SUBMISSION ON THE WATER SERVICES ECONOMIC EFFICIENCY AND CONSUMER PROTECTION BILL

DATE: **17 FEBRUARY 2023**

TO: **FINANCE & EXPENDITURE COMMITTEE**

SUBMITTER: **WATER NEW ZEALAND**

INTRODUCTION AND OVERVIEW

1. Water New Zealand (Water NZ) is a national not-for-profit organisation which promotes the sustainable management and development of New Zealand's water environment, particularly the three waters (drinking water, wastewater and stormwater). Water NZ provides leadership and support in the water sector through advocacy, collaboration, and professional development. Its ~3,000 members are drawn from all areas of the water management industry including regional councils and territorial authorities, consultants, suppliers, government agencies, academia and scientists.

2. Water NZ welcomes the opportunity to provide a submission on the Water Services Economic Efficiency & Consumer Protection Bill (the WSEECP Bill).

Approach to submission

3. Water NZ acknowledges that there are strongly held views in relation to water reform particularly with regards to governance and representation. Water NZ includes many members who hold these strong views. As with all submissions, Water NZ makes its focus technical excellence in the delivery of safe and environmentally appropriate water infrastructure and services.

4. Water NZ membership is drawn from across the entire water sector and is therefore interested in the entire Bill. Whilst this submission makes comments supporting or opposing particular provisions, this does not limit the generality of the overall interest in the Bill. Generally, Water NZ supports the intent of the Bill and these submissions focus on areas that Water NZ consider could be improved or adapted to better meet the Bill's intent.

Submission

5. Water NZ submission focusses on several themes:

   (a) Consistency and cohesion with other water sector legislation, specifically the Taumata Arowai – Water Services Regulator Act 2020 (TA-WSR Act), Water Services Act 2021 (WS Act), Water Services Entities Act 2022 (WSE Act), and the Water Services Legislation Bill (WSL Bill).

   (b) Need for the WSEECP Bill to provide recognition for the Water Services Entities (WSEs) relationship with iwi/Māori, through the need to give effect to

Te Mana o te Wai, to uphold the Te Tiriti o Waitangi/Treaty of Waitangi and the need to uphold Treaty Settlements.

(c) Recognising that the water services & water services infrastructure sector is different, whilst at the same time leveraging the wider economic regulatory regime operating in Aotearoa New Zealand.

(d) Achieving a balance between certainty of process, and flexibility – avoiding too much prescription.

(e) Identifying areas where it will be important that the WSEECP Bill is workable.

(f) Identifying areas where further clarity would be helpful.

(g) Identifying missing concepts.

6. Rather than providing revised drafting the submission identifies principles for revision where appropriate.

7. Appendix 1 provides a summary of recommendations.

Consistency and cohesion

8. The purpose of the WSEs established under the Water Service Entities (WSE Act 2022) needs to be acknowledged in the WSEECP Bill. Section 3(1), WSE Act outlines the purpose is "…to enable long term, sustainable improvements in the safety, quality, resilience, accessibility, affordability, efficiency and performance of water services, and water services infrastructure. This contrasts with the overview of the price and quality regulation in Part 2, WSEECP Bill which outlines "…regulation of price and quality of water infrastructure services in markets where there is little or no competition and little of no likelihood of a substantial increase in competition. Further section 12, Part 2, WSEECP Bill details a set of outcomes that are consistent with outcomes produced in competitive markets, but which do not reflect the statutory objectives of the WSEs. This lack of cohesion risks allocative, productive and dynamic inefficiencies occurring over time.

9. Water NZ **recommends** that section 12 (purpose of Part 2) is expanded to include the need for economic regulation to support the WSEs meeting their statutory objectives and wider operating principles.

10. The WSE Act address water services and water services infrastructure. The WSEECP Bill focuses on water infrastructure services, Water NZ **recommends** this is expanded to explicitly include water services as defined in the WSL Bill.

11. Under WSEECP Bill, section 5 the Commission and Minister are required to consider certain matters when making a recommendation, determination or decision. Specifically, section 12 - purpose of Part 2 Price and Quality Regulation; section 60 - purpose of Part 3 Consumer Protection; and four additional obligations of regulated WSEs – te Tiriti o Waitangi/Treaty of Waitangi, giving effect to Treaty Settlement obligations, Te Mana o te Wai and mitigating the effects of climate change and natural hazards. These are matters are appropriate. However, under the WSE Act (section 12) the WSEs have objectives to:

(a) own and operate water services infrastructure, and deliver water services, in an efficient and financially sustainable manner:

(b) protect and promote public health:

(c) protect and promote the environment:

(d) support and enable planning processes, growth, and housing and urban development:

(e) operate in accordance with best commercial and business practices:

(f) act in the best interests of present and future consumers and communities:

(g) deliver water services in a sustainable and resilient manner that seeks to—

i. mitigate the effects of climate change and natural hazards; and

ii. support and enable climate change adaptation.

12. Further, section 13 of the WS Act details the functions of the WSEs. Water NZ notes that the WSL Bill also before this Committee details amendments from two all-encompassing functions to a more detailed breakdown (20 functions).

13. These objectives and functions are broader than the matters the Commission must take into account. This creates a potential disconnect between the regime that will underpin the Statement of Strategic and Performance Expectations (SSPE). The SSPE will state the regional representative group's objectives and priorities for water services in the entity's service area and are designed to inform and guide the decisions and actions of the board of the respective WSEs. Water NZ is concerned limiting the Commission's powers to only the matters currently specified in this Bill will impact the ability to fund and regulate services delivered by the WSEs.

14. Water NZ **recommends** that the matters (section 5) that the Commission is required to take into account are expanded to include statutory objectives and functions specified for the WSEs under section 12 of the WSE Act, and then section 13 of the WSE Act following its amendment in the WSL Bill.

15. Under section 144, the Commerce Commission (Commission) must have regard to economic policies of the Government. The Commission should also have regard to a Government Policy Statement on Water Services (GPS-WS) issued under the WSE Act, subpart 2, section 132, not simply economic policy of the Government. The GPS-WS will state the Government's overall direction and priorities for water services and inform and guide agencies involved in, and the activities necessary or desirable for, water services.

16. **Recommend** that Commission should have regard to a gazetted GPS-WS.

17. The Commission and Taumata Arowai must have a close working relationship. To this end, it is pleasing to understand steps are already underway for this to be established.

18. Water NZ **recommends** that the Bill reenforces the need for the two regulators to work closely together, as there will need to be a specific direction to override section

8 of the Commerce Act which requires the Commission to act independently when performing its functions.

19. Under the TA-WSR Act and WS Act, Taumata Arowai's responsibilities include the safety of drinking water. The WSEECP Bill acknowledges this through carve out provisions (part 1, section 4(3)).

20. The Funding and Pricing Plans (FPPs) and Asset Management Plans (AMPs) prepared by the WSEs under WSE Act will need to reflect operating and capital expenditure associated with the safety of drinking water. Water NZ is unclear whether the intention is that this funding will be taken account through information the Commission may request about goods and services not subject to regulation under Part 2 of the WSEECP Bill (section 35).

21. **Recommend** further clarity is provided in relation to how funding, quality and information disclosure for drinking water safety initiatives is considered and taken account of by the Commission.

22. Under the WS Act, Taumata Arowai sets Network Environmental Performance Measures and currently requires water service providers, and in the future WSEs to report against these measures. Under the WSEECP Bill, Part 2, subpart 4, the Commission can make determinations relating to Information Disclosure which WSEs must follow.

23. To avoid unnecessary compliance costs and general duplication, Taumata Arowai and the Commission should seek to share pertinent information collected and seek to avoid definition differences for similar information.

24. It remains unclear from the drafting whether Taumata Arowai will be an interested person under section 32, in particular given the carve out of the safety of drinking water.

25. **Recommend** provision is made to enable Taumata Arowai and the Commission to share data/information collated and the requirements for purpose of disclosure.

26. The WSEs will produce a range of plans under the WSE Act - Funding and Pricing Plans, Asset Management Plans and Infrastructure Strategies. Each of these has a specific regularity and timeframe associated:

    (a) Funding and Pricing Plans: produced at least once every 3 years and cover a period of not less than 10 consecutive financial years.

    (b) Asset Management Plans: produced at least once every 3 years and cover a period of not less than 10 consecutive financial years.

    (c) Infrastructure Strategies: produced once every 3 years and cover a period of at least 30 consecutive financial years.

27. Under the WSEECP Bill the WSEs will be subject to information disclosure, quality regulation or price-quality regulation for specific Regulatory Control Periods. It would be helpful for the WSEs if there is an alignment in these various timeframes and content, noting the different functions and outcomes the different legislation imposes, otherwise there is likely to be inefficiencies created, and potentially cause much confusion with stakeholders and other interested persons across the sector.

28. **Recommend** alignment in scheduling of Regulatory Control Periods, and the various plans or strategies produced by the WSEs.

29. The WSEs are subject to a penalty regime under the WS Act for failure to fulfil an enforceable undertaking (section 133 and section 143). Penalties can also be applied under this Act (section 84). There must be cohesion across the enforcement regimes under the two Acts. At a minimum the WSEs should not be subject to double jeopardy.

30. Water NZ **recommends** that the penalty regimes under the WS Act and this Bill are reviewed for consistency.

31. The WSE Act requires the WSEs to deliver water services in a sustainable and resilient manner to mitigate the effects of climate change and natural hazards, and to support and enable climate change adaptation. The concept of climate adaptation is missing from this Bill. The storm and flooding events over January and February 2023 have highlighted the importance of climate adaptation in the water sector.

32. Water NZ **recommends** that 'supporting and enabling climate change adaptation' is added to section 5 (2)(c).

Te Mana o te Wai, and Te Tiriti o Waitangi/Treaty of Waitangi

33. Te Mana o te Wai creates a hierarchy of obligations. First, the health and wellbeing of water bodies and freshwater ecosystems. Second, the health needs of people (such as drinking water). Third, the ability of people and communities to provide for their social, economic and cultural well-being, now and in the future. Yet at the heart of traditional economic regulation is "economics", which is third in the Te Mana o te Wai hierarchy. How Te Mana o te Wai and economic regulation for water are brought together will be fundamental to the success of the overall reforms.

34. The Te Mana o te Wai statements provided by mana whenua to each WSE are important components of the WSE governance arrangements. Each WSE is required to give effect to Te Mana o te Wai and is required to respond to a Te Mana o te Wai statement. The response must include a plan that sets out how the WSE intends to give effect to Te Mana o te Wai, to the extent that it applies to the entity's duties, functions, and powers.

35. In light of this, Water NZ considers that a greater onus should be placed on these plans by the Commission or Minister than is currently provided for. For example, should the Board of Taumata Arowai chose not to adopt recommendations by the Māori Advisory Board it should be required to explain to Parliament why those recommendations are not being adopted.

36. **Recommend** the Commission or Minister is required to give greater weight to Te Mana o te Wai Statements than currently provided for in section 5 and is required to consult with interested parties and publish the decision and justification where Te Mana o te Wai Statements are not permitted to be fully given effect to due to Commission decisions.

37. Section 6 requires the Commission to maintain systems and processes to ensure they have the capacity and capability to uphold the principles of te Tiriti o Waitangi/Treaty of Waitangi and engage with Māori and understand perspectives of Māori. This is appropriate. A similar provision is included in the WSE Act in relation to the collective

duties of the Board. Section 76 of the WSE Act however, includes an additional provision in relation to the need to "…maintain systems and processes for the continuing education of all board members to gain knowledge of, and experience and expertise in relation to, the principles of te Tiriti o Waitangi/the Treaty of Waitangi".

38. Water NZ **recommends** s6 of the WSEECP Bill is expanded to include a requirement for continuing education of the Commission on the principles of te Tiriti o Waitangi/Treaty of Waitangi.

Recognise sector differences whilst leveraging the wider economic regulatory regime

39. Water NZ acknowledges the design steps taken following receipt of submissions on the 2021 Discussion Paper "Economic regulation and consumer protection for three waters services in New Zealand" to take account of sectoral differences. The explicit inclusion of Te Mana o te Wai, and Te Tiriti of Waitangi within the Bill has addressed an important part of Water NZ's 2021 submission. See paragraphs 33 to 38 for further changes sought.

40. Pragmatically, the design of the proposed regime must balance two factors. First, that water services & water services infrastructure is complex and different to other utility infrastructure services regulated by the Commerce Commission. Second, that regulatory efficiencies may be available if the Commission can leverage current systems and processes for economic regulation when they commence the regulation of water services infrastructure.

41. Water NZ supports:

    (a) Establishment of a Water Services Commissioner (section 127).

    (b) The explicit requirement for the Commission to perform functions as a regulator of water services infrastructure (section 4).

    (c) The concept of leveraging case law from the Commission's experience regulating other utilities.

42. However, Water NZ is concerned the fundamental and distinctive features of the Aotearoa New Zealand water sector model will create regulatory challenges not yet foreseen by policy designers, the Commission or the sector. For example,

    (a) *Te Mana o te Wai:* While the Bill requires the Commission to consider Te Mana o te Wai when making recommendations, determinations, or decisions Te Mana o te Wai is a developing constitutional framework and critically is a local (place based) concept. The Commission will not be able to develop a nationwide approach to Te Mana o te Wai, in terms of what it means for different iwi.

    (b) *Community*: A critical part of each WSEs statutory objectives is to support and enable planning processes, growth, and housing and urban development. This consideration is very different from the requirements for electricity, gas and telecommunications businesses regulated under Part 4 and Part 6 of the Commerce Act respectively. Yet section 12 is effectively the same as section 52A, Commerce Act. This raises the question of whether sufficient recognition of the uniqueness of water has been provided for.

(c) *Timing*: An obvious challenge is timing. For example, the future readiness of the WSEs to be able to participate in a meaningful way given the current schedule for developing Input Methodologies needs to be taken into account. The WSE Act provides for the development of Funding & Pricing Plans, Asset Management Plans and Infrastructure Strategies. As these are developed contemporaneously with the Input Methodologies there are risks of inconsistencies, or worse conflicts.

43. Water NZ **recommends** the Commission engages with the WSEs (and their respective governance groups), the wider water sector, mana whenua and community stakeholders to test whether the uniqueness of water, and the differences to the other utilities regulated under the Commerce Act 1996 have been appropriately considered. This is particularly necessary given that there has not been an inquiry into how economic regulation might be applied to water infrastructure services and water services. During an inquiry of this sort, the Commission, and interested parties would have the opportunity to appreciate the essential differences in the proposed three waters economic regulation.

44. The Commission will need to exercise judgement when considering the 'multi-tiered objectives' in section 5, the price and quality regulation purpose in section 12 and the consumer protection purpose in section 60. The 'best gives effect to or is likely to best give effect to" language is appropriate, as the outcomes that are not 'consistent with promoting outcomes produced in competitive markets'. The Commission should be required to seek input into how it exercises judgement. This is particularly important because of the requirement for the WSEs to give effect to Te Mana o te Wai. For example, the WSEs will need to grapple with how and where treated wastewater is discharged. Into water, or on to land, with permutations within each option. The economics of each set of solutions will be different, as will ability of each set to give effect to Te Mana o te Wai. This reenforces the comments made in paragraph 33 to 35.

45. In addition to the points raised above in relation to section 6 (Commission's duties), it is important that the Commission understands the WSEs statutory objectives, what is involved in three waters delivery, and the challenges facing the sector particularly in relation to climate change adaptation and mitigation. A key factor for success will be whether the Commission has the capacity and capability to perform its water economic regulatory and consumer protection duties. Water NZ notes the Commission's activities have recently expanded to include groceries and the retail payments system.

46. Water NZ **recommends** section 6 (Commission's duties) is expanded to include a requirement to ensure three waters services capacity and capability, and to take into account the WSEs statutory objectives.

47. Section 128 sets out the requirements for a person to be qualified for appointment as the Water Services Commissioner. This includes "…person's knowledge of, or experience in, the water services industry or any other industry, commerce, economics, law, accountancy, public administration, or consumer affairs." The water sector is different to other utilities currently regulated by the Commission. An understanding of the situation and the challenges facing the water sector should be given due weight in determining whether a person is qualified for the role of Water Services Commissioner.

48. Water NZ **recommends** that the requirement for the Water Services Commissioner (section 128) to have knowledge of the water sector should be strengthened.

49. Water NZ considers that consideration should be given to the default position being two Commissioners supporting the Water Services Commissioner. This will be a new and complex regime. The WSEs will also be new. Having a "team" considering these issues should reduce the risk of errors, and potentially avoidable merit reviews or questions of law.

50. Water NZ **recommends** further consideration is given to two Commissioners supporting the Water Services Commissioner as the regime is established.

Achieving a balance between certainty of process, and flexibility

51. Water NZ notes that when the Commission commences the regulation of a particular sector it typically follows some form of review or market study which has established that there is little or no competition and little or no likelihood of a substantial increase in competition. This is not the situation for water. Water NZ suggests the Commission should consider whether this will create 'gaps' or areas where they will not have the information that would normally have. For example, the costs and benefits of transitioning from Information Disclosure to Quality Regulation to Price-quality Regulation.

52. Water NZ **recommends** that a study is undertaken to assess the cost-benefit of transitioning from Information Disclosure to a quality regulatory regime, and to price-quality regulatory regime.

53. Water NZ notes that under section 15 the Commission must make determinations specifying how the input methodologies, quality regulation and price-quality regulation applies to regulated water services providers. Water NZ seeks to clarify whether it is the intention that the Commission may make quality regulation and price-quality regulation determinations that relate to each individual water services provider, akin to an individual or customised price quality path provided for under the Commerce Act 1986. Water NZ would be concerned if the intention was for the WSEs to be subject to some form of "default price quality" regulation. A default regime would fail to recognise the different circumstances of the four new WSEs and would be inappropriately constraining.

54. Water NZ **recommends** further clarity is provided around whether the WSEs will not be subject to *default information disclosure*, *default quality* or *default price quality* regulation.

55. It is important, however, that the input methodologies are common across WSEs. If this is not the case, it will create the potential for confusion across the broader sector.

56. Water NZ **recommends** that the Input Methodologies used must be the same for all WSEs.

57. Parts 2 and 3 each have a purpose statement. For certainty of process it is important that there is also a purpose statement for Part 4 (enforcement). Furthermore, there should be a consistent basis for decision making between the Commission and the courts, i.e. they both should use the same criteria or principles for determinations.

58. Water NZ **recommends** a purpose statement is added to Part 4, and this is added to the matters that the Commission and Minister must consider in section 5.

Workability

59. A staggered timetable for implementation of the 3 forms of regulation proposed is appropriate. It will take time for the four WSEs to be able to establish systems required for economic regulation. Water NZ queries whether section 18 has switched the order for the preparation of input methodologies.

    (a) Section 18(a) states that the Commission must determine input methodologies for *information disclosure* and *price-quality* regulation no later than 1 July 2026.

    (b) Section 18(b) indicates the Commission may determine input methodologies relating to *quality* regulation at any time after the input methodologies in section 18(a).

60. The task of establishing input methodologies for price-quality regulation should build on the Input Methodologies established for quality regulation, rather than the other way round.

61. Water NZ **recommends** that section 18(a) refers to information disclosure and quality regulation, and 18(b) to price-quality regulation.

62. Water NZ appreciates that the Bill provides for revisions in the schedule for activating the different components of the economic regulatory regime. However, we **recommend** that officials from across Department of Internal Affairs, the National Transition Unit, the Ministry of Business, Innovation & Employment, and staff from the WSEs should, in the period leading up to 1 July 2024, sense check whether the planned timeframe is appropriate, and subsequent timings to avoid overlapping/inconsistent plans and regulatory control periods.

63. Water NZ **recommends** the Input Methodologies must consider the requirements of the Funding & Pricing Plans, Asset Management Plans, and Infrastructure Strategies.

64. Section 12(b) refers to the provision of services 'at a quality that reflects consumer demands'. Water NZ suggests this should also reflect a level that consumers are prepared to *pay* for. An example of the trade-offs consumers around the country will need to consider is whether they collectively want to invest in new water supply or reduce demand for water. Average residential consumption of water is 280 litres per person per day (National Performance Review 2020/21), in Auckland it is ~140 litres per person per day. Maintaining consumption levels at ~280 litres per person per day may require significant water supply investments which may be less economic than behavioural changes which reduce demand, and the pressure to invest in new water sources. The respective Regional Representation Groups will likely have a view as to what are appropriate quality service levels (potentially through the Statement of Strategic and Performance Expectations (SSPE) required by the WSE Act).

65. Water NZ **recommends** section 12(b) is amended to include a reference to willingness to pay as well as demand.

66. Section 118 provides that quality regulation determinations, and decisions can be subject to merit review by the High Court, while Input Methodologies, price-quality and

information disclosure are subject only to judicial review. Water NZ considers that it would be appropriate for price-quality determinations and decisions to also be subject to merit review. Information disclosure and quality regulation impose material costs and obligations on a WSE and should have broader grounds for appeal. Information Disclosure for water will cover three waters, and three interacting networks. Relying on leveraging the current Information Disclosure regulations is not a reasonable basis for limiting the grounds for appeal. Further, the uniqueness of water and the establishment of economic regulation as the WSEs are being set up increases the risk of errors.

67. Water NZ **recommends** price-quality determinations, Information Disclosure and Input Methodologies are subject to merit reviews by the High Court.

68. Water NZ supports the repeal of section 38-40 of the WS Act. One complaints scheme will enhance consumer understanding and avoid unnecessary confusion. Water NZ notes that the Whanganui River has the legal status of a person under Te Awa Tupua (Whanganui River Claims Settlement) 2017 and may be captured by the definition of consumer. Water NZ does not a view on the appropriateness or not of the Whanganui River to be able to raise complaints, rather is raising this to illustrate the uniqueness of water for both economic regulation and consumer protection purposes.

69. Water NZ **recommends** consideration is given to the types of consumers, and the nature of the complaints that can be raised under the consumer protection scheme.

70. The WSEECP Bill is focussed on the consumer. However, water services and water infrastructure services are also consumed or experienced by communities. For example:

    (a) Wet weather wastewater overflows may be experienced by a group of consumers or a whole community rather than an individual household. The closures of beaches this summer, across the country, following storm events is an illustration of this.

    (b) A stormwater event may flood a property, a subdivision or large part of a community.

    (c) A drinking water contamination event may have detrimental health effects for a whole community. This was the case in Havelock North in 2016.

71. The decision to invest in infrastructure assets or broader services may reflect the needs of a wider community rather than individual consumers. For example, flooding may impact a neighbourhood which includes properties that are not on reticulated networks. Further, it is not immediately clear how those investments which impact communities should be considered in the context of workably competitive markets.

72. Water NZ **recommends** there is consideration of expanding the definition of consumer to include communities.

73. Water NZ is conscious that the reform of resource management legislation in parallel to this legislative reform. Water NZ has made submissions to the Local Government & Environment Committee. At the heart of those submissions is the need for the two sets of reforms to work together. Unlike Councils, the new WSEs are not plan makers under the Natural & Built Environment Bill, Spatial Planning & Climate Adaptation Bill.

74. Water NZ recommends:

(a) Amending the Spatial Planning Bill and Natural & Built Environment Bill to clarify that it is the DIA National Transition Unit/WSE Establishment CEs (until 1 July 2024) and the WSEs (or their chief executives) who have the primary responsibility for advocating for the interests of three waters infrastructure in the new system rather than councils. If this amendment is not made, inefficiencies may be built into the system which may not be taken into account by the Commission. For example, the SSSE, the Te Mana o te Wai Statements, the AMPs, the Infrastructure Strategies are all relevant to, and add value and efficiency to, the RSS and NBE plan process. There is no need to duplicate statutory planning processes; each should work with the other.

(b) Better integration of the NBE and SP bills with other legislation, including the WSE Act and this WSEECP Bill, by adding a new decision-making principle that requires all decision-makers to have regard to statements, plans and strategies prepared under other legislation.

75. Water NZ **recommends** there is greater cohesion with the resource management reforms.

76. Water NZ **recommends** that all decision-makers have regard to statements, plans and strategies prepared under other legislation, including the Spatial Planning Bill, the Natural & Built Environment Bill, and the Climate Adaptation Bill.

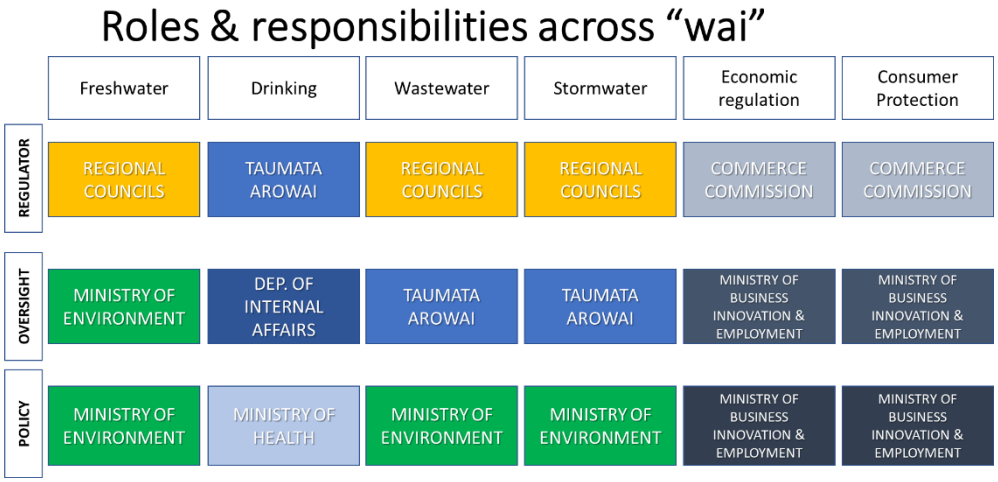
77. Under the WSE Act, and the WS Act the WSEs can be asked or instructed to take over supplies that "fail" or "need other forms of support". It is important that the WSEs are appropriately funded to undertake these tasks, which are unlikely to occur in a timely manner as regards the Regulatory Control Periods.

78. Water NZ **recommends** that provision is made for ad hoc adjustments to determinations as required should a WSE be required to take financial responsibility for "failing" supplies.

Further clarity required

79. Multiple agencies have responsibilities in relation to the regulation of wai. See figure below. It would be helpful if it the various regulators, oversight and policy setting roles could be confirmed.

80. Water NZ notes that the Commission rather than MBIE appear to have responsibility for advising the Minister and determining Government priorities in section 63. Water NZ is unclear whether this is the policy intent.



81. Water NZ **recommends** the agencies with responsibilities across wai are confirmed – regulation, oversight, and policy setting roles.

82. Water NZ **recommends** that this Bill enables the Commission to enter Memorandums of Understanding with Taumata Arowai, and other agencies as appropriate. This will facilitate establishment of sound understanding of each regime, and the avoidance of duplication and or increased compliance costs.

83. There appear to be several differences in definitions used across the various water specific legislation.

    (a) Definition of drinking water infrastructure services might not cover all infrastructure required for supply of potable water.

    (b) S7 includes a definition of water supply infrastructure services and refers to the infrastructure required for firefighting water supplies. Water NZ notes that this is broader than water contained in infrastructure.

    (c) Definition of wastewater infrastructure services is missing from the WSEECP Bill.

84. Water NZ **recommends** definitions are aligned across the various specific water services legislation.

85. Section 42(3)(b)(vii) requires WSEs to ring fence minimum amounts of revenue for investment purposes. This is a new provision – relative to other utilities regulated by the Commission. Water NZ queries how useful this measure will be, as after the fact the quantum will either be too little or too much.

86. Water NZ considers this could be improved by adopting a similar fund to one used by the Water Industry Commission for Scotland. Under this mechanism, Scottish Water is able to access additional funds when it has produced evidence that it would incur additional costs in selecting an investment option with a higher Net Present Value than the lowest forecast cost option, after allowing for externalities (carbon, natural and social capitals). The primary aim of the fund is to align with the Scottish Environmental Protection Agency’s ‘One Planet Prosperity’ and enables Scottish Water to propose investments that shift water infrastructure services and water services towards this overall vision.

87. In the context of Aotearoa New Zealand, this may facilitate reconciling Te Mana o te Wai and economic regulation, particularly when the proposed investments deliver improved access to beaches post a storm event or provide greater opportunities to harvest mahinga kai in important cultural areas. The key point is that initiatives that enable the WSEs to give effect to Te Mana o te Wai may not be captured in a commercial NPV analysis if the value is non-monetary or intangible. Having intangible value does not mean the activity or initiative has no value, rather that there is a need to capture its value in a different way, through option values calculated through hedonic pricing, travel cost methods for example.

88. Further, a fund of this sort may help address differences in commercial NPV analysis and outcomes that would occur if a social discount rate were adopted.

89. Section 52 provides for the Commission to direct the Board of a WSE to reconsider a Funding and Pricing Plan if it is inconsistent with any charging principles (specified in WSL Bill). This is inconsistent with the Cabinet Paper which suggests that the Commission should have the powers to "require the amendment" rather than to require the Board to reconsider the Funding and Pricing Plan.

90. Water NZ **recommends** it is clarified as to whether the Commission can require amendment or require the Board to reconsider the Funding and Pricing Plan.

91. Dispute resolution schemes such as Utilities Disputes (the approved scheme for electricity and gas under the Electricity Act and the Gas Act respectively) are free for consumers. We acknowledge that the costs of contributing to management of such schemes ultimately are recovered through charges to consumers. Providing for complaints schemes to be free for consumers means the barrier to participation/use is lower than would otherwise be the case. Water NZ is unclear whether a similar approach proposed for water complaints.

92. Water NZ **recommends** that consideration is given to whether the complaints scheme should be free to consumers.

93. Schedule 2, section 5(2) lists the principles that the Minister must use when considering whether to approve a complaints schemes application. These principles appear reasonable and reflect the Australian Department of Industry, Science and Tourism (DIST) benchmarks. Water NZ is unclear whether advice has been sought from MBIE's Government Centre for Dispute Resolution (GCDR). The purpose of GCDR is to build capability across government to design and deliver appropriate and accessible dispute resolution. The GCDR section of MBIE's website advises that "they can help you design policy, legislation and services for dispute resolution using a best practice lens"[1].

94. Water NZ **recommends** GCDR are asked to review schedule 2, and that the Commission and MBIE work with them in providing advice to the Minister on which application for the role of the consumer dispute resolution scheme should be approved.

95. In the future, consumers may receive water services and water infrastructure services from the four new WSEs or from other smaller water service providers. It is unclear

[1] https://www.mbie.govt.nz/cross-government-functions/government-centre-for-dispute-resolution/who-we-are/

whether the policy intent is for non-statutory water service providers to be subject to the consumer protection regime.

96. Water NZ **recommends** clarification is provided regarding the nature of water service providers that will be covered by the consumer protection regime.

Missing concepts

97. The size of the infrastructure deficit facing Aotearoa New Zealand is significant. To achieve outcomes desired in section 12 – innovation, investment, efficiencies, quality improvements, and lower prices than might otherwise occur – the WSEs need to be able to consider new ways of doing things, to explore transformations in a safe or supported environment.

98. Provision should be made within the regulatory construct for transformation to be enabled. Water NZ acknowledges this is part of a wider conversation but would like to ensure that there is scope within this Bill for the funding of special interest groups or centres of excellence that will facilitate and enable innovation to occur. Looking back, the Smart Grid Forum in the electricity sector served a useful purpose[2]. It was enabled with funding from both the electricity networks and the Ministry for Business, Innovation and Employment.

99. Appendix 2 provides further information on the matters[3] an industry levy could cover, and examples of industry levies currently operational.

100. Water NZ **recommends** that the economic regulatory regime is permissive in relation to the costs the WSEs may be able to recover from consumers with respect to innovation, transformation and the continued development of technical documents, standards and codes of practice. Part of the funding for this could be through an industry levy.

Select Committee Oral Submission

101. Water NZ would like to speak to this submission.

102. If you have any queries please contact, Gillian Blythe, Chief Executive, Water NZ.

[2] See New Zealand Smart Grid Forum | Ministry of Business, Innovation & Employment (mbie.govt.nz)
[3] Including for applied research, innovation centre, the development of technical guides, maintenance of standards and codes of practice.

Appendix 1: Summary of Water NZ recommendations

Consistency & cohesion

103. Water NZ **recommends** that section 12 is expanded to reflect the need for economic regulation to also support the WSEs meeting their statutory objectives and wider operating principles.

104. The WSEECP Bill focuses on water infrastructure, **recommend** this is expanded to explicitly include water services.

105. Water NZ **recommends** that the matters that the Commission is required to take into account are expanded to include statutory objectives and functions specified for the WSEs in section 12 of the WSE Act, and then section 13 of the WSE Act following its amendment in the Water Services Legislation Bill.

106. **Recommend** that Commission should have regard to a gazetted GPS-WS.

107. Water NZ **recommends** that the Bill reenforces the need for the two regulators to work closely together, as there will need to be a specific direction to override section 8 of the Commerce Act which requires the Commission to act independently when performing its functions. **Recommend** further clarity is provided in relation to how funding, quality and information disclosure for drinking water safety initiatives is considered and taken account of by the Commission.

108. **Recommend** provision is made to enable Taumata Arowai and the Commission to share data collected.

109. **Recommend** alignment in scheduling of Regulatory Control Periods, and the various plans or strategies produced by the WSEs.

110. Water NZ **recommends** that the penalty regimes under the WS Act and this Bill are reviewed for consistency.

111. Water NZ **recommends** that 'supporting and enabling climate change adaptation' is added to section 5 (2)(c).

Te Mana o te Wai / Te Tiriti o Waitangi

112. **Recommend** the Commission or Minister is required to give greater weight to Te Mana o te Wai Statements than currently provided for in section 5 and is required to consult with interested parties and publish the decision and justification where Te Mana o te Wai Statements are not permitted to be fully given effect to due to Commission decisions.

113. Water NZ **recommends** section 6 of the WSEECP Bill is expanded to include a requirement for continuing education of the Commission on the principles of te Tiriti o Waitangi/Treaty of Waitangi.

Recognise sector differences whilst leveraging the wider economic regulatory regime

114. Water NZ **recommends** the Commission engages with the WSEs (and their respective governance groups), the wider water sector, mana whenua and community stakeholders to test whether the uniqueness of water, and the differences to the other

utilities regulated under the Commerce Act 1996 have been appropriately considered..

115. Water NZ **recommends** s6 (Commission's duties) is expanded to include a requirement to ensure three waters services capacity and capability, and to take into account the WSEs statutory objectives.

116. Water NZ **recommends** that the requirement for the Water Services Commissioner (section 128) to have knowledge of the water sector should be strengthened.

117. Water NZ **recommends** further consideration is given to two Commissioners supporting the Water Services Commissioner as the regime is established.

Achieving a balance between certainty of process, and flexibility

118. Water NZ **recommends** that a study is undertaken to assess the cost-benefit of transitioning from Information Disclosure to a quality regulatory regime, and to price-quality regulatory regime.

119. Water NZ **recommends** further clarity is provided around whether the WSEs will not be subject to *default information disclosure*, *default quality* or *default price quality* regulation.

120. Water NZ **recommends** that the Input methodologies used must be the same for all WSEs.

121. Water NZ **recommends** a purpose statement is added to Part 4, and this is added to the matters that the Commission and Minister must consider in section 5.

Workability

122. Water NZ **recommends** that section 18(a) refers to information disclosure and quality regulation, and 18(b) to price-quality regulation.

123. Water NZ **recommends** the Input Methodologies must consider the requirements of the Funding & Pricing Plans, Asset Management Plans and Infrastructure Strategies.

124. Water NZ **recommends** that officials from across Department of Internal Affairs, the National Transition Unit, the Ministry of Business, Innovation & Employment, and staff from the WSEs should sense check in the period leading up to 1 July 2024 whether the planned timeframe is appropriate, and subsequent timings to avoid overlapping/inconsistent plans and regulatory control periods.

125. Water NZ **recommends** section 12(b) is amended to include a reference to willingness to pay as well as demand.

126. Water NZ **recommends** price-quality determinations are subject to merit reviews by the High Court.

127. Water NZ **recommends** consideration is given to the types of consumers, and the nature of the complaints that can be raised under the consumer protection scheme.

128. Water NZ **recommends** there is consideration of expanding the definition of consumer to include communities.

129. Water NZ **recommends** there is greater cohesion with the resource management reforms.

130. Water NZ **recommends** that all decision-makers have regard to statements, plans and strategies prepared under other legislation, including the Spatial Planning Bill, the Natural & Built Environment Bill, and the Climate Adaptation Bill.

131. Water NZ **recommends** that provision is made for ad hoc adjustments to determinations as required should a WSE be required to take financial responsibility for "failing" supplies.

Further clarity required

132. Water NZ **recommends** the agencies with responsibilities across wai are confirmed – regulation, oversight and policy setting roles.

133. Water NZ **recommends** that this Bill enables the Commission to enter into Memorandums of Understanding with Taumata Arowai, and other agencies as appropriate.

134. Water NZ **recommends** it is clarified as to whether then Commission can require amendment or require the Board to reconsider the Funding and Pricing Plan.

135. Water NZ **recommends** definitions are aligned across the various specific water services legislation.

136. Water NZ **recommends** that consideration is given to whether the complaints scheme should be free to consumers.

137. Water NZ **recommends** Government Centre for Dispute Resolution are asked to review schedule 2, and that the Commission and MBIE work with them in providing advice to the Minister on which application for the role of the consumer dispute resolution scheme should be approved.

138. Water NZ **recommends** clarification is provided to the nature of water service providers that will be covered by the consumer protection regime.

Missing concepts

139. Water NZ **recommends** that the economic regulatory regime is permissive in relation to the costs the WSEs may be able to recover from consumers with respect to innovation, transformation and the continued development of technical documents, standards and codes of practice. Part of the funding for this could be recovered through an industry levy.

Appendix 2: Water Levy

1. Funding is needed for applied research to support the industry and address the specific cultural, social, economic, and environmental water service provision in Aotearoa. Existing innovation funding is concentrated on fundamental research and does not support the "last mile" between research innovation and practical application. Institutional and funding support is needed to support innovations moving from the academic sphere to implementation. This would include innovations that include new treatment methods, non-asset solutions to water delivery, and digital innovation.

2. An innovation broker is needed to provide an enabling environment to trial new technologies in a 'safe' way, reduce duplication of effort, and support collaboration between the research community, product developers, and industry. An industry levy could support an innovation broker, to enable national collaboration in sharing the risks of adopting new technologies and advancing the substantial benefits achievable through innovation.

3. The development of industry standards is managed by Standards New Zealand. Standards New Zealand does not receive direct government funding and operates on a cost recovery basis. Due to lack of funding several New Zealand Standards that establish essential operating protocols for the water sector are currently not upkept and are out of date. Two notable examples are:

    - NZS 4411:2001 Environmental standard for drilling of soil and rock which sets out standards for constructing testing and maintenance of rock. An update of the standard was a recommendation of the Havelock North Inquiry, to minimise the risks of a further similar outbreak. To date an update of the standard has fallen outside the operational interests of Ministry of Health and Taumata Arowai and has not been actioned.

    - NZS 4404:2010 Land development and subdivision infrastructure provides local authorities, developers, and their professional advisors with criteria for design and construction of land development and subdivision infrastructure, including stormwater, wastewater, and water supply. Design criteria for water supply is not keeping step with current operational conditions, meaning areas using the standard are delivering sub-optimal environmental outcomes. At current inflow and infiltration levels, 13% of wastewater networks constructed in accordance with New Zealand design standards for new developments, will fail to contain sewage overflows resulting from a storm event with a once annual recurrence interval[4].

4. The water sector also uses over 100 joint Australian New Zealand Standards, a full list is provided at the end of this submission. Administrative costs of a technical area recently required ~$7,500 AS/NZS 4087:2011 Metallic flanges for waterworks purposes. Development of AS/NZS 5328:2022 Flushable products to help reduce wastewater blockages was covered by the sector costing $30,000. Currently industry is seldom able to fund the administrative costs associated with standards development, meaning many existing industry standards are disjointed, preventing New Zealand from having input to ensure local conditions are met.

[4] Water New Zealand, National Performance Review 2019-2020
https://www.waternz.org.nz/Attachment?Action=Download&Attachment_id=5110

5. National collaboration to establish joint practices for data management[5], and development of a national code of practice have been established by the Building Innovation Partnership (BIP) and the DIA National Transition Unit respectively. Both of these organisations are funded for limited timeframes. There is currently no clear home for either the data standards or code of practice to be maintained beyond the funded life of these agencies. An industry levy would support the ongoing development and maintenance of these common practices. The underpinning consistency these provide would support national collaboration and economic efficiency of service delivery.

6. Technical guides are a pragmatic and enduring way of enabling knowledge transfer across organisations. Water New Zealand maintains a suite of technical guidelines whose development has been funded through a Water Services Managers Group levy, a collective of territorial authority water managers and their agents. The levy will no longer exist following the establishment of new entities. The guidelines cover issues such as asbestos cement pipe management, fluoride dosing, and inflow and infiltration management. The establishment of an industry levy would support the maintenance and development of such guides into the future, enabling national collaboration in the advancement of good practice.

7. Constrained water resources and rising demand are an increasing concern for water service delivery. Risk to potable water supplies (availability and quality) are listed in New Zealand's National Climate Change Risk Assessment as our most urgent climate risk[6]. High residential water usage rates, currently average 281 litres per day[7], are significantly in excess of proposed initial and final caps of 145 and 75 litres/per/day proposed in MBIE's Building for Climate Change programme[8]. Significant uplift in customer water use efficiency will be required to manage our future water use within the changing limits of our water resources whilst meeting the ever-increasing pressures of population growth, land development and economic intensification. A wellresourced and effective wide-spread customer education programme will be required to achieve this. National collaboration in the delivery of customer education programmes would enable more effective and efficient messaging. Funding for such a campaign could be supported through an industry levy.

8. Industry levies are a commonly applied method for funding national collaboration in the delivery of New Zealand infrastructure, that could also be applied to water service delivery. Three New Zealand examples are shown in the table:

	Telecommunications levy	Electricity Industry Levy	The Building levy
Enabling legislation	The Telecommunications Development Levy (TDL) was established by legislation in June 2011	Established under the Electricity Industry (Levy of Industry Participants) Regulations 2010.	Established under the Building Act 2004

[5] Building Innovation Partnership: Three Waters: Asset Data Codes of Practice https://bipnz.org.nz/877-2 /
[6] Ministry for the Environment, National Climate Change Risk Assessment for New Zealand https://environment.govt.nz/assets/Publications/Files/national-climate-change-risk-assessment-new-zealand-snapshot.pdf
[7] Water New Zealand, 2020-21 National Performance Review
[8] MBIE, Transforming Operational Efficiency https://www.mbie.govt.nz/dmsdocument/11793-transforming-operational-efficiency

Funding source	Collected from telco utilities as part of the telecommunications act	The levy is directly charged to industry participants. They may pass this cost on to consumers - this means a power bill could show the levy, or it could be included in other costs.	payable by building owners or developers on successful building consent applications for projects that are worth more than a prescribed threshold of $20,333.
Amount	$10 million a year	Set based on costs of the Electricity Authority, EECA, electricity efficiency programmes and the quantity of electricity generated, purchased and conveyed, plus the number of consumer connections.	The building levy rate from 1 July 2020 is $1.75 (including GST) per $1,000 and part $1,000.
Covers	Pays for telecommunications infrastructure including the relay service for the deaf and hearing-impaired, broadband for rural areas, and improvements to the 111 emergency service.	Funds the Electricity Authority and the energy efficiency programmes delivered by the Energy Efficiency and Conservation Authority (EECA).	Funds MBIE functions and activities under the Building Act 2004 including: policy, technical rules and guidance, operational policy advice and service design information and education service delivery (compliance and enforcement) and monitoring and reporting.

9. Water NZ **recommends** the establishment of an industry levy on WSEs to deliver on national collaboration on standards, good practice, customer education and support s13(m) Functions of Water Service Entities under the WSL Bill "to facilitate, promote, and support research, education, and training relating to water services".

JOINT AUSTRALIAN AND NEW ZEALAND STANDARDS PERTAINING TO THE WATER SECTOR

(Joint) Standard number	Standard name
1254:2010	PVC-U pipes and fittings for stormwater and surface water applications
1260:2017	PVC-U pipes and fittings for drain, waste and vent applications
1462.1:2006	Methods of test for plastics pipes and fittings - Method for determining the dimensions of pipes and fittings
1462.10:1998	Methods of test for plastics pipes and fittings - Method for hydrostatic pressure testing of fittings and elastomeric seal joints for non-pressure applications
1462.11:1996	Methods of test for plastics pipes and fittings - Method 11: Method for high temperature stress-relief testing of fittings
1462.13:2006	Methods of test for plastics pipes and fittings - Method for the determination of elastomeric seal joint contact width and pressure
1462.14:1996	Methods of test for plastics pipes and fittings - Method 14: Method for determination of the light transmission of pipe
1462.15:1996	Methods of test for plastics pipes and fittings - Method 15: Method for determination of vinyl chloride monomer content

1462.16:2006	Methods of test for plastics pipes and fittings - Method for high temperature testing of pipe
1462.19:2006	Methods of test for plastics pipes and fittings - C-ring test for fracture toughness of PVC pipes
1462.2:2006	Methods of test for plastics pipes and fittings - Method for determining the flattening properties of plastics pipes and fittings
1462.20:1996	Methods of test for plastics pipes and fittings - Method 20: Method for determination of long-term failure stress of PVC moulding compounds
1462.21:1997	Methods of test for plastics pipes and fittings - Method 21: Method for determination of bond strength
1462.22:1997	Methods of test for plastics pipes and fittings - Method 22: Method for determination of pipe stiffness
1462.23:2006	Methods of test for plastics pipes and fittings - Method for determination of ring flexibility
1462.25:2005	Methods of test for plastics pipes and fittings - Determination of slow-crack-growth of PE (polyethylene) resins - Notched, constant ligament-stress (NCLS) method
1462.26:2003	Methods of test for plastics pipes and fittings - Method 26: Determination of weathering resistance of plastics pipes for external storage
1462.27:2003	Methods of test for plastics pipes and fittings - Method 27: Determination of toluene extract of carbon black
1462.28:2003	Methods of test for plastics pipes and fittings - Method 28: Method for the assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds
1462.29:2006	Methods of test for plastics pipes and fittings - Plastics piping and ducting systems - Determination of the long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation
1462.3:1998	Methods of test for plastics pipes and fittings - Method for determining the impact characteristics of pipes
1462.4:2002	Methods of test for plastics pipes and fittings - Method for determining reversion of plastic pipes
1462.5:2002	Methods of test for plastics pipes and fittings - Vicat softening temperature
1462.6:2008	Methods of test for plastics pipes and fittings - Thermoplastics pipes, fittings and assemblies for the transport of fluids under pressure - Resistance to internal pressure
1462.8:2008	Methods of test for plastics pipes and fittings - Method of testing the leaktightness of assemblies
1477:2017	PVC pipes and fittings for pressure applications
1516:1994	The cement mortar lining of pipelines in situ
1546.1:2008	On-site domestic wastewater treatment units - Septic tanks
1546.2:2008	On-site domestic wastewater treatment units - Waterless composting toilets
1546.3:2008	On-site domestic wastewater treatment units - Aerated wastewater treatment systems
1547:2012	On-site domestic wastewater management
2031:2001	Selection of containers and preservation of water samples for microbiological analysis
2032:2006	Installation of PVC pipe systems
2033:2008	Installation of polyethylene pipe systems
2040.1:2021	Performance of household electrical appliances - Dishwashers, Part 1: Methods for measuring performance, energy and water consumption
2041.1:2011	Buried corrugated metal structures - Part 1: Design methods
2041.2:2011	Buried corrugated metal structures - Installation
2041.4:2010	Buried corrugated metal structures - Helically formed sinusoidal pipes
2041.6:2010	Buried corrugated metal structures - Bolted plate structures
2041:1998	Buried corrugated metal structures
2179.1:2014	Specifications for rainwater goods, accessories and fasteners - Part 1: Metal shape or sheet rainwater goods, and metal accessories and fasteners
2280:2020	Ductile iron pipes and fittings
2442.1:2021	Performance of household electrical appliances - Rotary clothes dryers, Part 1: Methods for measuring performance, energy and water consumption.
2492:2007	Cross-linked polyethylene (PE-X) pipes for pressure applications
2537.1:2011	Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications - Part 1: Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) – General
2537.2:2011	Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications - Part 2: Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) – Fittings
2537.3:2011	Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications - Part 3: Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Fitness for purpose of the system
2537.4:2011	Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications - Part 4: Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Guidance for the assessment of conformity
2537.5:2011	Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) for pressure applications - Part 5: Plastics pipes and fittings - Crosslinked polyethylene (PE-X) pipe systems for the conveyance of gaseous fuels - Metric series - Specifications - Fittings for mechanical jointing (including PE-X/metal transitions)
2544:1995	Grey iron pressure fittings

2566.1:1998	Buried flexible pipelines - Structural design - Commentary (Supplement to AS/NZS 2566.1:1998)
2566.1:1998	Buried flexible pipelines - Part 1: Structural design
2566.2:2002	Buried flexible pipelines - Installation
2638.1:2011	Gate valves for waterworks purposes - Part 1: Metal seated
2638.2:2011	Gate valves for waterworks purposes - Part 2: Resilient seated
2642.1:2007	Polybutylene (PB) plumbing pipe systems - Polybutylene (PB) pipe extrusion compounds
2642.2:2008	Polybutylene (PB) plumbing pipe systems - Polybutylene (PB) pipe for hot and cold water applications
2642.3:2008	Polybutylene (PB) plumbing pipe systems - Mechanical jointing fittings for use with polybutylene (PB) pipes for hot and cold water applications
2712:2007	Solar and heat pump water heaters - Design and construction
2845.1:2022	Water supply – Backflow prevention devices, Part 1: Materials, design and performance requirements
2845.3:2020	Water supply - Backflow prevention devices, Part 3: Field testing and maintenance of testable devices
3497:1998	Drinking water treatment units - Plumbing requirements
3499:2006	Water supply - Flexible hose assemblies
3500.0:2021	Plumbing and drainage, Part 0: Glossary of terms
3500.1.2:1998 INCORP A1	Plumbing and drainage - Water supply - Acceptable solutions
3500.1:2003	Plumbing and drainage - Water services
3500.1:2021	Plumbing and drainage, Part 1: Water services
3500.2.2:1996	Plumbing and drainage - Sanitary plumbing and drainage - Acceptable solutions
3500.2:2021	Plumbing and drainage, Part 2: Sanitary plumbing and drainage
3500.3.2:1998	Plumbing and drainage - Stormwater drainage - Acceptable solutions
3500.3:2021	Plumbing and drainage, Part 3: Stormwater drainage
3500.4.2:1997	Plumbing and drainage - Hot water supply systems - Acceptable solutions
3500.4:2021	Plumbing and drainage, Part 4: Heated water services
3500.5:2012	Plumbing and drainage - Part 5: Housing installations
3518:2013	Acrylonitrile butadine styrene (ABS) compounds, pipes and fittings for pressure applications
3558.12:1995	Methods of testing plastics and composite materials sanitary plumbing fixtures - Determination of resistance to thermal shock of baths for ablutionary purposes
3690:2009	Installation of ABS pipe systems
3707:2001	Method for testing pressure cycling resistance of pipes and fittings
3718:2005	Water supply - Tap ware
3725 Supplement 1:2007	Design for installation of buried concrete pipes – Commentary
3725:2007	Design for installation of buried concrete pipes
3823.1.3:2005	Performance of electrical appliances - Airconditioners and heat pumps - Water-source heat pumps - Water-to-air and brine-to-air heat pumps - Testing and rating of performance
3879:2011	Solvent cements and priming fluids for PVC (PVC-U and PVC-M) and ABS and ASA pipes and fittings
4020:2018	Testing of products for use in contact with drinking water
4049.3:1996	Paints and related materials - Road marking materials - Waterborne paint - For use with drop-on beads
4058:2007	Precast concrete pipes (pressure and non-pressure)
4087:2011	Metallic flanges for waterworks purposes
4129:2020	Fittings for polyethylene (PE) pipes for pressure applications
4130:2018	Polyethylene (PE) pipes for pressure applications
4131:2010	Polyethylene (PE) compounds for pressure pipes and fittings
4158.1:1994	Polymeric coatings on valves and fittings for water industry purposes - Thermal bonded coatings
4158:2003	Thermal-bonded polymeric coatings on valves and fittings for water industry purposes
4201.4:1994	Pliable building membranes and underlays - Methods of test - Resistance to water penetration
4201.6:1994	Pliable building membranes and underlays - Methods of test - Surface water absorbency
4327:1995	Metal-banded flexible couplings for low-pressure applications
4331.1:1995	Metallic flanges - Steel flanges
4331.2:1995	Metallic flanges - Cast iron flanges

4331.3:1995	Metallic flanges - Copper alloy and composite flanges
4348:1995	Water supply - Domestic type water treatment appliances - Performance requirements
4401(Int):1999	High-density polyethylene (PE-HD) pipes and fittings for soil and waste discharge (low and high temperature) systems inside buildings - Specifications
4401:2006	Plastics piping systems for soil and waste discharge (low and high temperature) inside buildings - Polyethylene (PE)
4441:2017	Oriented PVC (PVC-O) pipes for pressure applications
4765(Int):2000	Modified PVC (PVC-M) pipes for pressure applications
4765:2017	Modified PVC (PVC-M) pipes for pressure applications
4766:2020	Rotationally moulded buried, partially buried and non-buried storage tanks for water and chemicals
4793:2009	Mechanical tapping bands for waterworks purposes
4798(Int):2005	Polyethylene maintenance shafts
4936:2002	Air admittance valves (AAVs) for use in sanitary plumbing and drainage systems
4998:2009	Bolted unrestrained mechanical couplings for waterworks purposes
5065:2005	Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications
5328:2022	Flushable products
5667.1:1998	Water quality - Sampling - Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
5667.10:1998	Water quality - Sampling - Guidance on sampling of waste waters
5667.11:1998	Water quality - Sampling - Guidance on sampling of groundwaters
5667.12:1999	Water quality - Sampling - Guidance on sampling of bottom sediments
5667.4:1998	Water quality - Sampling - Guidance on sampling from lakes, natural and man-made
5667.5:1998	Water quality - Sampling - Guidance on sampling of drinking water and water used for food and beverage processing
5667.6:1998	Water quality - Sampling - Guidance on sampling of rivers and streams
5667.7:1998	Water quality - Sampling - Guidance on sampling of water and steam in boiler plants
5667.8:1998	Water quality - Sampling - Guidance on the sampling of wet deposition
5667.9:1998	Water quality - Sampling - Guidance on sampling from marine waters
6400:2016	Water efficient products - Rating and labelling
7671:2010	Plastics piping systems for soil and waste discharge (low and high temperature) inside buildings - Polypropylene (PP)