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Central Otago District Plan

Plan Change 19 – Residential Chapter Provisions

Section 42A Report – PART 2 (Zoning Requests): Water and wastewater servicing matters

Prepared by

Julie Muir

Three Waters Director

Introduction

1. This report is prepared under s42A of the RMA in relation to Plan Change 19 - Residential Chapter Provisions (PC19) to the CODP. The purpose of this report is to provide the Hearing Panel with a summary of water and wastewater servicing matters that are relevant to the Panel's consideration of submissions seeking the zoning of additional residential areas. It should be read in conjunction with the Report on Submissions and Further Submissions PART 2 (Zoning Requests) prepared by Liz White.

Qualifications and Experience

2. My Name is Julie Muir. I am the Three Waters Director at Central Otago District Council. I have held this role for 1 year. Prior to this is I was the Executive Manager Infrastructure Services at CODC for 6 years, and the Roading Manager at CODC for 13 years. I am authorised to present this statement on Central Otago District Council's behalf.

3. In my role I am responsible for the planning and delivery of three waters services within Central Otago District Council.

4. Although this is a Council hearing, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note and that I have complied with it when preparing this report. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person. Having reviewed the submitters and further submitters relevant to this topic I advise there are no conflicts of interest that would impede me from providing independent advice to the Hearings Panel.

General

5. Plan Change 19 is based on the Vincent and Cromwell Spatial Plans. These are strategic planning documents prepared by the Central Otago District Council (CODC) in conjunction with the Central Otago community. The plans explore how and where growth projected for the next 30 years can be accommodated. Submitters have proposed additional sites for inclusion in the PC19 residential zones, through the formal submission process.

6. This evidence relates to the supply of water and wastewater services required to support PC19. Specifically, this evidence addresses the implications of including the additional areas proposed by submitters.

Planning for Water and Wastewater Services Upgrades

7. The Council identifies future water and wastewater infrastructure requirements and associated funding in its Long-Term Plan and associated 30 year Infrastructure Strategy. The Infrastructure Strategy identifies infrastructure investment that will be undertaken to address level of service, renewal, and growth requirements. These plans are based on priorities identified through the development of asset management, water safety and resilience plans and balanced by funding availability. The current adopted Infrastructure strategy was prepared in 2020 for inclusion in Councils 2021 Long Term Plan.

8. These plans are reviewed every three years. Planning is well advanced for the 2024 Three Waters Asset Management Plan and infrastructure strategy.

9. The Water Services Entities Act was adopted in December 2022. This Act transfers the responsibility for the planning and delivery of services to four new water entities from 1 July 2024.

10. The Department of Internal Affairs National Transition Unit have been leading the development of asset management plans for the 30 year period from 1 July 2024 for the four new water entities. Individual councils submitted the second draft of the 30 year future infrastructure requirements and associated costs to the National Transition Unit on 31 March 2023.

11. All projects that were included in councils adopted 2021 Infrastructure Strategies are included in the 2024 National Transition Unit Plan. Council staff were directed to prepare the National Transition Unit Plan on the basis of unconstrained funding which means there are more infrastructure upgrades in this plan than in the 2021 Infrastructure Strategies.

12. On the 13 April 2023 the Government announced a reset of the Water Reform program. The reset extends the transition date to the new Water Entity from 1 July 2024 to between 2025 and 1 July 2026. This means the basis on which the draft 2024 plan has been prepared has changed. Councils will now continue to fund and deliver three waters for up to a further two years. Council will have a greater level of constraint on funding availability and resources to progress infrastructure upgrades.

13. In addition, current differences in policy of the major political parties regarding reform of three waters means that there is a high degree of uncertainty as to if Councils will be responsible for three waters in the future, or the new water entities. This results in a greater level of uncertainty regarding the timing of the upgrades outlined in this report.

14. For the purposes of this evidence staff have relied on the Central Otago District Council adopted 2021 Infrastructure Strategy, and upgrades that have been identified as high priority in the National Transition Unit Plan due to compliance or significant capacity issues.

Increasing Capacity of Water and Wastewater Services Infrastructure to Accommodate Growth

15. The need for and timing of three waters projects in the 2021 Infrastructure Strategy and Long-Term Plan has historically been driven by compliance requirements for drinking water safety and wastewater discharge quality. Capacity for growth has been a secondary driver to compliance. This has meant that additional capacity is incorporated into upgrades when they are undertaken for compliance or renewal needs rather than to meet growth needs.

16. From 2024 there are specific upgrades planned in the Cromwell area that are primarily driven by the need to provide increased capacity to meet growth demand for both water and wastewater. These are required due to existing capacity expected to be reached in parts of the network within the next few years. These upgrades have been identified based on the increased capacity needed to meet the population forecasts used to develop the Cromwell Spatial Plan.

Private Water Supplies

17. Private water supplies that were not registered under the Health Act 1956 prior to the commencement of the Water Services Act 2021 are required to be registered by November 2025 and comply with the Drinking Water Standards by November 2028. If a private supplier is facing a significant problem or potential problem with any of its drinking water services then Council (or the new water services entity) can be required provide a solution to the problem.

18. There are a significant number of private supplies in Central Otago, which are predominantly located in the rural residential areas around Cromwell, Clyde, and Alexandra. Most of these supplies do not meet the current NZDWS requirements.

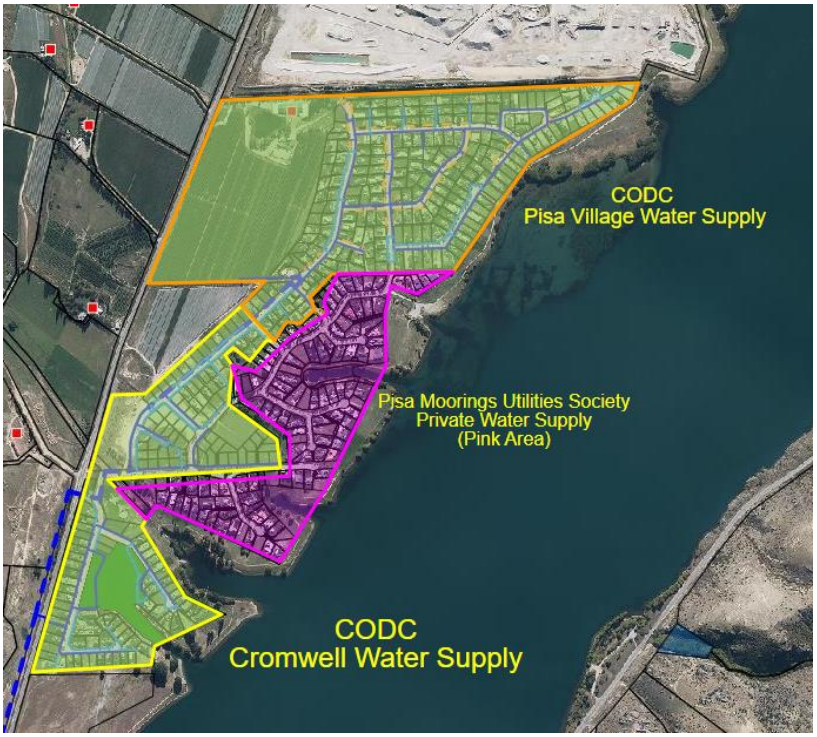
19. Council expects that there will be existing private supplies that will need to be connected to the council water supplies because of this legislative requirement. Council is incorporating capacity to meet this anticipated demand in its treatment plant upgrades. Provision is also being made in reticulation upgrade planning where private supplies have already approached council to consider taking over their supplies.

Cromwell Water Supply

20. The Council operates two water supply networks in the Cromwell Ward, these are the main Cromwell supply and the smaller Pisa Village supply.

21. The main Cromwell water supply feeds the communities of Bannockburn, Cromwell, Ripponvale, Lowburn and the southern third of the Pisa community, also known as Perriam Cove. The Burn Cottage Private Water Supply is also fed from the on the Cromwell network.

22. The council operated Pisa Village water network supplies water to the northern third of the Pisa community. The centre third of the Pisa area, known as Pisa Moorings, is supplied by a private water supply operated by the Pisa Moorings Utilities Company. The southern third of the Pisa area (Perriam Cove) is supplied from the main Cromwell network.



23. The privately operated Pisa Moorings Water Supply was installed as part of a subdivision of the area around 2002. The reticulation network is not compatible with the Council networks as it has been constructed to a lower pressure standard. This means that the pipes would need renewing to mitigate pipe failure if it is connected to either the higher-pressure Cromwell or the Pisa Village supplies.

24. The Cromwell water supply is sourced from two bores in Cromwell on the Alpha Street lakefront area and treated nearby. Treated water is pumped through the existing reticulation network to two storage reservoirs located above Cromwell and west of SH8. Water is distributed from the Cromwell reservoirs into the Cromwell network.

25. The Pisa Village supply is sourced from two bores adjacent to an orchard to the east of SH8. Water is pumped to the nearby treatment plant and reservoir and then distributed into the Pisa Village network.

26. None of the Cromwell water supplies comply with the New Zealand Drinking Water Standards (NZDWS) due to the absence of Protozoa treatment and addressing this is a high priority.

27. Design is underway for a new water treatment plant for the main Cromwell network that will provide drinking water that is fully compliant with the NZDWS with construction expected to commence in 2024 and be completed in 2025.

28. The council supplied Pisa Village scheme and the main Cromwell network will then be consolidated into one scheme, with the Cromwell treatment plant supplying compliant drinking water to Pisa Village. Funding has been provided in both the Council 2021 Infrastructure Strategy and the National Transition Unit Plan for this to be completed between 2025 and 2028.

29. The capacity of the new treatment plant has been designed to meet the requirements the Cromwell Masterplan and PC19 for a combined Cromwell, Pisa Village and Pisa Moorings scheme.

Consented Cromwell Water Takes

30. The Cromwell water supply take is consented by the Otago Regional Council for a maximum abstraction of 18,000 cubic metres of water per day and expires in 2028. Current demand is within the existing consented limit. The forecast water take demand in 30 years is 20,000 cubic metres of water per day which exceeds the current consented volume.

31. The Pisa Village water supply take is consented by the Otago Regional Council for a maximum abstraction of 810 cubic metres of water per day and expires on 1 July 2052. In peak months demand on the Pisa Village supply is 600-800m^3 per day. There is insufficient headroom in the current water take consent to service substantial growth at Pisa.

32. There is sufficient capacity within the existing Cromwell consent to service the combined Cromwell and Pisa schemes for the next 10 years, but this will need to be increased to meet predicted growth demand for the next 30 years. Any new consent is likely to require increased demand management actions as a condition of the potable water take consents. Irrigation of green spaces is unlikely to be provided within future consents for water takes for community potable water.

Cromwell Water Reticulation and Pumpstations

33. Council has an existing hydraulic model of the Cromwell water network. Historical greenfield developments have been added to the existing model as they are consented.

34. The existing hydraulic model has identified that there are existing capacity constraints to a small number of pipe sections within the existing Cromwell township, and on the main pipeline to Bannockburn and towards the end of the existing reticulation on Hall Road in Bannockburn. Council has programmed to replace the main Bannockburn pipeline which feed Bannockburn township between 2024 and 2026. The Bannockburn reservoir is fed through a combined rising/falling main. Increased demand on the Bannockburn network could result in increased pressure fluctuations within the network.

35. A new hydraulic model for water is currently being built which models the population densities and yield proposed in Cromwell Master Plan and PC19. This includes amalgamating the Cromwell and Pisa Village supplies.

36. The base model will be completed in June 2023. This will provide a detailed program of upgrades required to meet the future capacity needs associated with the Cromwell Masterplan.

37. The model will identify additional capacity constraints within the existing network that will occur as greenfield and infill development occurs. Funding has been planned in 2027 to address the highest priority reticulation and pumpstation capacity constraints needed to support the Cromwell Masterplan and PC19. Other pipes will have sizes increased when they are due for replacement.

Cromwell Wastewater

38. The Council operates one wastewater network in the Cromwell Ward. The network services the Bannockburn, Cromwell, Lowburn and Pisa areas. Wastewater is piped to the Cromwell wastewater treatment plant in Richards Beach Road, Cromwell. The Cromwell plant comprises two oxidation ponds and a membrane treatment plant. The membrane plant was constructed in 2017 to meet compliance requirements for wastewater discharge. The design life of the new treatment plant was to 2031.

Cromwell Wastewater Consented Discharges and Treatment

39. The Cromwell wastewater discharge is consented by the Otago Regional Council and expires in 2049.

40. Growth forecasts at the time of the last upgrade of the Cromwell Treatment plant in 2017 identified that consented nitrogen limits would be met around 2031 as a consequence of growth. Further process improvements were programmed in 2028 to address this. Higher than forecast growth in Cromwell means this limit is being met earlier, with the nitrogen improvements now needed within the next two years.

41. Future extension of the treatment plant building and reconfiguration of the membrane treatment process will be required to provide for the full expected growth from the Cromwell Masterplan and PC19.

42. Funding has been provided in the Draft National Transition Unit 2024 budgets between 2025 and 2028 to implement nitrogen removal and increase the capacity of the membrane treatment plant to meet the requirements of the Cromwell Masterplan and PC19.

Cromwell Wastewater Reticulation

43. Council has an existing hydraulic model of the Cromwell wastewater network. Historical greenfield developments have been added to the existing model as they are consented.

44. A new hydraulic model for wastewater will be prepared which will model the population densities and yield proposed in Cromwell Master Plan and PC19. The base model will be completed in 2024. This will provide a detailed program of upgrades required to meet the future capacity needs associated with the Cromwell Masterplan.

45. Funding has been included in the Draft National Transition Unit 2024 budgets to address the highest priority reticulation and pumpstation capacity constraints. Further reticulation capacity upgrades will be provided when planned renewal of existing pipes occurs.

46. The reticulated wastewater main for Lowburn Valley was not initially designed to carry the level of development that has occurred in this area. This is resulting in issues with pumpstation and odour. The Lowburn wastewater main and pumpstation requires reconfiguration to enable it to operate effectively and to provide additional capacity. Funding has been included in the Draft National Transition Unit 2024 budgets to enable this to occur between 2026 and 2028. This will provide increased capacity to accommodate growth.

Servicing of Areas Raised in Submissions – Cromwell Area

47. Council staff have been asked to comment on the rezonings sought through submissions on Plan Change 19 from a water and wastewater servicing perspective.

48. Minor changes to zoning which result in small numbers of additional lots can be serviced if these are within existing water and wastewater servicing areas e.g submission #137 RS Perriam – Pisa Moorings.

49. Where submissions are requesting increased densities or areas at the extents of the networks to be serviced, then there will be difficulty in accommodating these until significant treatment and reticulation infrastructure upgrades are completed. The anticipated timelines for these upgrades are provided, noting that there is increased uncertainty regarding these due to uncertainty regarding water reform timelines.

SUBMISSION #	SUBMITTER NAME	SITE DESCRIPTION	Can it be serviced?	Reason
# 144	Wally Sanford	Lot 2 DP 3970990 – Pisa Village	No	This could be serviced for water after 2029 when the Cromwell and Pisa Water schemes are combined, and a new water take consent has been approved by the Regional Council. This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.
# 144	Wally Sanford	Lot 100 DP433991	No	This could be serviced for water after 2029 when the Cromwell and Pisa Water schemes are combined, and a new water take consent has been approved by the Regional Council. This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.
#138	Wakefield Estates Limited	Land on west of State Highway in Pisa Moorings	No	This could be serviced for water after 2029 when the Cromwell and Pisa Water schemes are combined, and a new water take consent has been approved by the Regional Council. This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.
#146	Pisa Moorings Vineyard Ltd & Pisa Village Developments Ltd	828 Luggate-Cromwell Road – Pisa Moorings – Cherry Orchard	No	This could be serviced for water after 2029 when the Cromwell and Pisa Water schemes are combined, and a new water take consent has been approved by the Regional Council. This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.
# 83	A F King and Sons Ltd	Lowburn Valley - southern end	No	This could be serviced for water now.

				This could be serviced for wastewater in 2029 following reconfiguration and upgrading of the Lowburn wastewater main and pumpstation and after nitrogen removal and increased treatment capacity has been constructed.
# 123	Lowburn Viticulture Ltd	Lowburn Valley Section 27 Block V	No	This could be serviced for water now. This could be serviced for wastewater in 2029 following reconfiguration and upgrading of the Lowburn wastewater main and pumpstation and after nitrogen removal and increased treatment capacity has been constructed.
# 142	Lakeside Christian Centre	Lowburn Valley Section 2 SO 22525	No	This could be serviced for water now. This could be serviced for wastewater in 2029 following reconfiguration and upgrading of the Lowburn wastewater main and pumpstation and after nitrogen removal and increased treatment capacity has been constructed.
#69	The Van der Velden Family Trust	Kawarau Gorge Road Lots 1-5 DP420009 Adjacent to Ripponvale hospital area	No	This could be serviced for water now. This could be serviced for wastewater in 2029 after nitrogen removal and increased treatment capacity has been constructed.
#145	Thyme Care Properties	Kawarau Gorge Road Part Lot 4 DP 22109, Lot 1 DP 23343, Lot 2 DP 23343 – Ripponvale hospital area	No	This could be serviced for water now. This could be serviced for wastewater in 2029 after nitrogen removal and increased treatment capacity has been constructed.
# 149	Kathryn Adams	Cromwell golf course and orchard area Lot 3 DP 470945, Lot 12 DP 2970, Lot 11 DP 2970, Section 4 Blk XCII Town of Cromwell	No	This could be serviced for water now. This could be serviced for wastewater in 2029 after nitrogen removal and increased treatment capacity has been constructed.
#100 And	N Smith & K Parsons And	Bannockburn Lot 50- 51 DP 511592 And Lot 1 & 2 DP 460583, Lot 50- 51 DP 511592	No	This would require significant upgrading to existing water reticulation and storage capacity to achieve the required pressure to this site. Water would need to be pumped to this area which would result in higher operating costs. It

#163	J Klevstul and R Klevstul and Rubicon Hall Road Limited			would also require capacity increases in wastewater treatment. These upgrades exceed current infrastructure planning provisions for level of service and growth.
#127	Harold Davidson	Bannockburn - Hall Road	No	This would require significant upgrading to existing water reticulation and storage capacity. Water would need to be pumped to this area which would result in higher operating costs. It would also require capacity increases in wastewater treatment. These upgrades exceed current infrastructure planning provisions for level of service and growth.
#135	C. McLeod	Bannockburn - 97 Hall Road	No	This could be serviced for water after 2026 after the main Bannockburn pipeline is upgraded. This could be serviced for wastewater after 2029 after nitrogen removal and increased treatment capacity has been constructed.
#82	D J Jones Family Trust and N R Searell Family Trust	Bannockburn - Lot 4 DP 339137 and Part Section 103 Block I Cromwell Survey District – increased densities (e.g. LRZ and MRZ outside Building Line Restriction)	No	This would require significant upgrading to existing water reticulation and storage capacity. It would also require capacity increases in wastewater treatment. These upgrades exceed current infrastructure planning provisions for level of service and growth.
#143	Kōraki Limited and ScottScott Limited	Bannockburn – Hall Road (Western end)	No	This would require significant upgrading to existing water reticulation and storage capacity. It would also require capacity increases in wastewater treatment. These upgrades exceed current infrastructure planning provisions for level of service and growth.

Alexandra/Clyde Water Supply

50. The Council operates two water supply networks for Clyde and Alexandra that from May 2023 will have a combined water source and treatment plant at Clyde adjacent to Lake Dunstan.

51. The combined water source is from bores upstream of the Clyde Dam which feed a membrane treatment plant located on the Clyde hill. This plant supplies water that is fully compliant with the NZDWS to reservoirs above Clyde for distribution to the Clyde community and at the top of Gilligans Gully Road for the Alexandra township. A second reservoir site is located at the top of Kamaka Crescent on Bridge Hill to provide water to the Bridge Hill area. A third, smaller reservoir is located on Old Golf Course Road to supply water to the area above Kamaka Crescent.

52. The new treatment plant has been designed to provide sufficient capacity to supply water to the existing Clyde and Alexandra communities and growth provisions in the Vincent spatial plan and PC19. Provision has been made in the design to enable further membrane banks to be installed within the existing building to supply the area between Clyde and Alexandra known as Dunstan Flats.

Consented Lake Dunstan Water Takes

53. The Lake Dunstan Water supply take is consented by the Otago Regional Council for a maximum abstraction of 16,200 cubic metres of water per day and expires in 2028. Current demand is within the existing consented limit. The consented volume will need to be increased as consents are renewed to meet expected growth.

54. Any new consent is likely to require increased demand management actions as a condition of the potable water take consents. Irrigation of green spaces is unlikely to be provided within future consents for water takes for community potable water.

Clyde and Alexandra Water Reticulation and Pumpstations

55. Council has an existing hydraulic model of the Clyde and Alexandra water networks. Historical greenfield developments have been added to the existing model as they are consented.

56. A new hydraulic model for water will be built following completion of the Cromwell model which will model the population densities and yield adopted in PC19.

57. The base model is expected to commence in July and be completed in December 2023. This will provide a detailed program of upgrades required to meet the future capacity needs associated with the Vincent spatial plan.

58. Increased water storage for Alexandra was constructed in 2022/23 to provide for future growth and peak day demand. Funding has been provided in the 2021 Infrastructure Strategy and the National Transition Unit Plan for:

    - a booster pump is in the main trunk pipeline between Clyde and Alexandra to meet anticipated growth demand in 2045.

- a second reservoir was also included into provide increased storage capacity to meet growth is programmed for Bridge Hill in 2044.
- extending water reticulation into the Dunstan Flats area, consistent with the Vincent spatial plan and PC19.

59. Further funding has been provided in the Draft National Transition Unit 2024 budgets for capacity improvements to meet growth demand within the Alexandra water reticulation network between 2025 and 2027.

Alexandra and Clyde Wastewater

60. The Council operates two wastewater networks in the Alexandra and Clyde area. The Alexandra network services Alexandra township. Clyde township has historically been serviced by septic tanks.

61. In November 2022 the first stage of a reticulated network for Clyde was completed. This provides reticulation to approximately 150 existing properties and provides for greenfield development to occur in the Muttontown Road area. Wastewater from reticulated properties in Clyde is piped to the main Clyde pumpstation, and then pumped along a trunk main to Walton Street in Alexandra. From there it mixes with Alexandra wastewater and is pumped to the Dunorling Street pumpstation and across the Manuherekia River to the Alexandra treatment plant.

62. The remaining properties in Clyde which are on septic tanks are unable to be reticulated until a significant treatment plant upgrade is undertaken.

63. The reticulated Alexandra network has had storage upgrades undertaken on key pumpstations during 2022-2023. There are no known capacity issues within the piped reticulation network.

64. Council has an existing hydraulic model of the Alexandra and Clyde wastewater network. Historical greenfield developments have been added to the existing model as they are consented.

65. A new hydraulic model for wastewater will be prepared which will model the population densities and yield proposed in the Vincent spatial plan and PC19. The base model will be completed in 2024.

Alexandra Wastewater Treatment and Consented Discharge

66. The Alexandra wastewater treatment plant is located on Graveyard Gully Road to the east of the confluence of the Clutha Mata-au and the Manuherekia rivers in Alexandra. The plant uses an activated sludge process and UV to treat wastewater from Alexandra which is discharged to the Clutha Mata-au River.

67. The Alexandra wastewater discharge is consented by the Otago Regional Council and the consent expires in 2038. Council is required to investigate new and alternative technologies that have become available since the granting of the consent including land-based disposal

options. Council must report to the Regional Council on options for improving the discharge five years before consented volumes are reached, or by 2033.

68. Growth forecasts prepared during investigation of the Clyde reticulation project indicate that discharge limits will be met earlier than 2038. This means the report to the Regional Council will be required earlier than 2033, around 2026. Council is progressing the development of a business case which is considering options to meet this requirement. This includes consideration of developing the current site with continued discharge to water, alternative sites with land disposal, and consolidation of treatment for Alexandra and Omakau with land disposal on a new site.

69. The timeline to complete the upgrade has a high level of uncertainty depending on which treatment upgrade option will be progressed. Provision has been made to undertake some upgrading on the current site in the short term to accommodate initial growth expected from the Vincent Spatial Plan.

70. Extending reticulation to other existing properties within the Clyde township cannot be undertaken until this treatment upgrade is completed, and a new regional council consent is issued for treatment of Alexandra and Clyde wastewater.

71. The Alexandra plant has a single process line which is nearing the end of its useful life. This means there is a high risk of mechanical failure, and there is no redundancy within the system to take the plant off-line for repairs. The investigation and implementation of wastewater treatment upgrades for Alexandra is being progressed as a high priority to meet compliance and growth needs.

Servicing of Areas Raised in Submissions – Alexandra/Clyde Area

72. Council staff have been asked to comment on the rezonings sought through submissions on Plan Change 19 for a water and wastewater servicing perspective.

73. Where submissions are requesting increased densities or areas at the extents of the networks to be serviced, then there will be difficulty in accommodating these until significant treatment and reticulation infrastructure upgrades are completed. The anticipated timelines for these upgrades are provided, noting that there is increased uncertainty regarding these due to uncertainty regarding water reform timelines.

SUBMISSION	SUBMITTER NAME	SITE DESCRIPTION	Can it be serviced?	Reason
#76	John Sutton	Alexandra - Muttontown Gully Sec 1 S0 23741, Lot 10 DP 12910	No	This could be serviced for water but will require reticulation into this area. This cannot be serviced for wastewater. There is no plan for reticulation of this area in the future. If reticulation was to be provided by the developer, then this could not proceed until wastewater treatment upgrades are completed.
#139 #141	Shanon Garden Chris Cameron & Carolyn Patchett	Alexandra - Dunstan Road – reduce lot size from 2000m2 to 500m2	No	This could be serviced for water. This cannot be serviced for wastewater. This could not proceed until wastewater treatment upgrades are completed.
#159	Rocky Glen Ltd	Alexandra - Rocky Glen	No	There is no capacity included in the current water treatment plant to provide water to this area. This is above existing reservoir levels and water would need to be pumped which would result in higher operating costs. This cannot be serviced for wastewater. There is no capacity in planned wastewater treatment upgrade to service this area.
#44	Phil Murray and Lynne Stewart	Earnscleugh/Fruit growers Road	No	This area could be serviced with water but would require reticulation from the Clyde township to be installed across the Clyde Bridge. It could be serviced for wastewater from Clyde in the future after the wastewater treatment upgrades are completed. The costs for providing reticulated wastewater will be significant as this is likely to need to be pumped.
#168	Carey Weaver	East side of Waipuna Road and fronting Springvale Road	No	This request is outside the scope of Plan Change 19 and is not able to be serviced for wastewater.

Ranfurly Submission #81 (John Elliot)

74. The Ranfurly wastewater scheme has capacity to accommodate further growth.

75. The Ranfurly water supply does not meet the NZDWS for protozoa treatment and has had resilience issues during rain events and drought conditions. Council is currently developing a business case to consider options for future supply and treatment of water for Ranfurly. This means there is limited ability to provide water supply to more properties in Ranfurly.

76. The area between Caulfield and Welles Street could be supplied water, however capacity to supply of water to the area beyond Welles Street is uncertain.