstances relating to the potential conflicts evolve as the review of the Urban Growth Strategy progresses.

Councillor Dave Macpherson

Hamilton City Council

dave.macpherson@hcc.govt.nz

Memo

Special Projects

To:	Chief Executive Richard Briggs Mayor Paula Southgate							
	Chair of Strategic Growth Committee Dave Macpherson							
From:	Blair Bowcott, Executive Director - Special Projects							
Subject:	Declaration of Conflict of Interest							
Date:	24 March 2021	File:	D-3669061					

Background

- Hamilton City Council (Council) has commenced a review (review) of its urban growth strategy (growth strategy). This review falls within the remit of the Strategic Growth Committee and will report regularly to that committee. Jen Baird is the Project Sponsor for the review.
- 2. In my role as Executive Director of Special Projects I am involved at a macro/strategic level in a range of growth related projects, such as Future Proof, the Metro Spatial Plan, infrastructure financing and funding, and 3 Waters reform. I also work with neighbouring councils, Government, and Iwi, on growth strategies which apply the 'boundaryless planning' principle. In my role I am required to make various contributions to the review of the growth strategy.
- 3. The review of the growth strategy is intended to address strategic growth issues both within and beyond Council's existing territorial boundary. In respect of the growth pressures and opportunities at and beyond the existing territorial boundary, the review will address the issue of whether Council should support urbanization of land outside that territorial boundary, the timing and necessary steps towards urbanization, and whether that territorial boundary should be extended to include those areas that are identified as suitable for urbanization.
- 4. The review will take a 360 degree view of the territorial boundary. This will include the land which is described in the Strategic Boundary Agreement between Council and Waikato District Council dated 5 November 2020 as the HT1 area. The HT1 area is recognized in that agreement as an area of land that is intended to transfer from Waikato District to Hamilton City at some stage in the future.

Declaration of potential conflict of interest

- 5. I and my wife Amanda are the registered proprietors of 2.5644 hectares of land at 52a Osborne Road, Horsham Downs (land). The land is our family home, comprising a dwelling and a working lifestyle farm block. Attached is a copy of the title.
- 6. The land is located within the HT1 area.



Hamilton City Council Memo

- 7. There is a potential that the land, and the value attached to the land, may be affected by the outcome of the review. This may occur due to a range of factors, including as a result of the land coming within the territorial boundary of HCC, and being rezoned from its current rural zone status.
- 8. I request that this memorandum be taken as formal notice of my declaration of a potential conflict of interest and that my declaration be formally acknowledged in the minutes of the next meeting of the Strategic Growth Committee when the review is next on that committee's agenda.

Ongoing management of the potential conflict

- 9. Key roles within the review have been assigned to other HCC staff. The Project Lead is Karen Saunders, Greg Carstens leads value capture and growth funding work, and the first point of contact for developers outside of the HCC territorial boundary will be one of the HUGS review project team members.
- 10. Unless advised otherwise by the Chief Executive, I will continue to diligently perform my role including contributing to the review project.
- 11. I will remain diligent in identifying my potential conflict in any ongoing discussion or evaluation of boundary developments within the HT1 area and will keep the potential conflict under constant review. If, in the course of my duties the potential conflict becomes real I will notify the Chief Executive immediately, and if necessary, step back in my role to the extent necessary to resolve the conflict.

Blair Bowcott Executive Director – Special Projects

Attachment: Certificate of Title

BEBA





COMPUTER FREEHOLD REGISTER **UNDER LAND TRANSFER ACT 1952**

Registrar-General of Land

Search Copy

Identifier

233853

Land Registration District South Auckland

Date Issued

28 October 2005

Prior References

SA5B/867

Estate

Fee Simple

Area

2.5644 hectares more or less

Legal Description Lot 3 Deposited Plan 357534

Blair Elliott Bowcott and Amanda Jane Bowcott

Interests

Appurtenant hereto is a right of way, right to convey water, electricity, telecommunications, computer media and drain water and sewage created by Easement Instrument 6625375.4 - 28.10.2005 at 9:00 am

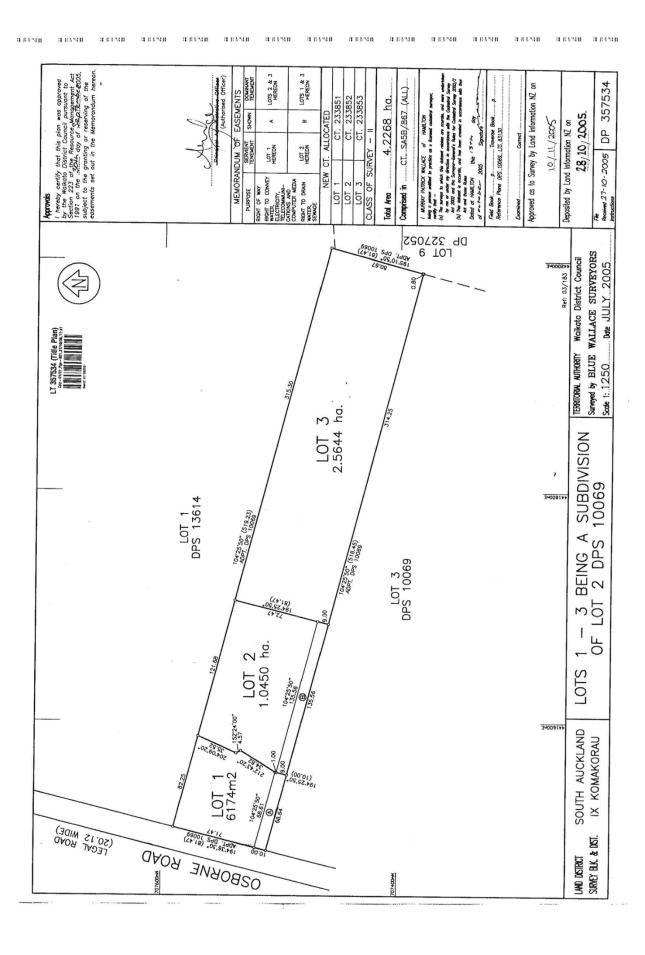
The easements created by Easement Instrument 6625375.4 are subject to Section 243 (a) Resource Management Act 1991

7053197.1 Mortgage to Bank of New Zealand - 3.10.2006 at 9:00 am

Transaction Id

25798247

Client Reference vhodgkinson001 Search Copy Dated 7/09/09 8:39 am, Page 1 of 1 Register Only



Memo

Development

	Chief Executive Richard Briggs							
To:	Mayor Paula Southgate							
	Chair of Strategic Growth Committee Dave Mac	cpherson						
From:	Chris Allen, General Manager Development							
Subject:	Declaration of Conflict of Interest							
Date:	24 March 2021	File:	D-3669836					

Background

- Hamilton City Council (Council) has commenced a review (review) of its urban growth strategy (growth strategy). This review falls within the remit of the Strategic Growth Committee and will report regularly to that committee. Jen Baird is the Project Sponsor for the review.
- 2. In my role as General Manager Development I am required to provide Infrastructure advice as well as being involved at a macro/strategic level in a range of growth related projects, such as Future Proof, the Metro Spatial Plan, infrastructure financing and funding, and 3 Waters reform. I am also required to communicate and liaise with a range of stakeholders including land owners and developers and other agencies promoting areas for development. In my role I am required to make various contributions to the review of the growth strategy.
- 3. The review of the growth strategy is intended to address strategic growth issues both within and beyond Council's existing territorial boundary. In respect of the growth pressures and opportunities at and beyond the existing territorial boundary, the review will address the issue of whether Council should support urbanization of land outside that territorial boundary, the timing and necessary steps towards urbanization, and whether that territorial boundary should be extended to include those areas that are identified as suitable for urbanization.
- 4. The review will take a 360 degree view of the territorial boundary. This will include the land which is described in the Strategic Boundary Agreement between Council and Waikato District Council dated 5 November 2020 as the WA area. The WA area is recognized in that agreement as an area of land that is intended to transfer from Waikato District to Hamilton City at some stage in the future.

Declaration of potential conflict of interest

- I and my wife Sharon are the registered proprietors of 0.5128 hectares of land at 93B
 Wallace Road, Hamilton RD9 (land). The land is our family home, comprising a dwelling and adjacent lawn and landscaping. Attached is a copy of the title.
- 6. The land is located within the WA area.



Hamilton City Council Memo

- 7. There is a potential that the land, and the value attached to the land, may be affected by the outcome of the review. This may occur due to a range of factors, including as a result of the land coming within the territorial boundary of HCC, and being rezoned from its current rural zone status.
- 8. I request that this memorandum be taken as formal notice of my declaration of a potential conflict of interest and that my declaration be formally acknowledged in the minutes of the next meeting of the Strategic Growth Committee when the review is next on that committee's agenda.

Ongoing management of the potential conflict

- 9. Key roles within the review have been assigned to other HCC staff. The Project Lead is Karen Saunders, Greg Carstens leads value capture and growth funding work, and the first point of contact for developers outside of the HCC territorial boundary will be one of the HUGS review project team members.
- 10. Unless advised otherwise by the Chief Executive, I will continue to diligently perform my role including contributing to the review project.
- 11. I will remain diligent in identifying my potential conflict in any ongoing discussion or evaluation of boundary developments within the WA area and will keep the potential conflict under constant review. If, in the course of my duties the potential conflict becomes real I will notify the Chief Executive immediately, and if necessary, step back in my role to the extent necessary to resolve the conflict.

Chris Allen General Manager Development

Attachment: Certificate of Title





COMPUTER FREEHOLD REGISTER **UNDER LAND TRANSFER ACT 1952**



Search Copy

Identifier

64028

Land Registration District South Auckland

Date Issued

04 December 2003

Prior References SA55A/969

Estate

Fee Simple

Area

5182 square metres more or less

Legal Description Lot 1 Deposited Plan 316383

Christopher Jamieson Allen and Sharon Lee Allen

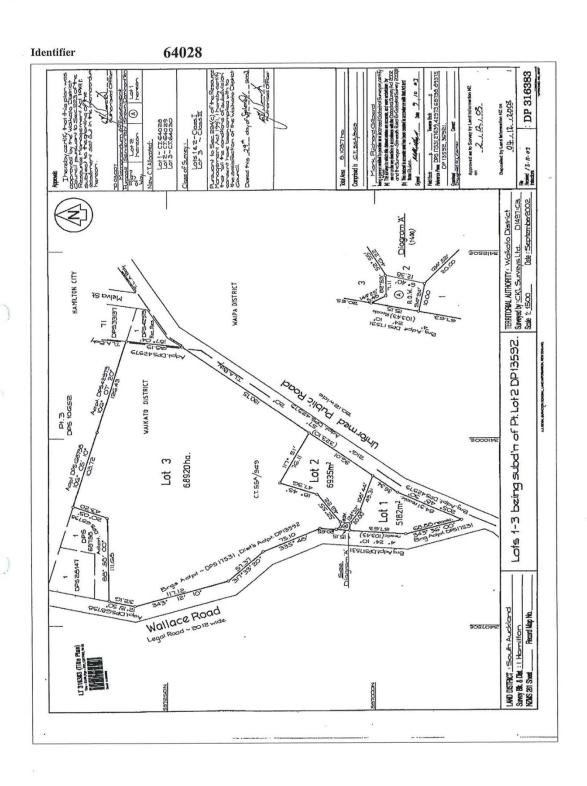
Appurtenant hereto is a right of way created by Easement Instrument 5825664.2 - 4.12.2003 at 11:26 am

The easements created by Easement Instrument 5825664.2 are subject to Section 243 (a) Resource Management Act 1991 Land Covenant in Transfer 5825664.3 - 4.12.2003 at 11:26 am

Subject to a right (in gross) to convey electricity over part marked A on DP 348736 in favour of WEL Networks Limited created by Easement Instrument 6372124.2 - 7.4.2005 at 9:00 am

6372124.4 Mortgage to ANZ National Bank Limited - 7.4.2005 at 9:00 am

Transaction Id 12772795 Client Reference hnpublicc4



Transaction Id 12772795
Client Reference hnpublicc4

Search Copy Dated 26/01/06 10:40 am, Page 2 of 2 Register Only

Council Report

Committee: Strategic Growth Committee **Date:** 30 March 2021

Author: Jackie Colliar Authoriser: Blair Bowcott

Position: Strategic Manager - **Position:** Executive Director Special

Infrastructure City Projects

Development

Report Name: Hamilton-Waikato Metro Waste Water Detailed Business Case Project

Update

Report Status	Open

Purpose - Take

 To seek approval from the Strategic Growth Committee on the preferred wastewater servicing option to take forward for final refinement as part of the Southern Metro Wastewater (WW) Detailed Business Case (DBC).

Staff Recommendation - Tuutohu-aa-kaimahi

- 2. That the Strategic Growth Committee:
 - a) receives the report;
 - b) notes **Option 4A (Five Plant Option)** as the preferred staff-recommended wastewater servicing option to take forward for refinement, and to inform completion of the Southern Metro Wastewater Detailed Business Case;
 - c) notes that the full Southern Metro Wastewater Detailed Business Case will be presented to the 29 July 2021 Strategic Growth Committee meeting for endorsement.
 - d) notes that successful implementation of a **Refined Option 4A** (as outlined in paragraph 68 of the staff report) requires collaborative boundaryless planning and partnership;
 - e) notes that successful implementation of a **Refined Option 4A** requires financial contribution and multi-partner co-ordination to complete land acquisition, designation and consenting processes for a new southern plant over the next three years in addition to the significant investment needed at the Cambridge and Pukete plants;
 - f) requests the Hamilton City Council Governance Group members to indicate that any support for **Option 4A** to take forward for refinement and completion of the Southern Metro Wastewater Business Case, is subject to the Waipa District and Waikato District commitment to invest in securing land and discharge consents for the new southern plant;
 - g) requests staff include in the Hamilton City Council submissions on the Waipa District and Waikato District Council Long term Plans a request to include necessary budgetary provision to support an equitable contribution to future-proof the delivery of a new southern plant;

- h) notes that further investigation will be undertaken as part of the Northern Detailed Business Case to consider the servicing solution for the Northern Metro Area communities; and
- notes that further investigation will be undertaken as part of the Southern Metro Wastewater Detailed Business to consider wastewater servicing solutions for Southern Metro Area communities and areas, including those immediately adjacent to the current Hamilton City boundary

Executive Summary - Whakaraapopototanga matua

- 3. In October 2020, the Project Governance Group approved two short-listed options for further development and assessment as part of the Southern Metro WW DBC:
 - i. Option 2A Three Plant Option Involves upgrades and expansion of the Pukete WWTP to service the Northern Metro area (including Taupiri, Ngaruawahia, Te Kowhai, Horotiu and majority of Hamilton); a new southern plant to service the Southern Metro area (including South Hamilton, airport area and environs, Cambridge) and the Te Awamutu WWTP.
 - ii. **Option 4A Five Plant Option** Involves treatment plant upgrades at Ngaruawahia, Pukete, Cambridge and Te Awamutu and a new southern plant to service the airport area and environs.
- 4. The approved short-listed options were reported to the Strategic Growth Committee at the November 2020 meeting.
- 5. The draft short-listed options assessment (November 2020) noted **Option 2A** as the emerging preferred option. This was primarily based on the outcomes of the multi-criteria assessment (MCA) which scored the **Option 2A** higher than the **Option 4A** against agreed "Best for River" objectives and other critical success factors. While **Option 2A** scored higher both short-listed options scored very well and would deliver large step change improvements (in water quality, ecological, and operational efficiencies outcomes) from the current state and business as usual (BAU) approaches.
- 6. Although a substantial amount of work had been undertaken to identify a preferred servicing solution in November 2020, including stakeholder engagement, several important matters required further consideration and refinement in order to recommend the preferred option with confidence. These matters included:
 - i. Reviewing the MCA scoring based on stakeholder input and more developed concepts.
 - ii. Completing the capital and operational cost estimates including documenting the design assumptions informing the estimates.
 - iii. Considering the ability to stage delivery of each option where practicable and where there is no or minimal impact on outcomes.
 - iv. Closer examination of the likely build-out capacity of the Pukete WWTP site and when the Pukete WWTP site may have insufficient space to accommodate further expansion to meet demand and, the extent of flow to be diverted from Hamilton South to a new facility.
 - v. Documenting the risks and opportunities associated with each option to inform the options assessment and preferred option recommendation, in addition to the MCA.
- 7. As a result of further consideration and refinement of the options assessment, **Option 4A** is recommended by the project team to be taken forward as part of the DBC for further final refinement and development.

- 8. **Option 2A** remains the preferred option in the very long term (100 years and beyond) but requires significant capital investment upfront with limited ability to stage that investment (particularly in terms of treatment facilities, and the construction of the conveyance system from Cambridge). When considering what is achievable and 'affordable' over the coming decades **Option 2A** is challenged.
- 9. In addition to major investments in the Southern Metro Area, both options rely on and require significant investment at the Pukete WWTP. The majority of flows and loads from the Metro Area will continue to be treated at Pukete. Option 2A includes for \$290M (uninflated) capital investment at Pukete WWTP out to 2061. Option 4A includes for \$304M (uninflated) capital investment at Pukete WWTP out to 2061.
- 10. Key reasons for recommending **Option 4A** as the preferred option for further refinement include:
 - i. **Option 4A** delivers on the agreed "Best for River" objectives in much the same way as **Option 2A** does. The updated MCA scoring brought the two options much closer together with Option 2A scoring only marginally higher than **Option 4A**. Both options scored very well against the "Best for River" objectives and critical success factors.
 - ii. Like **Option 2A**, **Option 4A** provides for a large step change in treatment quality outcomes and requires accelerated boundaryless planning and investment (i.e. for the airport and environs). In addition, while Option 4A (in its current form) includes five 'medium' to 'large' plants, this could be reduced to four (i.e. Ngaruawahia could be serviced via Pukete WWTP) delivering a similar level of operational efficiency to **Option 2A**.
 - iii. **Option 4A** is considered more flexible and adaptable than **Option 2A**. **Option 4A** has significant potential to be refined and developed over time to meet demand. This includes the staged development of a new sub-regional plant near the airport to cater for demand in the airport precinct and its environs and beyond (e.g. Southern Links area and Hamilton South).
 - iv. The total capital cost estimate (uninflated total dollars for investment out to 2061) for **Option 2A** is \$64M higher than **Option 4A**. A key differentiator are the conveyance costs associated with **Option 2A**.
 - v. The annual operating costs of the treatment plants are in the same order for both options, however the annual operating costs associated with conveyancing is significantly higher for **Option 2A** due to the high flows needing to be pumped over significant distances.
 - vi. Once an appropriate discount rate and inflation are applied, the Present Value of the Costs (PVC) of Option 2A (over a 50-year period) is more than 10% higher than Option 4A. This is because Option 4A avoids the need for major upfront investment in conveyance. Staged implementation of Option 4A can be further refined.
 - vii. With all the partners facing significant capital constraints, the opportunity cost of spending a large amount earlier than may be needed is significant. The ability to better stage and sequence **Option 4A** to match demand makes it attractive, particularly given the capital constraints facing the councils.
 - viii. **Option 4A** also has potential to apply innovative funding and financing solutions (through linking staged investment of the new southern plant to development).

- ix. The Pukete site has capacity (with significant investment, upgrades and expansion) to meet the needs of Hamilton, Te Kowhai, Horotiu, Ngaruawahia, Hopuhopu and Taupiri out to at least 2061 (based on reasonably conservative growth assumptions and including provision for wet industry).
- x. Diverting flow away from Pukete to free up capacity at the site will incur significant costs in the short-term (large southern plant and Hamilton South conveyance), but the benefits may not be realized for many decades. Therefore, it would not be a prudent financial decision for the Councils to invest in a new large treatment facility in the south (and conveyance systems) that is not required for a reasonably long time.

11. Key risks associated with **Option 4A** include:

- i. That the partners do not co-invest in a new southern plant (land, consenting etc) in the short-term and only focus on investment in Pukete and Cambridge as per the current Long-Term Plans (LTPs). This could force landowners/developers to pursue wastewater servicing solutions (e.g. piping, package plants) that are inefficient and deliver poor environmental, economic and social and cultural outcomes for the Metro area.
- ii. That a new southern plant could be very challenging to consent.
- iii. That development of the new southern plant cannot be funded. This risk applies to **Option 2A** as well.
- iv. That development pressure occurs in areas not currently contemplated in the Metro Spatial Plan requiring wastewater servicing solutions.
- v. That the Pukete site is used up faster than anticipated, requiring flows from Hamilton to be diverted to a new plant sooner.
- 12. A key mitigation action for the **Option 4a** risks is to purchase land for a southern plant in the short-term. This action is strongly recommended. This would provide certainty on the long-term servicing solution for the airport and surrounding areas. Also, it should be noted that land values are increasing significantly, and that delays in securing a site may have significant cost implications.
- 13. Development of the site could master planned to provide for modular build out over time. This would enable flexibility and responsiveness to different patterns or rates of development.
- 14. Developer funding of the new southern plant could be linked to out of sequence development and future southern growth areas.
- 15. Another key risk mitigation would be to pursue discharge consents for the new southern plant in co-ordination with the Cambridge plant. This approach would improve the consentability of a new southern plant. A co-ordinated consenting approach would enable the environmental "betterment" from the improvements at Cambridge to be more readily recognised at a catchment scale.
- 16. Seeking discharge consents for a new southern plant separately from Cambridge, would likely make the consenting process significantly more challenging as the impacts of the activity would be considered in isolation from the improvements made at Cambridge.
- 17. Hamilton City Council (HCC) have included \$9M in Years 1 3 of the proposed 2021-31 LTP to contribute toward securing land and resource consents for a new southern treatment facility. Waikato District Council noted a \$4M (unfunded) contribution. Waipa District Council did not explicitly provide for a contribution toward land purchase and consenting for a new southern plant, rather they retained funding based on their indicative cost estimates for the Cambridge facility only.

- 18. While HCC have included some funding in years 1-3, if Waipa and Waikato District Councils do not contribute to the costs of securing land and consents for a new plant simply securing the land and consents may not be possible.
- 19. Continued dialogue between partners is needed to secure funding required to purchase or secure a site for a new southern plant. Dialogue between partners and key stakeholders is also needed to develop and agree an appropriate consenting strategy for the southern metro area and Cambridge.
- 20. Investment in the new Southern WWTP (as part of **Option 4A**) is currently assumed to be required in 2031. The total capital cost estimate (uninflated) of a new Southern WWTP to service a population equivalent (PE) of 18,000 PE is \$54M. The scale and timing of investment in a new southern plant will be refined as part of the DBC. HCC have included an unfunded contribution of \$127M to construct a new sub-regional facility (in accordance with **Option 2A**) in Years 8 10 of the proposed 2021-31 LTP.
- 21. If the preferred option recommendation is accepted, the next steps to completing the Southern Wastewater DBC include:
 - Seeking Governance Group approval of the preferred option to complete the DBC.
 - Further discussions on funding land purchase for a new southern plant; co-ordinating consenting processes across the Southern Metro area and aligning partner Council LTPs.
 - Refinement of Option 4A: including developing the Southern Metro area preferred WW option concept designs, staging and implementation plans to support the DBC and completing sensitivity testing of different land use and growth assumptions and identifying land requirements for the southern / airport WWTP site.
- 22. Implementation of the Southern Metro area components of a refined **Option 4A** could include:
 - a) Years 1-3:
 - i. Seeking resource consents and designations for Cambridge and a new southern treatment facility near the airport.
 - ii. Securing a site (c 15 20ha) near the airport to meet servicing needs in and around the airport and developing treatment as demand necessitates. This site would ideally be large enough to allow a plant to be developed in the future to service growth beyond that anticipated in the Metro Spatial Plan (e.g. growth south of the current Hamilton City Boundary).
 - iii. Developing localised servicing solutions to meet the immediate needs of the airport and its environs. This could include utilising the site secured for the new southern plant in the short term with the ability to transition to a bespoke plant.
 - b) Years 4 10:
 - i. Building a standalone facility to service Cambridge/Hautapu, designed to allow for modular expansion over time.
 - ii. Improved servicing for Matangi/Tamahere.
 - iii. Improved servicing to meeting growth demand at Tauwhare Pa.
 - c) Years 11 onward:
 - i. Developing and expanding a centralised modular facility on the secured site near the airport as development requires. The area of service could be expanded to include Hamilton South in the future as demand requires.

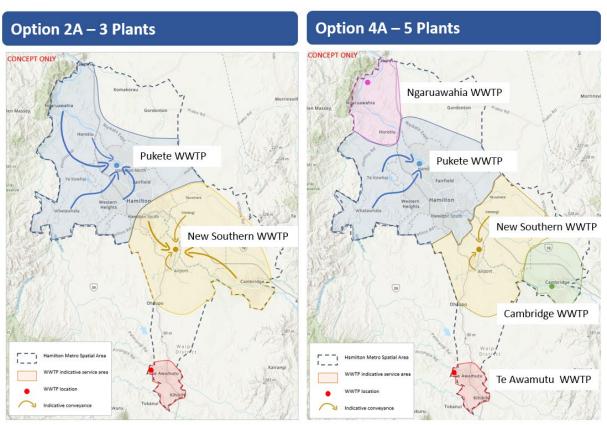
- ii. Servicing Ohaupo in the future when need arises, and treatment capacity is in place via the southern facility or at Te Awamutu.
- 23. The servicing solution for the Northern Metro Area communities will be considered as part of the Northern Metro WW DBC. Based on the capacity assessments for the Pukete site, there will be enough space and capacity (with significant investment) to service all of Hamilton, Ngaruawahia, Te Kowhai, Taupiri, Hopuhopu and Horotiu out to at least 2061.
- 24. Staff consider the decisions in this report have low significance and that the recommendations comply with the Council's legal requirements.

Background - Koorero whaimaarama

- 25. This is the third project update report to the Strategic Growth Committee. This report covers the period from late October 2020 February 2021. Previous reports to the Strategic Growth Committee were provided at the <u>1 October 2020</u> and <u>12 November 2020</u> meetings. The presentation provided at the 12 November 2020 meeting is included as **Attachment 1**.
- 26. Earlier reports have included key project assumptions, methodologies and decisions approved by the Project Control Group and/or Project Governance Group. Overall project updates and emerging directions have also been reported.
- 27. Key project decisions presented to and approved by the Control Group and/or the Governance Group (and presented to the Strategic Growth Committee) include:
 - i. Wastewater performance standards.
 - ii. Growth assumptions.
 - iii. Project investment objectives and key performance indicators.
 - iv. Multi Criteria Analysis (MCA) criteria to assess options.
 - v. Long list wastewater servicing options assessment.
 - vi. Long list of commercial options (i.e. delivery structure, contracting model, contract packaging options).
 - vii. Long list of funding and financing options.
 - viii. Short list of wastewater servicing options.
- 28. The growth assumptions used to size the system components for each option include for:
 - i. Existing development (residential and non-residential).
 - ii. Infill development.
 - iii. Planned industrial development (e.g. Taupiri, Te Kowhai, Hopuhopu, Horotiu, Te Rapa North, Rotokauri, Ruakura, Airport, Cambridge / Hautapu).
 - iv. Planned residential greenfield development (e.g. Rotokauri, Peacockes, Temple View, R2, HT1).
 - v. Additional infill development as noted in the Metro Spatial Plan.
 - vi. "Wet industry" allowances at Horotiu, Te Rapa, Ruakura, Airport and Cambridge. While these allowances have been included in the current DBC work, the most appropriate strategic locations for wet industrial activity in the Metro Area needs to be properly considered and discussed by Future Proof.

- vii. The ultimate design horizon also includes for 35,000 Population Equivalent (PE) for the area between the Southern Links designation and the current Hamilton City Boundary, and an additional 30,000 PE in the vicinity of Ruakura.
- 29. The short-list of wastewater servicing options approved (October 2020) for further consideration are:
 - i. Option 2A Three Plant Option Involves upgrades and expansion of the Pukete WWTP to service the Northern Metro area (including Taupiri, Ngaruawahia, Te Kowhai, Horotiu and majority of Hamilton); A new southern plant to service the Southern Metro area (including South Hamilton, airport area and environs, Cambridge) and the Te Awamutu WWTP.
 - ii. **Option 4A Five Plant Option** Involves treatment plant upgrades at Ngaruawahia, Pukete, Cambridge and Te Awamutu and a new southern plant to service the airport area and environs.
- 30. Schematics of the short-listed options are in **Figure 1** below. The service areas shown in Figure 1 are diagrammatic. The actual areas of service associated with each option (and each plant) are included in **Attachment 2**.

Figure 1: Diagrammatic Overview of Short-listed Metro Area Wastewater Servicing Options



- 31. The draft short-listed options assessment (November 2020) noted **Option 2A** as the emerging preferred option based on the MCA assessment. Despite the indicative cost estimates for **Option 2A** being between \$50m and \$100m greater than **Option 4A**, there was general agreement from stakeholders that **Option 2A** was the emerging preferred technical solution. However, several important matters required further consideration and refinement in order to recommend the preferred option with confidence. These matters included:
 - i. Reviewing the MCA scoring based on stakeholder input and more developed concepts.

- ii. Completing the capital and operational cost estimates including documenting the design assumptions informing the estimates.
- iii. Considering the ability to stage delivery of each option where practicable and where there is no or minimal impact on outcomes.
- iv. Closer examination of the likely build-out capacity of the Pukete WWTP site and when the Pukete WWTP site may have insufficient space to accommodate further expansion to meet demand and,
- linked to (iv) above, the extent of flow to be diverted from Hamilton South to a new ٧. facility.
- vi. Documenting the risks and opportunities associated with each option to inform the options assessment and preferred option recommendation, in addition to the MCA.
- 32. As noted in previous reports, the project timeframes are driven by conditions in the Cambridge WW discharge consents held by Waipa DC1. The original milestone date for recommending a preferred option to the Governance group was December 2020. The recommendation to the Governance Group was deferred to provide time for the options assessment to be further refined and considered by relevant stakeholders and decision makers.
- 33. Option 4A is now the preferred option recommended by the project team to take forward as part of the DBC for further final refinement and development. This recommendation has been workshopped with and accepted by key stakeholders (January and February 2021).
- 34. The Control and Governance Groups workshopped the findings of the refined short-list assessment in February 2021. Some Governance Group members sought time to engage with their organisations on the findings of the short-list assessment prior to reaching a decision on the preferred option to take forward. The Governance Group workshop presentation is included as Attachment 3 of this report. The full briefing paper can be provided on request.

Discussion - Matapaki

- The summary of findings for each of the matters listed in paragraph 31 above follow. 35.
- 36. These findings have all contributed to **Option 4A** being recommended as the preferred option to take forward as part of the Southern Metro WW DBC for further final refinement and development.

MCA Scoring

- Both options scored very well against the "Best for River" objectives and critical success 37. factors. The MCA scoring of the short-listed options was updated to give effect to stakeholder input and feedback and further development of the concepts. The updated MCA scoring brought the two options much closer together with Option 2A scoring only marginally higher than Option 4A.
- 38. Like Option 2A, Option 4A provides for a large step change in treatment quality outcomes and it requires accelerated boundaryless planning and investment (i.e. for the airport and environs). In addition, while Option 4A (in its current form, i.e. prior to refinement) includes five medium to large plants, this could be reduced to four (i.e. Ngaruawahia could be serviced via Pukete WWTP) delivering a similar level operational efficiency to Option 2A.

¹ Waipa DC have consent obligations to submit a long-term consent application for a Cambridge stand-alone solution by 31 December 2022. If a sub-regional plant is identified as the preferred solution for Cambridge a long-term consent application must be lodged by 21 December 2023. The consent also requires a long-term solution for Cambridge to be operational by 1 December 2026. Interim milestones relating to the DBC are also included in the consent. The consent does provide opportunity to request time extensions to these deadlines.

Capital, Operating and Present Value Cost Assessments for Full Metro Area

- 39. The updated capital cost estimates for the two short-listed options are²:
 - Option 2A: \$716 million.
 - Option 4A: \$652 million.
- 40. The total capital cost estimate for Option 2A is \$64M higher than **Option 4A**.
- 41. These estimates include for both the northern and southern area plants and conveyance systems required to divert flow to new treatment locations. The estimates do not include the cost to upgrade existing conveyance systems (e.g. upgrading Hamilton strategic interceptors or installation of bulk storage. The cost estimates do not include for local wastewater network upgrades or the cost of conveyance needed to service new greenfield development areas (e.g. R2, HT1). These costs would likely be required irrespective of the treatment location.
- 42. Summaries of the capital cost estimates are included in **Table 1** below.

Table 1 – Summary of Total Capital Cost Estimates out to 2061 (Uninflated)

OPTION 2A	MOST LIKELY COST ESTIMATE OUT TO 2061							
WWTP name?	Plants (\$ Million)	Conveyance (\$ Million)						
Pukete? (Northern) WWTP	\$322 (TOTAL)	\$50 (TOTAL)						
	Upgrade WWTP:\$288 Consenting?: \$8 Procurement & council internal costs: \$26	Hamilton North \$0 Te Kowhai \$5? Ngaruawahia \$45?						
New Southern WWTP?	\$222 (TOTAL)	\$89 (TOTAL)						
	Land purchase: \$12 Consenting: \$8 New WWTP: \$177 Decommisioning: \$2 Procurement & council internal costs: \$23	Hamilton South?\$33? Matangi?\$7? Airport? ? Ohaupo?\$7? Cambridge? \$42?						
SUB-TOTAL	\$544	\$139						
TOTAL COSTS (excluding TA, Tauwhare)	\$683							
TOTAL COSTS (including TA, Tauwhare)	\$716							

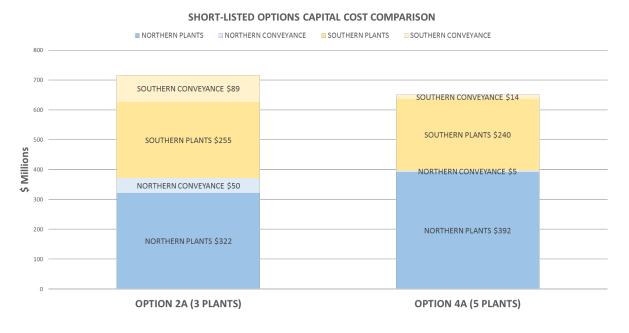
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² Total dollars out to 2061 and unadjusted for inflation

OPTION 4A	MOST LIKELY COST ESTIMATE OUT TO 2061						
WWTP name?	Plants (\$ Million)	Conveyance (\$ Million)					
NORTHERN METRO	\$392 (TOTAL)	\$5 (TOTAL)					
Pukete (Northern) WWTP	?\$337	\$5					
	Upgrade WWTP: \$304 Consenting?: \$8 Procurement & Council internal costs: \$25	Te Kowhai \$5?					
Ngaruawahia WWTP?	\$55	?					
SOUTHERN METRO	\$207 (TOTAL)	\$14 (TOTAL)					
New Southern WWTP?	\$93	\$14					
	Land purchase: \$12 Consenting: \$10 New WWTP: \$54 Decommisioning: \$2 Procurement & council internal costs: \$15	Airport ? Matangi?\$7? Ohaupo?\$7?					
Cambridge? WWTP	\$114	?					
SUB-TOTAL	\$599	\$19					
TOTAL COSTS (excluding TA, Tauwhare)	\$618						
TOTAL COSTS (including TA, Tauwhare)	\$652						

43. Key components of the capital cost estimates are compared in **Figure 2** below. These are grouped by location (Northern or Southern Metro area) and system component (plant or conveyance). The capital cost difference between the two options is largely associated with the cost of conveyance.

Figure 2: Short-listed Options Capital Cost Comparison (including Te Awamutu & Tauwhare)



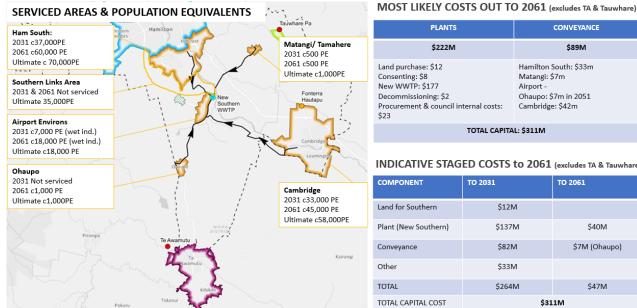
- 44. Both options require significant investment at the Pukete WWTP. Option 2A includes for c\$290M (uninflated) investment at Pukete WWTP out to 2061. Option 4A includes for \$304M (uninflated investment) at Pukete WWTP out to 2061.
- 45. The annual operating costs of the treatment plants are in the same order for both options, however the annual operating costs associated with conveyancing is significantly higher for Option 2A due to the high flows needing to be pumped over significant distances.
- 46. Applying inflation to the capital and operating costs and a discount rate reflecting the cost of capital the Present Value of the Costs (PVC) of the two options are:
 - Option 2A: \$1,213 million.
 - Option 4A: \$1,097 million.
- 47. The PVC includes capital cost inflation of 3%, operating cost inflation of 2%, costs modelled to 2071 (50 years) and 5% discount rate. The summary of the PVC assessment is shown below in Table 2.

Table 2- Full Metro Wastewater Servicing Present Value of the Costs

	OPTION 2A	OPTION 4A
Present Value of Costs	\$ Million	\$ Million
Capital costs	555.5	515
Renewal capital costs	24	27
Operating costs - Conveyancing	84	2.5
Operating costs - Treatment Plants	549.5	555
TOTAL	1,213	1,097

48. The serviced areas, population equivalents (PE), capital costs estimate (unadjusted) and initial staging for the Southern Metro area components of Options 2A and 4A are included below in Figure 3 and Figure 4 respectively.

Figure 3: Option 2A - Southern Metro Area Servicing Details



PLANTS	CONVEYANCE								
\$222M	\$89M								
Land purchase: \$12 Consenting: \$8 New WWTP: \$177 Decommissioning: \$2 Procurement & council internal costs: \$23	Hamilton South: \$33m Matangi: \$7m Airport - Ohaupo: \$7m in 2051 Cambridge: \$42m								
TOTAL CAPITAL: \$311M									

INDICATIVE STAGED COSTS to 2061 (excludes TA & Tauwhare)

COMPONENT	TO 2031	TO 2061		
Land for Southern	\$12M			
Plant (New Southern)	\$137M	\$40M		
Conveyance	\$82M	\$7M (Ohaupo)		
Other	\$33M			
TOTAL	\$264M	\$47M		
TOTAL CAPITAL COST	\$31	1M		

MOST LIKELY COSTS OUT TO 2061 (excludes TA & Tauwhare) SERVICED AREAS & POPULATION EQUIVALENTS **PLANTS** CONVEYANCE Matangi/ Tamahere \$207M \$14M 2031 c500 PE 2061 c500 PE Land purchase: \$12 Matangi: \$7m Ultimate c1,000PE Consenting: \$10 Airport Decommissioning: \$2 Ohaupo: \$7m in 2051 New Southern WWTP: \$54 Cambridge WWTP: \$114 Procurement & council internal costs: Airport Environs 2031 c7.000 PE (wet ind.) 2061 c18,000 PE (wet ind.) Total Capital \$221M Ultimate c18,000 PE INDICATIVE STAGED COSTS to 2061 (excludes TA & Tauwhare) Ohaupo 2031 Not serviced COMPONENT TO 2031 TO 2061 2061 c1,000 PE 2031 c33.000 PE Ultimate c1,000PE 2061 c45,000 PE Land for Southern \$12M Ultimate c58,000PE Plant (New Southern) \$54M Plant (Cambridge) \$114M Conveyance Ś7M \$7M (Ohaupo) Othe \$27M TOTAL \$214M \$7M TOTAL CAPITAL COST \$221M

Figure 4: Option 2A - Southern Metro Area Servicing Details

Potential Staging of Options

- 49. Option 2A requires a new southern plant and conveyance system to be constructed by 2031 to service Cambridge. While there may be some potential to stage servicing of smaller communities as part of Option 2A, major investment in the new southern plant and conveyance systems from Cambridge are required upfront. There is limited ability to defer or stage that investment.
- 50. **Option 4A** requires the new Cambridge Plant to be constructed by 2026, again with limited ability to defer of stage that investment. However, the new southern plant included in **Option 4A** has significant potential to be refined and developed over time to meet demand. The southern plant sizing and cost estimates are based on servicing up to 18,000 PE in and around the airport. A significant proportion of this PE comes from the "wet industry" assumptions used for the DBC. As part of refining the preferred option, changes to the growth and land use assumptions, such as removing "wet industry" from the airport area and/or increasing the area to be serviced by the new Southern plant (e.g. the Southern Links area and South Hamilton), can be tested and allowed for in master planning a new site. In addition, there may be options available to further stage investment in and around the airport to meet demand.
- 51. Costs and risks of conveyance from the southern extent of the city/airport area to Pukete may mean that a new plant in the south is a better approach than conveyance to Pukete, irrespective of Pukete having space to accommodate further treatment. This will be considered as part of the preferred option refinement.
- 52. Given the points noted above, **Option 4A** is considered more flexible and adaptable than Option 2A with greater ability to match investment in system capacity to meet need.
- 53. The potential to defer investment in the Pukete WWTP site as part of **Option 2A** was considered. Very little opportunity exists to defer investment in the Pukete WWTP process in the next 10 20 years. This is largely because the investment needed at Pukete is largely driven by compliance and resilience needs. In addition, the assumed portion of Hamilton flow and load to be diverted away from Pukete to a new plant in the south would be replaced by flow and load from the northern communities, therefore retaining the need to invest in Pukete in the short, medium and long term.
- 54. Potential to defer capital expenditure associated with lower water quality standards (i.e. the Te Awamutu WWTP consent standard) was also investigated. The advice from the technical

team was that the capital cost savings were expected to be minimal, however the operating cost savings could be more significant. While this work was considered, the project partners have consistently promoted adoption of at least the Pukekohe standard used to develop the concept designs and cost estimates.

Pukete Wastewater Treatment Plant Site Capacity

- 55. Closer examination of the likely build-out capacity of the Pukete WWTP site and in particular when the Pukete WWTP site may have insufficient space for expansion to meet demand was considered as part of testing the short-listed options.
- 56. This work determined that the current plant site has space to provide treatment for both short-listed options out to at least 2061 with a change to MBR technology and additional treatment processes. The assessment assumed that the treatment plant would be redeveloped and expanded within the existing site-built footprint only (outlined in red in Figure 5).
- 57. This is considered a reasonable approach to inform this DBC given that the full land holding owned by HCC (outlined in green) provides appropriate buffers to surrounding sensitive land uses, including residential development to the south and the Waikato River to the east. There are however, areas of the total land holding that may be appropriate for siting non-process related assets, such as the administration building, to maximise the use of space within the existing footprint (outlined in red). There may also be some areas that are suitable for future process unit expansion (e.g. the area west of Pukete Road).
- 58. The Pukete WWTP site capacity has an impact on recommending **Option 2A**, as the costs of diverting flow away from Pukete to free up capacity at the site would be incurred in the short-term, but the benefits not be realized for many decades.

Figure 5: Pukete Wastewater Treatment Plant.

The overall site owned by HCC is outlined in green. This includes buffers around the site. The site build - out assessment was based on re-developing and expanding the treatment processes within the area outlined in red only.



- 59. The assessment of the build out capacity of the Pukete WWTP site indicates that (with appropriate staged investment) Pukete can meet the needs of Hamilton, Te Kowhai, Ngaruawahia, Taupiri, Hopuhopu and Horotiu to at least 2061. There are several risks associated with the assessment that must be highlighted.
 - i. The assessment is based on assumed characterisation of wastewater and expected rate and patterns of growth. Higher strength waste, or faster and more intensive development could reduce the period that the Pukete site will be able to meet the needs of Hamilton and the Northern Metro communities. This could in turn bring forward the need to divert flow away from Pukete to a new treatment facility.
 - ii. The Pukete WWTP capacity assessment relies on significant network upgrades (including storage) to be implemented to manage peak wet weather flows. If these interventions are not implemented in the network, storage at the WWTP may be required which may take up valuable space at the site.
 - iii. The extent of ground dig out and remediation required in northern area of the Pukete site is unknown, which presents cost risks. While some allowances have been included for geotechnical uncertainty the allowances may not be enough.
 - iv. Brownfields construction complexity may impact the ability to make the site as efficient as necessary and add to the overall cost of building out the Pukete site. This requires further consideration as part of the Northern DBC.
 - v. Renewals of existing structures/buildings not factored into cost estimates (although these costs apply to both Option 2A and 4A).
 - vi. Maximising the capacity that Pukete can deliver relies on a change in technology (i.e. the adoption of MBR technology). Commitment and appropriately staged investment will be required to implement the technology change (included in the indicative cost estimates) over time to enable the plant to remain operational and compliant through future upgrades. This requires further consideration as part of the Northern DBC.
 - vii. The potential to service wet industry may be limited by the build-out capacity of the Pukete site. While the agreed wet industry land use assumptions (i.e at Te Rapa, Horotiu, Ruakura) have been included in the assessment of the Pukete site, servicing major dischargers (e.g. Fonterra, Open Country Diary, AFFCO) through the Pukete site may not be feasible options in the long term. This requires further consideration as part of the Northern DBC.
 - viii. Sludge management A future management strategy could require additional processing steps.

Key Risks and Opportunities

- 60. Key risks associated with **Option 2A** include:
 - i. Inability to secure funding or agreement to implement the preferred option in acceptable timeframes (i.e. as determined by the Cambridge discharge consents). This is evidenced by insufficient funds included in the HCC, Waipa DC and Waikato DC proposed 2021-2031 LTPs. HCC has included funds for Pukete WWTP upgrades, and a share of a new plant and Waipa DC has included for a Cambridge Plant but it is not enough for the full **Option 2A**.
 - ii. Building infrastructure well in advance of need and ratepayer bearing the financial burden of that investment.

- 61. Key risks associated with **Option 4A** include:
 - i. That the partners do not co-invest in a new southern plant (land, consenting etc) in the short-term and only focus on investment in Pukete and Cambridge as per the current LTPs. This could force land owners/developers to pursue wastewater servicing solutions (e.g. piping, package plants) that are inefficient and deliver poor environmental, economic and social and cultural outcomes for the Metro area.
 - ii. Development opportunity potentially lost between Cambridge and Hamilton South.
 - iii. Development south of Hamilton that is not currently contemplated in the Metro Spatial Plan could require a wastewater servicing solution sooner than expected. This could be an outcome of significant growth pressures, or pressure to develop in ways not currently reflected in sub-regional planning.
 - iv. Not being able to consent a new southern plant.
 - v. Not consenting the new southern plant at the same time as Cambridge, and therefore not being able to benefit from the "betterment" created through upgrading the Cambridge plant.
- 62. A key mitigation action for the **Option 4A** key risks would be to purchase land for a southern treatment plant in the short-term. This would enable flexibility and responsiveness to different patterns or speed of development. The new southern plant could be developed in stages to progressively respond to growth. Staged development and developer funding of the new southern plant could be linked to out of sequence development and future southern growth areas.
- 63. **Option 4A** potentially foregoes the following opportunities that **Option 2A** presents:
 - i. Partially financing a sub-regional facility using monies need to meet the immediate and long-term needs of Cambridge.
 - ii. To partner with Central Government and attract third-party funding to develop a subregional facility, although there is no evidence to suggest that third-party funding would be available.
 - iii. Supporting wet industry in and around the airport. Option 2A had the advantage of a high domestic flow from Cambridge that could buffer the flows and loads from wet industry in and around the airport. If the assumed airport wet industry were to proceed, the proportion of wastewater flow and load originating from wet industry would be very large, therefore resulting in significant operational risks at the plant which could prove challenging to manage. As noted earlier, wet industry locations need to be properly considered and discussed by Future Proof.

Recommended Preferred Option for Refinement

- 64. **Option 4A** is recommended as the preferred option to take forward for refinement as part of the DBC.
- 65. Key reasons for the recommendation are:
 - i. **Option 4A** and **Option 2A** achieve similar outcomes in relation to the investment objectives (MCA) and 'Best for River' outcomes.
 - ii. **Option 4A** and **Option 2A** are assessed as having similar ability to be successfully consented and implemented. Note that the assessment assumes that the consenting for the Southern Metro area WW facilities will be co-ordinated.

- iii. The unadjusted capital cost estimate (out to 2061) for **Option 4A** is \$64M less than **Option 2A**.
- iv. The annual operating costs for the treatment plants for both **Options 2A** and **4A** are similar, however the annual operating costs for the conveyance systems associated with **Option 4A** are significantly lower than **Option 2A**.
- v. Option 4A has a Present Value Cost (PVC) estimate of \$1,097 million compared with Option 2A which is \$1,213 million. This includes capital cost inflation of 3%, operating cost inflation of 2%, costs modelled to 2071 and 5% discount rate.
- vi. **Option 4A** is considered more flexible and adaptable than **Option 2A** with greater ability to match investment in system capacity to meet need.
- vii. The ability for a refined **Option 4A** to be staged to deliver infrastructure to meet demand. **Option 4A** includes a new plant vicinity of the airport, however the timing of that need will be dependent on the type, location and rate of growth. **Option 4A** has the potential to stage investment in the new southern plant to progressively respond to growth. Staged development and developer funding of the new southern plant could be linked to out of sequence development and future southern growth areas.
- 66. Other key factors that along with the above points have collectively resulted in **Option 4A** being recommended include:
 - Greater confidence in the conveyancing costs, energy consumption and costs associated with each option and the difference between the two options. The costs and energy consumption associated with Option 2A (largely arising from conveyance) are significantly greater than Option 4A.
 - ii. Greater clarity on the capacity of the Pukete WWTP site footprint and the ability of that site (through staged upgrades, investment and adoption of alternative technologies) to meet the needs of the Hamilton, Ngaruawahia, Taupiri, Hopuhopu and Horotiu for at least the next 40 years; further investigation will be undertaken as part of the Northern DBC.

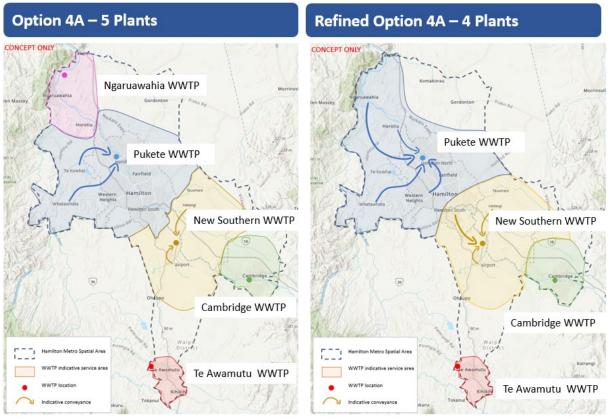
Next Steps

- 67. If the preferred option recommendation is accepted, the next steps to completing the Southern Wastewater DBC include:
 - i. Seeking Governance Group approval of the preferred option to complete the DBC.
 - ii. Further discussions on funding and coordinating land purchase and consenting process across the Southern Metro area and alignment of partner Council LTPs.
 - iii. Refinement of **Option 4A**: including developing the Southern Metro area preferred WW solution concept designs, staging and implementation plans to support the DBC and completing sensitivity testing of different land use and growth assumptions and identifying land requirements for the southern / airport WWTP site.

Southern Metro Area - Refined Option 4A Concept

68. The refined overall **Option 4A** could include Ngaruawahia/Taupiri/Horotiu being serviced via Pukete instead of via an upgraded plant at Ngaruawahia and a new southern plant being master planned to service a larger area than the Airport and environs as demand requires (e.g. Hamilton South and Southern Links area). A possible refinement of option 4A is shown diagrammatically in Figure 6 below. The new Southern WWTP would be staged to meet demand.

Figure 6: Diagrammatic Overview of Option 4A and a possible refined Option 4A



- 69. Implementation of the Southern Metro area components of a refined **Option 4A** could include the following:
 - a) Years 1-3:
 - i. Seeking resource consents and designations for Cambridge and a new southern treatment facility near the airport.
 - ii. Securing a site (c 15 20ha) near the airport to meet servicing needs in and around the airport and developing treatment as demand necessitates. This site would ideally be large enough to allow a plant to be developed in the future to service growth beyond that anticipated in the Metro Spatial Plan (e.g. growth south of the current Hamilton City Boundary).
 - iii. Developing localised servicing solutions to meet the immediate needs of the airport and its environs.
 - b) Years 4 10:
 - i. Building a standalone facility to service Cambridge/Hautapu, designed to allow for modular expansion over time.
 - ii. Improved servicing for Matangi/Tamahere.
 - iii. Improved servicing to meeting growth demand at Tauwhare Pa.
 - c) Years 11 onward:
 - Developing and expanding a centralised modular facility on the secured site near the airport as development requires. The area of service could be expanded to include Hamilton South in the future as demand requires.

- ii. Servicing Ohaupo in the future when need arises, and treatment capacity is in place via the southern facility or at Te Awamutu.
- 70. The servicing solution for the Northern Metro Area communities will be considered as part of the Northern Metro WW DBC. Based on the capacity assessments for the Pukete site, there will be enough space and capacity (with significant investment) to service all of Hamilton, Ngaruawahia, Te Kowhai, Taupiri, Hopuhopu and Horotiu out to at least 2061.

Project Update

- 71. A high-level update on the overall Waikato Metro Wastewater Project is included as **Attachment 4**.
- 72. The project is behind programme with the Governance Group meeting planned for December 2020 to consider the recommended preferred option to take forward deferred to April 2021.
- 73. The original completion date was late May 2021. The forecast completion date for the Southern Metro WW DBC is now July 2021. Achieving the July 2021 completion date relies on confirming the preferred option to take forward for refinement by early April 2021.

Programme - Cambridge Wastewater Consent Obligations

- 74. The project delivery timeframes are being driven by key dates in the resource consent to discharge wastewater for the Cambridge plant (RC AUTH141113.02.01):
 - a. Completion of the DBC by March 2021 and endorsement by Waipa DC (the consent holder) by 20 June 2021 (Interim milestones in Condition 33).
 - b. If a standalone long-term wastewater solution is proposed at Cambridge, then a long-term consent application shall be prepared and submitted to WRC by 31 December 2022 (Condition 33).
 - c. If a sub-regional option at a new location is pursued as the long-term option for Cambridge, then a consent application shall be prepared and submitted to WRC by 31 December 2023 (Condition 33).
 - d. If the above timeframes cannot be met, then an appropriate timeframe can be agreed in writing with the consent authority and will consider feedback from key stakeholder groups. Any extension shall be as brief as reasonably practical (Condition 33).
 - e. Condition 34 states that the long-term option for wastewater treatment currently undertaken at Cambridge WWTP shall be in place and operational by the expiration (1 December 2026) of the consent or as otherwise agreed in writing with the consent authority.
- 75. Waipa DC are responsible for ensuring compliance with the conditions of consent. Given the delays in the project, Waipa DC will be seeking extensions to dates specified for the Interim milestones in paragraph 61 (a) above.

Financial Considerations - Whaiwhakaaro Puutea

- 76. There are no financial implications in relation to this current report, however implementing the DBC recommendations is likely to have significant financial implications for the 2021–31 LTPs if adopted by the partner Councils.
- 77. As noted in the 12 November 2020 Committee meeting, staff from HCC, Waikato DC and Waipa DC worked to align 2021-31 LTP requests across organisations so that funding is available for at least the initial planning and land acquisition elements of a new Southern WW facility.

78. The "order of magnitude" estimate to secure land, designate and consent a new wastewater facility south of the city (as at November 2020) was c\$22M. To align with Waipa DC requirements for Cambridge, these activities would be spread over Years 1 to 3 of the 2021-31 LTP as shown below:

			YEAR					
		TOTAL					Ιte	
		Y 1 - 3	1		2		3	
Land Purchase	\$	12,250,000	\$ 250,000	\$	12,000,000			
Designation & consenting process	\$	9,500,000	\$ 2,025,000	\$	3,800,000	\$	3,675,000	
Plant, conveyance, indirect costs								
Total	\$	21,750,000	\$ 2,275,000	\$	15,800,000	\$	3,675,000	

79. The cost-apportionments between the three Councils and associated funding requests submitted to fund the Year 1 – 3 activities are below:

		TOTAL				
	% contribution	Y 1 - 3		1	2	3
Waikato District Council	18%	\$ 3,915,000	\$	409,500	\$ 2,844,000	\$ 661,500
Waipa District Council	41%	\$ 8,917,500	\$	932,750	\$ 6,478,000	\$ 1,506,750
Hamilton City Council	41%	\$ 8,917,500	\$	932,750	\$ 6,478,000	\$ 1,506,750
HCC ROUNDED		\$ 9,000,000	\$	1,000,000	\$ 6,500,000	\$ 1,500,000

- 80. This approach was taken to preserve the opportunity to commence delivery of a new Southern WW facility in line with Waipa DC programme needs.
- 81. Funding for construction of a new treatment facility and strategic conveyance systems could potentially be programmed to commence from Year 9 and extend beyond the 2021-31 LTP.
- 82. HCC have included for c\$9M in the proposed 2021-31 LTP to contribute toward the costs of land acquisition and consenting a new southern treatment facility in years 1 3. HCC noted a \$127 million (uninflated) contribution toward building a new sub-regional treatment facility in years 9 10 of the proposed 2021-2031 LTP (in accordance with Option 2A) but did not fund the expenditure in the proposed LTP.
- 83. Waikato DC noted a \$4M contribution to the facility in years 1 3 of their proposed 2021-2031 LTP but did not fund the expenditure in the proposed LTP.
- 84. Waipa DC were unable to revise their 2021-31 LTP funding requests to reflect the 40% contribution to purchase land and consent a new southern treatment facility as they had already finalised their proposed 2021-31 LTP by October 2020. They retained their indicative cost estimates for the Cambridge facility only.
- 85. While HCC have included some funding in years 1-3, if Waipa and Waikato DC do not contribute to the costs of securing land and consents for a new plant simply securing the land and consents may not be possible.

Legal and Policy Considerations - Whaiwhakaaro-aa-ture

86. Staff confirm that this project complies with the Council's legal and policy requirements.

Wellbeing Considerations - Whaiwhakaaro-aa-oranga tonutanga

- 87. The purpose of Local Government changed on the 14 May 2019 to include promotion of the social, economic, environmental and cultural wellbeing of communities in the present and for the future ('the 4 wellbeings').
- 88. The Metro WW DBC(s) will adopt the Treasury Better Business Case Programme Business Case model. The 4 wellbeing's are core considerations in delivering the business case in addition to

Te Ture Whaimana o te Awa Waikato – The Vision and Strategy for the Waikato River and relevant Iwi Management Plans.

Risks - Tuuraru

- 89. Delays in identifying the preferred option to take forward as part of the DBC has impacted on the project and increases the risks of not being able to implement the findings of the DBC. This is due to time constraints associated with Cambridge Wastewater short-term consent conditions. While mitigation strategies are being developed, further delays will increase this risk.
- 90. There are several significant risks associated with the successful delivery of the overall project. A project risk register has been prepared for the project. The significant risks relate to:
 - a) lack of alignment across partner organisations leading to conflicting aspirations, inconsistent messaging, partner disagreement at key decision points; and
 - b) funding and affordability challenges
 - c) timing constraints arising for Cambridge Wastewater short-term consent conditions.
- 91. Other risks associated with the recommended option to take forward as part of the DBC are described from paragraphs 9-10 and 47-51.
- 92. Detailed implementation risk management plans will be developed as part of completing the DBC.

Significance & Engagement Policy - Kaupapa here whakahira/anganui Significance

93. Staff have considered the key considerations under the Significance and Engagement Policy and have assessed that the matter(s) in this report has/have a low level of significance.

Attachments - Ngaa taapirihanga

- Attachment 1 Waikato Metro WW DBC Strategic Growth Committee 2020-11-13 Presentation
- Attachment 2 Short-listed Waste Water Options Servicing Areas
- Attachment 3 Waikato Metro WW DBC- PGG Workshop Presentation 2021-02-26
- Attachment 4 Metro Area WW Project Governance Group Agenda 2021-02-26 Project Update















Metro Wastewater Detailed Business Case

Hamilton City Council Strategic Growth Committee 12th November 2020





Project recap

- HCC, Waipa DC, Waikato DC, Iwi/Mana Whenua partnership
- Short-listing wastewater servicing options for full Metro Area
- Detailed Business Case for Southern Metro Area by May 2021. Preferred servicing solution by Dec. 2020
- Southern Metro DBC timeframes driven by Waipa DC needs
- Separate Northern Metro DBC
- Waters Reform Stimulus Funding of DBCs confirmed



WAIKATO METRO WASTEWATER















Key project objectives

- Detailed Business Case for Strategic Wastewater Treatment Facilities for Metro Area that:
 - Uses Treasury Better Business Case Model
 - Is delivered in time to inform critical investment decisions (e.g. Cambridge)
 - Is deliverable and supported by all partners
 - Maximizes opportunities to transform 3-waters infrastructure
 - Delivers solutions that achieve "Best for River" Outcomes

Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri The river of life, each curve more beautiful than the last

Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come.

WAIKATO METRO WASTEWATER







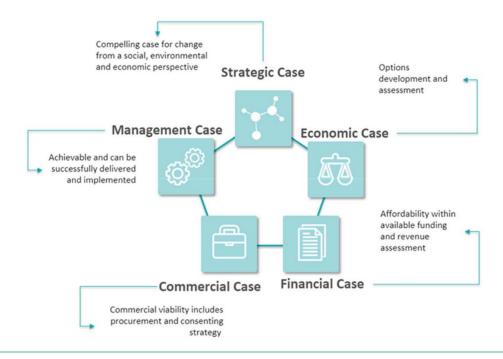






Better Business Case Model





WAIKATO METRO WASTEWATER













Key Activities



- Engagement with project partners and Iwi/Mana Whenua is ongoing.
- Short list of wastewater servicing options confirmed.
- Long-list of commercial delivery, capital works packaging and contract/procurement models assessed and short list recommended.
- Long-list of finance and funding options identified and prelim assessment complete
- Potential approach to 2021 2031 Long Term Plan Funding Requests across partner HCC,
 Waipa DC, Waikato DC being worked through.





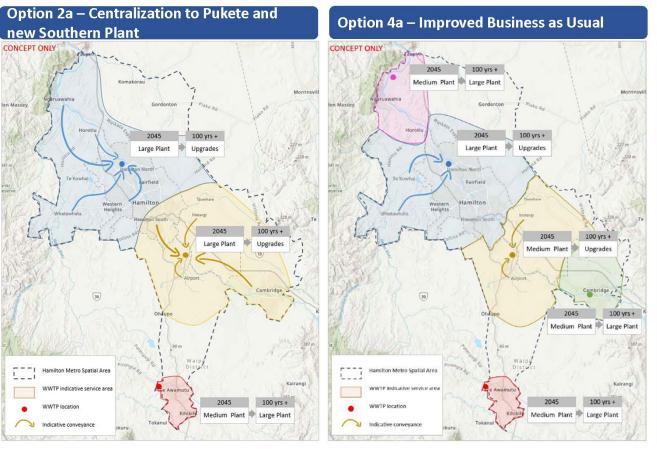








WASTEWATER SERVICING OPTIONS SHORT-LIST





| Note

Areas of benefit are diagrammatic only and don't reflect the areas under consideration

Timing and staging of upgrade shown is conceptual only and is being considered as part of the DBC

High level cost estimates for new Southern WW Facility to meet 2061 projected base flows:

COMMERCIAL CASE- Delivery structure short list



(for sub-regional facility)

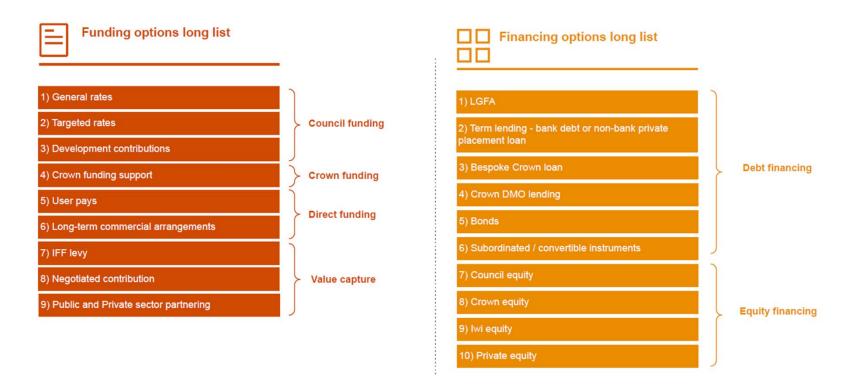
- 1) Traditional council delivery
- 2) Joint Procurement
- 3) Partnership with principal council or principal CCO
- 4) New entity fully council owned
- 5) Existing shared services organisation
- 6) New regional water entity
- 7) New entity joint council and third party ownership
- 8) Community Trust

- 3) Most effective way for multiple councils to jointly procure works without establishing an entity
- 4) Benefits may outweigh the drawbacks if the new entity incorporates projects/services in the whole sub-region rather than just being formed to deliver the Southern-Metro solution
- 6) Not progressed at this stage as dependant on 3 waters reform but the preferred option will need to retain the flexibility to transition to this structure in future
- 7) Provides an opportunity to introduce third party equity, including the possibility of iwi equity. This may have the potential to deliver a limited reduction of the financial liabilities on councils' balance sheets

FINANCIAL CASE- Funding & Financing Long List



(for sub-regional facility)



ALIGNING LTP FUNDING REQUESTS



(for sub-regional facility)

- To align LTP funding requests across councils, meeting with CEs to work through:
 - Emerging cost estimates (order of magnitude costs for Southern Facility (\$140m for plant + \$100m for conveyance for base population to 2061)
 - Staging options to optimise investment timing
 - Cost allocation principles and choices
- Objective of collaboration between Council CEs is to put forward LTP funding requests based on agreed principles and assumptions.
- Funding and affordability are key challenges to be overcome for both short-listed options.
- Option 2a potentially brings level of investment forward significantly
- Seeking to preserve opportunity to deliver new Southern Metro facility, recognising that project is a "work in progress".















Key Activities & Upcoming Milestones

- Ongoing collaboration with partners to:
 - Identify preferred wastewater servicing & commercial options
 - Develop potential staging options
 - · Identify short-list of potential sites for new Southern treatment facility
 - Develop cost allocation principles and associated financial modelling scenarios
- Initial financial modelling to assess potential rate payer / trade waste impacts

16th **December 2020** – Governance group consideration and confirmation of preferred wastewater servicing and commercial options

Jan – March 2021 – Develop preferred servicing solutions, identify preferred funding and finance options















Recommendations

That the Committee:

- receives the report;
- notes the short-listed wastewater servicing options and process undertaken to determine the short-list; and
- notes that staff are working with Waikato and Waipa District Council to align individual 2021-31 LTP funding requests to implement a new southern wastewater facility.













Northern Metro Area Northern Metro Area Servicing Areas Southern Metro Area Southern Metro Area **OPTION 4A: Partially OPTION 2A: Fully Centralised Option Centralised Option**





























Preferred Wastewater Servicing Option

Governance Group Meeting 26th February 2021



WAIKATO METRO WASTEWATER

OUTLINE

- Recap short listed options, areas for further testing and refinement
- Update on further testing completed
- Summary of key findings:
 - Cost estimates
 - Pukete WWTP Capacity Review
 - Other matters
- Decision making rationale
- · Recommended preferred option to take forward
- Key risks and opportunities of recommended preferred option
- Refinement and development of preferred option
- Possible programme to confirm recommendation to Governance Group













RECAP

- The short-listed wastewater servicing solutions recommended to and approved by the Governance Group were:
 - Option 2A Northern and Southern Centralisation Involving a northern (Pukete) and southern (at a new site) sub-regional plants, Te Awamutu WWTP, Fonterra Hautapu being serviced through a standalone system
 - Option 4A Enhanced Business as Usual (BAU) Involving treatment plant upgrades at Ngaruawahia, Pukete, Cambridge and Te Awamutu; New plant at Airport, and Fonterra Hautapu being serviced through a standalone system
- Both options scored very well against the investment objectives and deliverability criteria (i.e. MCA)
- Both options involve significant improvements from a 'Do Minimum' option















RECAP – Key Project Assumptions

- 'Best for River' Outcomes at forefront including high water quality discharge objectives
- Boundaryless approach to planning and outcomes
- Co-management/co-governance approach
- 40-year (2030-2070) project investment and assessment timeframe with a 100-year outlook
- Pukete WWTP Site constrained
- Treatment Standards confirmed through the project
- Growth assumptions and sensitivity assessments





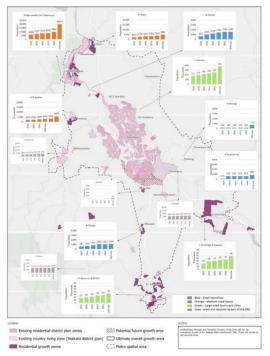


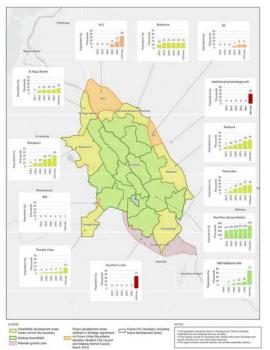






RECAP – Growth Assumptions



















RECAP – Growth Assumptions

Location	Type of development	Indicative area (incl deferred and non-zoned) ha	Base Industrial Flow allowance* m³/d	Base Industrial Flow PE/ha	Additional Wet Industry Allowance m³/d	Additional Wet Industry PE	Total Industrial flow allowance m³/d
Horotiu	Light Industrial/ logistics	194	931	30	1,341	6,705	2,272
Te Rapa North	Industrial	60	432	45	415	2,074	847
Ruakura	General Industrial	225	1,620	45	1,555	7,776	3,175
Airport	Light industrial	253	1,822	45	1749	8,744	3,570
Cambridge (near WWTP)	Industrial	23	165	45	159	795	325













Attachment

RECAP – Best for River Objectives & Criteria

- 1. Before 2050 municipal wastewater discharges are no longer impacting on the ability of people to swim and collect Kai from the river and connected waterways thereby contributing to the restoration and protection of the health and wellbeing of the river
- **2.** The quality and extent of aquatic and terrestrial habitat and biodiversity in and around water bodies is enhanced through the reduction of wastewater treatment and discharge impacts before 2050
- **3.** Wastewater treatment solutions contribute to restoring and enhancing cultural connectivity with the river so that before 2050 Marae, Hapuu and Iwi access to the river and other sites of significance for cultural and customary practice within the metro spatial area are no longer impeded by waste water treatment solutions.
- **4.** Maximise efficient use of resources and resource recovery to contribute to net zero greenhouse gas related emissions from wastewater treatment systems before 2050
- **5.** The wastewater solution provides sufficient capacity to ensure sustainable growth in the metro spatial area in accordance with growth projection assumptions for the next 100 years



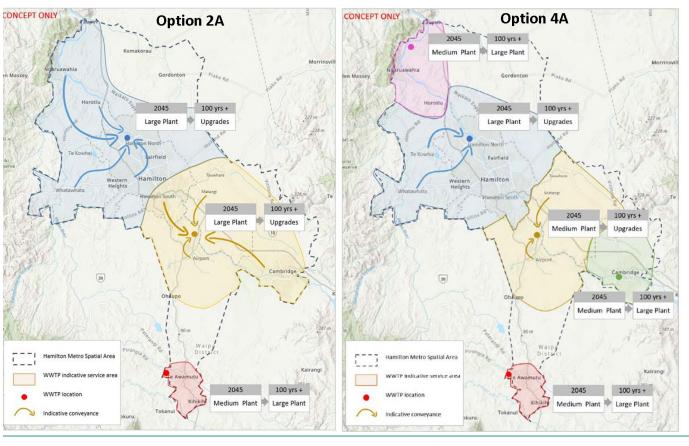














Short list option servicing concepts









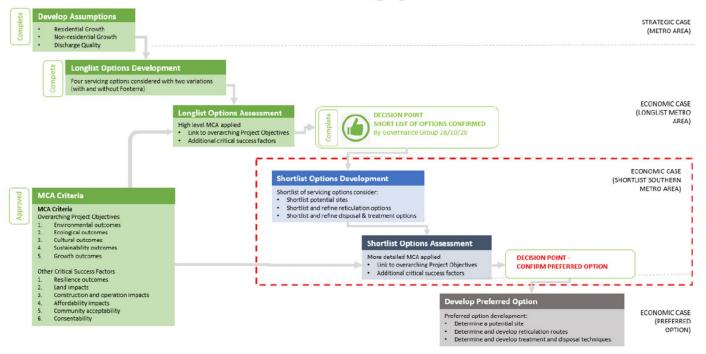






Attachment 3

RECAP – Decision making processes

















Areas for further consideration & testing

- Closer examination of the likely build-out capacity of the Pukete WWTP site, the extent of flow to be diverted from Hamilton South to a new facility, and optimal timing of the diversion.
- Documenting the cost estimates (capital and operating) and key assumptions.
- Assessing options to stage/ defer investment (for both short-listed options with particular focus on staged servicing of communities and staging of new plant development).
- Review of the scoring for the various MCA sub-criteria based on more developed concepts.
- Population and land use sensitivity assessments.
- Documenting the risks and opportunities associated with each













Summary of key findings: Pukete WWTP

- Additional testing has determined that the existing site (based on reasonable assumptions) can service growth to 2070 2090 (approx. 500,000PE) in Hamilton.
- Assumptions used for assessment of build out capacity for Pukete WWTP site include:
 - Development within the existing operational footprint (red line / boundary on next slide)
 - · Not encroaching on existing buffer to the west and south of the site
 - No siting of process units east of Pukete Road (note that siting of administration building on this
 property may be considered appropriate)
 - Adoption of the Pukekohe Treatment Standards at Pukete over time
 - Proposed Pukete WWTP upgrades can achieve water quality standards by 2031 as scoped and costed
 - That the technology change to MBR must start early (in next 10 years) to provide maximum flexibility for conversion of existing plant assets to new process
 - Relies on significant network upgrades (including storage) as outlined in Master Plan V3 to manage peak wet weather flow



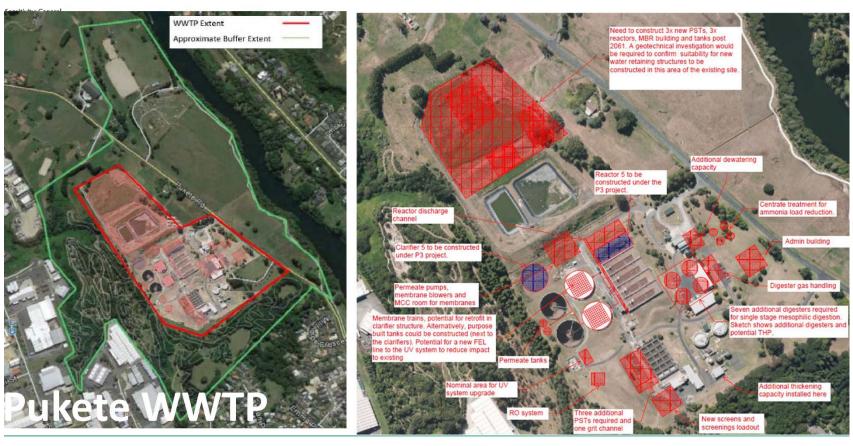
























Summary of key findings: Pukete WWTP

- Based on the baseline PE projections and timing adopted for the DBC this is expected to be able to meet the needs to all of Hamilton and the northern metro area (i.e. Ngaruawahia, Taupiri, Horotiu excluding AFFCo, Fonterra etc) out to at least 2060.
- The Pukete WWTP site capacity has an impact on recommending Option 2a as the preferred option to take forward in the DBC as the cost of Option 2a is significantly greater than Option 4a and, because of significant additional conveyance costs, the benefits of diverting flow away from Pukete to free up capacity at the site may not be realised for many decades.













Pukete WWTP Review – Risks / Mitigation

RISK	MITIGATION
Higher strength waste or faster growth could exhaust Pukete Real Estate earlier that assumptions predict	Pre-emptive Characterisation (flow and load) research. Land purchase south of Hamilton
Network storage not implemented would mean building it at Pukete leaving less space for process development	Network upgrades included in proposed LTP funding requests. Potential to retain the storage onsite
Extent of ground remediation required in northern area is unknown	Geotech investigations to support Northern Business Case
Brownfields construction impacts ability to build efficiently and economically	Further investigation as part of North DBC. Benchmarking costs against similar sites in NZ. Peer review of the initial assessment Build out timing and sequencing to move toward technology change
Costs comparative, not absolute. E.g Renewal of aged Pukete structures not included – both options	Further refinement as part of the NORTH DBC Ring fence depreciation fund. Renewals common to options.
Restricted ability to fund appropriately staged investment in a timely manner for upgrade of Pukete site	Improve surety of spending profile. Commitment from Council to fund BFR strategy
Pukete capacity may limit ability to service wet industry. Impact of a very large industry like Fonterra Te Rapa is currently unknown	Sensitivity analysis during detail stage. Requires good trade waste management
Sludge management – A future management strategy could require additional processing steps	Risk applies equally to both options
Development opportunity potentially lost between Cambridge & Hamilton South,	Further Development of the new southern facility (as part of Option 4a)
Unplanned development south of Hamilton may require a wastewater servicing solution sooner than expected	can be triggered by planned growth in these areas
Costs and risks of conveyance from southern extent of city/airport area to Pukete may recommend a new plant in the south over conveyance to Pukete, irrespective of Pukete having space to accommodate further treatment	Development of the new southern facility (as part of Option 4a) can be triggered by these outcomes.













Summary of key findings: Cost estimates

- Further certainty was sought on the capital and operating cost estimates developed for the short-listed options ahead of recommending the preferred option.
- This was in part because Option 2A was significantly higher than Option 4A and clarity on the assumptions associated with the estimates and associated documentation had not been provided as at November 2020.
- This documentation is still being prepared to clearly articulate and document the assumptions associated with the estimates.
- Client-side review comments are also still being worked through, however the consultant team are comfortable that the estimates meet the agreed level of accuracy for this stage in the project Class 5; P50 (used for NPV analysis) and P95 estimates.













Option 2a — Capital Costs (with north and south split) (NB: Class 5 Est. -30% to +50%)

Area	WWTP name	Other costs (\$M)	WWTP Capital Cost (\$ M)	PS & Conveyance Costs (\$ M)	
Hamilton South	Airport Southern WWTP		\$ 177	\$33	
Matangi				\$7	
Airport					
Ohaupo				\$7	
Cambridge				\$42	
Te Awamutu & Kihikihi	Te Awamutu		\$ 27		
Tauwhare Pa	Tauwhare Pa		\$ 6		
SUB-TOTAL			\$210	\$89	
Pukete WWTP costs	Pukete		\$288	\$5	
Ngarawahia Conveyance				\$45	
Council Internal Costs and procurement		\$49 (\$26 & \$23)			
Consenting		\$16 (\$8 & \$8)			
Allowance for decommissioning	Cambridge/Matangi	\$2			
Land purchase (15 ha)		\$12			
TOTAL		\$79M (\$34M & \$45M)	\$500M (\$288M & \$210M)	\$139 (\$50M & \$89M)	
NB: Class 5 Est30% to +50%		\$716 (\$372M & \$344M)			













Attachment 3

Option 4a — Capital Costs (with north and south split) (NB: Class 5 Est. -30% to +50%)

Area	WWTP name	Other costs (\$M)	WWTP Capital Cost (\$ M)	PS & Conveyance Costs (\$ M)	
Tauwhare	Airport / Southern		\$54		
Matangi	WWTP			\$7	
Airport					
Ohaupo				\$7	
Cambridge	Cambridge		\$ 114		
Te Awamutu & Kihikihi	Te Awamutu		\$ 27		
Tauwhare Pa	Tauwhare Pa		\$6		
SUB-TOTAL			\$200	\$14	
Pukete WWTP costs	Pukete		\$304	\$5	
Ngarawahia WWTP			\$55		
Council Internal Costs and procurement		\$40 (\$25 & \$15)			
Consenting		\$18 (\$8 & \$10)			
Allowance for decommissioning	Cambridge/Matangi	\$2			
Land purchase (15 ha)		\$12			
TOTAL		\$72M (\$33M & \$39M)	\$559M (\$359M & \$200M)	\$19M (\$5M & \$14M)	
north and south split		\$652M (\$397M & \$253M)			







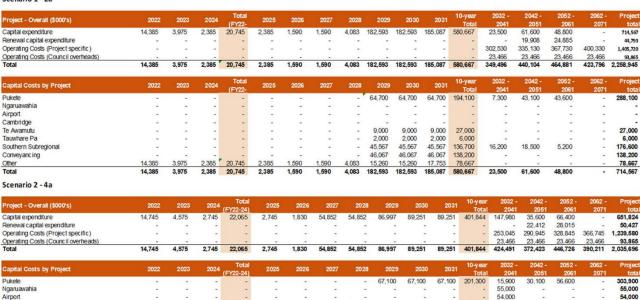






Capital and Operating Costs

Scenario 1 - 2a



47,600

2,041

5,212

54,852

1,830

47,600

2,041

5,212

54,852

WAIKATO METRO WASTEWATER



9,000

2,000

3,348

5,549

9,000

2,000

3,348

7,803

9,000

2,000

3,348

7,803



95,200

27,000

6,000

14,127

58,217

3,900

4,673

14,507



5.500



114,400

27,000

6,000

18,800

72,724





WASTEWATER

Cambridge

Te Awamutu

Tauwhare Pa

Other

Southern Subregional Conveyancing

Summary of key findings: Present Value of Costs analysis

2A

\$000's
(555,414)
(24,073)
(83,826)
(549,371)
(1,212,684)

- NPV 3% capital cost inflation
- 2% operating cost inflation
- 5% discount rate
- Costs modelled to 2071

4A

Net Present Value - Project	\$000's
Capital costs	(512,438)
Renewal capital costs	(27,100)
Operating costs - Conveyancing	(2,270)
Operating costs - Treatment Plant	(554,894)
Total	(1,096,703)













Potential for Staging of Options



Option 2a

- Requires significant capital investment upfront with limited ability to defer or stage that investment particularly in terms of treatment facilities at the southern sub-regional plant, and conveyance from Cambridge)
- Limited opportunity to defer investment in the Pukete WWTP process in the next 10 20 years largely because the portion of Hamilton flow and load to be diverted away from Pukete to a new plant in the south would be replaced by flow and load from the northern communities

Option 4a

• Has high potential to be refined and developed over time to meet demand, especially with servicing options for the airport and environs, and potentially Cambridge

Option 4a is more flexible and adaptable than Option 2a with greater ability to match investment to need

Potential to defer capital expenditure associated with lower water quality standards (i.e. the Te Awamutu WWTP consent standard) was also investigated. The advice from the technical team was that the capital cost savings were expected to be minimal, however the operating cost savings could be more significant.













Decision Making Rationale

The recommendation that Option 4a is developed further as the Preferred Options is primarily made on the following rationale:

- Option 4a & Option 2a achieve similar outcomes in relation to the investment objectives & 'Best for River' outcomes
- Option 4a & Option 2a are assessed as having a have similar ability to be successfully consented and implemented
- Option 4a has a capital costs estimate1 of \$652M compared with Option 2A which is \$716M
- Option 4a has an PVC estimate of \$1,096M compared with Option 2A which is \$1,212M
- Potential for Option 4a to defer capital costs in the first and second decades (2031 and 2041)

Key factors supporting this recommendation include:

- Greater cost confidence including conveyance and energy costs
- Greater clarity on Pukete WWTP footprint and capacity
- Flexibility of Option 4a to be staged as demand arise better than 2a over the short, medium and long term
- Localised servicing solutions will be needed int the short term for Matangi Tauwhare Pa and, airport environs
- Option 4a will require a long term however the timing of that need will be dependent on the type, location and rate of growth













Risks and Opportunities

- The ability to secure the required level of funding and affordability of the capital and operational costs
- There operational risks and considerations including:
 - Marginal costs and efficiencies to operate the southern plant will be high; and are higher following the Pukete capacity review
 - Wet industry mix implications needs a reasonable level of municipal waste to operate efficiently or have the risk of non-compliance
- Increasing energy costs and / or conveyance would be exacerbated with this option due to the high levels of conveyance infrastructure and servicing requirements
- Does suit a high growth scenario in the short to medium term in the southern area including Southern Links which is not scheduled for in this timeframe
- Does not leverage existing capacity and expansion potential of Pukete













Attachment

Refined Option 4a Concept for Southern DBC

A REFINED OPTION 4A IS RECOMMENDED FOR DEVELOPMENT AS THE PREFERRED OPTION FOR THE DBC:

- Building a standalone facility to service Cambridge/Hautapu.
- Securing a site in the vicinity of the airport to meet medium to long term servicing needs as demand necessitates for a southern sub-regional plant for the long term
- Developing servicing solutions at the airport to meet the airports immediate and short-term needs.
- Improved servicing for Matangi. The options for further consideration include:
 - o upgrading the existing Matangi WWTP and renewing the discharge consent
 - o seeking a connection to the existing Hamilton wastewater network (with appropriate upgrades)
 - o servicing via a centralised facility
- Improved servicing to meeting growth demand at Tauwhare Pa. The options include:
 - o Expanding and upgrading the existing Tauwhare WWTP facility as required,
 - o Conveying Tauwhare Pa to an upgraded Matangi WWTP,
 - Connecting to the existing Hamilton system with Matangi.
- Servicing Ohaupo in the future when need arises, and treatment capacity is in place via the southern facility or at Te Awamutu.
- Servicing Northern Metro communities via Pukete (to be considered as part of Northern DBC investigations)
- Review potential for servicing Tamahere by conveyance to other WWTPs













Risks associated with Option 4a

Risks

- Without agreement and a common approach between the councils about water quality and for the region, Stand-alone solutions may result in different (and lessor) performance standards being adopted in the short to medium term, which impacts on the ability to deliver "Best for River" objectives and outcomes for the community.
- Refer to risks associated with Pukete Plant capacity review
- Development occurs at a greater rate and extent than current projections resulting in capacity at Pukete being consumed earlier than expected, and potentially requiring a new site.
- Conveyance costs associated with transferring flows within Hamilton to Pukete could result in a new plant to the south being more feasible (reduced costs of conveyance relative to construction of plant construction)
- Costs to upgrade and re-develop Pukete are significantly greater than current estimates

Opportunity Cost

Option 4a foregoes the opportunity to:

- Partially finance a sub-regional facility using monies need to meet the immediate and long-term needs of Cambridge.
- To partner with Central Government and attract third-party funding to develop a sub-regional facility.
- Develop a state of the art, future proofed facility













Attachment 3

Summary

Option2a provides for an overall 'Best for River' solution when considering the long-term wastewater servicing needs over the coming 100-years for the wider Metro-Hamilton catchment.

However, when considering what is achievable and 'affordable' over the coming decades the option is challenged. Whilst, Option 2a provides for a step in the right direction for long term wastewater servicing needs of the catchment it does require the Council's to make significant investment up front, and potentially well in advance of when it is needed.

Option 4a is practical and while it does not score as highly as option 2a in the MCA, the difference in scoring is marginal, and it is does score very well. Like Option 2a, Option 4a provides for a large step change in treatment quality outcomes, it brings forward the boundaryless thinking and planning for the area currently un-serviced (i.e. airport). Option 4a also has the added benefit of being better suited for staged development, and the timely delivery of servicing and infrastructure.

Following the further Pukete capacity advice from the technical team, and the long-term servicing availability at the site (40+ years) it would not be a prudent financial decision for the Councils to invest in a new treatment facility in the south that is not required for a reasonably long time.













Questions?

What additional information is required to inform a decision?













Attachment 3

Next Steps

- · Review and incorporate feedback from the Governance Group meeting where required
- Further the activities to support the identification and land requirements for the southern / airport WWTP site, including seeking to confirm funding requests via long term planning processes.
- Update all documentation as required for the changes presented.
- Prepare information to support stakeholder engagement regarding the Preferred Option
- Developing the preferred option concept design and implementation plans to support the DBC













WAIKATO METRO WASTEWATER















TO: Waikato Metro Area Wastewater Governance Group

FROM: Peter Winder, Project Director

Jackie Colliar, Project Manager

DATE: 26th February 2021

SUBJECT: Waikato Metro Wastewater Project Update

1. PURPOSE

The purpose of this report is to provide the Governance Group with a high-level update on the overall Waikato Metro Wastewater Project. This report also sets out the main changes to the DBC timetable associated with the delay in confirming the preferred servicing option, and the consequential changes to the DBC content that is expected if Option 4a is taken forward as the preferred option.

Further detail can be provided verbally at the meeting.

2. PROJECT PROGRESS AGAINST KEY MILESTONES

Progress against the key milestones detailed in the Project Terms of Reference is shown in Table 1 $\,$

Table 1: Project progress against milestones

Milestone	Who	Status	Original Planned dates (TBC)	Proposed I Revised dates (TBC)
Project funding confirmed, Governance and Control Groups initiated, Terms of Reference approved.	Governance Group	COMPLETE		
Key assumptions confirmed: Population & Growth; Treatment Standards	Control Group	COMPLETE		
Fonterra Stage Gate 1 – Consentability Assessment and determination of Fonterra continuation in the project	Fonterra	COMPLETE		
Confirm investment objectives, overall MCA framework and criteria, long-list of Wastewater Servicing Options, long-list of commercial options, funding and financing options	Governance Group	COMPLETE	17 September 2020	
Fonterra Stage Gate 2 –Whether Fonterra is included in the Short-listed options or not will determine their continuation in the project	Governance Group & Fonterra	COMPLETE	26 September 2020	
Confirm short list of: metro wastewater servicing options, and southern metro option; commercial model options; funding and financing options.	Governance Group & Control Group	COMPLETE	28™ October 2020	
Confirm preferred southern metro wastewater servicing options, commercial models (KEY DECISION)	Governance Group	Overdue	16 th December 2020	26 th February 2020
Confirm details of preferred wastewater servicing solution: including concept treatment, conveyance, ecosystem re-entry methods; draft AEE, cost estimates. Confirm preferred funding and financial options models	Governance Group	Delayed	March 2021	May 2021 (TBC)

Draft Economic, commercial, financial and management cases for review and approval:	Governance Group	Delayed	April 2021	May 2021 (TBC)
Detailed business case for review and endorsement back to individual organisations	Governance Group	Delayed	May 2021	June / July 2021
Deliver final detailed business case and implementation plan	Governance Group	Delayed	May 2021	June / July 2021

An overview of key project activities is included as Appendix A.

3. TIMETABLE IMPLICATIONS OF DECISION TO PROCEED WITH OPTION 4A

Both the delay in recommending a preferred option to the Governance Group, and the choice of Option 4a as preferred will delay the preferred option development by [6 weeks]. This is partly because (as agreed at the outset of the project) the consultant team had been operating on the basis that Option 2a would be preferred and had started to develop that option in detail. The implications on the Detailed Business Case content are outlined in Section 4.

This has a knock-on impact on the DBC timetable and the nature of the engagements with the Governance Group. The key future engagements with the Governance Group, Control Group and Stakeholders are set out below, including an explanation of any changes in the nature of the engagements:

- March Stakeholder workshop to present and receive feedback on the fully developed preferred option
- 9th April Governance Group Meeting originally planned to present the five draft cases to Governance Group for feedback. Now proposed to be cancelled to enable sufficient time fully to develop the preferred option and other key aspects of the DBC. This work will be presented at the 14th May meeting.
- [14th May] Governance Group meeting originally planned to present the five draft cases to Governance Group for review and approval. The 14th May meeting to now be proposed to be used to present and receive [feedback/approval] on the fully developed preferred options: including concept treatment, conveyance, discharge methods; draft AEE, cost estimates. This meeting will also be used to confirm the preferred funding and financial options models. An overview of strategic, Economic, commercial, financial and management cases for feedback.
- June / July 2021 (TBC) an additional Governance Group Meeting to receive approval of the final Southern Metro WW DBC document and consider progress on Northern Metro WW DBC.

4. DETAILED BUSINESS CASE CONTENT IMPLICATIONS

The choice of Option 4a has a number of impacts on the content and focus of the business case. In particular, the decision not to go for a sub-regional option reduces the complexity of the commercial, financial and management case elements of the business case. The key changes to the five cases are set out below.

- Strategic case unaffected
- **Economic case** will reflect that Option 4a is chosen as preferred
- Commercial case
 - Work to date had been carried out on the basis that a sub-regional option would be preferred. This work included the selection of a preferred Delivery Structure, Packaging solution and Contracting Model
 - o The work on Delivery Structure is no longer relevant as the investments will now be

- delivered under BAU Council arrangements rather than joint mechanisms
- Assessment of Packaging and Contracting Model options has been repeated to consider the appropriate options for the various investments (upgrades and new plants) planned under Option 4a
- While the Commercial case will less complex than it would have been under Option 2a, it will still include consideration of non-BAU elements such cross boundary service agreements for certain smaller communities.

• Financial case

- o Funding and financing will revert to the use of traditional Council mechanisms
- Financial modelling will still be completed to look at the impact on ratepayers and on Councils' debt limits.

• Management case

- Work to date had been carried out on the basis that a sub-regional option would be preferred
- Most of the Management case will now revert to assumption that the projects will be delivered using BAU Council processes
- The main exception to this will be exploration of a potential co-operation framework / mechanism between councils
- The aim of this will be to ensure that Councils and stakeholders are accountable to
 each other in delivering the benefits and outcomes envisaged under Option 4a. It will
 also consider ways in which the spirit of co-operation that has been fostered through
 this project is able to be strengthened and carried forward for related issues e.g.
 planning and consenting of wet industry.

The work set out above under the Commercial, Financial and Management case headings will be presented for feedback at the next Governance Group meeting.

5. KEY ACTIVITIES IN PROGRESS

- Investigations to identify potential locations to site a new southern wastewater facility underway.
- Engagement with project partners and Iwi/Mana Whenua is ongoing.
- Collateral for wider stakeholder communication and web material online.
- Outline of potential approach to 2021 2031 Long Term Plan Funding Requests being prepared.
- Development of further detail on the recommended short-list of wastewater servicing.
- Planning to initiate northern Wastewater Detailed Business Case Project activities. Technical
 scoping is currently underway. The project plan will be updated to incorporate the Northern
 DBC. An engagement and meeting programme, including Project Control and Governance
 Group meetings will be developed to support completion of the Northern DBC.

6. RECOMMENDATIONS

That the Project Governance Group:

- 1. Receive this report.
- 2. Note the update on the Waikato Metro Wastewater project.

APPENDIX 1 – OVERVIEW OF PROJECT PROGRESS

An overall project progress and key activities completed to date is included below.

November 2020 - February 2021

- Scoping for Northern WW DBC
- Preferred wastewater servicing option recommended to Governance Group for approval.
- Assessment of wastewater servicing short-listed options completed for feedback and endorsement.
- Continued investigations and engagements to identify potential locations for a new Southern Wastewater Treatment Facility.
- Closer assessment of Pukete WWTP Capacity
- Recommendations to Council partners on budget provisions to include in the 2021-2031 Long Term Plans to support implementation of Option 2a, commencing with procuring land to site a facility.
- 3-waters reform stimulus grant funding for Southern and Northern Wastewater DBC confirmed.

September – October 2020

- Fonterra decision to withdraw from the project and not proceed to Stage Gate 3 received.
- Wastewater servicing options short list approved by Governance Group.
- Commercial Case options short list approved by Project Director (based on Option 2a being preferred).
- Funding and financing options fatal flaws assessment developed for feedback and short-list approved by Director.
- Commercial Case options long list (i.e. delivery, contracting, packaging options) approved.
- Funding and financing options long list approved.
- Wastewater servicing options long list developed and assessed through collaboration between project partners, key stakeholders, and the project team.
- Fonterra consentability assessment completed (Stage Gate 1) and decision made to proceed to Stage Gate 2.
- Growth and population assumptions approved by Control Group.
- Market testing via discussions with third party commercial entities largely complete.
- Engagement with project partners (i.e. Mana whenua, Iwi, Council) and other key stakeholders initiated in earnest and ongoing.
- Communications and engagement plan approved and being implemented.

July - August 2020

- Governance and Control groups established, with representatives from Hamilton City Council, Waikato District Council, Waipa District Council, Waikato Regional Council, Waikato Tainui and mana whenua.
- An independent Project Director has been appointed Peter Winder
- A Project Manager has been appointed Jackie Colliar.
- Terms of Reference for the project has been approved by the Governance group.
- A Project Management Plan, including project programme and milestones, approved by the Control Group.
- A communications approach and approvals framework to form the basis for preparing a Communications and Engagement Plan approved by Control Group.
- A specialist team of consultants, led by Price Waterhouse Cooper with technical support from GHD and BECA, engaged to deliver the southern metro DBC.
- Confirmation received that Fonterra Hautapu should be included in the project scope, as a separate parallel workstream, funded by Fonterra.
- Treatment performance standards approved by the Control Group.

Council Report

Committee: Strategic Growth Committee **Date:** 30 March 2021

Author: Karen Saunders **Authoriser:** Jen Baird

Position: Growth Programmes Manager Position: General Manager City Growth

Report Name: Hamilton Urban Growth Strategy Review - Scope approval

Report Status	Open
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Purpose - *Take*

1. To inform the Strategic Growth Committee on the Hamilton Urban Growth Strategy (HUGS) review and see approval for the scope of the review.

Staff Recommendation - Tuutohu-aa-kaimahi

- 2. That the Strategic Growth Committee:
 - a) approves the scope of the Hamilton Urban Growth Strategy review, as set out in paragraphs 15, 16 and 17 of the staff report;
 - b) approves the formation of a working group for the purposes of the Hamilton Urban Growth Strategy Review made up of Elected Members xxx, Maangai Maaori xxx and staff;
 - c) notes that staff will bring back project budget information to the Strategic Growth Committee on 20 May 2021; and
 - d) notes that staff will provide regular progress updates to the Strategic Growth Committee.

Executive Summary - Whakaraapopototanga matua

- 3. At its 18 February 2021 meeting, the Strategic Growth Committee approved a review of the Hamilton Urban Growth Strategy to commence.
- 4. Staff recommend the HUGS review includes the following pieces of work:
 - a) Development of a set of principles that guide decision making on opening out-of-sequence or out-of-boundary areas for development;
 - b) Review of the Urban Growth Strategy for land within Hamilton city boundaries and future urban land near the boundaries, for up to 50 years, with a focus on the four wellbeings;
 - c) Modelling, research and analysis;
 - d) Engagement, including a Special Consultative Process;
 - e) Development of a high-level roadmap of actions.
- 5. The HUGS review will take approximately 12-18 months to complete. A set of principles to guide out of sequence development requests will be an early deliverable likely within the next three months, by the end of June 2021.

- 6. Staff will provide further details of the project budget to the next Strategic Growth Committee meeting on 20 May 2021.
- 7. Staff will provide regular updates to the Strategic Growth Committee and through a 'HUGS Review reference group' comprised of four Elected Members and one Maangai Maaori.
- 8. Staff consider the decision in this report has low significance and that the recommendations comply with the Council's legal requirements.

Background - Koorero whaimaarama

- 9. The current Hamilton Urban Growth strategy (HUGS) was developed in 2009. A review is required to better reflect the changing policy, legislation, challenges and opportunities associated with urban growth. For example:
 - a) A growing emphasis on delivering communities that support wellbeing outcomes and a new vision for Hamilton;
 - b) Establishment of a progressive partnership approach with iwi;
 - c) Visible changes in how the city looks and feels, especially infill housing;
 - d) Continued, steady population growth in the city and surrounding towns;
 - e) Increasing challenges with affordability and availability of land for housing and employment;
 - f) Increasing challenges in funding the strategic infrastructure needed to enable development of land for new homes and businesses;
 - g) Changes to the city boundaries and increasing pressure from developers inside and outside the city boundaries;
 - h) Sub-regional and 'boundary-less' planning and collaboration, for example the expanded Future Proof Partnership and Strategy update, the Hamilton to Auckland Corridor Plan and the recent completion of the Hamilton-Waikato Metro Spatial Plan;
 - i) Changing external and Government policy and regulations, for example climate change, biodiversity, transport, urban development, NPS-UD, RMA reform, three waters reform, Regional Policy Statement updates etc.
- 10. The need for a review of the HUGS was discussed at a public excluded Strategic Growth Committee meeting on 18 February 2021. At that meeting, the Committee approved a review of the HUGS to commence. The Committee requested staff to bring back a proposed programme of work, scope and budget to the Strategic Growth Committee for input on 30 March 2021.
- 11. A briefing was held on 17 March 2021 and Elected Members provided feedback and direction on the draft scope. A copy of the briefing slides are in **Attachment 1**.
- 12. A visual of where HUGS fits in relation to other strategic planning documents such as the Hamilton-Waikato Metro Spatial Plan can be found in the briefing slides in **Attachment 1.**
- 13. A map showing the current boundaries and future growth areas is in **Attachment 2.**
- 14. The current HUGS is in Attachment 3.

Discussion - Matapaki

In Scope

15. The HUGS review will include the following pieces of work:

- a) Developing a set of principles that guide decision making on opening out-of-sequence or out-of-boundary areas for development;
- b) Reviewing the Urban Growth Strategy for land within Hamilton city boundaries and future urban land near the boundaries, for up to 50 years, with a focus on the four wellbeings;
- c) Modelling, research and analysis;
- d) Engagement, including a Special Consultative Process; and
- e) Developing a high-level roadmap of actions.

Out of Scope

- 16. The HUGS Review will exclude the following pieces of work:
 - a) Changing other existing strategies, policies and plans (this may occur later, for example the Growth Funding Policy may be updated following completion of the HUGS review);
 - b) Preparing detailed infrastructure funding plans and costs;
 - c) Implementing the strategy;
 - d) Land use planning and structure planning; and
 - e) Visualisation and interactive GIS platforms and associated technology.

Project Objectives

- 17. At the end of the HUGS review, we will have:
 - a) A set of principles that guide decision making on opening out-of-sequence or out-of-boundary areas for development (noting this will be an early deliverable);
 - b) A strategic plan that provides direction on a preferred urban form including how and where Hamilton city will grow in the next 50 years with a focus on people, jobs and the four wellbeings;
 - c) A strategic plan that sets out Council's approach to infill and greenfield growth, including a preferred scenario of sequencing and timing to direct infrastructure investment;
 - d) A strategic plan, developed with our key partners and neighbouring councils, that can be used by Hamilton City Council, Local and Central Government, developers, partners, iwi and community for long-term planning and investment purposes;
 - e) Quality research, data and analysis that supports the strategy;
 - f) Quality information that provides clarity on the costs of growth in greenfield and infill areas and return on investment;
 - g) A strategy that is aligned with sub-regional planning and Central Government law, policy and planning initiatives, for example the National Policy Statement Urban Development (NPS-UD), NPS Biodiversity, Hamilton-Waikato Metro Spatial Plan and Three Waters reform, Local Government Act requirements, climate change, and rapid transit and transport initiatives;
 - h) A community-friendly way of being able to find out about how the city will grow; and
 - i) A clear framework for monitoring and tracking success.

Project Timing

- 18. Staff estimate that the HUGS review will take approximately 12-18 months to complete. This includes undertaking research, analysis and scenario planning, developing the strategy and principles, engagement, consultation and publication.
- 19. Many elements of the review are dependent on deliverables or research outputs from other programmes of work. For example, the Future Proof review, the District Plan Programme and

- NPS-UD responses relating to density, Hamilton Waikato Metro Spatial Plan transport business case and waters business case and Climate Change policy.
- 20. Note that developing a set of growth principles to respond to requests for out-of-sequence or out-of- boundary developments will be an early deliverable, likely within the next three months.
- 21. Staff will provide regular updates to the Strategic Growth Committee. Elected Members have also indicated that they would like a working group or reference group set up as a sounding board for staff as they develop the strategy. Staff recommend that this group is made up of Elected Members and Maangai Maaori with membership to be determined by the Strategic Growth Committee.
- 22. Once the scope of the review is approved, a detailed project plan will be prepared. Staff will then report back to the Committee with more detailed timeframes.
- 23. If the project scope is not approved at this Committee meeting, staff will adjust the scope and return to the Strategic Growth Committee for approval in May 2020. Note that a delay in approving the scope of the review may extend the time frame for delivering the project.
- 24. This review of HUGS is relatively substantial because it has not been reviewed since 2009. Going forward, it is anticipated there will be more regular 'lite' refreshes of the strategy and high-level actions to align to Long-Term Plan priorities and other factors that may impact on urban growth strategy.

Financial Considerations - Whaiwhakaaro Puutea

- 25. Staff will provide budget information to the Strategic Growth Committee on 20 May 2021.
- 26. Initial high-level review of required work indicates that most of the costs of the project may be covered within existing budgets with some work being delivered within existing work programmes. This includes personnel costs for project management, consultancy costs for scenario planning, legal costs, some costs for research and analysis and engagement costs.
- 27. Many of the key research and analysis inputs required for the HUGS Review are funded as part of other projects. For example, the value capture analysis, growth modelling, NPS-UD analysis, Housing and Business Land Capacity Assessments etc.
- 28. More work is required to understand the quantity, type and costs of any additional research and analysis that may be specifically required for the HUGS review. For example, research required to understand the impacts of climate change or the costs of infill infrastructure versus greenfield infrastructure. Staff are currently in the process of identifying these potential additional costs.
- 29. Staff will ensure that budget for a lite review of the HUGS is included in year one of future Long Term Plan budgets.

Legal and Policy Considerations - Whaiwhakaaro-aa-ture

30. Staff confirm that the staff recommendation complies with the Council's legal and policy requirements, noting that the HUGS is not a statutory document.

Wellbeing Considerations - Whaiwhakaaro-aa-oranga tonutanga

- 31. The purpose of Local Government changed on 14 May 2019 to include promotion of the social, economic, environmental and cultural wellbeing of communities in the present and for the future ('the 4 wellbeings').
- 32. The subject matter of this report has been evaluated in terms of the 4 wellbeings during the process of developing this report as outlined below.

33. The recommendations set out in this report are consistent with that purpose.

Social

- 34. The reviewed HUGS will complement other Council and external strategies that support social wellbeing outcomes, for example the Housing Strategy.
- 35. The reviewed HUGS may also contribute towards social wellbeing outcomes by:
 - a) providing a strategic direction and framework that will contribute towards delivery of competitive land markets to address housing affordability;
 - enabling funding and delivery of community amenity at the right time to support new and existing communities, for example schools, parks, playgrounds and community facilities; and
 - c) assisting with increased community understanding and support for new models of living, for example intensification.

Economic

- 36. The reviewed HUGS may contribute towards economic wellbeing outcomes by:
 - a) enabling better long-term investment decisions on how and where our city will grow;
 - b) reducing the time between zoning of land and funding and delivery of strategic infrastructure;
 - c) improving flexibility to respond to or decline out-of-sequence growth opportunities;
 - d) planning and enabling land for jobs; and
 - e) increased innovative external funding of infrastructure through partnerships, private developer agreements or alternative infrastructure funding and financing solutions.

Environmental

- 37. The reviewed HUGS may contribute towards environmental outcomes by:
 - a) providing a preferred urban form and growth strategy that responds and aligns to climate change policy, actions and targets;
 - b) providing a preferred urban form and growth strategy that reflects existing internal and external environmental strategies, for example Nature in the City, Te Ture Whaimana o Te Awa o Waikato, Waikato-Tainui Environmental Plan.

Cultural

38. The reviewed HUGS may contribute towards cultural outcomes by providing a preferred urban form and growth strategy that is aligned with the outcomes in He Pou Manawa Ora, for example being a city that celebrates its special Maaori heritage, rich history, natural environmental wonders and ensuring that everyone has a voice in developing it.

Risks - Tuuraru

39. There are no known risks associated with the decisions required for this matter.

Significance & Engagement Policy - *Kaupapa here whakahira/anganui* Significance

40. Staff have considered the key considerations under the Significance and Engagement Policy and have assessed that the matter(s) in this report has/have a low level of significance.

Engagement

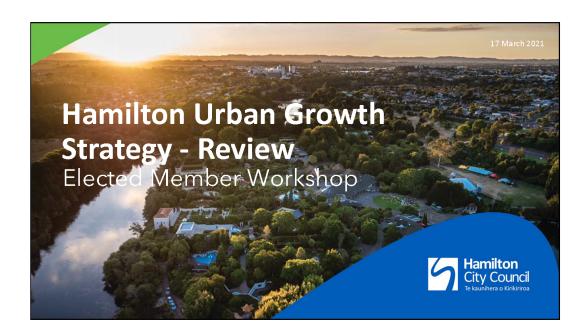
41. Given the low level of significance determined, the engagement level is low. No engagement is required.

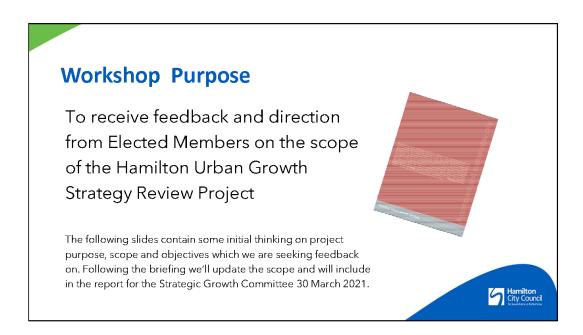
Attachments - Ngaa taapirihanga

Attachment 1 - HUGS Review Scope - EM Briefing Slides 17 March 2021

Attachment 2 - Map showing future Hamilton city extensions for boundary-less planning

Attachment 3 - Hamilton Urban Growth Strategy 2009



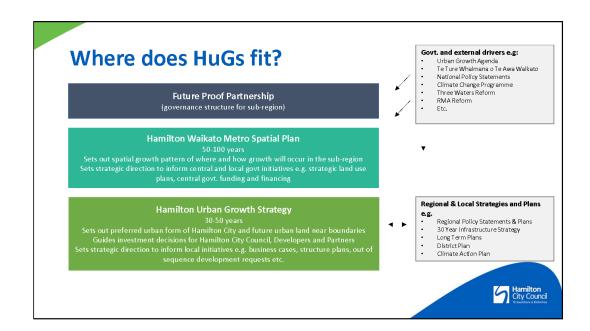


What is the project?

To review the existing Hamilton Urban Growth Strategy so that it articulates a preferred urban form and provides clear direction for long term investment decisions on how our city will achieve wellbeing outcomes in its response to growth, by June 2022.







What is in the project scope?

- a) A set of principles that guide decision making on opening out of sequence or out of boundary areas for development.
- b) Review of Urban Growth Strategy for land within Hamilton City Boundaries and future urban land near the boundaries, for 30 - 50 years, with a focus on the four wellbeings (e.g. affordability)
- c) Engagement, modelling, research and analysis
- d) A high level roadmap of actions



What is out of the project scope?

- a) Changes to other existing strategies, policies and plans
- b) Preparation of detailed infrastructure funding plans and costs
- c) A full implementation plan (do later)
- d) Implementation of the strategy
- e) Land use planning and structure planning activities
- f) Visualisation and interactive GIS platforms and tech (do later)



This project will deliver:

- a) A set of principles that guide decision making on opening out of sequence or out of boundary areas for development (early deliverable)
- b) A strategic plan that provides direction on a preferred urban form that sets out how and where Hamilton city will grow in the next 30-50 years with a focus on people, jobs and the four wellbeings
- A plan that can be used by Hamilton City Council, Local and Central Government, developers, partners, iwi and community for long term planning and investment purposes
- d) Quality research, data and analysis that supports the strategy



This plan will deliver...

- e) Quality information that provides clarity on the costs of growth in greenfield and infill areas and return on investment
- f) A strategy that is aligned with sub-regional planning and central Government law, policy and planning initiatives, for example NPS-UD, NPS Biodiversity, Hamilton-Waikato Metro Spatial Plan and Three Waters reform, Local Govt Act requirements, climate change and rapid transit and transport initiatives
- g) A community friendly way of being able to find out about how the city will grow
- h) A clear framework for monitoring and tracking success



Next steps

- Approve scope at Strategic Growth Committee 30 March 2021
- Commence project
- Keep Elected Members up to date through a reference group



Useful references

Hamilton Urban Growth Strategy 2009:

 $\underline{\text{https://www.hamilton.govt.nz/our-city/hamiltonurbangrowth/Pages/default.aspx}}$

Futurproof:

https://futureproof.org.nz/

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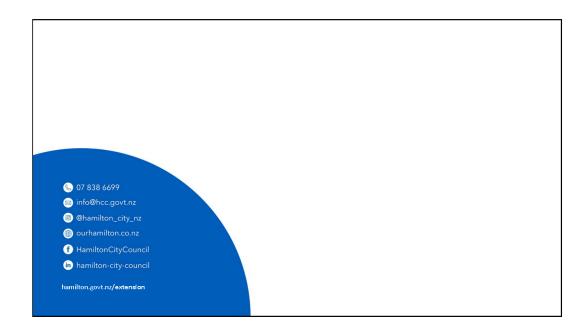
 $\underline{https://futureproof.org.nz/assets/FutureProof/H2A/Final-H2A-Plan-November-2020.pdf}$

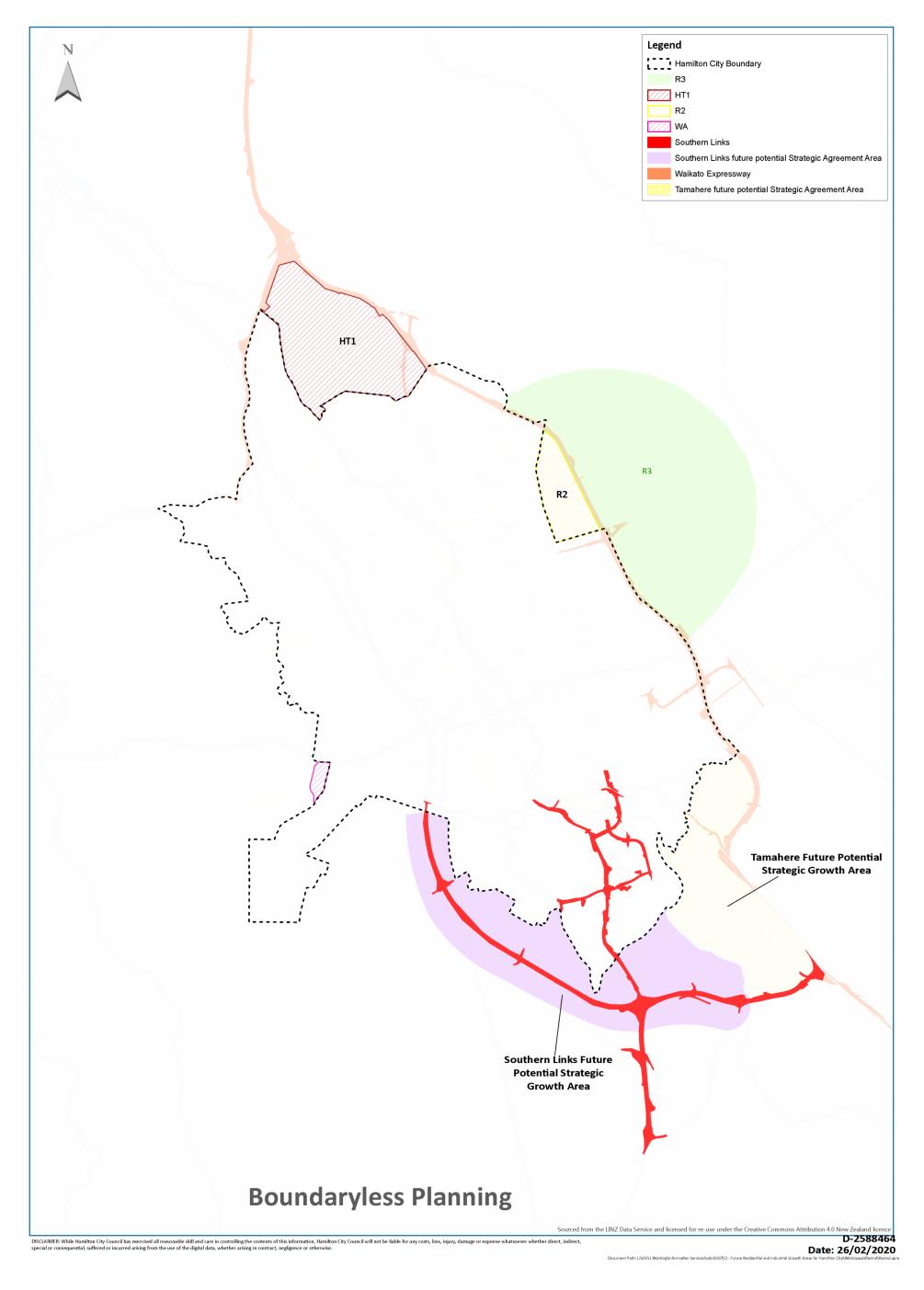
Hamilton-Waikato Metro Spatial Plan

 $\underline{\text{https://futureproof.org.nz/assets/FutureProof/H2A/Metro-Spatial-Plan/Hamilton-Waikato-Plan/Hamilton-Plan/H$

Metropolitan-Spatial-Plan-Final-Low-Res.pdf







Growing numbers. Strategic directions. Quality of life. Neighbourhoods and communities. Business and industry. Long-term thinking. Sustainable and well planned. Good urban design. Innovation precincts. Acknowledging the Waikato River. Reducing our footprint. Intelligent and progressive. Planning for choice. Community capacity and pride. Building on our competitive strengths. Planning for the future. Is it good enough for Hamilton? Managing sprawl. Improving development in greenfield sites. Safe communities. Managing our land use. Getting around easily. Maximising opportunities. Enhancing the urban experience. Safe and enjoyable journeys. The Hamilton Urban Growth Strategy identifies these aspirations for Hamilton and the ways in which we will work towards their achievement.

Hamilton Urban Growth Strategy A compact and sustainable city



> enabling new ways of thinking

IF YOU IMAGINE HAMILTON'S FUTURE, WHAT WOULD THE CITY LOOK AND FEEL LIKE? WHAT WOULD YOU WANT TO SEE?

In the past, growth planning has been primarily driven by cost only. The development of this Hamilton Urban Growth Strategy by Council has included a broadening of the debate for different growth options from simple cost to a wider consideration of value delivered to the entire city. This is a significant shift in thinking and a more holistic way of prioritising growth options.

Council's spatial vision for the city – provided in the Hamilton Urban Growth Strategy – has been enhanced through the development of seven other collaborative city strategies. These strategies have been formulated with input from key city leaders and stakeholder partners.

In addition, the aspirations of key partners and other specialist technical information was used as the basis for an Enquiry by Design (EbD) process as part of this strategy's development. This unique process brought key city planning disciplines around the same table, resolving issues as they arose and testing solutions in an integrated and dynamic manner.

The key growth issues discussed included:

- > our growing population
- > areas suitable for accommodating future residential growth
- > supporting city infrastructure requirements
- where to develop first, why and whenwhat other land uses are required e.g.
- business and industry

 > ensuring social well-being and protecting
- ensuring social well-being and protecting the local environment

However this does not mean growth at any cost. We still need to consider:

> the affordability of growth options

The principles underlying the city strategies were used as a framework to guide decisions through the EbD process. This ensured consistent thinking between the growth strategy and the strategic aspirations and direction of the city.

This Hamilton Urban Growth Strategy outlines the strategy approach that was agreed by Council following a thorough city-wide consultation process undertaken in November and December 2008.



>Hamilton Urban Growth Strategy > A COMPACT AND SUSTAINABLE CITY

THERE ARE AROUND 140,000 OF US LIVING IN HAMILTON RIGHT NOW. BUT BY 2041, THAT NUMBER IS EXPECTED TO INCREASE TO AROUND 225,000. WE WILL BE SHARING OUR CITY WITH AROUND 85,000 MORE PEOPLE.

>growing numbers

To accommodate them, the city will need around 36,000 more homes. We will need to provide for all kinds of accommodation choices, catering for young and old, large and small families, first home buyers and more mature occupiers, city dwellers as well as suburban households. How can we provide this choice when we are running out of room to grow?

Our past approach to growth

Council's previous strategy for growth is now a number of years old and has become outdated. The approach has been based on:

Structure Plans for the Rototuna, Peacocke and Rotokauri growth cells.

> These are indicative plans showing how we propose land to be used, for example how much will be for residential living, where it will be, will there be a town centre to support it and how will it connect with the bigger city.

An agreement with Waikato District Council about the areas on the Hamilton's boundary that will come into the city to allow us room to grow.

> The agreement was developed in 2005 and was based largely on construction dates for major transportation projects such as the Hamilton bypass. It is a now a number of years old and is being renegotiated given the changes to anticipated timing of key transportation projects and the changing aspirations of the partners to the agreement.

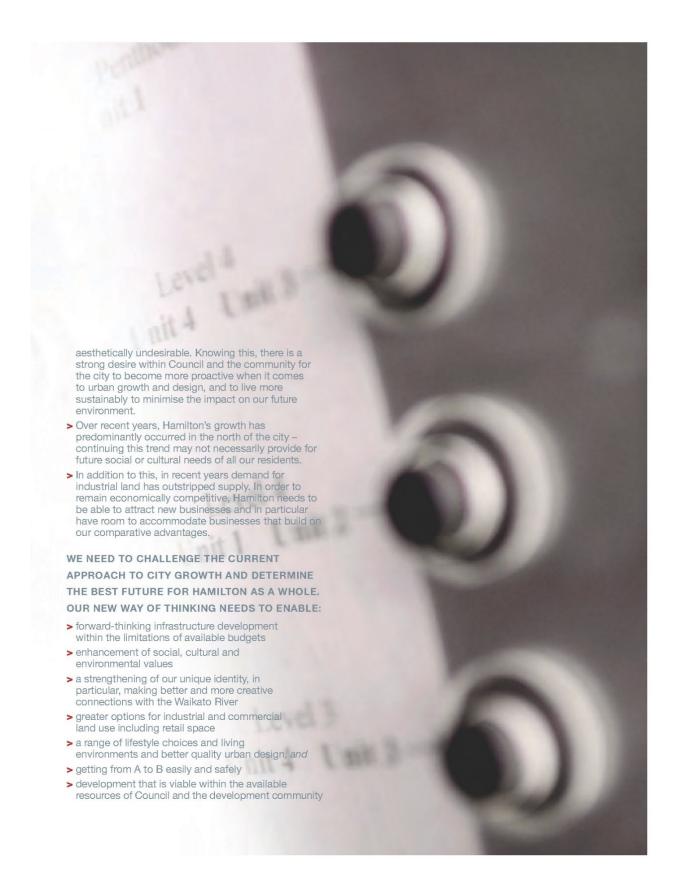
The Hamilton Community Outcomes identified aspirations for a city that is "not too big and not too small". The fact is we are growing, whether we want to or not. Why? We are the focal point of a rapidly growing and prosperous region and as

such growth pressures are inevitable. Growth can create opportunities.

While we don't have an option whether we grow or not, we do have an option whether or not we actively manage this growth...or simply allow it to happen to us.

The need to manage growth

- Large scale development of the Rototuna, Peacocke and Rotokauri growth cells at once may not be possible to do without significant increases to the cost of growing and running the city.
- > The way we currently develop land in the city is inefficient. With the majority of section sizes being maintained at 600-800 square metres, we are sprawling. This has impacts for the cost of travel and how we get from A to B.
- Sprawl is contributing to making land a scarce resource and therefore making it more and more unaffordable.
- > With the world's population also growing, our land is becoming more important for food production. The land surrounding Hamilton is highly productive growing soil.
- > The environment has a budget too. Having enough water to meet our current needs, lots of open space to enjoy, good air quality and energy for our everyday needs are elements of our lifestyle which we often take for granted. Future population growth will put increased pressure on the local environment and these key resources.
- > The type and quality of growth occurring in the city is often uniform and in some cases fails to blend with existing communities or is



> Hamilton Urban Growth Strategy > A COMPACT AND SUSTAINABLE CITY

SINCE THE 2006-16 LONG-TERM PLAN, COUNCIL HAS BEEN WORKING WITH KEY PARTNERS TO DEVELOP A SUITE OF EIGHT CITY STRATEGIES.

achieving a shared outcome

These strategy documents are guiding a collaborative approach for achieving shared outcomes for Hamilton and are geared to deliver tangible on-the-ground results through a series of high profile projects and programmes. In doing so, the strategies will contribute to progressing Hamilton's community outcomes.

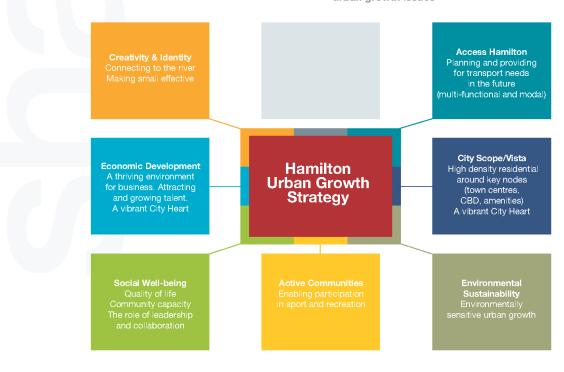
The full suite of strategies are:

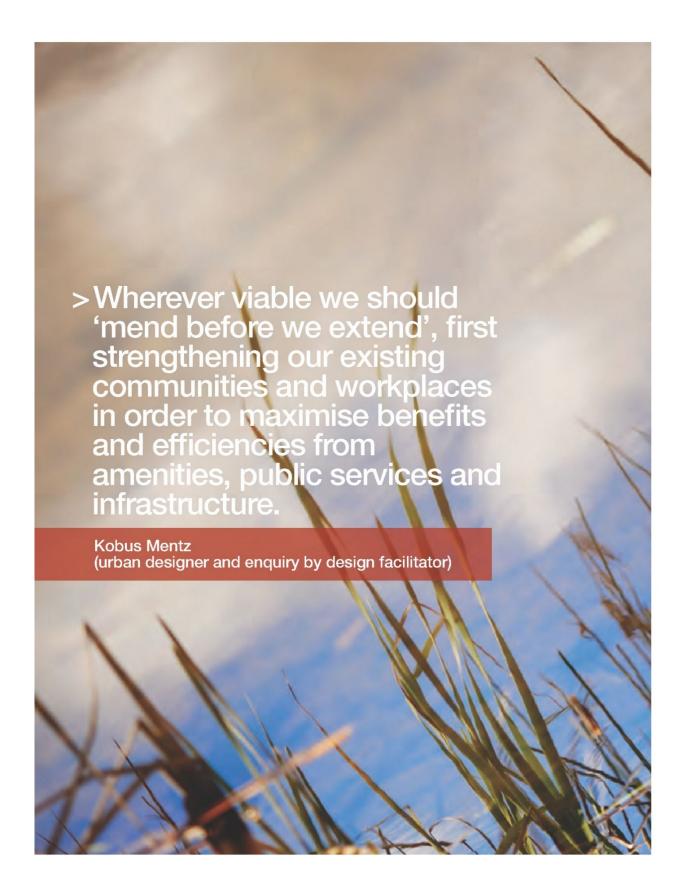
- > Environmental Sustainability
- > Social Well-being
- > Economic Development
- > Access Hamilton
- > CityScope

- > Creativity and Identity
- > Active Communities, and this
- > Hamilton Urban Growth Strategy.

Significant consideration has been given to how key principles from each of these strategies will inform and enhance the way the city grows - we are not starting from a 'blank page' for city growth. The key to going forward will be ensuring alignment between our urban growth decisions and these strategic aspirations. The Hamilton Urban Growth Strategy will be the blueprint to deliver co-ordinated sustainable growth in Hamilton.

Strategy directions and linkages to critical urban growth issues







WE KNOW THAT THERE ARE PARTS OF THE CITY THAT ARE IN NEED OF REGENERATION.

▶ mend

WE KNOW THAT THERE ARE PARTS OF THE CITY THAT ARE IN NEED OF REGENERATION IMPROVING THE QUALITY OF THE LIVING ENVIRONMENT AND MAKING PUBLIC SPACE MORE INTERESTING AND SAFE WILL CONTRIBUTE TO A MORE VIBRANT CITY.

Hamilton is a thriving city and increasing numbers of people want to live here. Recent numbers and projections emphasise that we will be stretched to provide space for them to live, work and play. The concept of mending is essentially making the most of what we have.

Improving the quality of the current living environment of the city

This should be the first priority. There is a general acceptance that many developments occurring in our established neighbourhoods do not deliver the outcomes the community expects. They don't tend to blend appropriately or enhance the aesthetic. We recognise a greater focus needs to be given to working with the development community to lift the standard of more compact living environments in regenerating parts of the city. Much of this work will occur through the comprehensive review of Hamilton's District Plan and the City Development Manual.

Developing the land we have available in existing parts of the city more efficiently

Current development section sizes are a consistent 600-800 square metres. This has impacts for the cost of travel and how we get from A to B and pushes up the cost of land. By providing a range of section sizes, including options for those wanting smaller sections and more compact living environments such as townhouses and city apartments as well as our traditional "quarter acre" lots, we will increase the capacity of the city to accommodate more of our growing population while providing more choice. We also know that our family size and structure is changing – families are getting smaller and there will be more people in the future in retirement age.

Our family size and structure is changing rapidly. More compact living environments in parts of the city create better numbers of users and therefore help to support the efficient operation of public transport. In such cases, services are more likely to cover their own costs and not require significant ongoing public subsidy. In addition, other transport modes such as walking and

cycling become less attractive if local activities are further away from people's homes. This issue is particularly important for local neighbourhood shopping nodes and schools.

In order to deliver a range of quality living options throughout the city, we may need to be more selective and specific about where compact living is best suited within the city and what these developments should look and feel like.

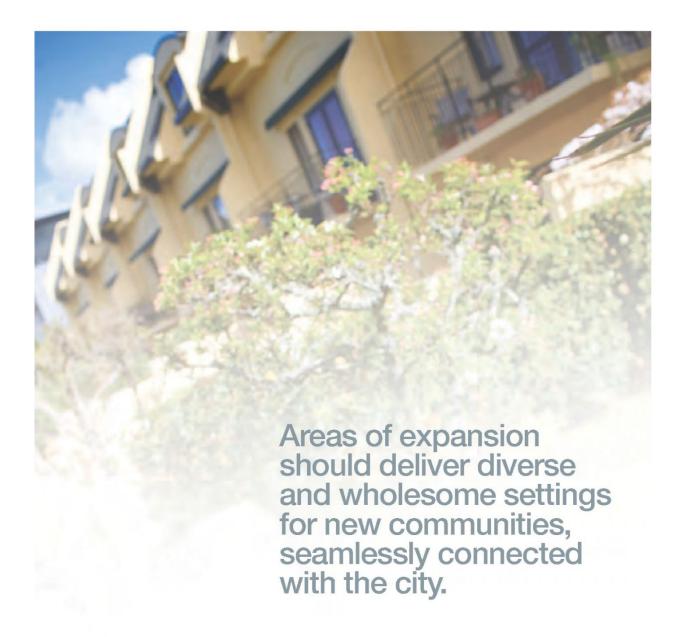
More compact living environments will allow us to proactively limit sprawl and manage our city's urban footprint.

We recognise that market factors will continue to influence development trends into the future irrespective of Council intervention. However, market demand is also rapidly changing. Hamilton now has choices and can be discerning. We need to be asking 'is it good enough for Hamilton?'

Growth Approach 1:

Over the next 10-20 years, approximately 50% of Hamilton's new dwellings will be increasingly provided through regeneration of existing parts of the city. It is recognised that this will not be appropriate for all areas. Therefore this regeneration will focus in and around key nodes including the CityHeart, transport hubs, suburban centres and areas of high public amenity such as parks and the river.

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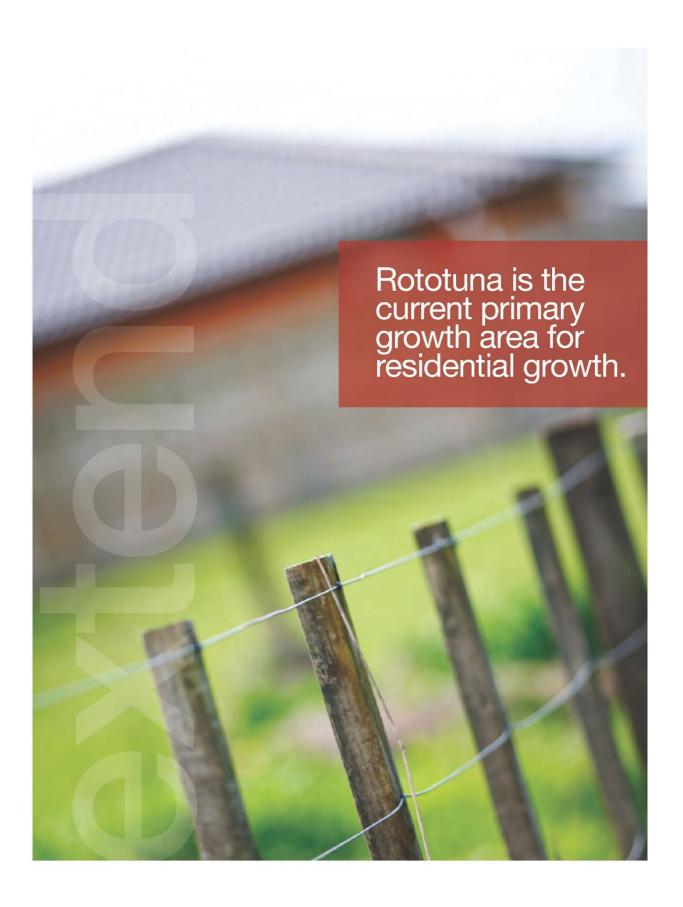




CITYHEART

SUBURBAN CENTRES AND TRANSPORT HUBS

AREAS OF HIGH AMENTY



extend

THE CONCEPT OF EXTENDING REFERS TO GROWING THE SIZE OF THE CITY AND ITS URBAN FOOTPRINT. IN A HAMILTON CONTEXT, THIS GENERALLY MEANS CONVERTING 'GREENFIELDS' THAT IS, PREDOMINANTLY RURAL LAND INTO URBAN ENVIRONMENTS.

As only up to 50% of the projected growth can be accommodated in existing areas of the city, the reality is that there will still be a continuing need to provide Greenfield options for growth.

While statisticians can estimate when the growth will occur, they can't determine where.

Distinct greenfield opportunities exist for residential development in the Rototuna, Peacocke and Rotokauri areas; all being within the current Hamilton city boundary. These areas have structure plans that provide for a range of activities and land uses and are designed to ensure development is undertaken in a managed way and provide good urban design outcomes.

We don't need to develop any major new greenfield areas within the next decade. Why?

- > Firstly, due to our ability to absorb up to 50% of the projected growth in the existing city. This is starting to occur on a modest scale particularly in areas fringing the CityHeart.
- > Secondly due to development already committed to in the remainder of Rototuna, and some early development commitments in Peacocke and Rotokauri.

Extending in the shorter term

Rototuna is the current primary growth area for residential growth. There is still a number of years' capacity existing within this area. Depending on market uptake, we anticipate that growth will continue in this area and if land continues to be developed as it is currently, it won't reach capacity for at least another 10 years.

We know that the developments already consented in this area will meet supply for the next few years. Beyond this supply, there is approximately 220 hectares of land remaining

in the Rototuna area for residential development. If more choice in living environments were available, for instance, more townhouse developments in key areas such as town centres or around parks and open spaces, then it is anticipated that the area could last longer – until approximately 2025.

There remains a commitment to undertake Stage 1 of the Rotokauri area. We can't develop beyond Stage 1 until construction of the Te Rapa Bypass is completed (anticipated to occur in 2013).

In addition, there is a current and restated commitment to facilitate the first residential stage of the Peacocke area in the vicinity of Dixon Road.

Growth Approach 2:

The commitments to developing the remainder of Rototuna and Stage 1 of both Peacocke and Rotokauri remain.

The development of
Rototuna and Stage 1 of both
Peacocke and Rotokauri
will include greater choice
in living environments, for
instance, more compact type
developments in key areas
such as town centres or around
parks and open spaces



Extending in the longer term

In the longer term, residential growth will be prioritised in the Peacocke area rather than in the remainder of the Rotokauri structure plan area. Both of these areas are likely to be developed at some point in the future and have had structure plans developed to ensure development is undertaken in a managed way and provide good urban design outcomes.

Following much debate, Peacocke was prioritised due to the unique strengths it has and what particular outcomes are seen to be more beneficial for the city in the likely development timeframe.

The general economic environment, pace of development within the city and developer aspirations will determine the exact timing of when future stages of Peacocke are released for residential development. Currently Council does not anticipate this to be before 2025 but will continue to monitor growth within the city and adjust plans as required.

So what does Peacocke offer?

- > Good access to employment in the CityHeart, hospital, Ruakura innovation precinct, university and airport. See map on page 13.
- Proximity to the Waikato River provides high amenity value and options for superior public space including access to Hamilton Gardens via a new river crossing as well as the potential extension of Hamilton Gardens across the river
- Access to extensive gully system which provides interesting recreation spaces and enjoyable walking and cycling networks.
- May offer opportunities to refresh investment and living environments in the south of the city

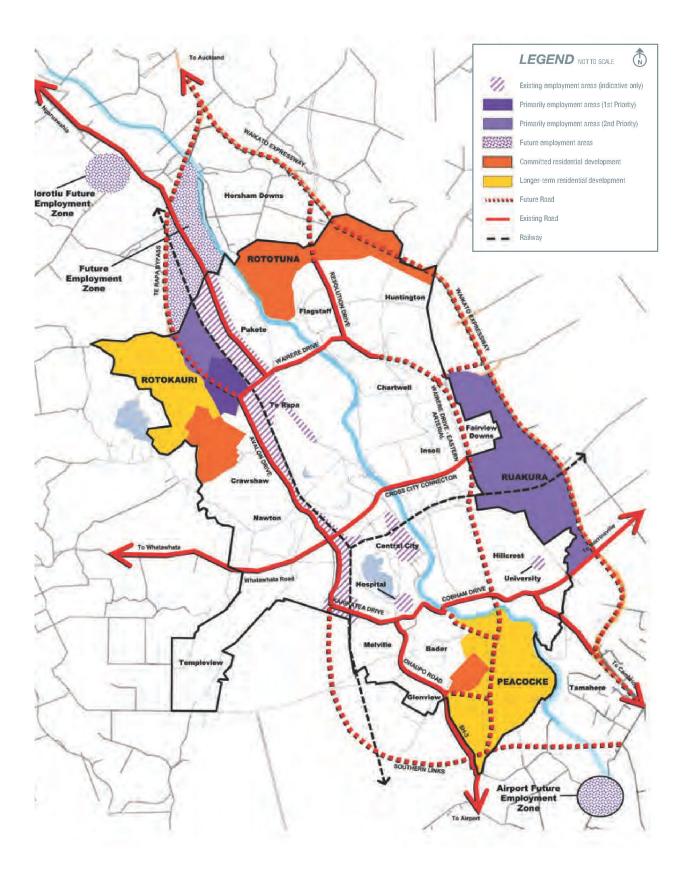
- > Detailed planning will be undertaken to reflect requirements for environmentally sensitive development
- Standard range of opportunities for dedicated public transport infrastructure and services
- Planned arterial road network (connection to the Eastern Arterial ring road via a new bridge) has significant benefits
- > Proximity to CityHeart and hospital provides opportunities for walking and cycling to work (via safe and pleasant off road routes)
- Approximately 580 hectares of land available for residential development (beyond the first stage)

Other considerations...

- > Rolling topography may require specific urban design and architectural solutions to make best use of sites
- > Distance to existing wastewater treatment plant will require significant piping (or an alternative solution)
- Planning of road network, particularly state highway links, is currently less advanced
- > Better community outcomes are likely to cost more and will require higher upfront costs

Growth Approach 3:

To prioritise the residential growth area of Peacocke in the longer term



>Hamilton Urban Growth Strategy > A COMPACT AND SUSTAINABLE CITY

>ruakura

high-value, innovation precinct

PROVIDING MODERN, ATTRACTIVE BUSINESS SETTINGS FOR THE CITY'S INDUSTRIAL AND COMMERCIAL SECTORS IS VITALLY IMPORTANT TO HAMILTON'S FUTURE ECONOMIC WELL-BEING.

Hamilton is planning for future growth by developing new business zones across the city. Employment uses are sensitive to location so Hamilton will be developing concepts for these areas to encourage the clustering of related businesses.

There is a current and restated commitment to undertake Stage 1 of the Rotokauri area which includes around 70 hectares of industrial and employment land. The existing business profile and locational advantages tell us that the Rotokauri area is ideally suited to accommodate service trades, light industry, manufacturing and a general business precinct. Beyond Stage 1, further stages of industrial and employment land will be made available in response to demonstrated demand. This is largely an extension of land uses anticipated in Stage 1.

Where are the other opportunities?

Hamilton is the urban centre of one of the world's leading agricultural and pastoral regions. It is also New Zealand's leading centre for the research, development and commercialisation of ag-bio and agri-technologies. This includes a host of related internationally competitive food, manufacturing and engineering companies that are already clustered here.

To build on these strengths, we are proposing to develop an innovation and employment precinct in the Ruakura area of the city, specialising in research, innovation and high-technology businesses. This will see the integration of the future development of Waikato Innovation Park and complementary industrial development in the area, with the research facilities at the Ruakura Research Centre and the University of Waikato as well as some general employment based on identified demand.

In order to achieve this, Ruakura will need to become part of the city. It currently sits in the Waikato District. The transfer of Ruakura into the city was agreed several years ago and was timed to coincide with the development of the Hamilton bypass section of the Waikato Expressway. We can't afford to wait that long if we want to maintain Hamilton's competitive advantages and secure these leading innovation and high-tech businesses in the city. Transfer of the Ruakura area into the city is now anticipated to take place in 2010/11. A more detailed structure Plan for the Ruakura area will be developed as part of the review of the Hamilton District Plan.

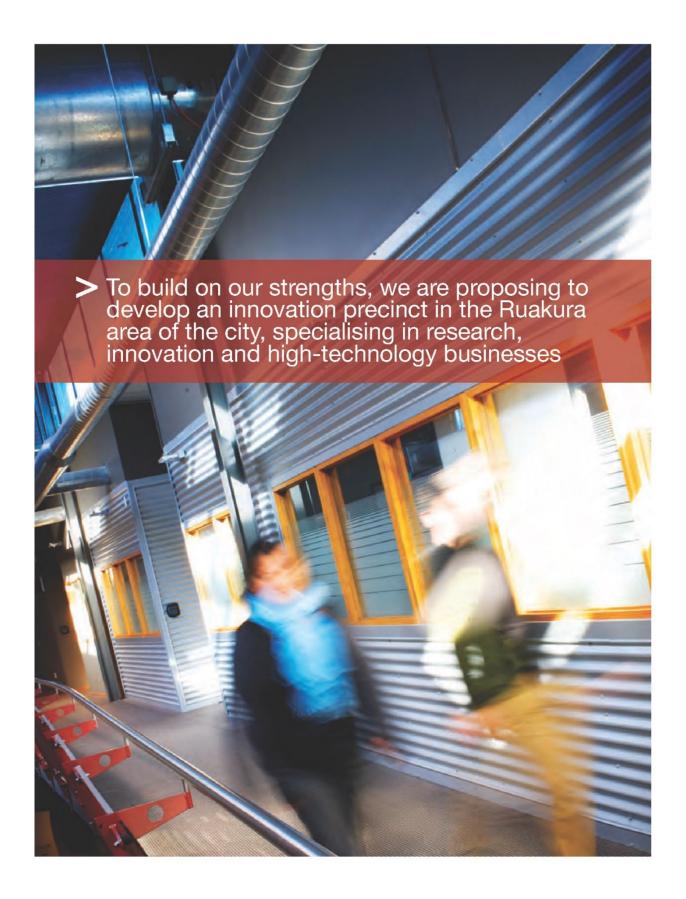
Ideally, we want to begin development in this area within the decade starting by actively developing the area around the existing Innovation Park.

Having a number of alternative employment locations across the city creates efficiencies in our transport networks and allows for the property market to operate more efficiently.

Growth Approach 4:

To enable the development of a high technology, innovation precinct in Ruakura - beginning development within the decade in the area around the existing Innovation Park and subsequently releasing additional land for more general employment needs.

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FUTURE PROOF IS THE NAME OF THE PROJECT THAT WILL PLAN AND MANAGE GROWTH IN THE AREA COVERING HAMILTON, WAIKATO, WAIPA DISTRICTS AND THE MORRINSVILLE AREA OVER THE NEXT 50 YEARS.

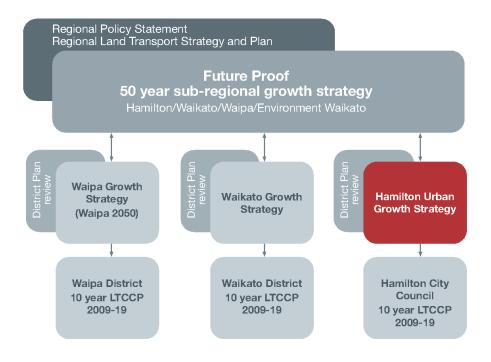
Future Proof is a combined project between five councils (Hamilton, Waikato, Waipa and Matamata Piako Districts and Environment Waikato), Tangata Whenua and the New Zealand Transport Agency. Future Proof deals with the challenges and impacts of growth facing the sub-region. In June 2009, following consultation in late 2008 and early 2009, the subregional growth strategy and implementation plan for Future Proof was adopted. The complex issues concerning future urban and rural land use, natural and cultural resources, roads and other infrastructure, need

to be addressed if community well-being for the area is to be sustained in the long-term.

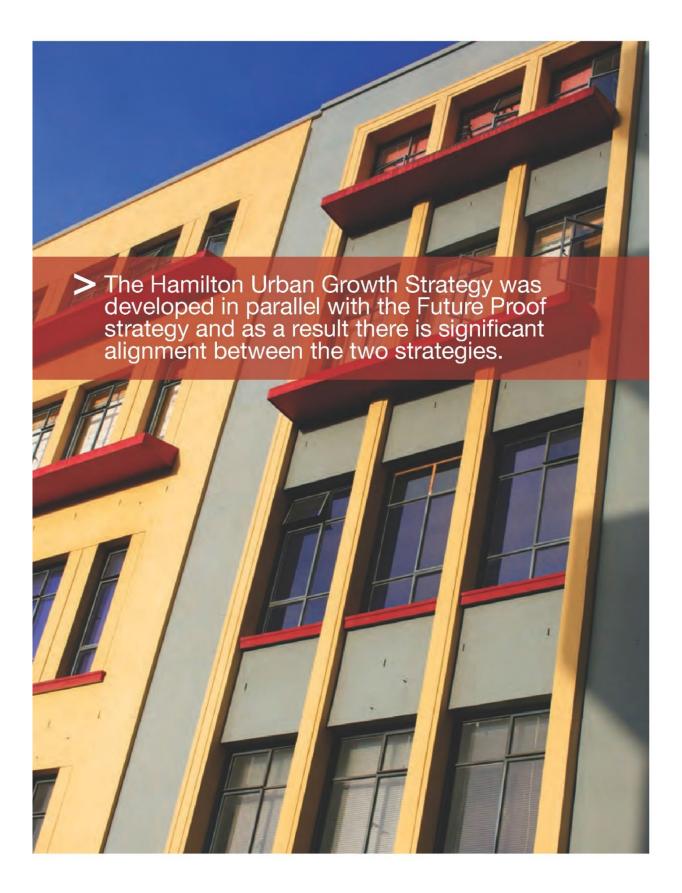
The Hamilton Urban Growth Strategy was developed in parallel with the Future Proof strategy and as a result there is significant alignment between the two strategies. The Hamilton Urban Growth Strategy is regarded as providing more localised interpretation of the Future Proof principles and will help to guide the review of the Hamilton District Plan.

For more information on Future Proof please go to **www.futureproof.org.nz**.

Relationship between the Future Proof Growth Strategy and the Hamilton Urban Growth Strategy



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➤ Hamilton Urban Growth Strategy ➤ A COMPACT AND SUSTAINABLE CITY

> taking the strategy forward

The Hamilton Urban Growth Strategy provides the strategic blueprint for future urban development of Hamilton City.

The upcoming review of the Hamilton City District Plan will consider what changes should be made to the regulatory planning environment in the city to encourage development that is in-line with this strategy. For more information on the review of Hamilton's District Plan please go to www.fastforwardhamilton.co.nz. The new Hamilton District Plan is anticipated to be notified

Changes to the economic environment, demand for land and shifting developer aspirations will mean that any of the indicative timeframes for the start of new growth areas outlined in this strategy are likely to move. Council will continue to actively monitor growth within the city and respond through future reviews of this strategy and other planning tools.

in late 2011.

While this strategy provides the blueprint for development – Council will make the necessary investments in infrastructure to facilitate urban growth as required through subsequent long-term plan budgeting processes.

These investments will need to be balanced against Council's other priorities for funding and ultimately secured through future long-term budget planning processes.



Hamilton Urban Growth Strategy A compact and sustainable city