I hereby give notice that an ordinary meeting of the Environment and Community Committee will be held on:

**Date:** Tuesday, 12 February 2019  
**Time:** 9.30am  
**Meeting Room:** Reception Lounge  
**Venue:** Auckland Town Hall  
301-305 Queen Street  
Auckland

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**Komiti Taiao ā-Hapori Hoki / Environment and Community Committee**

**OPEN AGENDA**

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**MEMBERSHIP**

- **Chairperson:** Cr Penny Hulse  
- **Deputy Chairperson:** Cr Alf Filipaina  
- **Members:**  
  - Cr Josephine Bartley  
  - IMSB Member Renata Blair  
  - IMSB Member James Brown  
  - Cr Dr Cathy Casey  
  - Deputy Mayor Cr Bill Cashmore  
  - Cr Ross Clow  
  - Cr Fa’anana Efeso Collins  
  - Cr Linda Cooper, JP  
  - Cr Chris Darby  
  - Cr Hon Christine Fletcher, QSO  
  - Mayor Hon Phil Goff, CNZM, JP  
  - Cr Richard Hills  
  - Cr Mike Lee  
  - Cr Daniel Newman, JP  
  - Cr Greg Sayers  
  - Cr Desley Simpson, JP  
  - Cr Sharon Stewart, QSM  
  - Cr Sir John Walker, KNZM, CBE  
  - Cr Wayne Walker  
  - Cr John Watson  
  - Cr Paul Young

(Quorum 11 members)

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Maea Petherick  
Senior Governance Advisor

7 February 2019

Contact Telephone: (09) 890 8136  
Email: maea.petherick@aucklandcouncil.govt.nz  
Website: www.aucklandcouncil.govt.nz

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**Note:** The reports contained within this agenda are for consideration and should not be construed as Council policy unless and until adopted. Should Members require further information relating to any reports, please contact the relevant manager, Chairperson or Deputy Chairperson.
Terms of Reference

Responsibilities
This committee deals with all strategy and policy decision-making that is not the responsibility of another committee or the Governing Body. Key responsibilities include:

- Development and monitoring of strategy, policy and action plans associated with environmental, social, economic and cultural activities
- Natural heritage
- Parks and reserves
- Economic development
- Protection and restoration of Auckland’s ecological health
- Climate change
- The Southern Initiative
- Waste minimisation
- Libraries
- Acquisition of property relating to the committee’s responsibilities and within approved annual budgets
  - Performing the delegations made by the Governing Body to the former Parks, Recreation and Heritage Forum and Regional Development and Operations Committee, under resolution GB/2012/157 in relation to dogs
- Activities of the following CCOs:
  - ATEED
  - RFA

Powers
(i) All powers necessary to perform the committee’s responsibilities, including:
  (a) approval of a submission to an external body
  (b) establishment of working parties or steering groups.
(ii) The committee has the powers to perform the responsibilities of another committee, where it is necessary to make a decision prior to the next meeting of that other committee.
(iii) The committee does not have:
  (a) the power to establish subcommittees
  (b) powers that the Governing Body cannot delegate or has retained to itself (section 2)
Exclusion of the public – who needs to leave the meeting

Members of the public
All members of the public must leave the meeting when the public are excluded unless a resolution is passed permitting a person to remain because their knowledge will assist the meeting.

Those who are not members of the public

General principles
- Access to confidential information is managed on a “need to know” basis where access to the information is required in order for a person to perform their role.
- Those who are not members of the meeting (see list below) must leave unless it is necessary for them to remain and hear the debate in order to perform their role.
- Those who need to be present for one confidential item can remain only for that item and must leave the room for any other confidential items.
- In any case of doubt, the ruling of the chairperson is final.

Members of the meeting
- The members of the meeting remain (all Governing Body members if the meeting is a Governing Body meeting; all members of the committee if the meeting is a committee meeting).
- However, standing orders require that a councillor who has a pecuniary conflict of interest leave the room.
- All councillors have the right to attend any meeting of a committee and councillors who are not members of a committee may remain, subject to any limitations in standing orders.

Independent Māori Statutory Board
- Members of the Independent Māori Statutory Board who are appointed members of the committee remain.
- Independent Māori Statutory Board members and staff remain if this is necessary in order for them to perform their role.

Staff
- All staff supporting the meeting (administrative, senior management) remain.
- Other staff who need to because of their role may remain.

Local Board members
- Local Board members who need to hear the matter being discussed in order to perform their role may remain. This will usually be if the matter affects, or is relevant to, a particular Local Board area.

Council Controlled Organisations
- Representatives of a Council Controlled Organisation can remain only if required to for discussion of a matter relevant to the Council Controlled Organisation.
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1 Apologies
At the close of the agenda no apologies had been received.

2 Declaration of Interest
Members are reminded of the need to be vigilant to stand aside from decision making when a conflict arises between their role as a member and any private or other external interest they might have.

3 Confirmation of Minutes
That the Environment and Community Committee:
   a) confirm the ordinary minutes of its meeting, held on Tuesday, 4 December 2018, including the confidential section, as a true and correct record.

4 Petitions
At the close of the agenda no requests to present petitions had been received.

5 Public Input
Standing Order 7.7 provides for Public Input. Applications to speak must be made to the Governance Advisor, in writing, no later than one (1) clear working day prior to the meeting and must include the subject matter. The meeting Chairperson has the discretion to decline any application that does not meet the requirements of Standing Orders. A maximum of thirty (30) minutes is allocated to the period for public input with five (5) minutes speaking time for each speaker.

5.1 Public Input : Study by Ngai Tai ki Tamaki and NIWA re sediment discharging effects form Wairoa river into the Tamaki straight

Te take mō te pūrongo
Purpose of the report
1. To present a six year study by Ngai Tai ki Tamaki and NIWA of the fine sediment discharging effects from the Wairoa river into the Tamaki straight.
2. Andrew Swales, NIWA and representatives of Ngai Tai ki Tamaki will present the study

Ngā tūtohunga
Recommendation/s
That the Environment and Community Committee:
   a) receive the presentation regarding the six year study of sediment discharging effects from Wairoa river into the Tamaki straight and thank the representatives from Ngai Tai ki Tamaki and Niwa for their attendance.
6 Local Board Input

Standing Order 6.2 provides for Local Board Input. The Chairperson (or nominee of that Chairperson) is entitled to speak for up to **five (5)** minutes during this time. The Chairperson of the Local Board (or nominee of that Chairperson) shall wherever practical, give **one (1)** day’s notice of their wish to speak. The meeting Chairperson has the discretion to decline any application that does not meet the requirements of Standing Orders.

This right is in addition to the right under Standing Order 6.1 to speak to matters on the agenda.

At the close of the agenda no requests for local board input had been received.

7 Extraordinary Business

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“An item that is not on the agenda for a meeting may be dealt with at that meeting if-

(a) The local authority by resolution so decides; and

(b) The presiding member explains at the meeting, at a time when it is open to the public,-

(i) The reason why the item is not on the agenda; and

(ii) The reason why the discussion of the item cannot be delayed until a subsequent meeting.”

Section 46A(7A) of the Local Government Official Information and Meetings Act 1987 (as amended) states:

“Where an item is not on the agenda for a meeting,-

(a) That item may be discussed at that meeting if-

(i) That item is a minor matter relating to the general business of the local authority; and

(ii) the presiding member explains at the beginning of the meeting, at a time when it is open to the public, that the item will be discussed at the meeting; but

(b) no resolution, decision or recommendation may be made in respect of that item except to refer that item to a subsequent meeting of the local authority for further discussion.”
Waikumete Cemetery: initial public engagement on potential development zones

File No.: CP2018/24445

Te take mō te pūrongo
Purpose of the report
1. To seek approval from the Environment and Community Committee for public engagement in relation to the potential development zones for additional burial capacity within Waikumete Cemetery.

Whakarāpopototanga matua
Executive summary
2. Waikumete Cemetery is one of three large cemeteries operated by Auckland Council. There is currently little remaining lawn burial capacity at Waikumete, and no remaining areas within the cemetery that allow for easy development of additional burial plots.

3. The governing body is the allocated decision maker for council’s operational cemeteries.

4. Council is investigating the opportunities for the development of additional burial capacity within Waikumete Cemetery. The first phase of this work has been to undertake an initial assessment of potential zones for development.

5. A number of factors influence the feasibility of creating additional burial capacity, including:
   - Ecological values, particularly of the existing ‘gumlands’ ecosystem
   - Historic heritage values of the graves, memorials and buildings
   - Physical constraints such as topography, ground conditions, drainage, access
   - Regulatory constraints including the Unitary Plan and Heritage NZ
   - Operational requirements for the continuing delivery of cemetery services
   - Financial constraints such as cost of development, operations and maintenance.

6. Areas have been identified within the cemetery where expansion of burial capacity may be possible, alongside areas where development is not recommended.

7. A range of burial methods has also been identified which could increase burial capacity.

8. Staff recommend a period of public engagement to gauge the public’s appetite for both expansion of new areas for burials, and for different forms of burial. The feedback from this engagement will inform the recommendations in the Waikumete Cemetery Feasibility Study.

Ngā tūtohunga
Recommendations
That the Environment and Community Committee:

a) approve the proposed public engagement plan to inform the Waikumete Cemetery Feasibility Study

b) approve the inclusion of the potential development Zones 1 and 2 in the public consultation documentation

c) approve the exclusion of the potential development Zone 3, 4 and 5 from the public consultation documentation

d) approve the inclusion of the information about different burial types in the public consultation documentation.
Horopaki

Context

Background

9. At 107 hectares, Waikumete Cemetery is the largest cemetery in New Zealand, and the largest public open space in west Auckland between the CBD and the Waitakere Ranges.

10. Waikumete Cemetery is a record of Auckland society and culture of the last 140 years. Due to the incremental nature of development, the cemetery has developed distinctive historical landscapes, with different denominational areas, historical buildings, monuments, graves, and memorials to those who died in the 1918 influenza epidemic, two world wars and the Erebus disaster.

11. The whole of the Waikumete Cemetery is identified in the Unitary Plan as a Category A* historic heritage place which is applied to places considered to be of outstanding significance well beyond their immediate environs.

12. The cemetery landscape encompasses formal patterns of the burial plots in parallel lines, natural patterns of vegetation on the steep hills and gullies, as well, as the valued ecological areas of gumlands, which are a transitional landscape over the original kauri gum digging areas. It is also home to regionally significant flora (native orchid) and fauna (skink, gecko). Originally there were kauri growing on the ridges, kauri and podocarp forest on the hillsides, and broadleaf wetlands in the gullies.

Cemetery provision and capacity in Auckland

13. Waikumete Cemetery is one of three large cemeteries in Auckland, alongside Manukau Memorial Gardens and North Shore Memorial Park.

14. Within four years it is anticipated that Waikumete Cemetery will run out of lawn burial plots available for purchase. It will remain an active cemetery for at least another sixty years due to the use of pre-purchased plots, the option for double burials in a plot, space available for many more ash and natural burials and the ongoing use of the crematorium.

15. Manukau Memorial Gardens has sufficient space for to accommodate lawn burial sales until 2035, and North Shore Memorial Park until 2050.

16. While existing cemeteries provide adequate capacity in the north and south of the region, there is an identified need to provide additional capacity in the west. This may be provided in part through increasing the burial capacity at Waikumete.

17. Panuku is leading a concurrent project exploring land purchase options for future designated public cemeteries in north west Auckland.

Past planning for additional burial capacity at Waikumete

18. Plans for increasing burial capacity at Waikumete Cemetery have been considered for many years. These plans have variously sought to balance the need for burial space against the desire to protect other values within the cemetery, particularly ecological values.

19. In 1998, the Waitakere City Council prepared the Waikumete Cemetery Management Plan. In this plan, much of the undeveloped areas of the cemetery were protected due to their ecological values. This aligned with the Waitakere City Plan (Waitakere Section, Natural Areas, map F9).

20. In 2001, a Conservation and Reserve Management Plan was approved. These plans had a strong emphasis on history and conservation, but proposed development of new burial plots into the vegetated gumlands spur while retaining the vegetated gullies.

21. In 2010, with the growing pressure for more plots within the cemetery, the Waitakere City Council prepared the Waikumete Cemetery Expansion Report. This report proposed maximising burial plots by developing much of the gumlands area. New suitable cemetery sites within the Waitakere City boundaries were also investigated.

Regulatory protection of gumlands

23. In 2013, the gumlands were identified as a Significant Ecological Area (SEA) in the Draft Auckland Unitary Plan. Vegetation alteration or removal within a SEA requires resource consent.

24. The area of vegetation identified as SEA in the draft plan was reduced in the Proposed Auckland Unitary Plan. This reduction enabled an easier regulatory process for the expansion of burials into the gumlands.

25. A submission was made at the 2015 Proposed Auckland Unitary Plan Hearings seeking to reinstate the larger area of SEA as it was published in the draft plan, with the addition of the Department of Conservation reserve on the northwest boundary. It was successfully argued that the gumlands are regionally significant, requiring protection for the larger area.

26. The Auckland Unitary Plan reinstated the total area of the gumlands as SEA. To alter or remove any of this vegetation within this area requires a resource consent.

27. The Reserve Management Plan 2015 is now not aligned with the SEA, as defined in the Operative in part Auckland Unitary Plan.

Tātaritanga me ngā tohutohu

Analysis and advice guidance

Option for no development of additional capacity at Waikumete

28. Council could potentially decide not to develop further burial areas at Waikumete. This option would result in incremental reduction in the burial capacity at Waikumete.

29. Without further burial site development the cemetery will reach capacity within the next four years. At this point the community would need to consider other cemeteries for burial.

30. As previously noted, work has commenced to identify land for a new cemetery in the northwest, which would effectively act as a replacement for Waikumete Cemetery. Any new cemetery will not be operational before the currently available plots in Waikumete run out.

31. Therefore, the implication of a decision not to develop additional burial capacity at Waikumete would be a period during which council is not able to offer burial plots in the north west area of the city. In addition, demand would increase at other council cemeteries.

Assessment of options for potential development zones

32. The current project focuses on assessing potential development zones within Waikumete Cemetery that could enable development of additional burial capacity, with consideration of all constraints including ecological and heritage values, site conditions, consent risks, operations and maintenance issues, and whole of life costs.

33. The feasibility study will also consider Waikumete Cemetery as a valued public open space within an increasingly denser Auckland, and as a memorial park for informal recreation into the future.

Potential Development Zones

34. In total, 23 discrete areas have been identified that offer potential for development for additional burials. These areas have been grouped into five zones, which represent groupings of potential development areas that have broadly similar characteristics and constraints.
35. Table 1 below provides a summary of five zones. This information should be read alongside the maps of potential development zones. See Attachment 1: Waikumete Cemetery Potential Development Maps (Maps of Zones page 1-7 and Maps of Constraints 8-11).

### Table 1 – Summary of potential development zones

<table>
<thead>
<tr>
<th>Potential Development Zone</th>
<th>Description</th>
<th>Colour on map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>Seven discrete areas (1A–1G) of varying size that are the readily accessible and generally lower ecological value fringes of the SEA. This zone also includes the existing operations/maintenance depot (area 1D).</td>
<td>Yellow</td>
</tr>
<tr>
<td>Zone 2</td>
<td>Five discrete areas (2H-2L) that are areas generally well served by existing infrastructure but that are of greater ecological value.</td>
<td>Orange</td>
</tr>
<tr>
<td>Zone 3</td>
<td>Two larger areas (3M, 3N) that are high value ecological areas on moderately steep land, not well served by existing infrastructure.</td>
<td>Red</td>
</tr>
<tr>
<td>Zone 4</td>
<td>Area within the older part of the cemetery, with high valued historic heritage and protected wildflowers sanctuary.</td>
<td>Pale blue</td>
</tr>
<tr>
<td>Zone 5</td>
<td>Five areas (5O-5S) which form a cluster in the north west of the cemetery with steep topography of ridges and gullies, high value ecology, and no existing infrastructure.</td>
<td>Pale pink</td>
</tr>
</tbody>
</table>

### Assessment criteria

36. A range of criteria have been used to assess the feasibility of development for burial plots. Criteria are described below.

- **Ecological:** criteria relate to the value of the regionally significant, critically endangered gumlands ecosystem, the presence of rare native orchid, skink and gecko. Assessment has considered reducing fragmentation and maintaining areas of contiguous forest.
- **Historic heritage:** constraints include the risk of damaging historic memorials and unintended disinterment. Only double empty plots can be considered due the increase in size of the current plots.
- **Physical:** site topography, soil conditions, groundwater and stormwater characteristics all influence the feasibility of developing additional burial capacity and have a direct impact on operational requirements for burial and maintenance, the type of burials that may be suitable, and the cost of new supporting infrastructure and additional burial plots.
- **Regulatory:** the Auckland Unitary Plan identifies much of the undeveloped area of the cemetery as a SEA and the whole cemetery has a Historic Heritage overlay. All development work within Waikumete cemetery requires resource consent. Higher value zones will have a higher consenting risk.
- **Operational:** ability to access burial sites, prepare plots for burial and maintain grounds are all important considerations. In addition, there are operational requirements for storage of vehicles, burial equipment and for staff facilities for the cemetery to operate effectively.
• Financial: the development of different types of burial plots will require large scale earthworks, drainage and construction, as well as a large upfront budget. Construction and infrastructure costs will rise if there is difficulty in accessing the site. If consent is achieved to develop some of the SEA, there will be mitigation costs additional to construction whole of life costs.

Summary of assessment

37. Table 2 summarizes the level of risk involved in developing the zones against the identified assessment criteria.

Table 2 – Summary of assessment

<table>
<thead>
<tr>
<th>Zone</th>
<th>Zone 1</th>
<th>Zone 2</th>
<th>Zone 3</th>
<th>Zone 4</th>
<th>Zone 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological</td>
<td>Moderate</td>
<td>Significant</td>
<td>Very significant</td>
<td>Minor</td>
<td>Very significant</td>
</tr>
<tr>
<td>Historic Heritage</td>
<td>Minor</td>
<td>Minor</td>
<td>Minor</td>
<td>Very significant</td>
<td>Minor</td>
</tr>
<tr>
<td>Regulatory</td>
<td>Moderate</td>
<td>Significant</td>
<td>Very significant</td>
<td>Very significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Physical</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Significant</td>
<td>Significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Operational</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Significant</td>
<td>Very significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Financial</td>
<td>Significant</td>
<td>Significant</td>
<td>Very significant</td>
<td>Moderate</td>
<td>Very significant</td>
</tr>
</tbody>
</table>

38. Staff recommend further investigation, including engagement with the public for areas within zones 1 and 2, for the following reasons.

• Zone 1: these areas are considered to have the lowest risk to existing ecology and are readily accessed from existing roads. Initial estimates suggest that Zone 1 could yield up to 17,000 plots through the use of modular vault retaining systems and a large public mausolea (Zone 1G), which could meet demand for up to the next 20 years. The inclusion of the existing depot area in this zone will require further investigation, as there is a requirement to identify a suitable alternative location for this infrastructure to allow use of the area for burials.

• Zone 2: these areas are more challenging to develop and have a greater impact due to the more significant ecological values. If consented, it is anticipated that significant ecological mitigation will be required. Zone 2 could contribute another 10,000 burial plots utilising a modular vault system, which could help meet demand for a further 12 years.

39. Staff do not recommend further investigation is warranted for areas within zones 3, 4 and 5. It is recommended that these areas are not included in the proposed engagement with the public for the following reasons.

• Zone 3: these areas have high ecological values and challenging physical characteristics. They would be difficult and expensive to develop the necessary infrastructure to allow burials.
• Zone 4: there are a number of challenges in creating additional burials within this historic area. Firstly, historic plots are smaller than current requirements, and excavation between historic plots comes with high risk of unintended exhumation and potential damage to adjacent historic memorials. Only unused double plots are considered viable, and only eight suitable plots have been identified.

• Zone 5: these areas are of high ecological value and very challenging topography, with steep slopes and deep gullies. The cost and feasibility of developing infrastructure to enable burials is likely to be prohibitive.

Burial methods

40. The traditional form of burial at Waikumete Cemetery is lawn burial. This required relatively flat and stable ground conditions.

41. Most of the proposed development areas will not be suitable for lawn burials, and to achieve burial capacity and warrant investment it is anticipated that a wider range of interment types will be required.

42. These systems will have higher development costs and require new operations equipment and methods.

43. Staff propose to include information on different forms of interment as part of the public consultation material to explore public perceptions and preferences for different burial methods in light of availability, cost and location.

44. Table 3 provides a brief summary of types of interment available. Further information is provided in Attachment 2: Interment Types.

Table 3 – Summary of Interment types

<table>
<thead>
<tr>
<th>Interment type</th>
<th>Description</th>
<th>Current availability at Waikumete Cemetery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawn burial</td>
<td>Traditional in-ground interment of casket on relatively flat, stable land in lawn. Opportunity for memorialisation.</td>
<td>Yes</td>
</tr>
<tr>
<td>Vault burial</td>
<td>Interlocking modular vaults installed underground which retain steeper, less stable land. Grass can be grown over the vault cover, which is lifted for interment. Opportunity for memorialisation.</td>
<td>No</td>
</tr>
<tr>
<td>Natural burial</td>
<td>Un-embalmed interment of body in biodegradable shroud or untreated coffin. Grave marked only by planted tree.</td>
<td>Yes (average 4 per year)</td>
</tr>
<tr>
<td>Private mausolea</td>
<td>Privately owned and constructed small buildings with stacked chambers for family members.</td>
<td>Yes</td>
</tr>
<tr>
<td>Public mausolea</td>
<td>Publicly owned and constructed large buildings with a large number of stacked chambers available for individuals or groups.</td>
<td>Yes</td>
</tr>
<tr>
<td>Ash interment and ash scattering</td>
<td>Use less space, can utilise land not suitable for other burial types. Opportunities for memorialisation – plaques on small berm, cover to niche in wall.</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Proposed Engagement Plan

45. Early public engagement is important to inform the development of the master plan, as it will help staff to understand the public appetite for development of burial plots within the SEA, and for different types of burial methods such as public mausolea, vault systems and natural burials.

46. The proposed Public Engagement Plan (Attachment 3) sets out the proposed approach. Key aspects include:
   - An online ‘Have Your Say’ survey, which will be open for feedback for four weeks from 5 March till 2 April 2019
   - Two public drop-in sessions at Waikumete Cemetery will occur at different times of the day on Saturday 9 March and Wednesday 20 March
   - Identified stakeholder groups will be invited to attend workshops. The number will be dependent on the level of interest expressed when the invitations are sent out.

47. The feedback from the online surveys, public open days, invited stakeholder sessions, local board workshops and engagement with mana whenua and urupa komiti will be analysed and inform the feasibility study.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera

Council group impacts and views

48. The governing body is the allocated decision maker for council’s operational cemeteries.

49. Waikumete Cemetery operational staff are engaged in the project and have provided operational input into the assessment of potential development areas.

50. Operational considerations include access to new burial areas, maintenance of grounds, health and safety of staff, visitors and contractors, soil conditions, cost to develop and maintain, and customer demand for particular interment types.

51. The operations team have a stated preference the depot facilities required to enable the cemetery operations is located within the cemetery grounds, central to the current and future operational areas. This will help ensure burial areas can be accessed efficiently and safely.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe

Local impacts and local board views

52. The Waitakere Ranges, Whau and Henderson-Massey Local Boards will be consulted as part of the stakeholder engagement process. The consultation material will be presented at a joint local board workshop on 21 February 2019, where feedback will be sought.

Tauākī whakaaweawe Māori

Māori impact statement

53. The project was introduced to the North West Mana Whenua Engagement Forum and the Waikumete Cemetery Urupa Komiti who advise on operation matters, in November 2018.

54. Mana whenua will advise on their preferred form and method of engagement to provide feedback on the consultation material.

Ngā ritenga ā-pūtea

Financial implications

55. The cost for the public and stakeholder consultation, and iwi engagement is estimated to be $20,000. This includes the preparation of the consultation material, staff and consultants’ time to organise workshops, arrange open days, as well as, collate and analyse the feedback.
56. The current project budget is $2.6 million. Until the extent and form of future burial areas has been determined and the necessary resource consents obtained, it is difficult to estimate how much budget will be available for the developed design and construction of new burial plots, including the supporting infrastructure, and any potential mitigation measures.

Ngā raru tūpono me ngā whakamaurutanga

Risks and mitigations

57. Consultation fatigue arising from previous Waikumete Cemetery consultations on the Reserve Management Plan and the Unitary Plan may contribute to a lack of engagement and reduced feedback.

58. Engagement opportunities will be broadly advertised, with a clear focus on assessing potential additional development areas.

59. The engagement plan offers people the opportunity to provide their views on a number of potential development areas, which will inform the design process and decision makers.

60. Feedback can be provided through a variety of channels, creating increased accessibility to participation.

61. Public consultation is necessary to meet the requirements of the RMA process as it is anticipated that the master plan, stage 2 of the project, will require a publicly notified consent. There is no certainty that any resource consent application will be successful.

62. There may be insufficient project budget to develop the consented burial plots and the necessary infrastructure and associated mitigation measures that might be required.

Ngā koringa ā-muri

Next steps

63. Consultation material based on the approved information will be prepared. This will include the online survey, information brochures and billboards.

64. Consultation material and invitations to attend stakeholder workshops and public open days will be provided to all councillors.

65. Engagement activities will be undertaken as outlined in the attached proposed Engagement Plan.

66. Feedback from the consultation will inform the draft Feasibility Report.

67. Further development of the Feasibility Report will include the cost/yield analysis and planning risk for the recommended development zones.

68. A further workshop with the Environment and Community Committee will be scheduled in mid-2019.
Ngā tāpirihanga
Attachments

<table>
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<th>Page</th>
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<td>33</td>
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<td>C</td>
<td>Proposed public engagement for Waikumete Cemetery feasibility study</td>
<td>37</td>
</tr>
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</table>

Ngā kaihaina
Signatories

<table>
<thead>
<tr>
<th>Author</th>
<th>Lucy Ullrich - Growth Development Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Mace Ward - General Manager Parks, Sports and Recreation</td>
</tr>
<tr>
<td></td>
<td>Rod Sheridan - General Manager Community Facilities</td>
</tr>
<tr>
<td></td>
<td>Dean Kimpton - Chief Operating Officer</td>
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Attachment 1: Waikumete Cemetery Potential Development Maps
Potential Development Zones Composite Map
Potential Development Zones

Zone 1
- This zone has been identified as the **lowest risk** for continued development of the cemetery.
- A large majority of these areas fall within the Significant Ecological Areas (SEA) as identified in the Unitary Plan, so their development is still constrained.
- Requires relocation of the operations depot (ID).
- The central area (IC) may be more intensely developed as a public mausoleum.
- Most areas are served by existing infrastructure.
- Identified as impacting the least on existing ecology.

Zone 2
- This zone has been identified as the **greater risk** for continued development of the cemetery.
- Most areas were considered critically challenging by the Botanical expert. If developed, significant mitigation would be required.
- Most areas are served by existing infrastructure.

Zone 3
- These zones were considered the **greatest risk**. Development of these areas is strongly discouraged.
- All areas are not served well by existing infrastructure.

Zone 4
- There are plots within the heritage area of the cemetery that are thought to be empty, but due to the age of this area it is not certain. Ground penetrating radar (GPR) has been carried out across the site, but this can not be guaranteed 100% accurate.
- The potential plots in this area are smaller than a standard plot and excavation between existing historic burials is extremely risky, so only double plots can be developed.
- Graves within the wildflower sanctuary can not be explored due to its protected status.
- Burials in this area would not be able to have a headstone due to heritage restrictions, so all new graves would need to be unmarked.
- Due to these restraints, there are only 8 burial plots that could be developed in this area, so we strongly discourage this option due to the high risk.

Zone 5
- It is highly impractical and strongly discouraged to develop within the following zones:
  - Active watercourses with a 10m offset due to steep topography, risk of site flooding, cost, regulatory constraints and ecological value. Please note that the exact watercourse extents will need to be confirmed onsite.
  - The northern patch of bush would be extremely costly and difficult to develop due to access constraints as it is bordered by water courses, has steep topography and is a significant ecological area.

Additional notes:
- All zones, including Zone 1 which is identified as lowest risk, may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.
Waikumete Cemetery: initial public engagement on potential development zones

Potential Development Zone 1

- This zone has been identified as the lowest risk for continued development of the cemetery.
- A large majority of these areas fall within the Significant Ecological Area (SEA) as identified in the Unitary Plan, so their development is still constrained.
- Requires relocation of the operation: depot (1D).
- The central area (1C) may be more intensively developed as a public mausoleum.
- Most areas are served by existing infrastructure.
- Identified as impacting the least on existing ecology.
- Areas may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.
This zone has been identified as a greater risk for continued development of the cemetery.

- Most areas were considered critically challenging by the botanist, and if developed, significant mitigation would be required.
- Most areas are served by existing infrastructure.
- Areas may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.
Potential Development Zone 3

- These zones were considered the greatest risk; it is strongly discouraged that these areas are developed.
- Zones are not served well by existing infrastructure.
- Areas may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.
Potential Development Zone 4

- There are plots within the heritage area of the cemetery that are thought to be empty, but due to the age of this area it is not certain. Ground penetrating radar (GPR) has been carried out across the site, but this could not be guaranteed 100% accurate.
- The potential plots in this area are smaller than a standard plot and excavation between existing historic burials is extremely risky so only double plots can be developed.
- Graves within the wildflower sanctuary can not be explored due to its protected status.
- Burials in this area would not be able to have a headstone due to heritage restrictions, so all new graves would need to be unmarked.
- Due to these restraints, there are only 8 burial plots that could be developed in this area, so we strongly discourage this option due to the high risk.
- Areas may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.
It is highly impractical and strongly discouraged to develop within the following zones:

- Active stream/rivers with a 10m offset due to steep topography, risk of site flooding, cost, regulatory constraints and ecological value.
- The Northern Patch of bush would be extremely costly and difficult to develop due to access constraints as it is bordered by water courses, has steep topography and is an ecologically significant patch of vegetation.
- Areas may have operational constraints which may exclude these areas from development or result in reduced plot yield. Operational constraints may include but are not limited to access, maintenance, health and safety, soil conditions, and cost.

**Potential Development Zone 5**
Heritage and infrastructure

Waikumete Cemetery: initial public engagement on potential development zones
Significant Ecological Area and Landscape Features

Notable Trees onsite include an English Oak, Norfolk Island Pine and a Sydney Blue Gum (Auckland Unitary Plan Operative in Part AUPoP).

Source information refer to Auckland Unitary Plan Operative in part (AUPoP) and the Waikumete Cemetery Reserve Management Plan 2015 for landscape features. Refer to WSP-Opus Botanical Ecology Assessment: Waikumete Cemetery 2018 for terrestrial ecological areas.

Legend
- Waikumete Cemetery Boundary
- Permanent watercourse with 10m offset (exact stream alignments to be confirmed)
- Intermittent watercourse with 10m offset (exact stream alignments to be confirmed)
- Ridgeline
- Amenity Trees
- Visually Prominent Ridgeline Vegetation
- DOC Land (Outside Cemetery)
- Ridgeline Protection (Unitary Plan)
- Topographic High Point
- Wildflower Sanctuary (Reserve Management Plan 2015)
- Significant Ecological Areas (SEA)
Topographical constraints
Sensitivity to Change - Critically Challenging Zones

Legend

- Critically Challenging

This heat map identifies the accumulative critical challenges as they relate to the ability of the landscape to accommodate development. Specialists who have identified critical risks include:

- Heritage Specialist
- Archaeologist
- Geotechnical Engineer
- Botanical Ecologist
- Bird and Macroinvertebrate Ecologist
- Bat Ecologist
- Aquatic Ecologist
- Herpetofauna Ecologist
- Civil Engineer
- Transport Engineer
- Planner
- Landscape Architect
- Arborist
- Land Contamination Specialist
- Stormwater Engineer

Zone areas are indicative only
<table>
<thead>
<tr>
<th>Reference Letter</th>
<th>Predominant Discipline Effected in this Area</th>
<th>Critical Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Transport</td>
<td>- The entrance/exit points by Gates 10581 (Awanui Rd) have an interior link road. The use of this area directly adjacent to the gates may impact the use of these gates for special occasions/events, and may result in the need to permanently close the gates</td>
</tr>
<tr>
<td>B</td>
<td>Transport</td>
<td>- This area is directly adjacent to the main gate and is essential for access to/from the cemetery. Currently, the cemetery's main parking facilities are located by Chapel 1 and Chapel 2. If any portion of this parking space is taken away for extra burials, without any mitigation, this will impact the operation of the cemetery. This access road is also critical for access around the cemetery areas. Any severance to this main road will significantly impact the access and circulation around the cemetery, and at worse, results in loss of access to certain isolated parts of the cemetery.</td>
</tr>
<tr>
<td>C</td>
<td>Landscape Architecture</td>
<td>- The gullies are a natural landscape feature, an expression of biophysical processes that shape the land and give it life. They represent an important part of the open space network that links to the wider open space network - both existing and potential.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Areas of the gully system feature mature native trees including rimu, kahikatea and kauri which contribute to the distinctive landscape character of the cemetery.</td>
</tr>
<tr>
<td>D</td>
<td>Heritage and Archaeology</td>
<td>- No burials into single plots due to the risk of side collapse and lack of space for benching - Only burials with two or more empty plots adjacent each other are being considered.</td>
</tr>
<tr>
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<td>- There is a high potential to disturb remains that may not sit strictly within the boundary of the marked grave site.</td>
</tr>
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<td></td>
<td></td>
<td>- HNZ authority constraints. Constraints are specific to individual authority conditions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Legal risks if accidental finds are discovered (Local planning - Not consistent with the current Reserve Management Plan; therefore, this must be altered before interments in the Historic areas can be undertaken. Unlikely to get resource consent from Auckland Council without strict restrictions and guidelines. Public health concern for remains are exhumed, the governing department must also be notified. If remains are encountered, under the HNZP/T the NZ Police, local tangata whenua and Heritage NZ must be notified if within the pre-1900 area. If the works are not covered by an active authority from Heritage NZ and the remains are pre-1900, this is a prosecutable offence under the HNZP/T).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- This area contains recorded archaeological site R11/2827, CHI items (Chapel of the Faith in the Oaks, Sexton’s House, Foreman’s House, Influenza Memorial trees, and the wildflower area, as well as the location of the original entrance to the Cemetery. This area is considered to be highly significant and integral to the heritage landscape of the entire cemetery, therefore, any development in this area will directly impact these values. Any works within this area will require an Archaeological Authority (within site boundary) which if within current burial plots may not be granted by HeritageNZ, as well as consideration of further heritage values through a heritage impact assessment. The current boundaries of recorded archaeological site R11/2827 are indicative only and do not represent the true extent of the pre-1900 portion of the cemetery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- All graves must be hand dug in this area which will double the cost of the burials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Disturbance to wildflower sanctuary. This area is internationally recognised for the wildflowers that festoon the heritage part of the site and create a stunning display and attraction for local and overseas visitors, contributing to the identity and attraction of the city at an international scale.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- There is a higher potential to disturb historic monuments if work is done in this area which would likely result in damage to these monuments. New interments must not occur within close proximity of high risk monuments or grave adornments. Any damage to historic monuments must be mitigated through restoration/repair/conservation. Graves in this area will be more difficult to access due to existing tightly packed interments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Graves in this area will be more difficult to access due to existing tightly packed interments. Access is limited further by the closeness of grave plot rows and limited width pathways between the existing graves.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- There is a potential lack of market for graves that are likely to be difficult, more expensive and unable to have a headstone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Impact to the landscape heritage character needs to be considered so that the overall heritage fabric and significance of the Cemetery is not diminished.</td>
</tr>
<tr>
<td>E</td>
<td>Transport</td>
<td>- This road is critical for access throughout the cemetery. Any severance to this main road will significantly impact the access and circulation around the cemetery and at worst, results in loss of access to certain isolated parts of the cemetery.</td>
</tr>
</tbody>
</table>

Sensitivity to Change - Critically Challenging Zones Table
<table>
<thead>
<tr>
<th>Reference Letter</th>
<th>Predominant Discipline Effected in this Area</th>
<th>Critical Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Civil</td>
<td>- No development permitted within the Marsden Point High Pressure Oil Line easement.</td>
</tr>
<tr>
<td>G</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is manuka/kanuka scrub, a subset of the gumland classification, and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>H</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is gumland heath which is considered a critically endangered ecosystem type in Auckland. This area is edged by manuka/kanuka scrub which is a subset of the gumland classification and is also critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>I</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is gumland heath which is considered a critically endangered ecosystem type in Auckland. This area is edged by manuka/kanuka scrub which is a subset of the gumland classification and is also critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>J</td>
<td>Transport</td>
<td>- This access road is critical for access around the cemetery areas. Any severance to this main road will significantly impact the access and circulation around the cemetery, and at worse, would result in loss of access to certain isolated parts of the cemetery.</td>
</tr>
<tr>
<td>K</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is gumland heath which is considered a critically endangered ecosystem type in Auckland. This area is edged by manuka/kanuka scrub which is a subset of the gumland classification and is also critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>L</td>
<td>Ecology - Botanical</td>
<td>- This area is manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>M</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is gumland heath which is considered a critically endangered ecosystem type in Auckland. This area is edged by manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>N</td>
<td>Ecology - Botanical</td>
<td>- This area is manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>O</td>
<td>Ecology - Botanical</td>
<td>- The predominant ecosystem type in this area is manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest. This area is edged by gumland heath, which is considered a critically endangered ecosystem type in Auckland.</td>
</tr>
<tr>
<td>P</td>
<td>Landscape Architecture</td>
<td>- The gullies are a natural landscape feature, an expression of biophysical processes that shape the land and give it life. They represent an important part of the open space network that links to the wider open space network - both existing and potential. Areas of the gully system feature mature native trees including rimu, kahikatea and kauri which contribute to the distinctive landscape character of the cemetery. These riparian areas feature predominately native canopy cover and hold significant biotic and visual landscape value. All riversstreams have aquatic value which contributes to biophysical landscape quality.</td>
</tr>
<tr>
<td>Q</td>
<td>Ecology - Botanical</td>
<td>- This area is manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>R</td>
<td>Ecology - Botanical</td>
<td>- This area is manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest.</td>
</tr>
<tr>
<td>S</td>
<td>Ecology - Botanical</td>
<td>- This area is half manuka/kanuka scrub which is a subset of the gumland classification and is critically endangered. Consideration should be given to reducing fragmentation and maintaining areas of continuous forest. The other half of this area is gumland heath which is considered a critically endangered ecosystem type in Auckland.</td>
</tr>
</tbody>
</table>

**Sensitivity to Change - Critically Challenging Zones Table**

Waikumete Cemetery: initial public engagement on potential development zones
Contents

Interment types 2
Interment types 3
Interment types availability table 4

Attachment 2: Waikumete Cemetery Potential Development Maps: Interment Types
Lawn interment

The cemetery currently caters for around 400 lawn burials per annum. In an effort to make more efficient use of burial land, the sale of dual-plots (two interments per plot) is actively encouraged. Prior to 1923, when the first crematorium opened, the cemetery catered exclusively for burials. Lawn burials need relatively flat land and can only be achieved on stable slopes up to a 1 in 6 gradient with only minor earthworks and retaining structures. There is limited available space for this type of burial on the site due to the remaining steep topography. Existing and future underground services, including drainage, may restrict or reduce yields.

Vault interment

For areas deemed too steep, unstable or unsuitable for lawn burial methods and layout, the modular vault retaining method is considered suitable. The modular vault is based on the type utilised at the Auckland Memorial Park. The vault method comprises a series of underground interlocking precast concrete crypts. Lawn is grown over the concrete lid of the crypts. This system is a more efficient use of land than a standard berm burial. Dual plots can also be installed using this method. This method can be used in areas where the traditional burial process is difficult if not impossible, e.g. steep slopes, rocky areas, where there is a high water table or in sandy soils. Sections of existing parts of cemeteries once thought unsuitable for burials can be considered using this method. Vault burials require specific operations equipment.

Natural burial interment

A natural burial (eco-burial) provides for an un-embalmed interment into a grave which is unmarked, apart from the planting of a native tree. The body is either buried in a coffin which is constructed from sustainably sourced untreated timber or is wrapped in a biodegradable shroud. This is the most environmentally sustainable option, but takes a larger amount of space due to the size of the tree planted on top.

Interment types
Private mausolea
The private mausolea are clustered at Waikumete near the top of the site. They make efficient use of land per interment and can utilise steeper areas that would not be suitable for lawn burials.
The first mausoleum was built by the Corban family in 1914, and the most recent is currently under construction.
Each family is responsible for the construction of the dwelling, so costs can vary greatly depending on size and ornamentation.
They range in size with the largest holding forty caskets.
There are currently 30-60 mausoleum interments per year.

Large public mausolea
The uptake of pre-purchased chambers within the 2 public mausolea has been very strong. The first of these was built in 1992 by Stately Mausoleums and contains 24 chambers, which are all full. The second built in 2010 accommodates 96 chambers.
Mausolea have a relatively low built footprint and are able to be sited on the land that is too steep for conventional lawn burial.
A public mausolea may be suitable within the steeper central area of the site similar to the Igualada Cemetery in Spain. The route is lined with repeatable concrete modules forming retaining walls. This form of body burial is the most efficient use of space.

Ash interment and Ash Scattering
More than half of the ashes from cremations are taken away by family to be scattered (or interred) outside the cemetery. Nonetheless, as a core function Waikumete Cemetery provides ash plots, memorial gardens, arboretum, niche-wall, as well as lawns for scattering, as options for the interment of ashes.
A relatively small percentage of cremated remains are interred in ash plots or niche walls. However, in terms of land-use, this form of interment is very space efficient, as the amount of land required is almost negligible. Ash plots cater for two sets of ashes per plot and may be marked by a small plaque on the berm.
The burial space required for lawn ash interments is significantly less than that required for lawn burials and can utilise smaller sections of land not suitable for body burials.

Burial Typologies
<table>
<thead>
<tr>
<th>Zones</th>
<th>Lawn Interment</th>
<th>Vault Interment</th>
<th>Natural Burial Interment</th>
<th>Private Mausolea</th>
<th>Large Public Mausolea</th>
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<td>5S</td>
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</tr>
</tbody>
</table>

**NOTE:** Areas within which different interment typologies are more suited based on an analysis of risk and sensitivity.
Te take mō te pūrongo

Purpose of the report
1. To note a progress update on the natural environment targeted rate funded work programmes.

Whakarāpopototanga matua

Executive summary
2. In July 2018 Auckland Council introduced a new natural environment targeted rate. This will provide $311 million of additional investment into environmental outcomes over ten years.
3. These outcomes will be delivered through nine work programmes comprising over 50 projects. The three largest work programmes are:
   • plant pathogens management programme, including kauri dieback ($102 million over ten years)
   • protecting our parks programme ($71.7 million over ten years)
   • expanding community action programme ($37.5 million over ten years)
4. The other six work programmes are island biosecurity, marine ecology, marine biosecurity, freshwater biosecurity, region-wide mainland biosecurity, and bio-information tools.
5. Significant achievements in quarter two of 2018/2019 are summarised as follows:
   • Four tracks around the Kitekite Falls in the Waitākere Ranges were re-opened to the public on Boxing Day 2018, after being closed in May 2018 for upgrades to ‘kauri-safe’ standards.
   • Over 30 kauri dieback ambassadors have been deployed around the Auckland region over the summer season to help prevent the spread of kauri dieback disease.
   • A new community co-ordination and facilitation grant opened in December 2018, with the aim of increasing collaboration, capacity and on the ground delivery of environmental outcomes. The total value of the grant is $300,000 per annum.
   • An additional $200,000 was allocated to 29 community conservation projects in December 2018 through the Regional Environment and Natural Heritage Grant.
   • The 1080 programme in Hunua Regional Park was expanded to cover more land in the regional park and privately-owned land adjoining the park. This will reduce the reinvasion pressure on the park, extending the time until pests, such as possums, re-establish. Results show that the pest management operation in 2018 was very successful in controlling rat and possum numbers.
   • A new inspector and dog team has been engaged to operate on the waterfront at vehicle departure points for Great Barrier and Waiheke. The new team will include additional pest detection dogs specialising in plague skinks, stoats, ferrets and rodents. The stoat dog (Gecko) has been recently deployed to respond to a suspected stoat incursion on Aotea Great Barrier.
   • Nine ambassadors have also been stationed at ferry terminals since December to educate the public on preventing the spread of pests and pathogens to Hauraki Gulf islands. A kauri dieback passenger cleaning station has been installed on Pier 2, with ambassadors directing passengers to clean their gear before departing for Waiheke.
6. Eight of the nine work programmes are on track and, in some cases, ahead of planned scoping and delivery. The capital investment on track upgrades for kauri dieback management within regional parks is either on track or ahead of schedule. The track upgrade work on local parks has been delayed as information in relation to kauri health and parks is being gathered ahead of the development of options for consideration by the respective local boards. An accelerated local park kauri dieback programme is now in place and plans for upgrades have been completed for Kaipātiki, Waiheke and Waitākere local parks.

7. The work on regional park track upgrades has been brought forward to offset the delay in local parks work. In addition, there are some delays arising from the availability of suppliers with the technical expertise needed to upgrade tracks to the required standards which staff are working through.

8. Maps showing an increase in activities funded by the natural environment targeted rate compared to business as usual are provided in Attachment A.

Ngā tūtohunga
Recommendation
That the Environment and Community Committee:

a) note the progress update provided on the natural environment targeted rate work programmes for quarter two 2018/2019.

Horopaki
Context
9. In June 2018 the governing body adopted Auckland Council’s ten-year budget for the period 2018-2028. This included a natural environment targeted rate which will provide $311 million of additional investment towards environmental outcomes.

10. This investment is focused on programmes to achieve Pest Free Auckland outcomes by:
   • controlling pest plants and animal species, at high priority sites on council parks, in our harbours, Hauraki Gulf islands and high priority freshwater lakes;
   • reducing the risk of plant pathogens spreading, particularly kauri dieback;
   • supporting community groups, schools and households to take action for conservation.

11. This investment creates a significant opportunity for Auckland Council to address the ongoing and gradual decline in wellbeing of our native ecosystems and species.

12. An update on progress on implementing the natural environment targeted rate work programmes from October to December 2018 (quarter two of 2018/019) is provided below.

Tātaritanga me ngā tohutohu
Analysis and advice
13. The approximately 50 new or scaled up natural environmental projects being funded by the targeted rate are being delivered across nine work programmes.

14. The budget, key objectives of each work programme and some highlights from quarter two of 2018/2019 are summarised in Table One below.
### Table One. Update on the natural environment targeted rate work programmes

<table>
<thead>
<tr>
<th>Work Programme</th>
<th>Budget (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plant pathogen management</strong></td>
<td></td>
</tr>
<tr>
<td><em>Key outcome:</em> To reduce the risk of spread of plant pathogens (including kauri dieback, myrtle leaf rust and Dutch elm disease). For kauri dieback this will be achieved through upgrading the track network and hygiene stations, as well as awareness raising and monitoring.</td>
<td></td>
</tr>
<tr>
<td>The targeted rate has increased funding for this area by $7.6 million in 2018/2019, in addition to the existing general rates budget of $250,000. The majority of this budget will be spent on track upgrades. These will decrease the risk of kauri dieback disease spreading and enable closed tracks to be re-opened.</td>
<td></td>
</tr>
<tr>
<td><strong>Highlights:</strong></td>
<td></td>
</tr>
<tr>
<td>• Four tracks around the Kitekite Falls were re-opened to the public on Boxing Day 2018, after they were closed in May 2018 to be upgraded to 'kauri-safe' standards. Another two track upgrades in the Hunua Ranges Regional Park will be completed by end of February 2018. A plan for track upgrades in Waitākere Ranges Regional Park is now open for public feedback.</td>
<td></td>
</tr>
<tr>
<td>• Over 30 kauri dieback ambassadors have been deployed around the Auckland region over the summer season to educate Aucklanders about ‘scrub, spray and stay’ messaging and help prevent the spread of kauri dieback disease.</td>
<td></td>
</tr>
<tr>
<td>• A kauri dieback passenger cleaning station was installed on Pier 2 of the Auckland ferry terminals, with ambassadors directing members of the public to clean their gear before departing for Waiheke Island.</td>
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</tr>
<tr>
<td>• Phosphte treatment of 7,000 trees with kauri dieback disease has begun in the Piha catchment.</td>
<td></td>
</tr>
<tr>
<td>• A request for proposals for a summer surveillance and monitoring programme for kauri dieback has gone to market.</td>
<td></td>
</tr>
<tr>
<td><strong>Expanding community action</strong></td>
<td></td>
</tr>
<tr>
<td><em>Key outcome:</em> To provide a high level of support to over 600 community groups, iwi, households, landowners and schools to achieve biodiversity outcomes. Currently council provides a low level of ad hoc support to around 450 community groups.</td>
<td></td>
</tr>
<tr>
<td>The targeted rate has provided $2.0 million of funding for this programme in 2018/2019, in addition to $150,000 from general rates funding.</td>
<td></td>
</tr>
<tr>
<td>The focus in 2018/2019 is on enabling expansion of community-led conservation action in corridors of high ecological value. Another priority is funding co-ordinator roles embedded in community organisations so they can operate more effectively. A co-design approach is being taken to the programme to ensure council understands what the community most needs and to build ownership external to council.</td>
<td></td>
</tr>
</tbody>
</table>
**Highlights:**

- An additional $105,000 was provided to the Trees for Survival programme to fund delivery of conservation planting with school students in priority areas. The programme was able to enrol another eight schools in late 2018, which will each receive seedlings and support with planting.

- A new community co-ordination and facilitation grant opened in December 2018, with the aim of increasing collaboration, capacity and delivery of environmental outcomes by community groups. The total value of the grant is $300,000 per annum and applications up to $50,000 are being accepted until 15 February 2019.

- An additional $200,000 was allocated to 29 community-led conservation projects from the Regional Environment and Natural Heritage grant scheme in December 2018.

- An expanded programme of environmental education is being co-delivered with Toimata Foundation (Enviroschools). Initial projects have been developed that will provide the basis for further expansion in future years. The intended outcomes are to increase the support available for early childhood centres and Enviroschools to achieve natural environment outcomes and develop a vibrant Te Aho Tū Roa network in Tāmaki Makaurau.

- The following projects are being co-designed with representatives from community groups:
  - a new region-wide funding strategy to ensure that support to community groups from council and other entities is aligned to provide maximum positive outcomes for Auckland’s natural environment and encourage innovation
  - research into best practice behaviour change to grow Aucklanders’ awareness of the natural environment and how their actions can contribute to improving current state.

- Approximately $120,000 of pest control tools and nursery supplies were purchased by council and distributed to six community conservations groups (including two iwi), to support landscape projects. A procurement plan is being developed to spend a further $915,000 over the next three years on pest control and restoration resources, which community groups will be able to access at reduced prices.

**Protecting our parks**

*Key outcome:* To protect 66 per cent of highest ecological value areas on regional and local parkland. The current level protected is 30 per cent. The targeted rate has increased funding by $2.2 million in 2018/2019, in addition to the $5 million available through general rates funding.

<table>
<thead>
<tr>
<th>Work Programme</th>
<th>Budget (millions)</th>
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</table>
### Highlights:

- A variation to the contract for ecological restoration services in local parks has been agreed with the suppliers. They are now developing management plans and carrying out expanded pest plant and animal control in ecologically significant areas in local parks.

- Significantly upscaled plant and animal pest control is being delivered in our regional parks. Key focus areas include:
  - feral pigs in Waitākere Ranges and Hunua Regional Parks
  - rats on Waiheke Island and in the Waitākere Ranges
  - stoat and ferret control in the Hunua Ranges Regional Park
  - pest plants at Whatipu, Muriwai, Waiheke and Brown’s Islands, Mahurangi East, Te Muri and Waitawa Regional Parks, Atkinson Reserve, Lion Rock and Cornwallis.

- The Project Hunua pest animal control operation was completed in October 2018. Targeted rate funding enabled staff to expand the treatment area in the regional park and on privately-owned land around the park. This will significantly reduce the ‘re-invasion’ risk for pests such as possums into the park. Results show that the 1080 pest management operation last year was successful in controlling rat and possum numbers, enabling native species to thrive.

### Island biosecurity

**Key outcome:** To either control, or where possible, eradicate plant and animal pests from Hauraki Gulf Islands. The natural environment targeted rate enables a five-fold increase of investment in biosecurity in the Hauraki Gulf Islands, providing $2.1 million in addition to the existing general rates funded budget of $420,000 in 2018/2019.

Projects are focused on reducing the risk of members of the public and commercial businesses transporting pests to the islands. These include freight companies, nurseries, building and landscape suppliers.

**Highlights:**

- The Pest-Free Warrant scheme is on track to issue 10 new warrants to commercial businesses in this year. These warrants show commercial operators are meeting biosecurity standards for visiting the islands.

- A new biosecurity inspector and dog team is now engaged to operate at vehicle departure points for Aotea/Great Barrier and Waiheke.

- Nine ambassadors have been stationed at the waterfront since December 2018 to provide public education on how to reduce the risk of spreading pests and pathogens to the gulf islands.
The new targeted-rate funded dog handler with her stoat detection dog (Gecko) were deployed immediately to assist with a joint Auckland Council and Department of Conservation stoat incursion response on Aotea/Great Barrier in January 2019. Neither the dog tracking tunnels, traps or trail cameras were able to confirm the stoat sighting.

Construction has begun of a pest detector dog day facility at the Domain to provide a base for the biosecurity team’s dogs, which are a key resource for emergency responses, surveillance on islands and inspections on mainland.

Various activities were delivered to raise awareness among boat users over the summer. These included digital messaging on the Met Service marine forecast website which generated 379,858 impressions and 349 click throughs to www.pestfreehaurakiqulf.co.nz. Approximately, 12 educational decals were also installed near boat loading ramps and quay access points.

Doubling the programme for Argentine and Darwin’s ant treatment and monitoring on Aotea Great Barrier.

Eradication of weeds on Rakino has been significantly expanded. On Waiheke staff are surveying the eastern boundary of distribution of key pest plants and currently procuring a feasibility study of eradication on Waiheke.

**Region-wide biosecurity**

*Key outcome: To control priority pest plants and animals in priority ecosystems across the region. The targeted rate has provided $1.8 million of funding in 2018/2019, in addition to $430,000 in general rates funding.*

*Highlights:*

- An increased possum control and monitoring programme, with a budget of $1.05 million, is on track for planned delivery. Target sites include the Hunua Halo, South Kaipara, Awhitu Peninsula, Dome Valley and northwest Waitākere Ranges.

- Expanded control for deer and feral goats is on track. Some goat control work planned for quarter two of 2018/2019 was delayed as a result of the concurrent 1080 work in the Hunua Ranges. This was because contractors and staff would usually work with dogs, but could not during the operation. This underspend is being offset by additional possum work.

- Rabbit control work is currently focused on Aotea/Great Barrier Island, with research also underway into appropriate controls for other sites.

- The council is part of a national collective reviewing a range of biocontrols that may be appropriate for our region.
A monitoring programme for low incidence pest plants is being developed, including a large number on Aotea/Great Barrier. This will ensure possible threats are contained before they become widespread.

**Marine ecology**

*Key outcome:* To increase protection of marine habitats and seabird populations. This programme is a new area of work, with the main focus in 2018/201, as well as, being on seabird data collection for monitoring and research supporting a plan change process to broaden the scope of significant ecological areas included in the Unitary Plan.

*Highlights:*

- Survey and monitoring plans for marine habitats and seabirds are being developed alongside gap analyses to determine priority areas.
- Additional seabird monitoring equipment, including sound recorders and trackers, has been purchased and will be deployed at key locations, based on the results of the gap analysis described above.
- A new initiative to agree how to share data, with other organisations is on track. These include:
  - Waikato Regional Council - sharing data layers across council boundaries for the Hauraki Gulf Marine Plan and developing new joint survey programmes.
  - Land Information New Zealand – focus on geospatial analysis and solutions to store large marine data sets. Data from previous surveys of areas such as Tamaki Strait will be shared with council.
  - NIWA – is providing survey information for Great Barrier Island and working with council and Department of Conservation on a shared habitat evaluation decision support tool.
- Auckland Council is working with other regional councils to develop consistent methodologies for mapping nearshore habitats and will be trialling estuarine habitat surveys this year.

**Marine biosecurity**

*Key outcome:* To protect threatened marine ecosystems and species from pests. This area is critically important given the current threats and heightened spread risk arising from the upcoming America’s Cup event. The targeted rate enables a significant increase in incursion response management. It also supports inter-regional collaboration to strengthen advocacy and enforcement to reduce the spread of marine pests by waterbody users. The targeted rate has provided increased funding of $700,000 in 2018/2019, in addition to the general rates funded budget of $100,000.
The first round of dive team surveillance has been completed at Great Barrier Island, as this is a high-risk site for Mediterranean fanworm incursions. Council staff are working with Ministry of Primary Industries to manage this species.

Staff are in contract negotiations with NIWA to undertake targeted marine pest surveys in the Kaipara and Manukau Harbours. This work will provide data on the presence or absence of marine pests.

Staff are working with other agencies to develop the Inter-regional Marine Pest Pathway Management Plan, due to open for consultation in March 2019. The plan will help protect the marine environment by increasing regulation of waterbody users. The draft discussion document for the plan is included on this agenda for Environment and Community approval for public consultation.

Biosecurity and compliance staff are working in collaboration to raise boat users’ awareness of biofouling rules for hulls in the Unitary Plan. This will lead to better monitoring and regulation of the rules.

Summer engagement and behaviour change initiatives are underway, including ambassadors being positioned at high-use marinas and boat ramps.

A prototype is currently being created of a system to spatially map our wide range of internal biological datasets, connect to a growing number of external datasets and manage current data quality processes. This will allow the council to go to market with a clear understanding of our requirements for a comprehensive biological database that is fully aligned with external information.

Staff are developing a monitoring and evaluation framework to provide quantitative and qualitative evidence for the immediate and long-term outcomes/benefits arising from the natural environment targeted rate funded programme of work.

An improved volunteer management system is being developed in partnership with Department of Conservation. This will enable people to participate more easily in community conservation activities.
A Community Relationship Management system is being developed. This will respond to feedback from both community groups and staff that council support for community-led conservation work is currently fragmented and inefficient. The community response management system will provide both council and community groups with up-to-date information on support being provided and interactions occurring. Specific requirements for the system were confirmed in quarter two through a co-design process with community groups and a business case is now being developed.

15. The freshwater biosecurity work programme is not included in Table 1 above, as it is a small programme of work and there have been no significant developments during quarter two. This programme will be reported on in future update reports.

16. Maps showing recent activities funded through the natural environment targeted rate and currently planned work for the rest of 2018/2019 are provided in Attachment A.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

17. Delivery of the natural environment targeted rate work programme requires close coordination between the Environmental Services department, Community Services and Community Facilities divisions, as well as, the Research Evaluation and Monitoring Unit (RIMU). These teams are working closely together and have established a joint governance structure, to ensure coordinated delivery.

18. Other members of the council family, such as Panuku, will also be impacted by some aspects of the targeted rate work programme. Council staff are working closely with these council controlled organisations on specific projects. For example, Panuku is being consulted on installing kauri dieback washdown stations at gateways to the gulf.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

Local impacts

19. The natural environment targeted rate will benefit local communities across Auckland. It will enhance protection of their local ecologically significant areas and provide additional support and funding to community conservation projects. A co-design approach is being used to develop support mechanisms for community groups, to ensure they are useful to local communities. The rate will also provide additional support to schools for local projects.

Local board views

20. Staff ran workshops from September to November 2018 to discuss the proposed natural environment targeted rate programme of work with local boards. Local boards and the Manukau Harbour Forum were invited to provide feedback on potential new community-led biodiversity conservation projects that could be considered for targeted funding.

21. Staff are now considering feedback and suggested projects from the local boards against regional priority criteria. An update on which projects have been short-listed for further assessment will be provided to local boards in early 2019. Further updates will be provided once the projects to be included in targeted rate work programmes are confirmed.
**Tauākī whakaaweawe Māori**  
**Māori impact statement**

22. Teams delivering the natural environment targeted rate work programme are committed to ensuring the principle of partnership set out in Te Tiriti o Waitangi and Māori outcomes are integrated throughout the programme.

23. In December 2018, staff presented to the Mana Whenua Kaitiaki Forum. The forum’s feedback on the targeted rate work programmes was generally supportive. Staff are now working with the Environment Pou of the forum to identify opportunities for Māori outcomes including:

- kaitiaki participation in advisory and governance discussions;
- Māori leading the scoping and delivery of key projects;
- a structured programme to build capacity and capability across iwi to work alongside council in their capacity as kaitiaki for the natural environment;
- developing key performance indicators for targeted rate funded programmes that reflect matauranga Māori perspectives;
- iwi involvement in local environmental projects delivered in their rohe.

24. A strategic assessment is currently being completed to identify and further scope opportunities to integrate Māori outcomes into work programmes. The strategic assessment will enable council staff to work with mana whenua and mataawaka to develop a mutually agreed implementation plan for the targeted rate.

**Ngā ritenga ā-pūtea**  
**Financial implications**

25. Budget expenditure on the targeted rate has been allocated to work programmes as shown in Table 2 below.

<table>
<thead>
<tr>
<th>Work Programmes</th>
<th>Year One 2018/2019</th>
<th>Total (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant pathogens (e.g., kauri dieback)</td>
<td>$7,592</td>
<td>$102,087</td>
</tr>
<tr>
<td>Expanding community action</td>
<td>$2,012</td>
<td>$37,522</td>
</tr>
<tr>
<td>Protecting our parks</td>
<td>$2,167</td>
<td>$71,714</td>
</tr>
<tr>
<td>Other work programmes (region-wide mainland, island, marine and freshwater biosecurity, marine ecology and bio-information tools)</td>
<td>$5,896</td>
<td>$99,523</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$17,666</strong></td>
<td><strong>$310,846</strong></td>
</tr>
</tbody>
</table>

26. In the first six months of 2018/2019, approximately $2.72 million has been spent on natural environment targeted rate projects. Delivery and associated spend for 2018/2019 is currently on track for 100 per cent forecast completion by end of the financial year. The delay in the local parks capital expenditure to upgrade tracks to prevent kauri dieback is being offset by accelerating the planned track upgrades on regional parks.

27. If there are any delays in the delivery and financial spend for 2018/2019, the funds will be carried over to the next year. In the event there are delays in the delivery and financial spend for this financial year the funds will be allocated to next year.
Ngā raru tūpono me ngā whakamaurutanga

Risks and mitigations

28. Some key risks to successful delivery of the natural environment targeted rate funded work programme are identified below, along with proposed mitigations.

Table Three. Risks and proposed mitigations

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of the natural environment targeted rate work programme is dependent on participation by a range of departments across council.</td>
<td>Governance structure established to enable efficient implementation of the targeted rate work programme across key departments of council.</td>
</tr>
<tr>
<td>Successful achievement of targeted rate outcomes will require coordination of work across the council, with external partners such as Department of Conservation and input from a wide range of environmental community groups.</td>
<td>An Executive Advisory Group including key external partners, such as Department of Conservation, and other representatives is being established. A co-design approach to projects will enable high levels of community participation and ownership.</td>
</tr>
<tr>
<td>Insufficient staff capacity to deliver a work programme that is approximately 300 per cent larger than previous workload.</td>
<td>22 staff recruited in initial phase and future needs are being confirmed.</td>
</tr>
<tr>
<td>Market capacity to provide capital works (such as track upgrades or hygiene stations) is limited.</td>
<td>Staff are developing training and best practice procedures to build capability of contractors to deliver these works.</td>
</tr>
</tbody>
</table>

29. As described above the 2018/2019 targeted rate spend represents a significant increase in budgets for natural environment programmes, with a two to six-fold increase in some areas. Staff are working to deliver as much additional environmental activity as possible in the short-term, while scoping detailed ten-year work programmes that will deliver maximum positive outcomes for the natural environment.

30. The ability of the existing market to deliver on the expanded work programmes is being tested. Staff are working to ensure that any outsourced delivery (to both existing and new suppliers) is procured as effectively and efficiently as possible.

Ngā koringa ā-muri

Next steps

31. Staff will continue to deliver those environmental programmes that can be immediately expanded, while also completing the detailed design for new work programmes. The key next steps for delivery of individual work programmes are listed below:

- scoping and delivery of initiatives to maximise Māori outcomes, as described above
- continued track upgrades and installation of hygiene stations in Waitākere Ranges and Hunua Regional Parks.
- finalising the Regional Pest Management Plan by March 2019.
- significant increases in the ecological restoration contracts to achieve best practice pest management in high ecological value Auckland Council parks.
• increase in Pest Free Warrant holders and increased inspections of high risk vessels and vehicles going to the Hauraki Gulf Islands.
• increase in marine biosecurity activities in the lead up to the America’s Cup event in 2021.

32. The next update on the natural environment targeted rate will be provided in April 2019.

**Ngā tāpirihanga**

**Attachments**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
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<tbody>
<tr>
<td>All</td>
<td>Maps of activities to be delivered through the natural environment targeted rate</td>
<td>49</td>
</tr>
</tbody>
</table>

**Ngā kaihaina**

**Signatories**

<table>
<thead>
<tr>
<th>Author</th>
<th>Gael Ogilvie, General Manager Environmental Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Barry Potter - Director Infrastructure and Environmental Services</td>
</tr>
<tr>
<td></td>
<td>Dean Kimpton - Chief Operating Officer</td>
</tr>
</tbody>
</table>
Item 9

Natural environment targeted rate update - Quarter two 2018/2019
Te take mō te pūrongo

Purpose of the report
1. To note a progress update on the water quality targeted rate work programmes.

Whakarāpopototanga matua

Executive summary
2. Auckland Council is working with Watercare to significantly improve the health of Auckland’s harbours, beaches and streams, as these are being polluted by overflows of stormwater and wastewater, during and after periods of heavy rainfall.

3. In June 2018, Auckland Council introduced a new water quality improvement targeted rate. This will provide $452 million of additional investment over the next ten years into water quality outcomes. At the same time, Watercare will invest $1.2 billion into The Central Interceptor and $412 million into the Western Isthmus water quality improvement programme.

4. Projects funded through the targeted rate are delivered through five key work programmes:
   • western isthmus water quality improvement programme ($361 million)
   • contaminant reduction programme ($54.3 million)
   • urban and rural stream rehabilitation programme ($22.3 million)
   • septic tank and onsite wastewater programme ($9.4 million)
   • safe networks programme ($5.6 million)

5. These five programmes are currently on track with key projects for each programme either underway or progressing through the design phases. Highlights for this quarter include:
   • Resource consent for the St Mary’s Bay and Masefield Beach water quality improvement project was granted in November 2018. Four appeals have been made against the consent to the Environment Court. These will be addressed through mediation in late February 2019. A main contractor for the first phase of the construction project will be appointed in March 2019. The project is currently on track to start construction in mid-2019 and be completed by late 2020.
   • The construction consent for the Daldy Street outfall upgrade was lodged in October 2018 and is expected to be granted in February 2019. This project will improve water quality in the Freeman’s Bay, Viaduct Harbour and Wynyard Wharf areas.
   • Resource consent for the Picton Street stormwater outfall extension has been lodged and the affected landowners are being notified. The project was tendered for construction in November 2018. Construction is expected to commence in May 2019, and be completed around November 2020.
   • Council and Watercare are working together to complete significant network investigations in the areas of Laingholm, Takapuna, Red Beach and Meadowbank to trace sources of contamination found in the stormwater network and identify solutions.
   • Council has completed detailed inspections of onsite wastewater systems in the Piha South Lagoon sub-catchment and a follow up of issues identified is near completion. Monitoring is now underway to evaluate the impacts of this pilot on water quality.
   • An additional $200,000 has been allocated to the Waterways Protection Fund to support projects in the Wairoa and Papakura catchments to improve water quality.
6. Overall, the water quality targeted rate programmes are on track with a number of projects moving through investigation, design and consenting stages. Delivery of capital works will accelerate as projects are procured and move into construction.

7. Maps showing safe network investigations and current or potential healthy waters capital works projects that will contribute to water quality outcomes are provided in Attachment A.

**Ngā tūtohunga**

**Recommendation**

That the Environment and Community Committee:

a) note the update on the water quality targeted rate work programmes for quarter two 2018/2019.

**Horopaki**

**Context**

8. Auckland’s harbours, beaches and streams are being polluted by overflows from ageing water infrastructure, particularly during and after periods of heavy rainfall. Pollution also comes from contaminants washed into natural waterways.

9. Aucklanders want to improve our infrastructure to address this problem but under the council’s previous budgets this would take over 30 years to achieve.

10. Auckland Council’s introduction of the new water quality improvement targeted rate in June 2018 provides an additional $452 million of funding over the next 10 years to address these issues.

11. This extra funding will allow significantly more infrastructure upgrades and other water quality improvement projects to speed up delivery of cleaner harbours, beaches and streams within ten years.

12. The overarching goals of the water quality targeted rate investment are to:

   • reduce wastewater overflows into the Waitematā Harbour
   • reduce stormwater volumes into the Manukau Harbour
   • reduce contaminants (such as litter, sediments, metals and oils) in stormwater across the region and in the South Kaipara Harbour
   • improve water quality, from the perspectives of public health and ecology.

13. Over time, the targeted rate work programmes will also reduce Safeswim non-compliance public health warnings at our recreational beaches across urban Auckland. Reducing pollution of our beaches will improve their amenity value and mean Aucklanders can swim safely there.

14. At the same time, Watercare is also doing work to improve Auckland’s wastewater infrastructure, using funds from its user charges. In addition to delivering the $1.2 billion Central Interceptor wastewater tunnel by 2025, it is also investing a further $412 million towards the Western Isthmus Water Quality Improvement programme over the next 10 years.

**Tātaritanga me ngā tohutohu**

**Analysis and advice**

15. Implementation of the water quality improvement targeted rate will be achieved through five work programmes.
16. The budget, key objectives of each work programme and some highlights from October to December 2018 (the second quarter) are briefly summarised in Table 1 below.

### Table 1 – Update on activities for the water quality targeted rate work programmes

<table>
<thead>
<tr>
<th>Work programme – objectives and highlights</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Isthmus water quality improvement programme</td>
<td></td>
</tr>
<tr>
<td><strong>Key objective:</strong> The primary benefit of this work will be to reduce waste water overflows into Waitematā Harbour and reduce stormwater volumes into Manukau Harbour. The project will reduce offensive beach litter, remove permanent closure of Meola Reef and Cox's Beach and reduce other intermittent beach closures in this area.</td>
<td></td>
</tr>
<tr>
<td>This workstream is led by Watercare in partnership with Auckland Council's Healthy Waters. Watercare will provide $412 million of additional funding from user charges for infrastructure upgrades. Watercare's $412 million contribution will support infrastructure works in the western isthmus area to improve water quality.</td>
<td></td>
</tr>
<tr>
<td>Core deliverables for projects to be delivered through the targeted rate programme include:</td>
<td></td>
</tr>
<tr>
<td>• constructing new stormwater enhancements, including separation of existing combined networks and the construction of strategic consolidated outfalls.</td>
<td></td>
</tr>
<tr>
<td>• constructing stormwater treatment devices to manage stormwater contaminants at targeted locations.</td>
<td></td>
</tr>
<tr>
<td><strong>Highlights:</strong></td>
<td></td>
</tr>
<tr>
<td>• St Marys Bay and Masefield Beach improvement project. This project will significantly reduce the frequency of overflows from the combined network at these two beaches. Resource consent for the project was granted on 9 November 2018. Four appeals to the Environment Court have been received, with mediation between Auckland Council and the appellants currently scheduled for late February 2019. Construction tenders for the project closed in January and a supplier is expected to be appointed for the first phase of construction in March 2019.</td>
<td></td>
</tr>
<tr>
<td>Watercare is leading investigations in St Mary's Bay and Herne Bay catchments to determine the best long-term approach to reducing the wastewater overflows in this area.</td>
<td></td>
</tr>
<tr>
<td>• Daldy Street outfall. This project will relocate the existing outfall at Daldy Street to the end of Brigham Street. This will improve water quality in the Wynyard Basin and significantly reduce water quality alerts at the nearby designated Safeswim site in the Viaduct Harbour. The resource consent for stage one of the project was lodged in October 2018, with consent expected to be granted in late February 2019. A supplier recommendation for the project will be provided to Strategic Procurement Committee in March, with onsite works planned to start in May 2019. Stage two of the project is currently in the investigation phase and is looking at stormwater treatment options, such as catchpit filters, gross pollutant traps and raingardens throughout Freemans Bay.</td>
<td></td>
</tr>
<tr>
<td>Ten years $361m</td>
<td></td>
</tr>
<tr>
<td>2018/2019 $10.5m</td>
<td></td>
</tr>
</tbody>
</table>
**Work programme – objectives and highlights**

<table>
<thead>
<tr>
<th><strong>Budget</strong></th>
<th><strong>Item</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picton Street stormwater network extension project. This project will construct new separate stormwater and wastewater networks, where a combined area currently operates. This will reduce stormwater runoff to the wastewater network and overflow volumes to the Wynyard Wharf outfall.</strong></td>
<td></td>
</tr>
<tr>
<td>A detailed design report is complete, and consultation has been undertaken with the local community and mana whenua. A tender for construction was released in November 2018 and closed on 5 February 2019. Resource consent has been lodged, and the affected landowners are being notified. Construction is expected to commence in May 2019 and will be completed around November 2020.</td>
<td></td>
</tr>
<tr>
<td><strong>Waterview separation works: Healthy Waters is leading design work in Waterview to extend and upgrade the existing public stormwater network and outfalls to Waterview Inlet, in order to separate the currently combined drainage network. Private drainage investigations to confirm the number of properties that are currently connected to the combined network have been completed. About 400 houses will require separation works.</strong></td>
<td></td>
</tr>
<tr>
<td>The project is currently at the concept design stage. Arboricultural (trees), geotechnical and topographical surveys will start in early 2019 to inform the design. Planned construction start for Waterview at this stage is June 2020, with completion by June 2022.</td>
<td></td>
</tr>
</tbody>
</table>

**Contaminant reduction programme**

*Key objective:* This programme will reduce the amount of litter, sediment and road pollutants entering waterways.

In rural areas, the primary focus will be on sediment reduction by reducing streambank erosion. Approximately $15 million over ten years is allocated to address sediment in Kaipara, a predominantly rural area where water quality is affected by agriculture and forestry. In urban areas, the focus of the programme will be on the capture of both gross pollutants (i.e. litter) and the multiple contaminants from heavily trafficked roads.

Delivery of existing projects continues to be on track, with a number of new projects being scoped. Local board feedback on potential projects that could be delivered through this work programme is being considered.

*Highlights:*

- A regional modelling tool is being developed to identify the highest areas of contamination across the region. This information will enable council to target pollution ‘hotspots’. The first draft list of high priority areas identified through the model is now due in March 2019.

- Healthy Waters and Housing Land and Communities (formerly Tamaki Regeneration Company) have identified a project to retrofit stormwater treatment devices in Glen Innes. It will be delivered as part of a partner funding arrangement, of which $1.8 million will come from the targeted rate.
### Work programme – objectives and highlights

<table>
<thead>
<tr>
<th><strong>Urban and rural stream rehabilitation projects</strong></th>
<th><strong>Budget</strong></th>
</tr>
</thead>
</table>
| **Key objective:** Improve ecological health of streams and reduce flow of contaminants into harbours. This programme will reduce and manage streambank erosion across the region. Delivery of existing projects continues to be on track, with a number of new projects being scoped. | **Ten years:** $22.3m  
2018/2019: $0.2m |

**Highlights:**
- An additional $200,000 was allocated to the Waterways Protection Fund to support landowners in the Wairoa and Papakura catchments to improve water quality. To date approximately $150,000 of this has been allocated to projects. Staff are scoping other opportunities within the area to be funded through the remaining $50,000.
- A tool is being developed to analyse erosion risk and test where sedimentation is occurring and the ability of natural stream beds to cope with this. It will be used to predict the best places for urban growth to take place with the least impact on water quality.
- Local stream rehabilitation projects are also being progressed in collaboration with community organisations. Current initiatives that are partly funded by the targeted rate include Wai Care community water quality projects, a partnership with the Whitebait Connection to restore whitebait habitat and a partnership with Million Metres to support community riparian tree planting.
- Local boards were consulted on potential water quality improvements projects to be delivered in their areas in September and October 2018. Their feedback is currently being reviewed and collated. This feedback will be taken into account before final stream rehabilitation projects to be delivered in each area are confirmed.

<table>
<thead>
<tr>
<th><strong>Septic tanks and onsite wastewater systems</strong></th>
<th><strong>Budget</strong></th>
</tr>
</thead>
</table>
| **Key objective:** Develop a compliance programme to ensure private onsite wastewater systems are regularly inspected and maintained to reduce the amount of wastewater entering our waterways. | **Ten years:** $9m  
2018/2019: $0.2m |

**Highlights:**
- Database development: An interim database has been created to identify over 40,000 properties with onsite wastewater systems across the region. A business case for a permanent database has also been approved.
- Education: Targeted education materials have been developed for property owners with onsite wastewater systems. Materials will be sent to those living in coastal areas in early 2019.
- Targeted compliance pilots: A pilot compliance and monitoring programme was run for 132 properties in the catchment of Piha South Lagoon last year. Water quality monitoring to measure the results of this pilot will be completed by the second quarter of 2019. This will help quantify the impact of the pilot on water quality in the area. Another targeted compliance initiative will start in Little Oneroa on Waiheke Island in February 2019, building on lessons learnt from the Piha pilot. An online checklist app is being developed for contractors making onsite wastewater inspections.
Work programme – objectives and highlights

<table>
<thead>
<tr>
<th>Work programme – objectives and highlights</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consultation in the annual plan: Consultation on ending the septic tank pump out targeted rate and associated service in the legacy Waitākere City Council area was approved by the Finance and Performance Committee in December 2018. Consultation will take place from February to March 2019.</td>
<td></td>
</tr>
<tr>
<td>• Review of incentive schemes: In December 2018, an independent review was completed on the effectiveness of several financial incentives schemes that were piloted to encourage homeowners to upgrade onsite wastewater systems in the catchments of west coast and Little Oneroa lagoons over the last few years. The review found that these incentives had low up-take for a range of reasons, including financial barriers. The review recommended that future financial incentives comprise more substantial grants (25-50 per cent of the cost of upgrades) in targeted, high impact areas.</td>
<td></td>
</tr>
</tbody>
</table>

Safe Networks

*Key objective:* Investigate and eliminate sources of faecal overflows from the stormwater system which cause increased public health risk at the region’s Safeswim sites. A variety of investigative methods are used to achieve this objective.

*Highlights:*

- Council’s existing safe networks programme has been scaled up to conduct sampling at stormwater outlets and streams at Safeswim sites where elevated health risks for contact recreation have been identified.
- Safe Networks investigations have made significant progress during the 2018 winter around the areas of Glen Innes, Takapuna, Red Beach, Piha, Meadowbank and along some of the northern Manukau beaches. The investigations have included a combination of water sampling, smoke testing, dye testing, closed circuit television (CCTV) and manual inspections. These will identify location-specific problems that contribute to faecal contamination of stormwater. This information will enable the council and Watercare to develop solutions to make these beaches safer for swimming.

<table>
<thead>
<tr>
<th>Safe Networks</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key objective: Investigate and eliminate sources of faecal overflows from the stormwater system which cause increased public health risk at the region’s Safeswim sites. A variety of investigative methods are used to achieve this objective.</td>
<td>Ten years: $5m</td>
</tr>
<tr>
<td>Highlights: Council’s existing safe networks programme has been scaled up to conduct sampling at stormwater outlets and streams at Safeswim sites where elevated health risks for contact recreation have been identified.</td>
<td>2018/2019: $0.5m</td>
</tr>
<tr>
<td>Safe Networks investigations have made significant progress during the 2018 winter around the areas of Glen Innes, Takapuna, Red Beach, Piha, Meadowbank and along some of the northern Manukau beaches. The investigations have included a combination of water sampling, smoke testing, dye testing, closed circuit television (CCTV) and manual inspections. These will identify location-specific problems that contribute to faecal contamination of stormwater. This information will enable the council and Watercare to develop solutions to make these beaches safer for swimming.</td>
<td></td>
</tr>
</tbody>
</table>

17. In summary, delivery of the work programmes is on track, with significant progress towards delivering a number of major infrastructure projects in the second quarter of 2018/2019.

18. Timelines for delivery of the major stormwater infrastructure projects that are focused on improving water quality in the city centre before the America’s Cup are tight. These projects are currently on track but delays to consenting or procurement processes may still mean they cannot be delivered by late 2020.

19. Maps showing safe network investigations, current and proposed healthy waters capital works projects that will contribute to water quality outcomes are provided in Attachment A.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera

**Council group impacts and views**

20. Successful achievement of water quality targeted rate outcomes requires collaboration between Auckland Council, Watercare and other members of the council family.
21. The work programmes have been developed in collaboration with the wider council group. This approach ensures that the most critical issues for the health of Auckland’s waters, which were not covered through existing work programmes, are being addressed through the targeted rate.

22. There are two work programmes that are being delivered jointly by Auckland Council’s Healthy Waters team and Watercare. These are:

- The western isthmus water quality improvement programme, which will involve significant collaboration to reduce wastewater overflows. This workstream is being delivered in partnership with Watercare who will provide $412 million of additional funding for infrastructure upgrades. These upgrades, together with the Central Interceptor project, will enable Watercare to reach their targets for the frequency and volume of wastewater spills per annum.

- The safe networks programme, which involves investigations and remediation of both the stormwater and wastewater networks to reduce bacterial contamination. This programme is run by Healthy Waters and works in collaboration with Watercare’s inflow and infiltration programme, which has similar goals. This Inflow and Infiltration programme is funded from Watercare’s operational budget.

23. At the same time, Watercare is also starting work on its Central Interceptor project, which includes the Grey Lynn tunnel extension that runs from Western Springs to Grey Lynn. Due diligence is currently underway with the preferred bidder, with construction due to commence in mid-2019. The Central Interceptor, including the Grey Lynn Tunnel, will cost in the order of $1.2b. The Grey Lynn Tunnel extension, which forms part of the Central Interceptor project, will help Auckland Council and Watercare achieve the key objectives of the Western Isthmus Water Quality Improvement Programme.

24. Watercare has had the benefit of reviewing this report prior to it being provided to the Environment and Community Committee and agrees with and supports the report.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

25. Staff held workshops with all local boards from September to October 2018 on the water quality improvement targeted rate work programmes. At these workshops local boards were presented with a list of potential water quality improvement projects to be delivered in their area. Local boards also provided informal feedback on priorities for their area.

26. In general, key themes arising from local board feedback include:

- Concerns relating to the impact of growth on waterways, particularly sediment run-off from development.
- Support for local stream restoration projects in their board area.
- Concerns relating to wastewater overflows at popular recreational beaches and a desire to see these urgently resolved.

27. Staff are currently reviewing this feedback and will use it to shape the programme of projects that will be delivered through the water quality targeted rate in each board area.

Tauākī whakaaweawe Māori
Māori impact statement

28. Auckland Council is working closely with mana whenua to develop the overall water quality targeted rate work programme. During the last quarter, staff presented to the Mana Whenua Kaitiaki forum on the water quality targeted rate work programme.

29. Forum members provided feedback that was generally supportive of the targeted rate work programme. They requested that council staff work with the Natural Environment Pou of the forum to identify more opportunities for Māori outcomes to be delivered through the rate.
30. Staff are also engaging with Māori on specific projects being delivered through the rate. For example, iwi have been involved in extensive consultation on the St Mary’s Bay and Masefield Beach water quality improvement project since its inception through a formal mana whenua Project Working Group. This approach has resulted in the design of the project being consistent with mana whenua aspirations and iwi support for the Resource Consent application.

**Ngā ritenga ā-pūtea**

**Financial implications**

31. Budget expenditure on the targeted rate has been phased as shown below in Table 2.

<table>
<thead>
<tr>
<th>Work programme</th>
<th>Year One 2018/2019 (thousands)</th>
<th>Year Two 2019/2020 (thousands)</th>
<th>Year Three 2020/2021 (thousands)</th>
<th>Years 4 to 10 2021/2022 to 2027/2028 (thousands)</th>
<th>Total (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western isthmus programme</td>
<td>$10,471</td>
<td>$28,169</td>
<td>$32,714</td>
<td>$289,563</td>
<td>$360,917</td>
</tr>
<tr>
<td>Contaminant reduction</td>
<td>$4,341</td>
<td>$5,000</td>
<td>$5,500</td>
<td>$39,409</td>
<td>$54,250</td>
</tr>
<tr>
<td>Urban and rural streams</td>
<td>$204</td>
<td>$2,233</td>
<td>$1,805</td>
<td>$18,067</td>
<td>$22,309</td>
</tr>
<tr>
<td>Safe networks</td>
<td>$509</td>
<td>$519</td>
<td>$529</td>
<td>$4,013</td>
<td>$5,570</td>
</tr>
<tr>
<td>Septic tanks and onsite wastewater</td>
<td>$209</td>
<td>$311</td>
<td>$423</td>
<td>$8,416</td>
<td>$9,359</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$15,734</strong></td>
<td><strong>$36,232</strong></td>
<td><strong>$40,971</strong></td>
<td><strong>$359,468</strong></td>
<td><strong>$452,405</strong></td>
</tr>
</tbody>
</table>

32. In the first six months of 2018/2019 approximately $4 million has been spent on delivery of water quality improvement targeted rate work programmes. This is $1.4 million ahead of forecast expenditure for this time period of $2.7 million. This reflects the good progress made on various major infrastructure projects, such as St Mary’s Bay and Picton Street.

**Ngā raru tūpono me ngā whakamaurutanga**

**Risks and mitigations**

33. Some key risks that have been identified to successful delivery of the water quality targeted rate work programmes are identified below, along with proposed mitigations in Table 3.

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful achievement of water quality targeted rate outcomes requires collaboration between Auckland Council, Watercare and other members of the council family.</td>
<td>Auckland Council is working closely with Watercare to progress delivery of water quality targeted rate projects. Healthy Waters is also collaborating with Auckland Transport, Panuku and other council teams.</td>
</tr>
</tbody>
</table>
### Item 10

#### Ngā koringa ā-muri

**Next steps**

34. As outlined above, some of the top priorities in 2018/2019 will be to:

- Progress delivery of key infrastructure upgrades project, such as the St Mary’s Bay and Masefield Beach, Picton Street separation and Daldy Street outfall projects.
- Continue engagement with local boards and community groups to confirm programme of stream restoration projects that will be delivered across the region.
- Continue investigations through the safe networks programme to identify sources of pollution at popular recreational swimming beaches and resolve these.
- Compile first draft of contaminant hot spots using the regional modelling tool being developed to identify the highest areas of contamination across the region.
- Undertake the onsite wastewater compliance and monitoring pilot in Little Oneroa, Waiheke and develop an online app for wastewater inspections.

35. The next update on the water quality targeted rate will be provided in April 2019.

#### Ngā tāpirihanga

**Attachments**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Water Quality Targeted Rate Q2 Maps - Funded Projects and SafeNetworks Programme for 2018/2019</td>
<td>61</td>
</tr>
</tbody>
</table>

#### Ngā kaihaina

**Signatories**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Craig McIlroy, Healthy Waters General Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Barry Potter - Director Infrastructure and Environmental Services</td>
</tr>
<tr>
<td></td>
<td>Dean Kimpton - Chief Operating Officer</td>
</tr>
</tbody>
</table>
Te take mō te pūrongo

Purpose of the report

1. To seek endorsement of Auckland Council’s submission to the Ministry of Transport in support of New Zealand’s accession to MARPOL Annex VI: Prevention of Air Pollution from Ships.

Whakarāpopototanga matua

Executive summary

2. Ships that burn low-grade fuel produce significant emissions – including sulphur oxides, nitrogen oxides, particulates, heavy metals and carbon emissions – while visiting ports throughout New Zealand. These emissions are known to cause negative health impacts.

3. The International Maritime Organisations (IMO) treaty – International Convention for the Prevention of Pollution from Ships (MARPOL): Annex VI – seeks to reduce a range of air quality impacts caused by ships. There are currently 91 Annex VI member states, including Australia and many of our pacific island neighbours. More than 96 per cent of New Zealand’s trade is carried by ships registered to member states.

4. The Ministry of Transport is seeking submissions on a discussion document that considers New Zealand’s possible accession to Annex VI of MARPOL. Annex VI seeks to:
   - limit emissions of sulphur oxide and nitrogen oxide from ship exhaust
   - prohibit emissions of ozone depleting substances
   - reduce GHG emissions through implementation of energy efficiency measures.

5. Compliance with the regulations will require ships over 400 gross tonnes to transition, by 2020, from using residual fuel with a sulphur content of 3.5 per cent to either low sulphur residual fuel containing no more than 0.5 per cent sulphur, or to diesel.

6. Low sulphur fuels will incur higher costs in the short term but are expected to be countered by fuel savings long term. Fuel availability is also a consideration but is not yet well understood.

7. In Auckland, emissions occur near to where large numbers of people live, work and play. Air quality monitoring indicates that people can be exposed to concentrations of sulphur dioxide from shipping emissions that exceed health-based national standards. Emissions inventories also show that emissions of pollutants from ships at-berth are equivalent to emissions from tens of thousands of motor vehicles.

8. Shipping is also a large and growing source of greenhouse gas emissions, contributing 2.2 per cent globally. In Auckland, ships emit 91,705 tonnes of CO₂ annually.

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9. Local control of shipping emissions is prevented by national regulation, although local technology solutions are being investigated. The impact of new technology will likely be limited by ship compatibility (e.g. not all ships are shore power capable) and voluntary participation of ship operators.

10. Policy and action to reduce shipping emissions at a national level is necessary to meet local and national health and climate commitments. It is also needed at a national level to ensure consistency and an even playing field for all New Zealand ports. For example, the Port of Auckland (POAL) may have a competitive disadvantage if more expensive energy options were mandated only in Auckland compared to other region ports.

11. Auckland Council’s submission (Attachment A) supports New Zealand’s accession to MARPOL Annex VI and answers several questions asked in the discussion document.

Ngā tūtohunga
Recommendation/s
That the Environment and Community Committee:

a) endorse the Auckland Council submission to the Ministry of Transport in support of New Zealand’s accession to MARPOL Annex VI: Prevention of Air Pollution from Ships contained in Attachment A of the agenda report.

Horopaki
Context
What is being considered?

1. MARPOL is the main international convention covering prevention of pollution of the marine environment by ships from operational and accidental causes\(^4\). It contains six annexes covering: oil (Annex I), noxious liquid substances (Annex II), packaged substances (Annex III), sewage (IV), garbage (V), and air (VI).

2. For MARPOL member states, two of the annexes are compulsory (Annex I and II) and four are optional. New Zealand has acceded to four of the six annexes with the two outstanding annexes relating to sewage (IV) and air (VI).

3. This consultation process relates specifically to New Zealand’s accession to Annex VI Prevention of Air Pollution from Ships which came into force in May 2005.

4. Annex VI seeks to address impacts on human health, port communities, climate change and ozone depletion from maritime pollution by:
   - setting limits on sulphur oxide and nitrogen oxide emissions from ship exhausts,
   - prohibiting deliberate emissions of ozone depleting substances, and
   - mandating technical and operational efficiency measures to reduce greenhouse gas (GHG) emissions.

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\(^3\) Auckland air emissions inventory 2016 – sea transport

5. The regulations apply to all ships over 400 gross tonnes that:
   • are registered to a member state (must comply even when visiting the port of a non-
     member state), or
   • visit a port of a member state (regardless of whether the ship is registered to a member
     state).

6. If New Zealand accedes to Annex VI, ships will have to do one of the following to comply:
   • use 0.5 per cent sulphur residual fuel, which could be more expensive as it may be
     difficult to source, or
   • switch to diesel which is more expensive than residual fuel and may require the
     recalibration of engines, or
   • upgrade to newer ships that are more fuel efficient or that are fitted with abatement
     technology.

Why is this important for Auckland?

12. Auckland is highly reliant on shipping for the import and export of goods and key
    commodities. The cruise industry is also a key contributor to New Zealand’s tourism trade,
    bringing more than 170,000 people to our shores each year\(^5\).

13. Auckland’s port is located on the shores of the CBD near to where large numbers of people
    live, work and play. Air quality monitoring in this area indicated that people can be exposed
    to concentrations of sulphur dioxide (SO\(_2\)) from shipping emissions that exceed health based
    national standards.

14. These findings are supported by emissions inventories that provide an indication of the scale
    of pollution generated by ships at the waterfront. They show ships at-berth emit 6.5 times the
    SO\(_2\) emitted by Auckland’s entire motor vehicle fleet and are the largest source of SO\(_2\) in the
    region. Further, shipping emissions of nitrogen oxide and PM\(_{2.5}\) are equivalent to 4.7 and
    15.3 per cent respectively when compared with Auckland’s entire motor vehicle fleet.

15. Shipping is also a large and growing source of greenhouse gas emissions, contributing 2.2%
    globally\(^6\). In Auckland, ships, ferries and port vessels combined emit 96,364 tonnes of CO\(_2\)
    annually with 80% attributed to ships\(^7\).

16. Anticipated growth in freight (200% by 2040) and passenger (40% by 2030) ship visits,
    increasing size of ships, and the growing number of international events hosted by
    Auckland\(^8\), are likely to result in a corresponding increase in air pollutant and GHG
    emissions.

Auckland Council’s commitments

17. Auckland Council is committed to acting on climate change and protecting human health.

18. In February 2018, the Environment and Community Committee agreed that Auckland
    Council will facilitate the development of Auckland’s Climate Action Plan. In November 2018,
    the committee unanimously endorsed the associated regional target of limiting temperature
    increase to 1.5°C.

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\(^5\) Port Future Study 2016
http://www.portfuturestudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf

\(^6\) UNEP DTU CO\(_2\) emissions from international maritime shipping -


\(^8\) Port Future Study 2016
http://www.portfuturestudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf
19. Since 2016, Auckland Council has been Convenor of the Harbour Emissions Stakeholder Group (HESG) comprising a cross-sector membership that seeks to reduce GHG emissions and health impacts from ship emissions and support energy resilience in the harbour environment.

20. HESG members are involved in a range of activities that include:
   - monitoring and research to grow our understanding of shipping emissions impacts (Council and POAL)
   - investigating technological solutions to reduce at-berth emissions, e.g. shore power (POAL)
   - consideration of national policy instruments, i.e. MARPOL Annex VI (MoT).

21. Auckland Council also has a regulatory responsibility under the Resource Management Act to protect human health.

Tātaritanga me ngā tohutohu
Analysis and advice

What are the implications of MARPOL Annex VI on shipping?

22. Compliance with Annex VI is likely to increase costs for shipping operators in the short term. The price hierarchy for fuel from lowest to highest is: standard 3.5 per cent sulphur fuel oil; low sulphur fuel oil (0.5 per cent); then diesel.

23. Marsden Point oil refinery currently produces fuel oil containing 3.5 per cent sulphur for the domestic fleet and visiting ships. It also produces marine diesel (in addition to some being imported). Low sulphur fuel oil would have to be imported.

24. The impact on fuel availability is unclear, however, MoT anticipates a shift to diesel from fuel oil if adequate supply of low sulphur fuel oil cannot be sourced.

25. These impacts will still be felt to some degree from 2020 when the regulations come into force globally, even if New Zealand does not accede. Visiting ships will still need to comply when visiting New Zealand and require low sulphur fuel while here. Our coastal fleet will also have to comply when visiting member states for maintenance and repair.

What are the benefits for Auckland?

Air quality and health

26. Distillate fuels such as diesel are much cleaner and better for the environment and human health. If ships comply with MARPOL Annex VI regulations, SO\textsubscript{2} emissions from ships could be reduced by 75\%\textsuperscript{9}. Sulphate particulate emissions will also decrease. Likewise, fuel efficiency measures resulting in lower fuel consumption will reduce emissions of all pollutants.

27. These reductions would likely improve health outcomes for thousands of Aucklanders living, working and visiting in the city centre.

International reputation and trade

28. New Zealand is heavily reliant on international shipping to move 98 per cent of imports and exports. As a MARPOL member state, we are afforded the opportunity to influence regulatory developments that affect trade, safety, security, and environmental protection.

\textsuperscript{9} Auckland air emissions inventory 2016 – sea transport
29. Internationally 96 percent of maritime trade is carried on ships registered to states that have acceded to Annex VI (Party States). This includes almost all of New Zealand’s maritime trade.

30. New Zealand is one of the few coastal trading states that have yet to accede to Annex VI. There are currently 91 Party States, including 30 of the 36 OECD countries. Party States also include many of our trading neighbours such as Australia, the Cook Islands, Tonga, Tuvalu, Samoa, Niue and Vanuatu.

31. Tourism is a key contributor to Auckland’s economy and many visitors get their first impression of Auckland and New Zealand on Auckland's waterfront. Visual impacts of ship plumes may pose a risk to our “clean green” reputation as Auckland’s waterfront is often a first destination.

Summary of benefits

32. New Zealand’s accession to MARPOL Annex VI will:
   • positively affect the scale of impact needed to meet Auckland’s health and climate commitments
   • improve health outcomes for thousands of Aucklanders living, working and visiting in the city centre
   • ensure an even playing field for New Zealand ports that does not impact on Auckland’s competitiveness
   • keep in step with our neighbours and trading partners and be able to influence global decisions that will impact our climate goals, trade and reputation
   • compliment and build on Auckland’s commitment to the C40 Cities Fossil Fuel Free Streets declaration
   • drive tourism by demonstrating our valuing of the environment and our people
   • mandate compliance monitoring of the shipping industry.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera Council group impacts and views

33. Auckland Council CCOs that participate in the Harbour Emissions Stakeholder Group (HESG) were consulted during the submission development. These include Auckland Tourism Events and Economic Development (ATEED) and Auckland Transport (AT).

34. ATEED is party to the submission and its views have been incorporated.

35. The Ports of Auckland also participate in the HESG. Their intention is to contribute to a joint national ports Chief Executive Group submission.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe Local impacts and local board views

36. The submission timeline presents a challenge in gathering a complete understanding of local board views. However, the Chief Sustainability Office has held workshops with nearly all local boards on the development of Auckland’s climate action plan.

37. Feedback from Waitemata Local Board, the most impacted by shipping emissions, emphasised that big emissions reduction shifts in transport and energy are needed; acceding to Annex VI would help such shifts, as well as, provide health benefits for many residents more directly affected by current emissions.

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Tauākī whakaaweawe Māori
Māori impact statement
38. Climate change, including carbon and emission of other pollutants, will affect areas over which Māori have kaitiakitanga; impacting ecosystems, shaping community vulnerability and resilience, and linking to economic outcomes. New Zealand acceding to Annex VI will help reduce emissions and impacts, particularly for those areas of downtown Auckland and the Waitematā more closely located to the POAL.

Ngā ritenga ā-pūtea
Financial implications
39. There will be no costs incurred by Auckland Council either from the implementation process or in compliance with the treaty.
40. Costs are likely to be incurred by Maritime New Zealand who will be responsible for monitoring and compliance against the regulations.
41. Ports of Auckland own the Awanui – a residual fuel tanker that will be subject to the Annex VI regulations should New Zealand accede. However, as the Awanui is contracted to Z Energy additional fuel costs will be borne by that company rather than POAL.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations
Risks if New Zealand accedes
42. There may be risks associated with low sulphur fuel availability and these are currently not well understood at a government level. For example, it is not known how increased demand for diesel globally will impact the price of diesel for motorists. The purpose of the consultation process is for the Ministry of Transport to better understand the issues to enable an informed decision.
43. The price of goods may increase with the increase in fuel costs if suppliers choose to pass those costs along.
44. It should be noted that these risks exist to some degree even if New Zealand does not accede to Annex VI as nearly all ships that visit New Zealand will have to comply from 2020 regardless. Also, New Zealand coastal fleet will have to comply when visiting member states for maintenance and repair.

Risks if New Zealand does not accede
45. Not acceding to Annex VI may increase the risk to being out of step with our trading partners and neighbours, as well as, potentially damage New Zealand’s credibility in global climate negotiations.
46. Additionally, poor health outcomes will be exacerbated, particularly with population and economic growth.

Ngā koringa ā-muri
Next steps
47. The submission will be submitted to Ministry of Transport by the deadline of 15 February 2019.
48. A Parliamentary Select Committee will consider the National Interest Analysis (NIA) and MARPOL treaty text and then report back to the House of Representatives in Quarter 2, 2019.
49. The House of Representatives considered the NIA and treaty text in Quarter 2, 2019.
50. Government agencies will then complete work on regulatory amendments required to implement the treaty in domestic law in Quarter 3, 2020.

51. New Zealand deposits the instrument of accession with IMO in Quarter 4, 2020.

52. Annex VI comes into force for New Zealand three months after depositing instrument of accession in Quarter 1, 2021.

**Ngā tāpirihanga**

**Attachments**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
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<tr>
<td>A0</td>
<td>Submission on New Zealand's accession to MARPOL Annex VI</td>
<td>71</td>
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**Ngā kaihaina**

**Signatories**

<table>
<thead>
<tr>
<th>Author</th>
<th>Lauren Simpson - Principal Sustainability &amp; Resilience Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisers</td>
<td>Jacques Victor – General Manager Auckland Plan Strategy and Research</td>
</tr>
<tr>
<td></td>
<td>Jim Quinn - Chief of Strategy</td>
</tr>
<tr>
<td></td>
<td>Dean Kimpton - Chief Operating Officer</td>
</tr>
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</table>
Submission

New Zealand’s Potential Accession to MARPOL Annex VI:
Discussion Document

February 2019
Overview

1. Thank you for the opportunity to provide feedback on New Zealand’s possible accession to MARPOL Annex VI. This joint Auckland Council and CCO submission is structured by responses to questions posed in the discussion document. Only questions relevant to Auckland Council’s interests and expertise have been addressed.

2. Shipping is a significant contributor to Auckland’s economy bringing over 170,000 guests to our shores and moving almost 1 million twenty-foot container equivalent units each year.

3. Auckland’s port is located on the shores of the city centre in close proximity to where large numbers of people live, work and play. This prime location affords cruise passengers an increasingly rare opportunity to arrive directly into the city centre, but also exposes large numbers of residents, workers and visitors to elevated levels of air pollution generated by ships entering and leaving the harbour and berthed at the port.

4. Shipping emissions are a key contributor to air pollution near the waterfront and have been responsible for exceedances of the National Environmental Standards for Air Quality (NESAQ). They are also responsible for 2.2% of GHG emissions globally.

5. Anticipated growth in freight (200% by 2040) and passenger (40% by 2030) ship visits, increasing size of ships, and the growing number of international events hosted by Auckland, are likely to result in a corresponding increase in air pollutant and GHG emissions.

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1 Port Future Study 2016  
http://www.portfuturesudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf

2 UNEP DTU CO2 emissions from international maritime shipping  

3 Port Future Study 2016  
http://www.portfuturesudy.co.nz/docs/pdfsconsensusworkinggrouprecommendations072016.pdf
6. Auckland Council has a regulatory responsibility under the RMA 1991 to manage air quality for the protection of human health and is also committed to achieve carbon neutrality (Resolution ENV/2018/149), in line with national aspirations.

7. While local solutions are being investigated to reduce shipping emissions in Auckland, these are limited to technology solutions and voluntary participation of ship operators based on national regulations that prevent local government control of emissions from ship engines. Local action may further be limited due to concerns associated with impacts on Auckland ports competitiveness.

8. Action at a national policy level to reduce emissions from ships will help affect the scale of impact needed to meet our health and climate commitments and ensure an even playing field for New Zealand ports.

**Improving New Zealand’s influence and credibility on climate policy**

Q1. New Zealand’s stated ambition is to be a global leader on climate change and strengthen our credibility and influence in international climate negotiations. To enable New Zealand to influence climate change policy at the IMO we need to accede to Annex VI and be at the table to influence decisions. Do you agree? Please provide a detailed response. If you don’t agree please provide reasons why.

9. Auckland Council considers accession to Annex VI is essential to be in a position to work with international partners and influence decisions that will impact our climate goals, trade and reputation.

10. Auckland is committed to taking bold action on climate change. In February 2018, the Environment and Community Committee provided the mandate for Auckland Council to facilitate the development of Auckland’s Climate Action Plan (ACAP) and in November 2018 unanimously endorsed the associated regional target of limiting temperature increase to 1.5°C.

11. Delivering on our ambitious national and local climate commitments will require NZ to tackle emissions from global transport networks such as shipping where we have limited influence and control.

12. While local emissions reduction solutions are being investigated⁴, such as shore power installation at Ports of Auckland Limited (POAL), such initiatives are limited in their impact on climate emissions as they only tackle emissions from ships while berthed. Global regulation is required to effect significant reductions in shipping emissions.

13. New Zealand’s reputation and ability to influence decisions therefore directly affects Auckland’s ability to deliver on its climate commitments. Being one of only a few OECD nations that have

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not acceded to Annex VI poses a potential reputational risk that could compromise our credibility in global GHG negotiations.

Protecting New Zealand’s trade interests and advancing effective mitigation measures

Q3. What are the benefits associated with the Energy Efficiency Design Index (EEDI) and Ship Energy Efficiency Management Plan (SEEMP) requirements?

14. A study commissioned by IMO to assess the climate emissions reduction potential of mandated fuel efficiency measures estimated reductions in annual CO₂ emissions of 151 million tonnes by 2020, increasing to 330 million tonnes by 2030⁵. Emissions of air quality pollutants should also reduce proportionally in response to these measures.

15. The above reductions are due to an expected reduction in fuel consumption, resulting in significant cost savings for the shipping industry, even when taking into consideration the increased cost of low sulphur fuel. The study acknowledges that investment in new technology and practices will be required.

Improving public health

Q5. What are the public health benefits of acceding to Annex VI?

Summary of benefits

16. If ships comply with MARPOL Annex VI regulations that require the use of low sulphur fuel from 2020, SO₂ emissions from ships could be reduced by 75%⁶. Sulphate particulate emissions will also decrease.

17. Likewise, fuel efficiency measures resulting in lower fuel consumption will reduce emissions of all pollutants.

18. These reductions would likely improve health outcomes for thousands of Aucklanders living, working and visiting in the city centre.

19. Accession would also compliment and build on Auckland’s commitment to the C40 Cities Fossil Fuel Free Streets declaration⁷ and the significant emissions reductions already made over several decades due to improvements in land transport fuel quality and engine technology.

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⁵ International Maritime Organisation - http://www.imo.org/en/MediaCentre/PressBriefings/Pages/57-EEDIstudy.aspx#XEY5eUzuUk
⁷ C40 Cities - https://www.c40.org/other/fossil-fuel-free-streets-declaration
Health and exposure

20. An important factor to consider when assessing impacts of emissions is exposure: the number of people exposed to the emissions and their proximity to the emission source or peak concentrations.

21. Auckland’s city centre is the most densely populated location in New Zealand, housing 57,000 residents, providing a workplace for over 100,000 employees, and hosting over 200,000 visitors each year. It is also home to Auckland’s main port which receives over 1,500 ship visits per year. While a convenient location for the workforce and tourism, it places a large population in close proximity to a significant localised emission source.

22. Emissions from ships include sulphur dioxide (SO₂), oxides of nitrogen (NOx), particulate matter (PM), volatile organic compounds (VOCs) and other toxics including heavy metals. These pollutants contribute to poor health outcomes for Aucklanders including respiratory illnesses, heart disease, stroke, and cancer.

23. The Health and Air Pollution in New Zealand 2012 update estimated annual social costs of $2.3 million and over 300 premature deaths from PM₁₀ emissions in Auckland alone. Continued population and tourism growth will exacerbate exposure to hazardous air pollutants and associated poor health outcomes.

Shipping emissions impacts in Auckland

24. While air quality across Auckland is generally considered good, elevated pollutant concentrations and exceedance of standards and guidelines still occur, particularly in the city centre where transport emissions are the predominant source.

25. For example, measurements taken at Auckland Council’s permanent peak roadside monitoring site on Queen Street shows that nitrogen dioxide (NO₂) concentrations exceed the World Health Organisations (WHO) annual guideline most years. Short-term monitoring studies using low cost passive sampling techniques indicate that exceedances are likely in a number of other city centre roadside locations.

26. While motor vehicles are the predominant source, shipping emissions also make a notable contribution to elevated levels of air pollution across the city centre with the scale of impact determined by wind direction and distance from the source.

27. For some pollutants it is not possible to ascertain the contribution of shipping emissions to measured concentrations, however, comparison of estimated source emissions provided in the 2016 Transport⁶ and Sea Transport⁶ emissions inventories (Table 1) provides an indication of their relative influence on air quality near the waterfront.

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⁶ Auckland air emissions inventory 2016 – transport
### Table 1: Proportion of air pollutant emissions from ships at-berth compared with Auckland’s regional motor vehicle fleet.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regional motor vehicle emissions(^9)</th>
<th>Ship emissions at-berth on Auckland waterfront(^10)</th>
<th>Shipping emissions as proportion of motor vehicle emissions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO(_2)</td>
<td>73</td>
<td>472</td>
<td>647</td>
</tr>
<tr>
<td>NO(_x)</td>
<td>10,250</td>
<td>488</td>
<td>4.7</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>647</td>
<td>53</td>
<td>8.2</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>314</td>
<td>48</td>
<td>15.3</td>
</tr>
<tr>
<td>VOC</td>
<td>3238</td>
<td>15</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* While these data include emissions from ships using the Manukau Harbour, their contribution is minor.

28. Table 1 shows that SO\(_2\) emissions are 6.5 times higher than total regional motor vehicle emissions, making shipping the largest source of SO\(_2\) emissions in Auckland. This is not surprising considering the heavy fuel oil contains on average 2,700\(^{12}\) times more sulphur than automotive diesel.

29. The dominance of shipping among SO\(_2\) sources near the waterfront, in conjunction with wind direction data, means measured ambient SO\(_2\) concentrations can feasibly be used to indicate likely impacts of shipping emissions on air quality. A number of such monitoring studies have been summarised in the Auckland Council report ‘A review of research into the effects of shipping on air quality in Auckland’\(^{13}\).

30. The review found that SO\(_2\) concentrations measured using low cost passive sampling techniques were highest near the waterfront, particularly when the wind direction was from the port, and that long-term average concentrations at these sites were up to four times higher than elsewhere in Auckland. These findings were corroborated by a recent campaign conducted by NIWA and Drexel University in 2018\(^{14}\).

31. Further, a short-term monitoring campaign at the ports using NESAQ compliant methods measured exceedances of the NESAQ 1-hour standard for SO\(_2\). The exceedances occurred while several cruise ships were hoteling in port during the Rugby World Cup.

32. Table 1 also shows a significant contribution of NO\(_x\) (includes NO\(_2\)) from ships on Auckland’s waterfront, equivalent to almost 5% of regional motor vehicle emissions.

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\(^9\) Auckland air emissions inventory 2016 – sea transport

\(^10\) Auckland air emissions inventory 2016 – transport

\(^11\) Auckland air emissions inventory 2016 – sea transport

\(^12\) Auckland air emissions inventory 2016 – sea transport

\(^13\) A review of research into the effects of shipping on air quality in Auckland: 2006-2016

\(^14\) An interim summary of results is appended to this submission. Full results are due for publication this year.
33. Analysis of particulate from samples collected at the Queen Street monitoring site found that shipping emissions influenced particulate (PM) concentrations some distance away from the waterfront. They are estimated to contribute 5% to overall PM$_{2.5}$ concentrations. Elevated concentrations measured coincide with wind direction from the ports, and the presence of trace metals, vanadium and nickel, which are markers of combustion of heavy fuel oil only used by ships.

34. These findings are supported by the emissions inventory that shows significant emissions of PM$_{2.5}$ from ships equivalent to 15.3% of regional motor vehicle emissions.

35. Black carbon is an important sub-micron (<PM$_{1}$) particle associated with significant negative health impacts and is a climate forcing agent. Auckland Council’s review found that 10% of annual black carbon measured from PM$_{2.5}$ samples at Queen Street can be attributed to shipping emissions.$^{15}$

36. Auckland Council will be installing a new permanent monitoring site within the shipping emissions impact area near the waterfront during 2019. SO$_{2}$ and black carbon will be monitored at this location.

Low sulphur fuel

Q13. What are the benefits of moving to fuel with a sulphur limit of 0.5 percent?

37. As stated under Q5, SO$_{2}$ emissions from ships berthed at the waterfront could be reduced by 75%, with a corresponding reduction in sulphate particulate.

38. If in the future the NESAQ adopts a lower SO$_{2}$ standard (currently 120μg/m$^{3}$ 24-hr mean) in line with the WHO guideline (20μg/m$^{3}$ 24-hr mean), the risk of non-compliance will be significantly reduced.

Q21. What are the benefits of switching to diesel?

39. Diesel is a much cleaner fuel, containing only 0.001% sulphur and free of a multitude of heavy metals and other toxics, including vanadium and nickel (known neurotoxins) present in heavy fuel oil.

Q24. What are the costs associated with using abatement technology?

40. The increased use of open-loop water scrubbers may increase risk of environmental impacts in the marine environment. Open-loop water scrubbers, produce wastewater that is discharged in the ocean.$^{16}$ More research is required to better understand the impacts of these discharges.$^{17}$

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Q27. Are there any other considerations apart from price that is likely to be taken into account when deciding to switch fuels or use abatement technology?

41. Fuel availability and the impact on fuel prices at the pump should be considered. Increased demand for diesel, for example, could result in the need to import more fuel and potentially increase fuel prices for motorists.

Other issues

Q36. Are there any other issues not considered above, but which you deem important and need to be factored in when considering the costs and benefits of accession to MARPOL Annex VI?

42. Additional issues to be considered:

a. A timely decision to accede, provision of clear timeframes for implementation and a plan for low sulphur fuel security would provide industry with certainty and adequate time to transition. The pace of implementation should not impact ship owner’s decision to come to New Zealand.

b. While almost all ships involved in New Zealand’s international trade are registered to states that have acceded to Annex VI and are therefore required to comply regardless of the status of the port state they visit, without New Zealand’s accession there will be no mandate to monitor their compliance when visiting our shores.

c. Failure to reduce emissions from shipping could reduce Auckland’s ability to comply with potentially more stringent air quality standards in the future. The NESAQ for particulate is currently under review and the anticipated outcome is that there will be a new standard for fine particulate (PM$_{2.5}$). There is also a growing body of evidence globally concerning black carbon and its health and climate impacts that could support development of guidelines and standards in the future.

d. New Zealand’s clean green image is a key driver for our tourism industry. Visual impacts of ship plumes may pose a risk to our reputation as Auckland’s waterfront is often a first destination and therefore first impression of New Zealand. Accession to Annex VI will demonstrate our values and passion for the environment and our people.

Q37. Having taken all of the above into consideration, should New Zealand accede to Annex VI?

43. Auckland Council strongly supports New Zealand’s accession to MARPOL Annex VI.

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17 A New Perspective at the Ship-Air-Sea-Interface: The Environmental Impacts of Exhaust Gas Scrubber Discharge
Appendix 1:

Update for Auckland Council on the SO₂ results for the 2018 NIWA-Drexel city centre measurement study
Update for Auckland Council on the SO₂ results of the 2018 NIWA-Drexel city centre measurement study.

Purpose of the study

This international collaboration has previously measured particles in the Auckland city centre, with an aim to capture the spatial variation in pollutants commonly associated with traffic, shipping and domestic heating activities. This second campaign was focused on emissions from shipping and so included sulphur dioxide (SO₂) which had not been included in the initial study.

With a view to determining the best method for measuring the impact of shipping emissions in the city centre, NIWA and Drexel deployed the two most common types of passive SO₂ monitors (namely, Gradko Palms tubes and Ogawa samplers) over various durations (four, six and eight weeks). For the final month, low cost particle counters called ODINS (Outdoor Dust Information Nodes) and portable Harvard Impactor filter samplers were deployed for four week-long periods.

Currently the Gradko tubes have been analysed and the data from this method are summarised here.

Gradko SO₂ method

SO₂ was measured using Palms-type diffusion tubes (Palms, 1981). These consist of a small plastic tube, approximately 7 cm long with an absorbent for SO₂ inside the top end. During sampling, the bottom end is capped with a porous filter so that ambient air can enter the tube and reach the absorbent but particles which might interfere with the absorption of SO₂ are excluded. After the sampling period exposed tubes are analysed using a colorimetric or spectrophotometric technique, or alternatively ion chromatography.

Palms tubes are widely used in air quality monitoring around the world as a cheap and reasonably reliable alternative for expensive reference monitors.

Tubes were purchased pre-prepared with the standard absorbent mixture of 50% triethanolamine (TEA) and 50% acetone (C₃H₆O). When not exposed in the field, tubes were kept refrigerated. The analysis of the tubes was conducted by the suppliers of the Palms tubes, Gradko Laboratories, in the UK. Tubes were attached to traffic signposts or lamp posts at a ‘tamper-proof’ height of approximately 2.5 metres.

Quality control measures of the sampling and analysis included deploying the tubes in triplicates and the mean of the three tubes is reported here. Where tubes were missing, the remainder are reported. If the duplicate tube concentrations differed by more than 30%, the results would have been removed. (No duplicate measurements reached this threshold.)
Locations of measurements

Measurement sites were chosen in transects radiating out from the waterfront. There were initially 30 sites where Gradko SO₂ tubes were deployed, however site 24 was not used after the first tubes were set out, as they were immediately taken. (Other losses occurred throughout the deployment, particularly in the first fortnight.) Figure 1 shows the approximate locations of the monitoring sites.

![Measurement Sites Map]

Figure 1: Sites in central Auckland where Gradko SO₂ tubes were deployed

Climate, Freshwater & Ocean Science
**Time of Deployments**

Deployment of the tubes was staggered into three durations, so that the maximum number were in the field during the final month when the Harvard samplers were in place. Table 1 below shows how the deployments were arranged.

<table>
<thead>
<tr>
<th>Session number</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Session 3</th>
<th>Session 4</th>
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</thead>
<tbody>
<tr>
<td>Start and end dates</td>
<td>21st Feb – 6th March</td>
<td>6th – 21st March</td>
<td>21st March – 6th April</td>
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<td>1-month deployments</td>
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<td>6-week deployment</td>
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<tr>
<td>2-month deployment</td>
<td></td>
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Table 1 Deployments of Grodke (and Ogawa) SO2 samplers
Results

The results presented here are for the overall two-month period and the individual month results.

The general pattern is as expected with higher concentrations seen along the waterfront and a falling away with distance from Quay Street. Overall the predominant wind direction was from the north-east, meaning emissions from the port and harbourside were dispersing over the city centre.

Overall Period

Figure 2 shows the concentrations measured by Palmes tubes exposed for eight weeks. The wind-rose insert shows that for the two-month period winds were variable in direction with a general south-westerly flow and a secondary countering north-easterly flow.

Figure 2: SO₂ concentrations over the two-month period
Sessions 1-2 (the first month)

Figure 3 shows the concentrations measured by Palmes tubes over the first month (21st Feb – 21st Mar 2018). Along with the actual measurements represented by points, an interpolation is included to indicate possible concentrations over the city centre during this time. During the first half of this month there were extended periods of easterly winds, while south-westerly winds dominated in the second half. As well as the regular ongoing emissions from the port and harbour, nine cruise ships docked and departed during this month.

Figure 3: SO2 concentrations over the first month
Sessions 3-4 (the second month)

Figure 4 shows the concentrations measured by Palms tubes over the second month (21st Mar – 22nd Apr 2018) and concentrations interpolated from those measurements. Overall the concentrations were much lower than in the first month as south-westerly winds continued to dominate, effectively dispersing shipping emissions away from the city centre. Eleven cruise ships departed during this month.

![Map showing SO2 concentrations](image)

Figure 4: SO2 concentrations over the second month

Conclusion

The SO2 concentrations reported here are not comparable to National Environment Standards (NES) air quality standards or the World Health Organisation's guideline concentrations, as these are both based on short term exposures of at most, a day in length. (In the NES, the concentration limits are based on an hourly measurement.) However, these measured concentrations give an indication of the extent of the impact of shipping activity over central Auckland and could be used to calculate population exposure to SO2. Further supporting data from this study will become available in due course.
This summary has been written by Doctor Elizabeth Somervell who can be contacted at NIWA at elizabeth.somervell@niwa.co.nz or on 09-3752038.
Retrospective approval for Submission on Child and Youth Wellbeing and Strategy and Proposed Outcomes Framework

File No.: CP2019/00068

Te take mō te pūrongo
Purpose of the report
1. To seek the Environment and Community Committee’s retrospective approval for Auckland Council’s submission to the government on the Child and Youth Wellbeing Strategy – Proposed Outcomes Framework (the Framework).

Whakarāpopototanga matua
Executive summary
3. On 12 December 2018, the council made a submission to the government on the Framework.
4. The submission is in general support of the Framework, and recommends the following:
   • a stronger focus on Māori, by including it as a stand-alone outcome domain
   • places more significance on reducing inequities across all outcome areas
   • enhanced emphasis on the importance of creativity and innovation
   • consideration of the explicit influence of mental health as a determinant of wellbeing
   • puts a greater focus on harm reduction and access to alcohol, drugs, and gambling.
5. Due to the closing date for the submission, receiving prior committee approval was not possible. Elected members, including local board members and the Independent Maori Statuary Board, had the opportunity to provide feedback on the draft submission.
6. The final submission incorporating feedback was signed off by the Chair of the Environment and Community Committee.
7. There are no risks associated with approving the submission.

Ngā tūtohunga
Recommendation/s
That the Environment and Community Committee:
a) retrospectively approve the council’s submission on the Child and Youth Wellbeing Strategy – Proposed Outcomes Framework.

Horopaki
Context

**Tātaritanga me ngā tohutohu**

**Analysis and advice**

10. The council’s submission is in general support of the Framework and its desired outcomes for children and young people *(Attachment B)*. Auckland represents a third of all children and young people in New Zealand many of who live in poverty.

11. The Framework aligns well with the Auckland Plan outcomes, as well as, I am Auckland, the Council’s strategic plan for children and young people.

12. The council recommends that the Framework:
   i) strengthen the focus on Māori, by including it as a stand-alone outcome domain
   ii) places greater focus on reducing inequities across all outcome areas, by substantially improving the situation of those most disadvantaged
   iii) could enhance the emphasis on the importance of creativity and innovation, access to arts and culture and the role of sport and recreation
   iv) needs to provide more focus on housing affordability, physical and emotional safety and security
   v) considers the explicit importance of mental health as a determinant of child and youth wellbeing
   vi) highlights the need for accessible, affordable, and active transport, as a key enabler to children and young people’s participation and inclusion
   vii) needs to focus on adults’ role to care and protect the environment, so that our children can enjoy a healthy environment and a sustainable future
   viii) puts a greater focus on harm reduction relating to access of alcohol, drugs and gambling by providing stronger regulations, as well as adolescent appropriate treatment addiction and mental health services
   ix) is underpinned by a comprehensive and well-resourced action plan and evaluation framework, with adequate funding for services at the local level
   x) provides for a more collective approach between government agencies, local government and communities to achieving sustainable solutions and outcomes.

**Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera**

**Council group impacts and views**

13. The draft submission was shared and discussed with relevant council staff and CCOs.

**Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe**

**Local impacts and local board views**

14. The draft submission was circulated to all local board members for feedback, a drop-in session was also provided. Feedback was incorporated into the submission.

**Tauākī whakaaweawe Māori**

**Māori impact statement**

15. Māori children experience disproportionate poverty in Auckland and live in households with lower than average income levels.
16. The submission recommends greater focus on the need to address inequalities and socio-economic disparity experienced by Māori tamariki and their whānau.

**Ngā ritenga ā-pūtea**  
**Financial implications**

17. There are no financial implications arising from approving the submission.

**Ngā raru tūpono me ngā whakamaurutanga**  
**Risks and mitigations**

18. There are no risks arising from approving the submission.

**Ngā koringa ā-muri**  
**Next steps**

19. There are no further next steps associated with approving this submission.

**Ngā tāpirihanga**  
**Attachments**

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**Signatories**

<table>
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<tr>
<th>Author</th>
<th>Quanita Khan - Principal Policy Analyst</th>
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<tr>
<td>Authorisers</td>
<td>Kataraina Maki – General Manager - Community &amp; Social Policy</td>
</tr>
<tr>
<td></td>
<td>Dean Kimpton - Chief Operating Officer</td>
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New Zealand is the best place in the world for children and young people

This will be achieved when all children and young people:

- **are loved, nurtured & safe**
- **have what they need**
- **belong, contribute & are valued**
- **are happy & healthy**
- **are learning & developing**

**VISION**

**WELLBEING DOMAINS**

**DESIGNED OUTCOMES**

**Desired outcomes**

Children, young people and the adults caring for them have a good standard of material wellbeing, including food and housing

Parents and caregivers, and young people transitioning to adulthood, enjoy quality employment

Young people who are not in education, training or employment receive additional support to gain education and skills and to obtain and maintain employment

Children and young people live in sustainable communities and environments

Children and young people know who they are, their heritage, their whakapapa and their connection to family, whānau, community, culture, place (tūrangawaewae) and beliefs

Children and young people feel connected to their family, whānau and communities, and are actively included in schools, communities and society

Children and young people are valued and respected by who they are and are supported to have their voices heard

Children and young people are empowered to make age-appropriate decisions, and are supported to exercise increasing autonomy as they move to adulthood

Children and young people care about and recognise their responsibilities to others, and contribute positively at home, school and in their communities

Children and young people are empowered to engage on matters of civic and environmental importance

Children and young people have the best possible physical health, and health status is not a barrier to living a good life

Children and young people experience mental wellbeing, are supported to cope with life’s challenges and to heal and recover from trauma

Children and young people have strong networks of trusting, caring relationships with family, whānau, peers, communities and school

Children and young people can play, express themselves creatively, have fun, and have opportunities for down time

Young people take a positive approach to relationships, sexual health and reproductive choices

Children have positive development starting before birth, including through the wellbeing of mothers, families and whānau

Children and young people develop resilience, and emotional, behavioural and communication skills at home, and in education, and are equipped to make successful transitions, including to primary school, secondary school, and into adulthood

Children and young people are positively engaged with and achieving in education, and building skills and knowledge for life and learning

Children and young people have developmentally appropriate opportunities outside the classroom that build confidence and important life skills

Young people make positive choices about alcohol, drugs and sexual relationships, and avoid criminal offending

**Our approach to wellbeing is underpinned by seven principles:**

1. The inherent dignity and value of children and young people
2. The wellbeing of children and young people is intervened with the wellbeing of the family and whānau
3. That networks of living, trusting, caring relationships are at the heart of children’s and young people’s wellbeing
4. The foundational role of the Treaty of Waitangi and the importance of the Crown-Māori partnership in work to promote the wellbeing of New Zealand’s children and young people
5. That children’s and young people’s voices and views should be taken into account in developing and implementing the wellbeing Strategy and in important decisions affecting them
6. The rights contained in the United Nations Convention on the Rights of the Child, which New Zealand has ratified
7. We have collective responsibility to nurture the children and young people in our communities, and to support and value the adults who are caring for them
Environment and Community Committee
12 February 2019

Attachment A

Item 12

1. Children and young people are safe and nurtured in their families, whānau and homes
- Children and young people live in loving homes, connected to relationships and support and are free from abuse, neglect and family violence
- The work of parenting and nurturing is recognised, valued and supported
- Adults caring for children and young people enjoy good mental health, including freedom from anxiety, stress, misuse of alcohol and drugs
- Children and young people in care (including because of fostering) have a safe environment and relationships of care, trust and connection

2. Children’s and young people’s physical safety is protected during everyday activities like travel and recreation
- The community and the physical, policy and regulatory environment work together to promote children’s and young people’s physical safety
- Serious injury and death through road accidents, drowning and other major accidental causes are reduced
- The particular vulnerability of disabled children and young people to accidental injury is addressed

3. Children and young people have positive interactions with peers and others outside the home
- Children and young people have safe and appropriate relationships with other children and young people and with adults outside their home
- Bullying in schools and recreational environments is addressed
- Children’s and young people’s safety online is supported

4. Children and young people and their families and whānau live in affordable, quality housing
- Families and whānau can access and afford housing near their work and/or social support structures
- Housing is warm and dry, has space and facilities to meet essential needs and supports good health
- There is stability of tenure for children and young people and families and whānau in rented accommodation
- Housing is supported by quality infrastructure and community facilities to enable good quality of life and positive social connection

5. Child poverty is reduced, in line with the Government’s intermediate and ten-year targets
- Children, young people and families and whānau have the resources they need to meet children’s basic needs and enable them to participate fully in society
- Rates of child poverty are significantly and sustainably reduced
- Parents’ education and participation in paid work is supported, where appropriate
- Once housing costs are met, families have enough income left over to meet their other needs

6. Children and young people experience improved equity of outcomes, with services helping address the impacts of poverty, low socioeconomic status and disadvantage
- Services and institutions are accessible, welcoming and respectful to all
- Parents, children and young people have the ability to influence the way they get support so it works best for them
- Core services and systems like health, education, justice and social support are designed and delivered in ways that meet diverse needs and that minimise the costs and stresses of engaging with them
- Universal services identify children and young people facing disadvantage and focus proportionately greater resources, effort and energy on supporting them

7. Children and young people are free from racism, discrimination and stigma
- All children and young people are respected and valued for who they are
- No child or young person, or group of children and young people, faces discrimination or stigma on the grounds of ethnicity, disability, or for any other reason

8. The cultures of children, young people and their families and whānau are recognised, enhanced and supported
- Whānau centered approaches are recognised and supported, increasing the agency of children, young people and their families and whānau
- Te Ao Māori and Te Rito Māori are actively promoted
- Children and young people see their cultures, values and context portrayed in a positive way

9. Children and young people have improved opportunities for civic engagement and environmental awareness
- Children and young people are supported to be positive, valued contributors to civic life and the protection of the environment & all its inhabitants
- Children and young people’s individual and collective agency is encouraged, and they participate in decisions that affect them directly and wider society

10. Children and young people and their families and whānau are empowered to make healthy lifestyle decisions for children and young people
- Children and young people and those caring for them have the knowledge and resources to make healthy decisions about food, exercise and sleep
- Communities offer access to affordable, nutritious food and environments that enable children to be physically active

11. Disabled children and young people have improved opportunities and outcomes
- Disabled children and young people
  - Are actively included as full and equal participants in every aspect of community and society
  - Have agency and voice in their wellbeing and choices
  - Have access to quality support and services to enable full and equitable participation
- Neurodiversity and neurodivergent people are recognised, with children and young people receiving quality services and support

12. Children’s and young people’s mental wellbeing is supported
- Families and are equipped to provide a supportive home environment that promotes children’s and young people’s good mental wellbeing
- Children and young people are supported to build the resilience that helps them navigate life’s challenges
- Children and young people with emerging mental health needs are identified and they and their families and whānau receive quality, culturally appropriate support
- Children and young people are free from bullying, substance abuse, self-harm and suicide
- Children and young people are supported to recover from trauma and harm

13. Children and young people are supported to make positive decisions
- Children and young people make considered and informed decisions about alcohol, drugs and sexual relationships
- Children and young people consider the impact of their behaviour on others
- Children and young people are supported to be accountable and address the underlying causes of their behaviour if they break the law

14. Children experience best development in their “first 1000 days”, safe and positive pregnancy, birth and responsive parenting (conceptualisation around 2)
- People make positive, empowered choices about when to have a family
- The environment around parents helps them make positive choices for pregnancy, birth and parenting
- Communities support families and whānau to grow stable, loving relationships of care for each other and for their babies
- Services for parents and babies are accessible, culturally appropriate, meet a range of needs and support parents to build the lives they want for their babies
- Parents’ mental wellbeing is supported and care is taken to reduce stress in the lives of new parents

15. Children are thriving socially, emotionally and developmentally in the early years (around 2 to 6)
- Parents, families, whānau and communities are supported to provide loving, stimulating environments for children to develop and learn
- Children build resilience, self-control and mental wellbeing
- Children develop effective communication skills to support learning and social success
- Children benefit from high quality early learning
- Children’s learning needs are identified quickly, and responded to in a timely way, including through additional learning support and support for family and whānau

16. All children and young people have an equal chance to gain the skills, knowledge and capabilities for success in life, learning and work
- High quality education for all children and young people is assured, given the intrinsic value of education, and its role in enabling children and young people to meet their academic and social potential and in meaningfully work once they leave school
- Children, young people, their families and whānau have a voice and can help shape their learning and skills opportunities
- There is equity in access to quality learning and achievement among children and young people of different socio-economic groups and ethnicities
- All children and young people can take part in a full range of opportunities to develop and express their talents
Submission to the Department of the Prime Minister and Cabinet

In the matter of the

Child and Youth Wellbeing Strategy – Proposed Outcomes Framework

Auckland Council, December - 2018
Mihimihi

Ka mihia ake ai ki ngā maunga here kōrero,
ki ngā pari whākarongo tai,
ki ngā awa tuku kiri o ōna manaawherua,
ōna mana a āti taketake mai, tawhiti atu.
Tāmaki – makeau a te rau, murau a te tini, wenerau a te mano.
Kāhore to rite i te ao.

I greet the mountains, repository of all that has been said of this place,
there I greet the cliffs that have heard the ebb and flow of the tides of time,
and the rivers that cleansed the forebears of all who came those born of this land
and the newcomers among us all.
Auckland – beloved of hundreds, famed among the multitude, envy of thousands.
You are unique in the world.
Ko te tārea o te Kaunihera o Tamaki Makaurau

Auckland Council Submission

December 2018

Taitara/ Title: Submission on the Child and Youth Wellbeing Strategy - Proposed Outcomes Framework

This submission is to the Department of the Prime Minister and Cabinet.

Executive Summary

1. This submission is from Auckland Council (the council) and has been approved by the Chair of the Environment and Community Committee.

2. The council is in overall support of the Child and Youth Wellbeing Strategy - Proposed Outcomes Framework (the Framework), vision, domains and focus areas, and supports the focus on wellbeing as an ambitious and comprehensive agenda.

3. Auckland Council has a strong interest in the wellbeing of children and young people, because there are more than half a million young people and children in Auckland, representing over a third of all children and young people in New Zealand. A third of Auckland's children and young people live in areas of socio-economic deprivation.

4. The proposed outcomes framework aligns well to the council's vision for Auckland’s children and young people, as set out in the Auckland Plan 2050 and I am Auckland - the council's strategic action plan for children and young people.

5. The council recommends that the Framework:
   i. strengthen the focus on Māori, by including it as a stand-alone outcome domain
   ii. places greater focus on reducing inequities across all outcome areas, by substantially improving the situation of those most disadvantaged
   iii. could enhance the emphasis on the importance of creativity and innovation, access to arts and culture and the role of sport and recreation
   iv. needs to provide more focus on housing affordability, physical and emotional safety and security
   v. considers the explicit importance of mental health as a determinant of child and youth wellbeing
   vi. highlights the need for accessible, affordable, and active transport, as a key enabler to children and young people’s participation and inclusion
   vii. needs to focus on adults’ role to care and protect the environment, so that our children can enjoy a healthy environment and a sustainable future
   viii. puts a greater focus on harm reduction relating to access of alcohol, drugs and gambling by providing stronger regulations, as well as adolescent appropriate treatment addiction and mental health services
   ix. is underpinned by a comprehensive and well-resourced action plan and evaluation framework, with adequate funding for services at the local level
   x. provides for a more collective approach between government agencies, local government and communities to achieving sustainable solutions and outcomes.

6. We welcome an opportunity to participate and facilitate dialogue with the children and youth in Auckland on this in the future.
Whakataki/ Introduction

7. This submission is from Auckland Council (the council) and has been approved by the Chair of the Environment and Community Committee.

Tūnga whānui/ Overall Position

8. The council is in overall support of the Child and Youth Wellbeing Strategy - Proposed Outcomes Framework (the Framework), vision, domains and focus areas, and its intent. We support the government’s aspirational approach to ensuring all New Zealand children and young people have a happy, safe and secure future.

9. Auckland Council has a strong interest in the wellbeing of children and young people because:

i. there are more than half a million young people and children in Auckland, over a third (36 per cent in 2013) of all children and young people in New Zealand, representing a significant contribution to New Zealand’s future.

ii. a third of Auckland’s children and young people live in areas of socio-economic deprivation and areas with prevalent child poverty.

iii. Auckland has the highest number of Māori and Pacific Island children and young people, a disproportionate number of whom currently experience substantial disparities in social outcomes.

iv. children and young people are the future of our communities and cities. Ensuring children and young people feel safe, are cared for and are equipped with the knowledge, skills, values and opportunities to live happy and productive lives, will support better outcomes for all Aucklanders and for New Zealand.

10. The proposed outcomes framework aligns well to the council’s vision for Auckland’s children and young people, as set out in the Auckland Plan 2050 and I am Auckland - the council’s strategic action plan for children and young people.

11. The Framework aligns with the outcomes of the Auckland Plan 2050, particularly:

i. Belonging and participation: All Aucklanders will be part of and contribute to society, access opportunities, and have the chance to develop to their full potential.

ii. Homes and places: Aucklanders live in secure, healthy, and affordable homes, and have access to a range of inclusive public places.

iii. Opportunity and prosperity: Auckland is prosperous with many opportunities and delivers a better standard of living for everyone.

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1 The Social Deprivation Index is a measure of socio-economic status calculated for small geographic areas. The calculation uses a range of variables from the 2013 Census which represent nine dimensions of socio-economic disadvantage to create a summary deprivation score.
12. *I am Auckland* - sets out Auckland Council’s commitment to help children and young people reach their full potential. Its outcomes areas are:

- Goal 1: I have a Voice, am valued and contribute
- Goal 2: I am important, belong, am cared about and feel safe
- Goal 3: I am happy, healthy and thriving
- Goal 4: I am given opportunities to succeed and to have a fair go
- Goal 5: I can get around and get connected
- Goal 6: Auckland is my playground
- Goal 7: Rangatahi Tu Rangatira (all rangatahi will thrive)

**Tūhohunga/ Recommendations**

13. The council recommends that the Framework:

i. strengthen the focus on Māori, by including a stand-alone outcome domain in the Framework. This would recognise the special obligations under the Treaty of Waitangi and the need to address as a matter of urgency the inequities and ongoing socio-economic disparities Māori children and their whānau experience

ii. considers the work already undertaken under the Poverty Reduction Act, as well as the Child Poverty Reduction Bill (the Bill). We recommend that the linkages with the Bill need to be strengthened, to show the relevant connections between the measures set out in the Bill and the intention of the different domains and outcome areas in the Framework

iii. places greater focus on reducing inequities across all outcome areas, by substantially improving the situation of those disadvantaged. This could be an overarching principle of the Framework for delivery across all outcome areas

iv. could enhance the emphasis on the importance of creativity and innovation, access to arts and culture and the role of sport and recreation, for improving the health and wellbeing of children and young people

v. needs to provide more focus on housing affordability, noting that Auckland has the highest costs of housing in New Zealand and affordability is a common issue that impacts the living standards of children and young people

vi. considers underscoring the importance of mental health as a determinant of child and youth wellbeing, especially given the high incidence of bullying and suicide amongst children and youth in Auckland, and New Zealand as a whole

vii. highlights the need for accessible, affordable transport, including active transport options, as a key enabler to children and young people’s participation and inclusion

viii. needs to focus on adults’ role (as current stewards and decision-makers) to care and protect the environment, taking all steps necessary to reduce environmental degradation and deal with the causes and impacts of climate change so that our children can enjoy a healthy environment and a sustainable future

ix. puts a greater focus on harm reduction relating to access to alcohol, drugs and gambling by providing stronger regulations as well as adolescent appropriate treatment addiction and mental health services


x. is developed in consultation with local authorities given the significant role we play in improving the health and wellbeing of children and young people

xi. is underpinned by a comprehensive action plan and robust evaluation framework and regular monitoring, to allow results to be measured and reported

xii. that there is long-term and adequate resourcing to deliver on the outcomes and for services at the local level that support the wellbeing of children and youth

xiii. that there is more collective delivery across central and local government and local communities to help maximise efforts and achieve greater collective impact

xiv. takes into consideration the existing research undertaken by Council and professional bodies, that may support the Framework to provide a strong evidence base for investing in children and young people’s well-being.

Horopaki/Context

14. Auckland is the largest and fastest growing region in New Zealand, it is also one of the most diverse cities in the world with over 180 ethnicities and 40 per cent of the population is born overseas.

15. Auckland is a youthful city. The 2013 Census counted 507,496 children and young people under the age of 24 years living in Auckland, representing 35.9 per cent of the Auckland population.

16. A significant number of Auckland’s children and young people face adversity:
   i. nearly 20 per cent of the children and young people of Auckland live in low-income households
   ii. in 2013, 19 per cent of children aged 0 to 14 in Auckland lived in households with household incomes of $40,000 or less, well below the $78,600 median\textsuperscript{iv}
   iii. the proportion in low income households was particularly high among children living in the four local board areas that make up the Southern Initiative (Māngere-Otāhuhu, Otara-Papatoetoe, Manurewa and Papakura) and among Māori, Pasifika and Middle Eastern, Latin American and African children
   iv. Auckland has a disproportionate number of low decile schools (rated 3 or below), and a third of all decile 1 schools in New Zealand are found in Auckland.

Te tātari me te tohutohu/Analysis and advice

17. Auckland Council supports the Framework and its overall intent
   i. The council supports the Framework and its overall intent. We like the comprehensive wellbeing domains and focus areas, which set out bold aspirations for the children and youth of New Zealand.
   ii. We also like that the Framework acknowledges the critical importance of the wider whānau and other carers and support networks to children’s wellbeing.
   iii. We agree with the importance of ensuring that whānau have the help and support they need, particularly those under extreme stress.
18. Greater focus on the needs of Māori children and their whānau
   
   i. There should be more emphasis on improving outcomes for Māori, potentially by creating a stand-alone outcome domain. This is important to demonstrate commitment to the unique position of Māori and their special relationship with the Crown under the Treaty of Waitangi.
   
   ii. Focus on improving outcomes for young Māori is important because:
       - the Māori population in Auckland is comparatively youthful those aged under five make up 12 per cent of the of the Māori population in Auckland
       - Māori children and young people have proportionately lower wellbeing outcomes, over all other ethnicities
       - approximately 50 per cent of Māori students attend a decile 1, 2 or 3 school and almost a third of Māori children are living in low income households.

19. We need to address equity of outcomes and focus on those most in need - (Domain 2)
   
   i. The council appreciates the focus on equity and poverty. We would like to see clear alignment with Government legislation such as the Poverty Reduction Act objectives and the Child Poverty Bill. This is especially important in the context of Auckland, where almost a quarter of the children and youth live in areas of economic deprivation and attend low decile schools.
   
   ii. The Framework should take into consideration the multi-dimensional nature and definition of poverty, beyond income. The definition of poverty should explore structural causality such as affordable housing and transmitted poverty, more explicitly to focus on the wider contributing elements to poverty.
   
   iii. There could be a greater focus on reducing inequity across all outcome areas; this could be included as an overarching principle of the Framework and focus on substantially improving the situation for those disadvantaged.

20. Culturally appropriate services are required to meet the needs of our growing, diverse and young communities (Domain 3)
   
   i. The council recognises and celebrates the diversity of Auckland and would like to see stronger language within the Framework relating to the needs of diverse communities. The Framework could reflect more strongly the different realities of children and young people who are part of these communities, and ensure relevant services that cater fully to their wellbeing.
   
   ii. Auckland’s Pacific population is youthful and growing, with a median age of 22.6 years. In 2013, about one in four children in Auckland (24 per cent) had at least one Pacific ethnic identity. However, half of people of Pacific ethnicity aged 0 to 24 years are living in a crowded household and in challenging socio-economic circumstances.
   
   iii. The Framework should consider and address the overarching role inequities play across the diverse ethnicities and populations in Auckland, especially ethnic communities, rainbow communities (LGBTIQ plus), and children with disabilities.
   
   iv. Reducing inequity is at the core of all the United Nations (UN) sustainable development goals (SDGs). The Framework may review SDG 10, that aims to empower and promote the social, economic and political inclusion of all people irrespective of age, sex, disability, race, ethnicity, origin, religion, economic or other status.
21. The council agrees and supports the outcome relating to belonging and inclusion (Domain 3)

i. We strongly agree that children and youth people should be free from racism, bullying, discrimination and stigma. In this context we recommend the Framework also specifically mention discrimination and bullying based on gender identity and sexuality.

ii. We acknowledge the key issues facing rainbow children and youth and how the council, our partners across government and the community need to work together, to meaningfully empower these young people.

iii. The council recommends strengthening the emphasis around rainbow youth and to recognise the needs and appropriate services to ensure their overall wellbeing.

iv. Particular reference and focus on rainbow communities is important because:
   - rainbow young people make up 40 per cent of the homeless youth statistics\[a\]
   - almost half of rainbow youth had seriously thought about taking their own life in the previous year. One in five had attempted suicide, compared with one in 20 of their non-rainbow peers\[b\]
   - rainbow youth were three times more likely to be bullied every week than their peers, and almost half had been hit or hurt at school in the previous year.

22. Importance of affordable, healthy homes (Domain 1)

i. The council supports the Framework’s focus on warm, healthy homes for children, where consequences of illnesses are minimised. This should also include ensuring both physically and emotionally safe and secure homes.

ii. Strong direction could be provided on the importance on housing stability and the impact this has on the emotional and mental wellbeing of children and young people.

iii. Housing is a particularly important issue for Auckland because:
   - Auckland’s children and young people experience the highest levels of over-crowding compared to any other age groups\[c\]
   - the most recent, street count in Auckland identified 2,974 people in temporary or emergency accommodation, and of those people almost 44 per cent were young people under the age of 18\[d\]
   - since 2012, Auckland has gradually experienced an increase in the number of transient students\[e\] to 8.1 per cent\[f\]. Transient students are less than half as likely to achieve National Certificate of Educational Assessment (NCEA) level 2 and above\[g\].

iv. Security of tenure and reducing transience encourages the development of longstanding community connections, which support wellbeing. Placemaking also plays a role in facilitating this and delivering sustainable social outcomes.

23. Access and participation to arts, culture and sports are key to the health and wellbeing of our children and young people (Domain 4)

i. The Framework could more clearly reference the important contribution that creativity, innovation and participation in arts and culture have on the wellbeing of children and young people. In particular, the role creativity and innovation play in:
   - the development of social and cognitive skills
   - building social connections and cross-cultural understanding\[h\]
   - supporting a sense of identity
- self-esteem and overall mental wellbeing
- and improving their ability to actively contribute to wider society.

ii. The council also recommends increased emphasis on the role of sports, recreation and outdoor activities, including having access to open spaces. This is important to:
- improving the overall mental and physical wellbeing of children and young people, especially for those children and youth at risk;
- teaching fundamental motor skills and encouraging healthy lifestyles;
- improving educational and social outcomes.

iii. Participation in sports and recreation tends to decrease as children enter their teens. The drop-out rate is particularly high for teenage girls. This is likely to have an impact on the long-term health and physical wellbeing of our young people.

24. Transitions are an important focus area (Domain 5)

i. The council appreciates the child and youth centred perspective of the Framework, and the focus on the early years. Academic studies have shown that investing in the early years, including early childhood education, supports positive outcomes in later life.

ii. For example, focusing on oral language skills, including talking in children's first or heritage language, in the early years leads to improved learning outcomes and can be a predictor of better long-term wellbeing. Early language is a key contributor to the achievement gap between poorer and more affluent families. Children that start school with a large vocabulary stay ahead.

iii. We recommend that clear objectives be set around the key transition stages. This is particularly important for disadvantaged communities, to address underlying equity issues.

iv. Effective transitions between early childhood education and primary school are critical to the development of children's self-worth, confidence and resilience, and ongoing success at school. Similarly, effective transitions into and through secondary schools are important to a student's future achievements and wellbeing. This focus seems to be missing from the Framework.

v. Providing a range of pathways after secondary school is also important. Education and skills training for young adults are key steps in equipping young people to be economically active and engage productively in the labour market.

- This is particularly relevant because Auckland has a higher per cent, than average of young people not in employment, education, or training (NEET) and supporting young people as they transition towards employment is important for their economic participation and wellbeing.
- The higher NEET rate for Auckland highlights the significant proportion of young people that are being left behind on the path to better jobs and economic productivity.
- Māori and Pacific young people are over-represented in this group. Reasons include leaving the education system earlier, being unable to work or study due to caregiving responsibilities at a younger age, and facing longer durations of unemployment.
- Māori and Pacific young people are facing challenges in finding work in Auckland and their unemployment rate is nearly double that of other groups.
25. Children and young people need access to safe, reliable and affordable transport (suggest for Domain 2)

   i. The council recommends that the Framework is explicit around the need for safe, accessible and affordable public transport. This has direct impact on overall wellbeing of children and young people and is especially important in Auckland given the city’s size, road congestion and geographical spread.

   ii. Transport, including active transport options, such as walking and cycling, is an essential enabler to children and youth’s participation and inclusion, allowing them to access school, sports and recreation, arts and cultural activities, places of study, work and to stay connected to friends and family. It also helps build their independence, confidence and overall resilience.

   iii. Statistics for Auckland show that transport costs act as a barrier to mobility\textsuperscript{xix}, with household spending on transport 75 per cent higher than the national average\textsuperscript{xxi}.

26. Harm reduction - reducing the impacts of drugs, alcohol and gambling (Domain 1)

   i. The Framework should include a greater focus on harm reduction. This could include strengthening the regulatory environment and creating better alignment between the role of central and local government in relation to harm reduction (i.e. particularly relating to alcohol, drugs, gambling and online safety).

   ii. It is important to also address access to online content and help protect our children and youth from the harmful effects of online gambling, pornography, and cyber bullying.

   iii. Raising greater awareness of the risks as well as reducing access to harmful substances and alcohol, would support the health and wellbeing of children, especially young adolescents.

27. Improving emotional and mental wellbeing (Domain 4)

   i. The council supports the Framework’s focus on mental health for children and young people. This is especially important, given the high rates of bullying in New Zealand schools which is the worst in OECD\textsuperscript{xxii}. Youth suicide statistics are also particularly high in New Zealand (especially among young Māori men)\textsuperscript{xxiii}. The council feels that this area of the Framework regarding bullying in schools and mental health needs to be strengthened.

   ii. There could be a stronger focus on emotional wellbeing of children and youth, especially around developing healthy relationships and having access to effective sex education.

   iii. We support active measures that provide timely interventions for at risk children and youth in emotional trauma or mental distress.
28. **We have a duty to ensure our children have and inherit a clean and healthy environment (Domain 3)**
   
i. We agree that fostering environmental awareness and responsibility in New Zealand children and youth is important. They are the guardians of the future and need to be encouraged to engage in the issues we face and the solutions to address these.

   ii. The Framework should also place a greater focus on the role adults, as the current stewards and decision-makers, to protect and care for New Zealand’s natural environment.

   iii. The council is committed to preserving, protecting and caring for the natural environment as part of our shared cultural heritage, and this an important commitment under the Auckland Plan 2050.

   iv. We must take all steps necessary to reduce environmental degradation and deal with both the causes and impacts of climate change. We have duty to ensure our children have access to clean air and water, can access and enjoy New Zealand’s natural heritage (its unique flora and fauna) and inherit a sustainable future.

29. **Recognise the important role local government has in supporting children and youth**
   
i. The council recommends that the Framework reference the important role local government plays in driving change and contributing to the vision for children and youth.

   ii. Local government plays a significant role in delivering services which support the wellbeing of children and youth, such as social infrastructure, local transport, environmental initiatives, community safety and civic participation.

   iii. Local government also plays a key role in supporting communities to develop and deliver sustainable and localised solutions and measures to improve child and youth wellbeing.

   iv. Attached to this submission is the 2017 I am Auckland Status Report, which provides an overview of some of the programmes and initiatives being delivered in Auckland.

   v. Improving the collective delivery of services across central and local government and communities would help maximise the potential to improve overall wellbeing for all children and youth from diverse communities, leading to greater collective impact and transformational change.

30. **Ngā koringa ā-muri / Next steps**
   
i. The council agrees and supports the focus on wellbeing as an ambitious and comprehensive agenda, and that the Framework is the vehicle for realising the aspirations for New Zealand’s future.

   ii. We support the development of a comprehensive action plan to underpin delivery of the new outcomes framework, including the development of an evaluation framework with clear outcome measures and indicators. This will be important to monitor progress towards achieving the desired outcomes.

   iii. It will also be essential that the Framework and action plan are well resourced including adequate funding for local services that support the health and wellbeing of children and youth.
iv. We recommend using a human-centred design approach as the Framework is developed further. This should include the voices of children and youth, and their wider whānau.

v. We welcome an opportunity to participate and facilitate dialogue with the children and youth in Auckland on this in the future. This will also assist us to better align existing work that the council is undertaking as part of the implementation of I Am Auckland.

vi. The council has conducted extensive research on children and youth profiles, relating to education, housing, health and transport amongst other wellbeing outcomes, with robust evidence linking to equity and access to social infrastructure.

vii. These references and evidence is easily available from http://www.knowledgesauckland.org.nz. These would be particularly important for overall planning and policy purposes, to inform decision makers for advancing in this important area of work.
Endnotes

2 The New Zealand Deprivation Index 2013 (NZDep, 2013)
3 I am Auckland – Status Report – 2017
5 Statistics New Zealand, Census of Population and Dwellings, 2013
7 Goodyear and Fabian - 2014
8 https://www.lifewise.org.nz/2016/12/12/rainbow/
9 Ibid
12 Students who attended three or more schools for five years (2010-2014) beginning at Year 1 or Year 9 - Data from the Ministry of Education.
13 Education counts, Ministry of Education
14 Ibid
18 Active NZ, Sports New Zealand, 2018
20 HighScope Perry Preschool Study Through Age 40 (2005) found that adults aged 40, who had attended a high-quality preschool programme had higher earnings, committed fewer crimes, were more likely to be employed and more likely to have graduated from high school. The public benefit assessment estimated that for every $1USD invested, the social return was $12.90USD.
22 Continuity of learning: transitions from early childhood services to schools, Education Review Office - 2015
24 Statistics New Zealand
26 Statistics New Zealand -2018
27 New Zealand has the worst rate of bullying in the OECD, with just under 60% of students experiencing bullying either weekly or monthly - more than twice the rate of the countries with the lowest rates
28 Stuff.co.nz available at https://www.stuff.co.nz/national/health/106532292/new-zealand-suicide-rate-highest-since-records-began
Approval of a discussion document for informal public consultation on inter-regional marine pest pathway management

File No.: CP2019/00107

Te take mō te pūrongo
Purpose of the report
1. To approve the discussion document for an inter-regional marine pest pathway management plan, ahead of informal public consultation between March and May 2019.

Whakarāpopototanga matua
Executive summary
2. Auckland Council staff have participated in the development of a discussion document for an inter-regional marine pest management plan through the Top of the North Marine Biosecurity Partnership (a group composed of councils from the upper North Island, Department of Conservation and Ministry for Primary Industries).

3. The discussion document (see Attachment A) is intended for informal consultation with the public and key stakeholders to help the partnership understand their views on how to prevent the introduction and spread of marine pests. This is an initial step towards creating a plan that may regulate activities that can introduce or spread marine pest species.

4. The discussion document focuses on managing the risk of spreading marine pest species through vessel hull-fouling\(^{11}\), which presents the highest risk of spreading marine pests in the upper North Island region. The document also includes options to develop rules for other pathways such as ballast water, aquaculture, bilge water and marine equipment.

5. The informal public consultation is planned to take place between March and May 2019. The consultation will be run through the Bionet website with the option to host on regional council websites. Engagement will be promoted through media releases, digital advertisements, social media and stakeholder workshops as required. Engagement will target key stakeholders such as mana whenua, the marine industry and recreational boat users.

6. Feedback received through the consultation process will be collated, analysed and reported back to participating councils, including recommendations on next steps. Staff expect to present this report to the Environment and Community Committee in July 2019.

Ngā tūtohunga
Recommendation/s
That the Environment and Community Committee:

a) approve the discussion document for informal consultation on inter-regional marine pest pathway management.

b) note that the analysis of feedback received through the consultation process and recommended next steps will be presented to the Environment and Community Committee in July 2019.

\(^{11}\) the undesirable accumulation of microorganisms, plants, algae and animals on submerged structures (especially ships' hulls).
Horopaki

Context

7. The development of a discussion document for an inter-regional marine pest pathway management plan through the Top of the North Marine Biosecurity Partnership was endorsed by the Upper North Island Strategic Alliance (UNISA)\(^\text{12}\) of councils in late 2017.

8. On 31 May 2018, a memorandum was sent to the Environment and Community Committee advising that Auckland Council would participate in the development of this discussion document.

9. This information memorandum included information on:
   - the need to address the threat of marine pest species as the upper North Island is a high-risk region for the introduction and spread of marine pests
   - central government, regional and unitary council statutory responsibilities and available management tools under the Biosecurity Act 1993 and the Resource Management Act 1991. This overview included reference to marine biosecurity provisions in council’s Unitary Plan
   - the Top of the North Marine Biosecurity Partnership (including its purpose, participating partners, broader operational framework including monitoring and surveillance, research related to eradication and control methods, as well as, behaviour change through education)
   - different options for Auckland to address marine biosecurity threats, summarised below:
     - maintain the status quo of limited intervention
     - prepare a discussion document for an inter-regional marine pathway management plan through the Top of the North Marine Biosecurity Partnership (option chosen by council)
     - develop a marine pest pathway management approach for the Auckland region only without Top of the North partners
     - wait for a national marine pest pathway management plan.

10. On 3 December 2018, the Environment and Community Committee and Independent Māori Statutory Board members were sent an update on the development of the discussion document. Staff informed members that the Top of the North working group intends to finalise a high-level discussion document in February and March 2019 with informal public consultation planned between March and May 2019. Staff advised that they will present the high-level discussion document to the Environment and Community Committee for its approval in February or March 2019

Tātaritanga me ngā tohutohu

Analysis and advice

11. A discussion document has been prepared by a Top of the North Marine Biosecurity working group comprising of marine biosecurity staff from Auckland Council, Northland Regional Council, Waikato Regional Council and Bay of Plenty Regional Council.

\(^{12}\) UNISA responds to and manages a range of inter-regional and inter-city issues and is made up of seven member regions (Northland Regional Council, Waikato Regional Council, Bay of Plenty Regional Council, Auckland Council, Whangārei District Council, Hamilton City Council and Tauranga City Council). Alliance membership is made up from the mayors and chair people of the respective regional authorities.
12. This working group identified the following three options for managing pathways for marine pests (included in the discussion document):

- **Option 1. Lead the way with consistent rules for clean hulls** - develop consistent rules on managing hull-fouling across the four biggest boating regions – Northland, Auckland, Waikato, and Bay of Plenty

- **Option 2. Go even further – make rules for other pathways too** - along with rules for hull-fouling, develop rules for other pathways like ballast water, aquaculture, bilge water and marine equipment

- **Option 3. Wait for national rules** - wait for the Ministry for Primary Industries to develop a national ‘pathway’ approach for marine pests. Continue our combined efforts on public education, but each region keeps its own rules for managing marine pests.

13. The pros and cons associated with each option that have been considered in the discussion document are listed in Table 1 below.

**Table 1: Pros and cons for options to manage pathways for marine pests**

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| Option 1. Lead the way with consistent rules for clean hulls across the upper North island | • Reduced risk of marine pest spread  
• Long-term cost benefit of keeping pests out  
• Systems in place to easily manage pest arrivals  
• Easy to understand rules for marine industries  
• Lead the way for a national pathway plan | • Eventually superseded by national pathway plan  
• Increased cost to regions without hull surveillance programmes (note: Auckland has the programmes so will not incur a cost)  
• Increased cost for boat owners  
• Inconsistent rules with other New Zealand regions |
| Option 2. Make rules for other pathways too across the upper North Island | • Additional advantage to option 1 advantages in that rules will address all the main risk pathways for marine invaders | • Increased costs of implementation  
• Increased costs for marine businesses  
• Longer timeframe for implementation |
| Option 3. Wait for national rules | • Same rules for all regions  
• National rules easier to clarify and communicate to public and marine businesses | • Will take several years for rules to be developed  
• Will not address risk of marine pests in near future  
• National regulations may not suit some councils and regions |
14. The working group subsequently focused on the identification of potential rules for clean hulls, because fouling on boat hulls presents by far the biggest risk for transferring marine pests in the upper North Island. Identified options for clean hull rules included in the discussion document are:

- **Option 1. Clean hull required at all times** - all vessel hulls required to have no more than a slime layer or barnacles at all times
- **Option 2. Clean hull required only when moving** - no more than a slime layer or barnacles permitted when moving from one harbour or place to another. This rule is already in place for Northland
- **Option 3. Clean hull required only when moving to specially identified places** - no more than a slime layer or barnacles permitted when moving to specially identified high value places.

15. The pros and cons associated with each clean hull option considered in the discussion document are listed in Table 2 below.

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1. Clean hull required at all times</td>
<td>- Easy to understand</td>
<td>- Will require significant compliance and monitoring</td>
</tr>
<tr>
<td></td>
<td>- Possible exceptions for immobile vessels</td>
<td>- Still a risk of marine pest transfer</td>
</tr>
<tr>
<td></td>
<td>- Does not require a vessel identification system</td>
<td></td>
</tr>
<tr>
<td>Option 2. Clean hull required only when moving</td>
<td>- Easier to achieve than Option 1</td>
<td>- Requires a vessel identification system to track movement</td>
</tr>
<tr>
<td></td>
<td>- Requires mapping to identify the boundaries of movement zones</td>
<td>- Requires mapping to identify the boundaries of movement zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Harder to understand</td>
</tr>
<tr>
<td>Option 3. Clean hull required only when moving to</td>
<td>- Surveillance programmes can target 'high value places'.</td>
<td>- Only protects several identified places, other areas at risk</td>
</tr>
<tr>
<td>specially identified places</td>
<td></td>
<td>- Requires additional resourcing to identify high value places based on economic, environmental and cultural values.</td>
</tr>
</tbody>
</table>

16. Feedback on the options outlined in the discussion document will be sought from key stakeholders through the informal consultation process between March and May 2019. This feedback will be collated, analysed and reported back to participating councils and the Upper North Island Strategic Alliance (UNISA), and will include recommendations on next steps. Staff will present this report to the Environment and Community Committee in July 2019.
Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views
17. Auckland Council’s Biosecurity and Natural Environment Strategy units support the contents of the discussion document and recommend releasing the document for informal public consultation, because:
  - it will increase stakeholder and community understanding of issues around the spread of marine pests, options to address these issues and potential future responsibilities
  - it will help council understand public and key stakeholder views on how to prevent the introduction and spread of marine pests
  - the development of a pathway management approach for marine pests is consistent with council’s proposed Regional Pest Management Plan, council’s marine biosecurity programme proposed under the natural environment targeted rate and response to the SeaChange - Tai Timu Tai Pari Marine Spatial Plan.

18. Views from relevant council-controlled organisations will also be sought as part of the informal public and key stakeholder consultation process.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views
19. Biosecurity staff are working with the Great Barrier, Rodney, and Waiheke Local Boards to address marine biosecurity issues in their areas and have informally discussed this initiative with these boards since it was endorsed by the Upper North Island Strategic Alliance in 2017.

20. Franklin, Great Barrier, Rodney and Waiheke Local Boards have expressed support for the development of an inter-regional pathway management plan to manage spread of marine pests through the consultation process for the development of Auckland’s proposed Regional Pest Management Plan.

21. In November 2018, all local boards were sent a memorandum informing them of the development of a discussion document for an inter-regional marine pest pathway management plan to manage marine pests, with specific reference to opportunities for local boards to provide feedback. Local board engagement will proceed as follows:
  - channels for consultation engagement will be provided to local boards to share with their networks
  - local boards will receive a summary of consultation feedback and analysis, and will be able to provide additional feedback by June 2019
  - staff will attend individual local board workshops to present the draft discussion document in early 2019 upon request.

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13 The SeaChange- Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan identified non-indigenous marine species as a serious threat to marine ecosystems of the Hauraki Gulf, and recommended to develop pathway management plans and pest management plans by 2020 to prevent the arrival and further spread of new and existing species and diseases, especially to high value areas.
Tauākī whakaaweawe Māori
Māori impact statement

22. Mana whenua feedback was received through the proposed Regional Pest Management Plan and the following iwi expressed a desire to include marine biosecurity in a plan (either pathway or pest):
   • Ngāti Paoa
   • Ngāti Whātua o Kaipara
   • Ngāti Rehua
   • Te Runanga o Ngāti Whātua.

23. Biosecurity staff presented at the 10 November 2017 Infrastructure and Environmental Services mana whenua hui to introduce this initiative. Mana whenua expressed general support for the development of an inter-regional marine pest pathway management plan.

24. In December 2018, members of the Independent Māori Statutory Board received an update on the development of the discussion document for an inter-regional marine pest pathway management plan and were informed about opportunities to provide feedback.

Ngā ritenga ā-pūtea
Financial implications

25. The budget required for informal public consultation is approximately $42,000 and it will be funded by the Natural Environment Targeted Rate 10-year budget for marine biosecurity.

26. Progressing any identified marine pest pathway management options beyond the scope of this project will depend on feedback received through the consultation process. Any financial implications arising from the outcomes of consultation and proposed delivery will be reported on in July 2019.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations

27. There are no organisational risks arising from the consultation process. Any risks associated with suggested next steps following consultation will be reported in July 2019.

Ngā koringa ā-muri
Next steps

28. The next steps and anticipated timelines for the development of the discussion document and informal public consultation are outlined in Table 3 below.

Table 3. Anticipated timelines for the inter-regional pest management plan informal public consultation process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Anticipated timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating councils to seek approval from their elected members to release the discussion document for public consultation</td>
<td>February-March 2019</td>
</tr>
<tr>
<td>Engagement plan to be finalised through the Top of the North Marine Biosecurity working group</td>
<td>February-March 2019</td>
</tr>
<tr>
<td>Memo to local boards and mana whenua with the final discussion document and plans for informal public consultation</td>
<td>February-March 2019</td>
</tr>
</tbody>
</table>
Item 13

Activity | Anticipated timeline
---|---
Informal public and key stakeholder consultation | March-May 2019
Analysis of feedback received through the consultation process | June 2019
Results of the analysis sent to local boards and mana whenua for their information and informal feedback | June 2019
All feedback summarised and next steps identified through the Top of the North Marine Biosecurity working group | July 2019
Feedback and recommended next steps reported back to participating councils, including Environment and Community Committee and the Upper North Island Strategic Alliance | July 2019

Ngā tāpirihanga

Attachments

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4</td>
<td>Inter-regional pest management discussion document</td>
<td>115</td>
</tr>
</tbody>
</table>

Ngā kaihaina

Signatories

Authors
- Samantha Happy – Senior Biosecurity Advisor Marine
- Sietse Bouma – Team Leader Natural Environment Strategy Unit
- Phil Brown – Biosecurity Manager

Authorisers
- Dave Allen - Manager Natural Environment Strategy
- Gael Ogilvie - General Manager Environmental Services
- John Dunshea – Acting Director Infrastructure and Environmental Services
- Dean Kimpton - Chief Operating Officer
Better ways to stop marine pests?
Étahi tikanga pai atu mō te ārai orotā ō te moana?

We want to hear from you!
Mauria mai o whakaaro!
To protect the coastlines we all love, the four northern-most regions are considering shared rules on marine pests.

For several years, Northland, Auckland, Bay of Plenty and Waikato regions – together with boaters from all over – have been working together to stop the spread of marine pests.

We think that creating better, consistent rules across the regions is hugely important part of how we respond to the growing threat of marine pests.

But before going any further, we want to hear from you. So read on, find out more, and have your say!


Front cover image: Richard Hughes
What’s the problem?
He aha te raruraru?

New Zealand’s wealth of coastline and rich, diverse marine life is very much part of who we are. The sea is in our hearts.

As the movement of boats increases, so too does the risk of marine pests spreading and threatening our incredible coastal playground, kai moana, underwater life, tourism and aquaculture industries and more.

For vessels coming from overseas, there are national rules in place to minimise the risk of new pest species arriving.

But for vessels moving around within our coastal waters – mostly our own vessels – rules to prevent pests spreading to new places vary from region to region.

A consistent approach across the regions would be simpler, more effective and make it easier to understand the rules.

Our four northern-most regional councils (Northland, Auckland, Waikato and Bay of Plenty Toi Moana) are also home to the biggest boating populations in the country. We’re exploring whether inter-regional hull-fouling rules could be a better way forward – and we need to hear what you think.
What are the options?
He aha etahi ara?

Rules just for hull fouling? Include other pathways too?
Or wait for national rules?
Which option do you think is best – and why?

**OPTION 1**
Lead the way with consistent rules for clean hulls.

- Develop consistent rules on managing hull-fouling across the four biggest boating regions – Northland, Auckland, Waikato, and Bay of Plenty.

**Pros**
- Reduced risk of marine pest spread.
- Reduced cost in the long run – it’s cheaper to keep pests out than deal with them when they move to a new place.
- Good systems in place to deal with new pest arrivals.
- Easier for public and marine industries to understand.
- Could provide the model for an eventual national ‘pathway’ plan.

**Cons**
- Could be eventually superseded by national ‘pathway’ plan.
- Cost of hull surveillance programme in regions that don’t already have one.
- Cost to boat owners to keep hulls clean.
- Still inconsistent with rest of New Zealand.

**OPTION 2**
Go even further – make rules for other pathways too.

- Along with rules for hull-fouling, develop rules for other pathways like ballast water, aquaculture, bilge water and marine equipment.

**Pros**
- Addresses all the main risk pathways for marine invaders.

**Cons**
- Increased costs of implementation.
- Increased costs to commercial shipping, aquaculture and will require extensive changes to practices.
- Likely to take many years before new rules can be implemented.

**OPTION 3**
Wait for national rules.

- Wait for MPI to develop a national ‘pathway’ approach for marine pests.
- Continue our combined efforts on public education, but each region keeps its own rules for managing marine pests.

**Pros**
- Rules will apply to all regions.
- Provides clarity for everyone having the same rules everywhere.

**Cons**
- Delays – expected to be several years before national rules could be developed.
- Risk of marine pests spreading remains same in the near future.
- One size fits all approach may not work for some councils/regions.
What could the rules look like?
Me pēhea te hanga o ngā ritenga?

If clean hull rules were to be developed, there are a few different options. Which do you think is best? Are there any other good options?

**OPTION 1**
Clean hull required at all times.

*All vessels required to have no more than a slime layer and/or barnacles at all times.*

**Pros**
- Easy to understand.
- Exceptions could be applied to vessels which don’t move.
- Doesn’t require a vessel identification system.

**Cons**
- Rule will require compliance and monitoring by agencies.
- Cannot eliminate risk of marine pest transfer.

**OPTION 2**
Clean hull required only when moving.

*No more than a slime layer and/or barnacles permitted when moving from one harbour/place to another. This rule is already in place for Northland.*

**Pros**
- Easier to achieve than Option 1.

**Cons**
- Harder to enforce.
- Requires a vessel identification system.
- Requires mapping to identify the boundaries of the movement zones.
- Harder for the public to understand.

**OPTION 3**
Clean hull required only when moving to specially identified places.

*No more than a slime layer and/or barnacles permitted when moving to specially identified high value places.*

**Pros**
- Surveillance programmes can target ‘high value places’.

**Cons**
- Only protects those special places identified, other areas will still be at risk.
- High value places will need to be identified and categorised based on economic, environment and cultural values.

Tell us what you think – head to [www.(URLTBC).co.nz](http://www.(URLTBC).co.nz)
Marine pests, particularly in their juvenile stages, can hide amongst other hull-fouling, making them hard to detect. Fouled boat hulls can also act as a magnet for some marine pests by providing additional surface for them to settle on.

Unfortunately, it also makes it easy to accidentally transfer marine pests from one place to another on your boat hull if it hasn’t been effectively cleaned.

New legislation now allows councils to manage ‘pathways’ if they choose to – that is, the way pests are transported from one place to another.

In the marine environment, the ‘pathway’ really means boats, as movement of hull-fouled boats is the single biggest risk for marine pest transfer.

It’s not just about stopping the spread of pests that are already here and keeping them out of places like our world-class marine reserve at the Poor Knights in Northland.

It’s also about putting good systems in place in case new, worse marine pest species slip through the cracks and reach our shores.

Together with vessel owners and the wider marine industry, we now have an opportunity to better safeguard our precious coastline, now and for future generations.
What about other pathways?
Pēhea ētahi atu tikanga?

Unfortunately, some marine pest species have invaded parts of our coastal marine area in recent years, arriving as hitchhikers on boat hulls or in the ballast water of international sea-going vessels. Nowadays, vessels coming from overseas must meet national rules to minimise the risk of new pest species arriving. However, we need to deal with some of the problem marine pests that have already become established to stop them from spreading further.

Research tells us that fouling on boat hulls is by far the biggest risk for transferring marine pests, though there are other ways these pests hitch-hike around.

Aquaculture-related movement of marine pests will be covered by a proposed national standard. This standard will require aquaculture farms to manage their biosecurity risks, and can be found on the Ministry for the Environment’s website.

For ballast water, incoming international vessel risk is managed by the Ministry for Primary Industries. However, there are currently no regulations to manage the transfer of ballast water from one region to another.

There is also a risk of marine pests being moved within fishing gear (including crab pots and dredges), residual water in cooling systems, bilge water and the movement of structures in the coastal marine area.

However, these risks are minimal compared to biofouling on vessel hulls – managing this will cover off the majority of the risks we face.
What’s the current situation?  
He aha te āhua ināianei?

The four northern-most regional councils, with support from MPI, have been collaborating closely in recent years to build awareness of marine pests and help boaties understand the actions they can take to reduce the spread.

However, the rules and management approaches for marine pests vary from region to region.

A ‘pathway’ means the way pests are transported from one place to another.
Recently introduced pathway rules requiring a clean hull when entering the region or moving from place to place—the first region in New Zealand to do so.

Northland’s rules are implemented through a surveillance programme which inspects more than 2000 hulls a year. The pathways plan approach is a proactive way to managing the impacts of marine pests rather than a reactive measure of managing pests once they are established.

Has risk-based rules in the Unitary Plan to manage the spread of harmful and invasive organisms via fouled hulls.

Currently has no pathway plan rules but is active in managing the impacts and risks of marine pest species.

Has pathway-style rules in the Proposed Regional Pest Management Plan. Currently has Small-Scale Management Programmes for Sabella and Styela.

You can find out about more about these councils’ marine pest rules at www.marinepests.nz

The Ministry for Primary Industries (MPI) has indicated interest in developing a national pathways programme, in line with its Biosecurity 2025 vision, but considers it important to understand the different regional needs and approaches first.
Where to from here?
Mai konei ki hea?

This document is intended for informal consultation to help the four regional councils understand people’s views on how to prevent the spread of marine pests.

We’ll collate all feedback received and use this to help inform the shape of pathways management within the four regions.
Have your say

Tuku kōrero mai

Which option for marine pest rules do you think is best? If clean hull rules were developed, what do you think those rules should look like?

We’re keen to hear what you think!

You can jump online and have your say at: [link TBC]

If you’d prefer to email or post your feedback, send it to [email address] or [postal address].

Thanks for being part of the conversation and doing your bit to care for our precious marine environment.

Photo credit: Poiru Knight, Seacloud NZ.
Approval of a discussion document for informal public consultation on inter-regional marine pest pathway management

Item 13
Auckland Council’s submission on the proposed National Disaster Resilience Strategy: Rautaki Manawaroa Aituā ā-Motu

File No.: CP2019/00576

Te take mō te pūrongo
Purpose of the report

1. To seek the Environment and Community Committee retrospective approval for Auckland Council’s submission to the government on the proposed National Disaster Resilience Strategy, as submitted to the Ministry for Civil Defence & Emergency Management on 7 December 2018.

Whakarāpopototanga matua
Executive summary

2. The current National Civil Defence Emergency Management (CDEM) Strategy developed in 2008, expires on 9 April 2019. Its replacement, known as the National Disaster Resilience Strategy (the proposed strategy) (see attachment A) is developed and finalised through a formal process which includes formal submissions. The submission period for the proposed strategy ran from 11 October – 7 December 2018.

3. Given its broad nature and ambitious ‘over-arching intent for a resilient New Zealand’, the proposed strategy requires broad collaboration across Auckland to achieve the vision of the proposed strategy, including across the Auckland Council family.

4. As the proposed strategy’s intent is to enable and embed resilience across the whole-of-society, it was considered more appropriate for this submission to be approved by the Environment and Community Committee.

5. Development of Auckland Council submission leveraged the networks of the Auckland Climate Change Action Plan working group. However, this process meant the submission was not available for the Environment and Community Committee to endorse at its last meeting (4 December 2018). This report seeks retrospective approval from the committee for Council’s submission on the proposed strategy (see attachment B).

6. In principle, Auckland Council supports the direction of the proposed strategy as it aligns well with the Auckland Plan and more specifically, Auckland’s CDEM Group Plan.

Ngā tūtohunga
Recommendation/s

That the Environment and Community Committee:

a) retrospectively approve the Council’s submission on the proposed National Disaster Resilience Strategy.

Horopaki
Context

7. The Civil Defence Emergency Management (CDEM) Act 2002 governs the operation of New Zealand’s CDEM framework. The CDEM framework is comprised of the National CDEM Strategy, the National CDEM Plan, CDEM Group Plans and non-legislative guidelines.
8. The CDEM Act provides for a National Strategy (of up to 10 years duration) to set the Crown’s vision and long-term goals for CDEM in New Zealand, and the objectives and measurable targets to achieve those goals. There is no provision for the strategy to have directive powers, but the actions of the National Director of CDEM, and CDEM Groups, such as Auckland, must not be inconsistent with the intention of the strategy.

9. CDEM Groups are established under the CDEM Act and are comprised of a region’s local governing authorities. In Auckland context, as a unitary authority, the CDEM Group committee is a statutory committee comprised of governing body elected representatives, members of the Independent Māori Statutory Board, with observers from key CDEM partners and stakeholders. The role of the CDEM Group committee is to provide strategic direction and leadership across CDEM key partners, stakeholders and communities. They are supported by a coordinating executive group (CEG) made up of senior representatives from CDEM agencies such as emergency services and the health sector. The CEG provides strategic and operational advice to the CDEM Group Committee and council on matters relating to its CDEM responsibilities.

10. The current National CDEM Strategy developed in 2008, expires on 9 April 2019. The public consultation period on the proposed National CDEM Strategy, known as the National Disaster Resilience Strategy (the proposed strategy) ran from 11 October – 7 December 2018 (see attachment A).

11. Given the proposed strategy’s broad nature and ‘over-arching intent for a resilient New Zealand’, it is acknowledged that a broader collaborative approach across the Auckland Council Group is needed to achieve the vision of the proposed strategy.

12. As the intent is to enable and embed resilience across whole-of-society, it was considered more appropriate for this submission to be approved by the Environment and Community Committee.

13. Due to tight time constraints between the submission deadline (December 7) and the wish for a consultation with the wider council group, Auckland Council's submission was not ready for approval at the 4 December 2018 Environment and Community Committee meeting. This report seeks retrospective approval from the committee for Auckland Council’s submission on the proposed national strategy (see attachment B).

Tātaritanga me ngā tohutohu
Analysis and advice

Difference between the current and proposed national strategy

14. The proposed National Disaster Resilience Strategy (attachment A) builds on the current strategy in several ways. It promotes actions to strengthen resilience across the six key environments: social, cultural, economic, built, natural and governance.

15. However, the current strategy pre-dates lessons learned over the past 16 years, including those learnt from significant and damaging emergencies in New Zealand and overseas. In addition, several factors have influenced thinking on how the CDEM sector works together to achieve the vision of a resilient New Zealand including:

   a) global agreements such as the Sendai Framework for Disaster Risk Reduction 2015 – 2030 and the Paris Agreement on Climate Change, which outlines how nations should approach their wider societal risk from disasters; and

   b) a Ministerial Review (2017) on Better Responses to Natural Disasters and Other Emergencies that resulted in several significant recommendations for the CDEM sector.
16. The most significant change from the current strategy is the focus on building broad societal resilience to disasters, with more explicit reference to communities and community-based resilience. This is a more inclusive approach, comprising individuals, whānau, communities, households, communities, hapū and iwi, and businesses and organisations, as well as central and local government.

17. Other significant changes include:
   a) specific considerations of Māori concepts of resilience, and the resilience of Māori, and how that links with the vision for a safe and prosperous nation;
   b) the importance of reflecting culture and cultural difference in building resilience; and
   c) inclusion of high-level measurements for assessing progress to reduce losses from disasters.

18. The strategy provides the vision and strategic direction, including outlining priorities and objectives for increasing New Zealand’s resilience to disasters. The detail of how those objectives are to be achieved will sit in an accompanying national roadmap alongside other related key documents such as Auckland’s CDEM Group Plan and an Auckland Council action roadmap.

Ngā whakaaweawe me ngā tirohanga a te rōpū Kaunihera
Council group impacts and views

Auckland Council’s submission on the proposed national strategy

19. The formulation of Auckland Council’s submission was coordinated by Auckland Emergency Management and included engagement and consultation with the wider council group.

20. Auckland Council used the Auckland Climate Action Plan working group as a platform for engagement which included representatives from Auckland Council (for example Sustainability Office, Healthy Waters, and the Research, Monitoring and Evaluation Unit) Watercare, Panuku Development and Auckland Transport. Auckland Emergency Management also interviewed the representatives from Community Services, the Community and Social Policy team, Local Board services and the Independent Māori Statutory Board.

Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe
Local impacts and local board views

21. As mentioned earlier in the report, there is a strong focus on building broad societal and community resilience within the proposed national strategy. Auckland Emergency Management has an active programme of engagement with local boards and the views of local boards are routinely sought and integrated into the CEG work programme.

22. Owing to time constraints there was no opportunity to seek the views of Local Boards for this submission. However, Local Board services provided feedback was also included in the submission.

Tauākī whakaaweawe Māori
Māori impact statement

23. The proposed strategy is informed by Te Ao Māori and includes Māori concepts of resilience. Resilience and Te Ao Māori are both underpinned by three focus areas:
   a) Tangata whenua and resilience,
   b) Tangata whenua and disaster risk reduction, and
   c) Tangata whenua and a resilient nation.
24. It also provides for partnership and collaborative engagement with iwi. A key part of the Ministry for Civil Defence and Emergency Management’s consultation will be to seek feedback on how Māori perspectives should be incorporated in the proposed strategy.

**Ngā ritenga ā-pūtea**

**Financial implications**

25. There are no direct financial implications resulting from the adoption of the proposed strategy. Auckland Council will be able to make choices about how best to meet and/or contribute to the objectives of the proposed strategy, which will become clearer as we develop Auckland Council’s roadmap of actions.

**Ngā raru tūpono me ngā whakamaurutanga**

**Risks and mitigations**

26. The risk of the Auckland Council not submitting on the national strategy is significant. The scale and diversity of the region across the six key environments mean it is critical that Auckland’s views are submitted to the proposed strategy to ensure strategic local and central government alignment.

**Ngā koringa ā-muri**

**Next steps**

27. The Minister of Civil Defence, the Hon Chris Faafoi, will undertake cross-party consultation on the revised strategy in early February 2019 and will seek approval from Cabinet on the final strategy in late February 2019 with a view to tabling it in the House in March 2019, for commencement by 10 April 2019.

28. In due course the CEG will review Auckland’s CDEM Group Plan (2016 – 2021) to align to the adopted national strategy and roadmap of actions including a measuring and monitoring regime.

**Ngā tāpirihanga**

**Attachments**

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**Ngā kaihaina**

**Signatories**

<table>
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<tr>
<th>Author</th>
<th>Sarah Sinclair - Chief Engineer</th>
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<td>Authoriser</td>
<td>Dean Kimpton - Chief Operating Officer</td>
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National Disaster Resilience Strategy
Rautaki Manawaroa
Aituā ā-Motu

We all have a role in a disaster resilient nation
He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā

DRAFT FOR CONSULTATION
Foreword
Kōrero whakapuaki

New Zealand enjoys a relatively high standard of living, regularly coming high in global prosperity rankings with qualities such as an open market, free people and strong sense of society.

Not all is perfect. We have areas we need to work on, including to address inequalities in the distribution of living standards, and improve areas of weakness or decline, such as housing availability and affordability.

We also face risks to that standard of living. Increasingly complex and uncertain risks that represent a threat to our way of life, and to our prosperity and wellbeing. If realised, these risks can be extremely costly. Globally, the economic cost of disasters has increased steadily over the last 40 years, in large part because of the expansion to the built environment: damage to infrastructure and buildings cause huge cost – public and private – when impacted.

It is the impact on wellbeing that can have the most profound effect. In 2011 New Zealand suffered one of its worst ever natural disasters in the 22 February Christchurch earthquake. New Zealand Treasury in 2013 estimated the capital costs to be over $40 billion, the equivalent of 20% of gross domestic product. Beyond the tangible costs of damage and rebuild, lay a web of social and economic disruption and upheaval: flow-on effects to business and employment, psychological trauma, dislocation of communities, creation or exacerbation of existing social issues, disruption to normal lives and livelihoods, and uncertainty in the future.

Many of the risks we face both now and in the future can be readily identified. However, we also need to recognise that the future is uncertain: major, unexpected, and hard-to-predict events are inevitable. Moreover, the further we probe into the future, the deeper the level of uncertainty we encounter. Within this uncertain future environment, resilience is an important requirement for success. Resilience is our – or a system’s – ability to anticipate, minimise, absorb, respond to, adapt to, and recover from disruptive events. In essence, it’s about developing a wide zone of tolerance – the ability to remain effective across a range of future conditions.

Given our risk landscape, and the uncertainty of the wider domestic and global environment, it is important for us to take deliberate steps to improve our resilience and protect the prosperity and wellbeing of New Zealand – of individuals, communities, businesses, our society, the economy, and the nation as a whole.

This Strategy proposes a three-pronged approach to improve our nation’s resilience to disasters – what we can do to minimise the risks we face and limit the impacts to be managed, building our capability and capacity to manage emergencies when they do happen, and a deliberate effort to strengthen our wider societal resilience.

The Strategy promotes a holistic approach to strengthening resilience that connects with a range of agencies and sectors to deliver improved outcomes for New Zealanders. Disaster risk and disaster impacts reach all parts of society, so, to the greatest degree possible, disaster resilience should be integrated into all parts of society. Disaster resilience therefore requires a shared approach between governments (central and local), relevant stakeholders, and the wider public – a collective approach to a collective problem. The goodwill, knowledge, experience, and commitment of all parts of society are needed to make a difference.
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Tā mātau matakitenga me te uaratanga

- Purpose of this Strategy
- Our vision: a safe and prosperous nation
- Risks to our wellbeing and prosperity
- Our goal: a resilient future

Our priorities for improved resilience:
Ā mātau kaupapa matua mō te whakapakari i te manawaroa

- Managing risks
- Effective response to and recovery from emergencies
- Strengthening societal resilience

Our commitment to action
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- Transparency and social accountability
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Appendices
Ngā āpitihanga

- Overview of this Strategy
- What can I do?
- Analysis of our current state as a baseline for this Strategy
- Two key opportunities
Key terms
Ngā kupu hira

Capacity
The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.

Disaster
A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, social, cultural, economic and environmental losses and impacts.

Disaster risk
The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined as a function of hazard, exposure, vulnerability and capacity.

Disaster risk management
Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

Disaster risk reduction
Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience.

Emergency management
The application of knowledge, measures, and practices that are necessary or desirable for the safety of the public or property, and are designed to guard against, prevent, reduce, recover from, or overcome any hazard or harm or loss that may be associated with any emergency, including the planning, organisation, co-ordination, and implementation of those measures, knowledge, and practices.

Exposure
People, infrastructure, buildings, the economy, and other assets that are exposed to a hazard.

Hazard
A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

National risk
A national risk is an uncertain, yet conceivable, event or condition that could have serious, long-term effects on New Zealand’s security and prosperity, requiring significant government intervention to manage.

Readiness
The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.

Reconstruction
The medium and long-term rebuilding and restoration of critical infrastructures, services, housing, facilities and livelihoods required for the full functioning of a community or a society affected by a disaster, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk.

Recovery
The coordinated efforts and processes used to bring about the immediate, medium-term, and long-term holistic regeneration and enhancement of a community following an emergency.

Response
Actions taken immediately before, during or directly after a disaster to save lives and property, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected, and to help communities recover.

Residual risk
The disaster risk that remains in unmanaged form, even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained.
Resilience
The ability to absorb the effects of a disruptive event, minimise adverse impacts, respond effectively post-event, maintain or recover functionality, and adapt in a way that allows for learning and thriving, while mitigating the adverse impacts of future events.

Risk assessment
An assessment of the nature and extent of risk by analysing potential hazards and evaluating existing conditions of exposure and vulnerability to determine likely consequences.

Risk transfer
The process of formally or informally shifting the financial consequences of particular risks from one party to another, e.g. via insurance.

Vulnerability
The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.
Our vision and goal
Tā mātau matakitenga me te uaratanga

Purpose of this Strategy
Our vision: a safe and prosperous nation
Risks to our wellbeing and prosperity
Our goal: a resilient future
1. Purpose of this Strategy
Te kaupapa o tēnei Rautaki

1.1 Delivering on the intent and purpose of the CDEM Act 2002

The purpose of this Strategy is to outline the vision and long-term goals for civil defence emergency management (CDEM) in New Zealand. CDEM in New Zealand is governed by the CDEM Act, which:

- promotes the sustainable management of hazards in a way that contributes to safety and wellbeing;
- encourages wide participation, including communities, in the process to manage risk;
- provides for planning and preparation for emergencies, and for response and recovery;
- requires local authorities to co-ordinate reduction, readiness, response and recovery activities through regional groups;
- provides a basis for the integration of national and local planning and activity; and
- encourages coordination across a wide range of agencies, recognising that emergencies are multi-agency events affecting all parts of society.

This reflects an overarching intent for a resilient New Zealand.

This is important because New Zealanders are, and will continue to be, at risk from a broad range of hazards.

We can do much to reduce our risks, through both a risk management approach, and by building broader societal resilience. We can also ensure we have effective processes in place for responding to and recovering from emergencies and other types of disruption when they do happen.

The Strategy sets out what we as New Zealanders expect in respect of a resilient New Zealand, and what we want to achieve over the next 10 years. It explicitly links resilience to the protection and growth of living standards for all New Zealanders, and promotes a wide, whole-of-society, participatory and inclusive approach.

The Strategy provides the vision and strategic direction, including to outline priorities and objectives for increasing New Zealand’s resilience to disasters. The detail of how those objectives are to be achieved sits in a roadmap of actions, alongside other related documents including the National CDEM Plan and Guide, the National Security Handbook, CDEM Group Plans, and a range of other supporting policies and plans.

1.2 This is the third Strategy made under the Act

The first Strategy was made in 2003; the second in 2007. They were aimed at embedding the (then) new approach to emergency management in New Zealand, which was to take a comprehensive and integrated approach, utilising the ‘sifs’ of risk reduction, readiness, response, and recovery.

In 2018 we have reached a level of maturity where we are ready for the next step. A number of things have influenced our thinking on what that step should be:

- 16 years of lessons from incidents and emergencies since the CDEM Act came into effect;
- work to develop a national risk register, which aims to support better identification, understanding and comparison of national risks;
- global agreements such as the Sendai Framework for Disaster Risk Reduction 2015-2030 that outlines how nations should approach their wider societal risk from disasters;
- a Ministerial Review (2017) on Better Responses to Natural Hazards and Other Emergencies, and the Government’s response to it, and
- a two-year long strategy development process with a wide range of stakeholders to analyse our current state and determine vision, goals, and objectives.

We have identified areas where we can do more – to be more effective, more capable, fit-for-purpose, to have all the information we need to make the smartest choices, to keep pace with changing risks, and changes in society. This Strategy details the conclusions, and the areas we need to focus on for a more resilient New Zealand.
1.3 Ring-fencing the scope of this Strategy

While acknowledging broad societal resilience is desirable for achieving higher living standards and optimal prosperity and wellbeing, this Strategy is confined to the disaster aspects of resilience.

Furthermore, while acknowledging the vital importance of wider social and economic attributes of disaster resilience (such as high levels of health and education, reduced inequalities and social deprivation, the building of fiscal and macro-economic strength, etc.), these issues are well catered for by other policies and programmes across government and through society, and will not be duplicated here.

This Strategy is focussed on building a culture of resilience, and the actions we can all take – at all levels, from individuals and families/whānau, businesses and organisations, communities and hapū, cities, districts and regions, and Government and national organisations – to contribute to a more resilient New Zealand.

1.4 Intended audience and use of the Strategy

This Strategy is for all New Zealanders, and all those who live, work or visit here.

It is intended to provide a common agenda for resilience that individual organisations, agencies, and groups can align with for collective impact.

Central government, local government, businesses, organisations, and iwi can use it to guide them in building resilience both for their own organisation, and for the people and communities they support or provide services for.

Hapū and community organisations can use it to support community wellbeing and resilience, and to understand the wider network of agencies and organisations working towards common goals.

Individuals, households and whānau can use it to prompt thinking on their own resilience, and what they can do to ensure they are prepared for disruption and crises in the long term. The Strategy hopefully gives assurance of the wider network of actors supporting them at a community, local, regional, and national level.

All readers are encouraged to consider what this Strategy means for them, their family/whānau, community/hapū, business or organisation, and what they can do to contribute to their own resilience or the resilience of others.

1.5 Currency of the Strategy

This Strategy will be current for a period of 10 years from the date it comes into effect, unless it is replaced during that time.
2. Our vision: a safe and prosperous nation

Tā mātau matakite: he iwi haumaru, he iwi rangatira

National success is about more than just economic measures. It is about a healthy and happy life, a good education for our children, a healthy environment that protects our natural resources and taonga, family/whānau and communities we can rely on, a safe place to live and work, opportunities to start a business or get ahead, and the freedom to be who we want to be. This is prosperity.

New Zealand has seen much success over the past decade in global indices designed to measure wellbeing and prosperity. We hold up well in most categories of measurement, including in economic quality, business environment, and governance; for our health and education systems, our natural environment, and – in particular – for our personal freedoms and social capital.

However, while we do well, we certainly can’t afford to be complacent. New Zealand must continually adapt and evolve if it is to see prosperity grow.

For us to secure wellbeing and prosperity for all our people – in this generation and for future generations – we must think about prosperity in more than economic terms. The New Zealand Treasury, in developing the Living Standards Framework, has initiated a shift of focus. The Living Standards Framework is based on an economic model, but puts intergenerational wellbeing as its core goal.

Wealth matters, but as a means, not an end: wealth is only useful if it translates into higher living standards for everyone. Protecting and growing those living standards is paramount for securing a prosperous future. This Strategy is centred on how it can contribute to that vision.

2.1 The Living Standards Framework

The Living Standards Framework is a New Zealand-specific framework that draws on a range of national and international approaches to wellbeing. In particular, it builds on the Organisation for Economic Cooperation and Development’s (OECD’s) approach to wellbeing: the How’s Life?/Better Life model.

The framework conceives of wellbeing as being comprised of a number of aspects of life experience, such as housing, income, employment, education, community engagement, enjoyment of environmental amenity and health and safety. Measures of these aspects provide a snapshot of current wellbeing. The wellbeing of future generations is represented by four ‘capital stocks’ – financial/physical, social, human, and natural capital.

![The Four Capitals Diagram](image)

**The Four Capitals**

Intergenerational wellbeing relies on the growth, distribution, and sustainability of the Four Capitals. The Capitals are interdependent and work together to support wellbeing. The Māori Crown relationship is integral to all Four Capitals. The LSF is being continually developed and the next iteration of the framework will consider the role of culture, including Māori culture, as part of the capitals approach in more detail.
The capitals are seen as ‘value stocks’, which jointly produce wellbeing outcomes over time. Each of the dimensions of wellbeing is the result of all of the different capital stocks. Investments in the capital stocks will result in the levels of the relevant stocks increasing, while depreciation, resource depletion, pollution or waste – or other shocks or stresses – may result in capital stock levels declining.

The four capitals in the Living Standards Framework help us to take into account the range of impacts that a policy option or practice may have on the material and non-material factors that affect New Zealanders’ wellbeing, now and in the future. The underlying principle of the capitals framework is that good public policy and practice enhances the capacity of natural, social, human and financial/physical capital to improve wellbeing for New Zealanders.

2.2 Risk and resilience, and our future wellbeing

Safety and security are integral to securing wellbeing and prosperity. People’s wellbeing is dependent on having secure living conditions, personal safety, and trust and confidence in authorities, and their ability to manage threats and dangers. A secure and stable environment is necessary for securing freedoms, and for attracting investment and sustaining economic growth. In short, a nation can prosper only in an environment of safety and security for its citizens.

To this end, it is imperative that we look to risk management and resilience for all four capitals stocks.

New Zealand is relatively well placed in this regard with a comprehensive legislative framework in place for risk management, including the Civil Defence Emergency Management Act 2002, the Resource Management Act 1991, the Building Act 2004, the Local Government Act 2002, and a range of other legislation and regulatory instruments. We have a system of managing, coordinating, and overseeing national security (the National Security System) and emergency management arrangements at the local, regional, and national level.

Today, however, risk management is increasingly challenged by complexity in which multiple systems simultaneously impact on the four living standards capitals. Risk management in this setting requires a greater acknowledgement of uncertainty and a shift from reactive to proactive risk management. Decision-makers in both the public and private sectors require more comprehensive strategies that combine the active management of specific risks with enhancement of generic resilience in society.

This Strategy combines these elements and considers ways to improve our resilience across the four capitals.
3. Risks to our wellbeing and prosperity

Ngā mōrea ki tō tātau oranga, tōnuitanga hoki

From the Hawkes Bay earthquake (1931) to the Tangiwai rail disaster (1953), the Wahine shipwreck (1968), the lower North Island floods (2004), Pike River mine disaster (2010), the Canterbury (2010-2011) and Kaikōura (2016) earthquakes, MV Rena grounding (2011), 1080 milk powder crisis (2015), Port Hills fires (2017), or M. Bovis disease outbreak (2018) – New Zealand has had its fair share of devastating events.

These events have caused loss of life, injury, damage and disruption. Some have caused impacts in the built and natural environments; they have cost millions of dollars in repair and reconstruction. Other events have caused lost productivity, lost livelihoods, and lost income. More than that, these events have caused untold trauma and social disruption to individuals, family/whānau, communities and hapū, the effects and costs of which we might never fully know. In short, disasters, or other highly stressful events, impact all four capitals in a profound and costly way.

Disasters may seem inevitable and intractable, but there is much we can do to reduce the chance that hazards will affect us, and much we can do to lessen the impacts if and when they do.

This section explores some key concepts so that we have a common understanding about our key risks and how we can manage them.

3.1 Our current risks

New Zealand is exposed to a range of significant hazards and threats. Natural hazards, such as earthquakes, volcanoes, or extreme weather, is only one type; our economy relies heavily on primary production and is thus vulnerable to adverse impacts from pests and diseases; the potential for an infectious disease pandemic has been highlighted in recent years through the SARS, bird flu and swine flu crises; heavy reliance on technology and just-in-time supply chains means we are vulnerable to disruption from a wide range of domestic and international sources; and the global geopolitical environment means threats to our security and economy are complex and often unpredictable.

In New Zealand, we classify these in five categories: natural hazard risks, biological hazard risks, technological risks, security risks, and economic risks.

3.2 How our risks might change in the future

In assessing our risks, we can learn from past events and crises, but we also need to consider broader and longer-term societal trends and think about how they could impact us in the future. These trends include:

- **Climate change and environmental degradation**, which could impact on, or accelerate, a wide range of our risks owing to their effects on sea level rise, the frequency and severity of natural hazards and extreme weather, biodiversity and the availability and quality of ecosystems and their services.

- **Population trends**, including that New Zealand society is becoming older and more ethnically diverse, with changing levels of income inequality, and changing geographic distribution of population. This has implications for how organisations engage inclusively, and what needs must be met.

- **Global economic growth and productivity**, which have implications for both the state and resilience of our economy, and how much we can afford to invest in risk management and resilience.

- **Digital connectivity and technological change**, which can, simultaneously, be a source of both risk (for example, cyber-crime) or opportunity (for example, by enhancing our ability to collect and analyse complex data about risks).

- **Challenges to the rules-based international order**, which have the greatest effect on some of our economic and security risks, but could have further-reaching implications.
3.3 Cost of disasters

Disasters over the decade or more, both in New Zealand and overseas, have shown the magnitude of costs that are involved in these events, both in terms of damage (the market value of losses), and in the response to and recovery from such events. It is important to note that the costs that are reported are often only direct costs. Less well defined is the flow-on, indirect costs, and – even less so – from other longer-term outcomes (also known as ‘intangible costs’).

A recent Australian study found that the indirect and intangible costs, when calculated, more than doubled the total reported cost of each of the three events studied.1

While we intuitively know that the impact of disasters is much larger than the direct economic cost, it is only when we start to consider the economic cost of these indirect and intangible impacts that we can see what these events really cost us as communities, and as a nation, and how critical it is to try to minimise these costs – financial and social – as far as we possibly can.

3.4 What is disaster risk?

Disaster risk is the chance that a hazard could impact us in a significant way.

Disaster risk is a function of three interlinked aspects: hazard, exposure, and vulnerability.

Hazard refers to the likelihood and intensity of a process or phenomenon that could cause us harm, such as ground shaking induced by an earthquake, extreme winds associated with a cyclone, or a pathogen caused by a food safety issue or biological agent.

Exposure refers to the location, attributes, and value of people and assets (such as buildings, agricultural land, and infrastructure) that are exposed to the hazard.

Vulnerability is the potential extent to which physical, social, economic, and environmental assets may become damaged or disrupted when exposed to a hazard.

Vulnerability includes physical vulnerability, which refers to the level of damage sustained by built structures due to the physical load imparted by a hazard event. It also includes social vulnerability, which refers to damage as it relates to livelihood, social connections, gender, and other factors that influence a community’s ability to respond to, cope with, and recover from a disaster.

These three components can be countered by a fourth component, capacity, which refers to the strengths, attributes and resources available to reduce or manage the risks associated with the combination of the other three factors.

When these potential impacts are determined probabilistically, that is, are multiplied by how likely the hazardous event is to occur, we can determine our risk – the chance of significant impacts.

3.5 Disaster risk reduction

Disaster risk reduction is the discipline concerned with reducing our risks of and from disasters.

Historically, dealing with disasters focused on emergency response, but towards the end of the 20th century it was increasingly recognised that disasters are not ‘inevitable’ and that it is by reducing and managing conditions of hazard, exposure and vulnerability we can prevent losses and alleviate the impacts of disasters. Since we cannot usually reduce the likelihood of hazards the main opportunity for reducing risk lies in reducing exposure and vulnerability. Reducing these two components of risk requires identifying and reducing the underlying drivers of risk, which are particularly related to economic, urban and rural development choices and practice. Degradation of the environment, poverty and inequality2 and climate change, which creates and exacerbates conditions of hazard, exposure and vulnerability. Addressing these underlying risk drivers will reduce disaster risk, lessen impacts if they do happen, and, consequently, maintain development and growth.

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1 The Economic Cost of the Social Impact of Natural Disasters (2016) Australian Business Roundtable

2 The impact of hazards and threats is likely to exacerbate existing inequities that exist across New Zealand. This means that some populations are disproportionately affected by many of the social and economic impacts of risks, particularly Māori, as well as Pasifika, people with disabilities and those living with high levels of social and economic deprivation. Obligations under the Treaty of Waitangi as well as commitments to improving wellbeing mean we need to ensure that any action toward reducing risk does not increase existing inequities. Any plan should explicitly embrace equitable outcomes for all affected people.
Disaster risk reduction can be seen as a policy objective, a risk management process, or a social aspiration. Successful disaster risk reduction tends to result from a combination of ‘top-down’ institutional changes, strategies, and policies, and ‘bottom-up’, local and community-based approaches.

### 3.6 Sendai Framework for Disaster Risk Reduction 2015-2030

In 2015 New Zealand signalled its commitment to the Sendai Framework for Disaster Risk Reduction 2015-2030 (the Sendai Framework). The Sendai Framework is one of three global agreements developed as part of the post-2015 sustainable development agenda. Together with the Sustainable Development Goals and the Paris Agreement on Climate Change, the Sendai Framework aims to be a blueprint for how nations should approach risks to their development – in this case, from disasters.

The Sendai Framework has a desired outcome of:

> The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

To attain this outcome, it has a goal to:

> Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thereby strengthen resilience.

The Framework has four priorities, and a series of recommended actions at the global, regional, national, and local levels. It promotes three key ideas:

1. A greater effort to understand risk (in all its dimensions), so that we can prioritise investment, make better risk-informed decisions, and build resilience into everyday processes.
2. A shift of focus from managing disasters to managing risk, including to reduce the underlying drivers of risk (exposure and vulnerability).
3. A broader ‘whole-of-society’ approach to risk – everyone has a role in reducing and managing risk.

The Framework sets 7 global targets for improved disaster risk reduction, which nations are asked to report on annually. The targets are:

| 1 | Substantially reduce disaster mortality by 2030, aiming to lower average per 100,000 mortality between 2020-2030 compared with 2005-2015. |
| 2 | Substantially reduce the number of affected people by 2030, aiming to lower the average figure per 100,000 between 2020-2030 compared with 2005-2015. |
| 4 | Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030. |
| 5 | Substantially increase the number of countries with national/local disaster risk reduction strategies by 2020. |
| 6 | Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of [the] framework by 2030. |
| 7 | Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030. |

The Sendai Framework has been a key influence in the development of this Strategy. The principles and priorities of the Sendai Framework have been incorporated into it; many of the national and local recommended actions have been instrumental in developing the Strategy objectives.
4. Our goal: a resilient future
Tā mātau whāinga: he anamata manawaroa

In an effort to address our current known risks, manage uncertainty, and be ready for any events that may occur in the future, it is generally agreed that the overarching goal is resilience. But – what does resilience mean to us, as New Zealanders? How do we define it, what are the attributes of resilience, and how do we improve it?

4.1 Vision of a resilient nation

Resilience can mean a lot of different things to different people. In a series of workshops we asked participants to describe what a resilient nation meant to them and the aspirations they have for New Zealand in respect of its disaster resilience. The result is a description of our desired ‘future state’ – the end goal, ‘what success looks like’ for this Strategy. This is shown on pages 20-21.

<table>
<thead>
<tr>
<th>Manaakitanga</th>
<th>We respect and care for others</th>
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<tr>
<td></td>
<td>• Wellbeing, health and safety</td>
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<td></td>
<td>• Hospitality, kindness, goodwill</td>
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<thead>
<tr>
<th>Whanaungatanga, kotahitanga</th>
<th>We nurture positive relationships and partnerships</th>
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<tr>
<td></td>
<td>• Engagement and communication</td>
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<td></td>
<td>• Collaboration and collective action</td>
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<td>• Respect of individuality</td>
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<tr>
<th>Kaitiakitanga, tūrangawaewae</th>
<th>We guard and protect the places that are special to us</th>
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<tbody>
<tr>
<td></td>
<td>• Protecting and enhancing our environment and ecosystems</td>
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<td>• Intergenerational equity</td>
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<td>• Stewarding our place in the world</td>
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<td></td>
<td>• Feeling enabled and connected</td>
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<tr>
<th>Matauranga</th>
<th>We value knowledge and understanding</th>
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<tr>
<td></td>
<td>• Using scientific, historic, local, and traditional knowledge</td>
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<td></td>
<td>• Striving for a common understanding</td>
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<td>• Accountability and transparency</td>
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<tr>
<th>Tikanga</th>
<th>Our customs and cultural practices are central to who we are</th>
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<tr>
<td></td>
<td>• Cultural identity and expression</td>
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<tr>
<td></td>
<td>• Ethical and values-based</td>
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<td></td>
<td>• Accountability and transparency</td>
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<tr>
<th>Rangatiratanga</th>
<th>We lead by example</th>
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<tr>
<td></td>
<td>• Values-based leadership</td>
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<tr>
<td></td>
<td>• Self-determination, principle of subsidiarity</td>
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4.2 Resilience: a working definition

In the wake of unprecedented disasters in recent years, "resilience" has become a popular buzzword across a wide range of disciplines, with each discipline attributing its own definition to the term. A definition that has long been used in engineering is that resilience is the capacity for "bouncing back faster after stress, enduring greater stresses, and being disturbed less by a given amount of stress". This definition is commonly applied to objects, such as bridges or buildings. However, most risks are systemic in nature, and a system — unlike an object — may show resilience not by returning exactly to its previous state, but instead by finding different ways to carry out essential functions; that is, by adapting and transforming to meet challenges.

In terms of disaster resilience, an important quality is also to anticipate and minimise risks as far as possible, such that any impacts are manageable and recoverable.

The working definition of resilience for this strategy is therefore "the ability to absorb the effects of a disruptive event, minimise adverse impacts, respond effectively, maintain or recover functionality, and adapt in a way that allows for learning and thriving."

Below we offer two additional explanations: one, a more technical explanation, and one, a simplified approach.

4.2.1 Getting more technical...

While risks tend to focus on the negative consequences from uncertainty, the concept of resilience encourages us to build capacity to help protect us from vulnerability, and to be able to better deal with the impact from shocks and stresses as they occur. The degree of vulnerability we have then depends on the nature, magnitude and duration of the shocks or stresses that are experienced as well as the level of resilience to these shocks.

Under this interpretation, resilience has two dimensions:

- an absorption dimension, which comprises resistance and buffers that can reduce the depth of impact, and
- an adaptability dimension, which focuses on elements of adaptability and innovation that maximise the speed of recovery.

![Diagram: Two dimensions of resilience: absorption and adaptability]

Figure 1 below illustrates this idea. When a system is subject to a shock or stress, the level of functioning declines, and can fall rapidly. The depth of the fall in functioning can be thought of as the absorption capacity of the system. A system with a high absorption capacity experiences only a small loss in functioning (e.g., because it has sufficient buffers to absorb the stress or shock to ensure it continues to achieve desired outcomes). The speed of recovery dimension is captured by the time lag between the stress or shock and when functioning returns to a steady-state level. Systems that have high adaptability are able to recover faster than otherwise the case. The two dimensions together acknowledge that the total impact of a shock is a function of both the depth of the impact and the time it takes to recover.

![Diagram: Impact and recovery phases]

Figure 1: Two dimensions of resilience: absorption and adaptability

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Auckland Council's submission on the proposed National Disaster Resilience Strategy: Rautaki Manawaroa Aituā & Motu

Page 145
4.2.2 Simplifying resilience...

A simpler way of thinking about resilience is our tolerance for disruption – how much disruption, in the form of hazards, that we, or the system, can cope with before it becomes a significant impact on our wellbeing.

The implicit suggestion here is that as we are able to remove, avoid, or minimise more risk factors, and build our people, assets, and systems to be responsive and adaptable, so our tolerance for disruption grows – we can deal with a wider range and size of shocks and stresses, without them becoming a major crisis or disaster, and recover fast – and well – without significantly affecting our quality of life. The greater our range of tolerance for disruption, the better off we are.

4.2.3 Types of resilience

Resilience as a concept has wide applicability to a range of disciplines, and has become a popular area of academic study and organisational pursuit over recent years. As a result, it is routine to hear about many different types of resilience, for example ecological, environmental, institutional, infrastructural, organisational, economic, social, community, familial, and individual resilience – to name just a few.

Within this context, it is particularly important to be clear about our goals and objectives; in particular:

Resilience of what, to what, why, and how?

In terms of this Strategy, we have talked about what, to what, and why – to protect and grow our capitals in the face of shocks, stresses, and uncertainty, in order to advance the wellbeing and prosperity of New Zealand. The remainder of this Strategy is about how we do that.
These types of resilience operate— in some form— at a range of levels, from individuals and families/whānau, to businesses and organisations, communities and hapū, cities and districts, and at a national level.

For example, at a community level, the attributes of a safe and resilient community are that it:

... is connected: It has relationships within its network, and with external actors who provide a wider supportive environment, and supply goods and services when needed.

... is healthy: It has a good level of individual and population health, access to medical treatment, education, and a range of other social welfare support, when needed.

... has cultural norms: It has a strong identity, attachment to place, and sense of civic responsibility. It is inclusive, and looks to cultural norms and values to sustain it in times of upheaval.

... has economic opportunities: It has a diverse range of employment opportunities, income, and financial services. It is flexible, resourceful, and has the capacity to accept uncertainty and respond to change.

... has infrastructure, services, and safe buildings: It has strong housing, transport, power, water, and sanitation systems. It also has the ability to maintain, repair, and renovate them.

... can manage its natural assets: It recognises the value of natural resources and indigenous ecosystems, and has the ability to protect, enhance, and maintain them.

... is organised: It has the capacity to identify problems, establish priorities, coordinate, collaborate, and act.

... is knowledgeable: It has the ability to assess, manage, and monitor its risks. It can learn new skills, build on past experiences, and plan for its future.

Adapted from: Characteristics of a Safe and Resilient Community. IPCC (2011)

This Strategy asserts that broad attention to resilient practices within and across each of these environments is critical to the overall resilience of the nation, and protection of our capitals and future wellbeing. The model is not a strategy itself, but a checklist, of kinds, to ensure we pay attention to the range of things that are important. It can also operate as a basis for assessment, or as a decision-making tool, for example, to evaluate whether options or investment are meeting, or are sensitive to, multiple needs.
4.3 Resilience and Te Ao Māori

Any comprehensive framework for resilience in New Zealand needs to consider both the resilience of Māori and Māori concepts of resilience. This reflects the status of Māori as the indigenous population of New Zealand and the principles of the Treaty of Waitangi.

4.3.1 Tangata whenua and resilience

Māori share a holistic and community perspective on resilience, which can be characterised as the social, physical, familial, spiritual and environmental wellbeing of whānau, the unit of cultural capital in Te Ao Māori. Sustainable wellbeing is achieved through having a secure Māori identity, that is intergenerationally linked through whānau, local communities, and different iwi, to the earth mother Papatūānuku (the land), from whom all Māori descend. This genealogy imposes moral obligations on Māori to enact guardianship roles and responsibilities to ensure the oraonga – ongoing wellbeing, or more broadly the resilience – of all residents, flora, fauna and the wider environment (lands, rivers and seas) of New Zealand.

4.3.2 Tangata whenua and disaster risk reduction

When a disaster occurs, the responsibility of caring for others and Te Ao Tūroa (the natural world), falls to whānau, hapū, and iwi with historical ties to the areas impacted by the disaster. Whakapapa creates a kinship-based form of capital understood by Māori as whanaungatanga (close relationships), that may be drawn on to aid communities during times of adversity. Whānau, hapū and iwi respond quickly and collectively to provide support and address the immediate needs of communities as well as to institute practices that will aid the recovery, and the development of disaster resilience in affected regions.

This process is considered whakaaroanga4 – the rescue, recovery and restoration of sustainable wellbeing and may be applied to whānau, hapū, and iwi, tribal homelands as well as all communities and parts of New Zealand impacted by disasters. The whakaaroanga process is underpinned by kaupapa Māori (cultural values), informed by mātauranga Māori (cultural knowledge and science) and carried out as tikanga Māori (cultural practices). These cultural attributes interact to co-create community and environmental resilience in the context of disasters.

Key values that shape Māori inter-generational practices for facilitating whakaaroanga (restoration and resilience) include kotahitanga (unity), whānau (family), whakapapa (genealogy), marae (community centres), whakawaunaungatanga (building/maintaining relationships), maataitanga (respect/support/hospitality), and kaitiakitanga (guardianship). From a Māori perspective, such values link with a set of practices that must be learnt and enacted through giving time and support for the good of all rather than the wellbeing of oneself, and such actions are a positive indicator of a person’s mana.

4.3.3 Tangata whenua and a resilient nation

The effective response and significant community support facilitated by Māori in the aftermath of the Canterbury and Kaikoura earthquakes, the floods in Edgecumbe as well as in other emergencies, has generated considerable interest in Māori disaster resilience. Māori moral and relational attributes applied to creating community resilience promote a collaborative response to disaster recovery, commitment to environmental restoration, and the extension of hospitality to others experiencing adversity. Māori also have a significant asset base, which has, and will again be mobilised to secure community wellbeing in the aftermath of disasters5.

These strengths are highly relevant to developing a resilient New Zealand, and partnering with Māori to build disaster resilience is essential to ensuring that outcome.

This Strategy recognises the importance of whakaaroanga, the Māori-Crown relationship, and Māori worldviews generally; it is committed to an inclusive, community approach to resilience; it is focussed on putting people at the centre of resilience, including an emphasis on manaakitanga and wellbeing; it aims to build a partnership approach between iwi and agencies with roles in the emergency management system, and it seeks to build recognition of the role culture – including kaupapa Māori and tikanga Māori – plays in our wider resilience.

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4. Acknowledgement: The concept and application of the term whakaaroanga to disaster resilience were developed in the National Science Challenge Resilience to Nature’s Challenges research project Whakaaroanga mana, led by Dr Christine Kenney.

5. It is important to note that while many Māori may share a similar worldview, there is still a need to recognise different dynamics within and between iwi/ hapū, and to engage with each on an individual basis. There is also a need to recognise that different iwi, hapū and marae have different resource constraints and asset bases and their ability to respond is dependent on this, not all iwi and marae have the same resilience or capacity to respond.
4.4 A resilient nation: how are we doing?

The process to develop this Strategy included a collective evaluation of New Zealand’s current state of resilience, including our strengths, barriers to, and opportunities for building resilience. Appendix 3 details the main conclusions and can be seen as the ‘baseline’ for the Strategy, as well as the main evidence base on which many of the priorities and objectives are based.

4.5 Conclusion: co-creating a resilient society

Today’s world is turbulent and is likely to be so in the future. However, it is also dynamic, and characterised by huge opportunities for leadership and innovation. A critical question for the next 10 years will be how to enable and use those opportunities to effectively build resilience and address the many challenges that will continue to confront us.

One of the key messages is that we need to look to a range of sources for inspiration and relevance as we adapt to a shifting, and increasingly challenging environment. These include exploring new opportunities for engagement and action through technology, new sources of inspiration and activity driven by younger generations, and new methods for measuring and demonstrating impact.

We need to embody agility and flexibility. We need to monitor risks and trends, maintain a learning, growth mindset, and adapt and transform our organisations and ourselves as necessary. Within this, it is important to focus on adaptive capabilities – the skills, abilities, and knowledge that allow us to react constructively to any given situation.

We need to work out how we build our resilience in a smart, cost-effective way, so that it’s realistic and affordable, and so it isn’t a ‘sunk’ cost, like stooples for a bad day – but rather enables better living standards today.

Above all, we need to work together. Building resilience as siloed sectors is not enough – government, the private sector, and civil society need to be more joined up. More effective ways of tackling challenges are required, which, by necessity, will transcend traditional sector barriers. This includes employing new business models that combine the resources and expertise of multiple sectors of society to address common challenges, as well as creating opportunities that enable leaders across all sectors to participate effectively in decision-making.

It is in this cross-sectoral space that we have the opportunity and ability to underpin the resilience dynamism that we need, by engaging in ways that inspire, support and shape a change agenda that is needed for improved resilience at both the national and local levels. By developing these cross-sectoral opportunities, we can build powerful networks built on trust, commitment, and a focus on the collective good, which can be translated into positive outcomes for society.

In this space, we can achieve greater impact and resilience by working together in ways that build on the strengths of each sector and that can be sustained over the long term. We need to work together to build the resilience that we need, and to do so in ways that are sustainable and effective.

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Vision of a resilient New Zealand
He matakitenga o te Aotearoa manawaroa

A future resilient New Zealand is a nation where resilience thinking is integrated into all aspects of life as a matter of course. There is a deep, shared understanding of a wide range of risks and the nature of the action that each of them requires. From an individual level, to families and whānau, communities and settlements, towns and cities, and at a national level, everyone understands their own share of responsibility for reducing risk and strengthening resilience. A strong understanding of risk and resilience is also an integral part of business culture. The sum of these parts builds a risk-savvy, resilient nation.

Strong leadership has created a coherent, joined-up approach to resilience that connects with a range of government departments and organisational mandates. Communities are empowered to problem solve and adapt. At a national level, a long-term resilience strategy and the associated capacities and governance structures are in place. There is a constant flow of up-to-date, evidence-based information on best practice. This supports the capacity for local, site-specific, and innovative response. Rich information flows make it possible for communities and the nation to identify and connect-up resources and use them where they are most needed.

New Zealand communities and neighbourhoods are well connected both by face-to-face interaction and digital networks. There are shared values and social norms in relation to resilience that support a whole of society approach. At the same time, resilience thinking connects with, draws on and permeates all cultures within New Zealand. People make the connection between resilience and their own culture, values traditions, sense of identity and sense of place.
New Zealand takes a proactive, anticipatory, smart approach to limit impacts before they happen, understanding that action up-front limits costs later. This includes taking steps to both to mitigate the risks from climate change, and to adapt to the change that is already taking place. Tough issues are tackled through collective conversation and action.

Resilience is integrated into urban and rural design principles as a matter of course and supported by quality information on safe building materials and design. Rich data and modelling of hazard and risk are enabling the transition to smart land-use, where permanent dwellings and key infrastructure are not built on the highest risk ground.

Response to emergencies is characterized by an end-to-end system that supports cooperative and coordinated emergency management, and timely, accurate, and relevant information that enables the public to understand the situation and take action to protect themselves and others, and limit damaging and costly flow-on effects.

New Zealand as a whole is able to have informed debate about the optimal level of resource to invest in order to ensure that ALL aspects of recovery, including economic recovery, are smooth and swift. Recovery from emergencies is comprehensive, participatory, and inclusive of all peoples and organisations, having had discussions about priorities, processes, and desired outcomes before emergencies happen.

In all, as a nation, we understand that we live in a country exposed to hazards, but we also understand the range of action to take to limit impacts and ensure the hazards, crises, and emergencies we will inevitably face do not become disasters that threaten our prosperity and wellbeing.
Our priorities for improved resilience:
Ā mātau kaupapa matua mō te whakapakari i te manawaroa

Managing risks
Effective response to and recovery from emergencies
Strengthening societal resilience
5. Managing risks
Te whakahaere mōrea

What we want to see: New Zealand is a risk savvy nation that takes all practicable steps to identify, prioritise, and manage risks that could impact the wellbeing and prosperity of New Zealanders, and all who live, work, or visit here.

This priority is concerned with identifying and monitoring risks to our wellbeing, taking action to reduce our existing levels of risk (corrective risk management), minimise the amount of new risk we create (prospective risk management), and ensuring that everyone has the data, information, knowledge, and tools they need to be able to make informed decisions about resilience.

We have seen how we already have a considerable amount of risk in our society through the hazards we face, the assets we have exposed to those hazards, and the vulnerability of people, assets, and services to impacts. It is important for us to try and reduce that level of existing risk so that the chances of disaster are reduced, and/or the impacts are reduced if or when hazardous events occur.

At the same time, it is critical to recognise how we inadvertently add to that risk through poor development choices, including land-use and building choices. Planning for resilience at the outset of new projects is by far the cheapest and easiest time to minimise risk and has the potential to significantly reduce disaster costs in the future.

Risk information provides a critical foundation for managing disaster risk across all sectors. At the community level, an understanding of hazard events—whether from living memory or oral and written histories—can inform and influence decisions on preparedness, including life-saving evacuation procedures and the location of important facilities.

In the construction sector, quantifying the potential risk expected in the lifetime of a building, bridge, or other critical infrastructure drives the creation and modification of building codes. In the land-use and urban planning sectors, robust analysis of flood (and other) risk likewise drives investment in flood protection and possibly effects changes in insurance as well. In the insurance sector, the quantification of disaster risk is essential given that the solvency capital of most insurance companies is strongly influenced by their exposure to risk.

A critical part of understanding and managing risk is understanding the full range of costs involved in disasters, both the direct costs from damage and the more indirect and intangible costs resulting from flow-on effects and social impact. We also need to identify the range of financial instruments that may be available to support the activities designed to reduce our risk and build our resilience, including those promoted in this Strategy.
The six objectives designed to progress the priority of managing risks are at all levels to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>What success looks like</th>
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<tr>
<td>1 Identify and understand risk scenarios (including the components of hazard, exposure, vulnerability, and capacity), and use this knowledge to inform decision-making</td>
<td>By 2030, there is an agreed, standardised, and widely-used methodology for assessing disaster risks at a local government, large organisation, and central government level. Risks can be aggregated and viewed at a national or sub-national level, and the results inform the risk assessment efforts of others. Businesses and small organisations can make use of a simplified version to assess their own risks, and make decisions about courses of action.</td>
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<tr>
<td>2 Put in place organisational structures and identify necessary processes to understand and act on reducing risks</td>
<td>By 2030, the governance of risk and resilience in NZ is informed by multi-sectoral views and participation including the private sector, civil society, and other community representatives. Progress on risk management and towards increased resilience is publicly tracked, and interventions evaluated for effectiveness.</td>
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<tr>
<td>3 Build risk awareness, risk literacy, and risk management capability, including the ability to assess risk</td>
<td>By 2030 we have an agreed ‘plain English’ lexicon for risk, including better visual products for describing the risk of any situation, hazard, product, or process; government agencies and science organisations regularly communicate with the public about risks in a timely and transparent manner, and in a way that is understandable and judged effective by the public.</td>
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<td>4 Address gaps in risk reduction policy (particularly in the light of climate change adaptation)</td>
<td>By 2030 we have had a national conversation – including with affected and potentially-affected communities – about how to approach high hazard areas, and we have a system level response (including central and local government) with aligned regulatory and funding/financing policies in place.</td>
</tr>
<tr>
<td>5 Ensure development and investment practices, particularly in the built environment, are risk-sensitive, taking care not create any unnecessary or unacceptable new risk</td>
<td>By 2030, communities value and accept having resilience as a core goal for all development, recognising that this may involve higher upfront costs though greater net benefits in the long term; plans, policies and regulations are fit for purpose, flexible enough to enable resilient development under a variety of circumstances, and can be easily adapted as risks become better understood; developers aim to exceed required standards for new development, and may receive appropriate recognition for doing so; earthquake prone building remediation meets required timeframes and standards.</td>
</tr>
<tr>
<td>6 Understand the economic impact of disaster and disruption, and the need for investment in resilience, identify and develop financial mechanisms that support resilience activities.</td>
<td>By 2030, there is an improved understanding of the cost of disasters and disruption, including the economic cost of social impact; we are routinely collecting data on disruption, and using it to inform decision-making and investment in resilience; there is a clear mix of funding and incentives in place to advance New Zealand's disaster risk management priorities and build resilience to disasters.</td>
</tr>
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</table>
6. Effective response to and recovery from emergencies
Te urupare tōkita me te whakaora mai i ngā ohotata

**What we want to see:** New Zealand has a seamless end-to-end emergency management system that supports effective response to and recovery from emergencies, reducing impacts, caring for individuals, and protecting the long-term wellbeing of New Zealanders.

Responding to and recovering from disasters remains – and may always remain – our toughest challenge. This is when we have most at risk, when human suffering is potentially at its greatest, and when there is most threat to our property, assets, and economic wellbeing. It is the phase of the fastest pace, of most confusion, of the most pressure, and the highest requirement for good decision-making and effective communications and action. It is also a phase when we have the chance to reduce impacts before they get out of control, to limit the suffering of individuals, families/whānau, communities and hapū, to manage risk and build in resilience for an improved future. In short it is the phase in which we all need to rise to the challenge, be the best that we can be, and work collectively to address the issues in front of us.

There are many strengths in New Zealand’s emergency management system. Our system is set up to deal with ‘all hazards and risks’, we work across the ‘4Rs’, and engage communities in emergency management. There is passion and commitment from all those who respond to emergencies, paid staff and volunteers alike.

In recent years, significant global and local events have changed how we think about emergency management. The Christchurch earthquakes are still fresh in our minds as a nation. A changing climate means we could get more frequent storms and floods. Globally, we see the impact of tsunami, pandemics, industrial accidents, terrorism incidents and other hazards that cause serious harm to people, environments, and economies. Our risks are changing. Our response system must change too to ensure it works when we need it.

This priority aims to take the progress we have made in responding to and supporting recovery from emergencies over the last 16 years since the CDEM Act came into force. It incorporates the Government’s response to the Ministerial Review into Better Responses to Natural Hazards and Other Emergencies (2017), and it looks at the next generation of capability and capacity we require. It aims to modernise the discipline of emergency management and ensure we are ‘fit-for-purpose’, including to address some of the emerging issues of maintaining pace with media and social media, responding to new and complex emergencies, managing whole-of-society response, and the type of command, control, and leadership required to ensure rapid, effective, inclusive, and compassionate response and recovery.
The six objectives designed to progress the priority of effective response to and recovery from emergencies are to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>What success looks like</th>
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<tbody>
<tr>
<td>7 Implement measures to ensure that the safety and wellbeing of people is at the heart of the emergency management system</td>
<td>By 2025, there is renewed levels of trust and confidence in the emergency management system. A partnership approach with iwi means a collaborative approach and full engagement in relation to emergency management. In emergencies, the safety, needs, and wellbeing of affected people are the highest priority. The public know what is going on, what to expect, and what to do; hazard warnings are timely and effective, and incorporate new technology and social science; strategic information is shared with stakeholders, spokespeople, and the media, so they get the right advice at the right time; and public information management is resourced to communicate effectively with the public, through a variety of channels, in formats that are sensitive to the particular needs of people and groups, such as people with disabilities or non-English speakers.</td>
</tr>
<tr>
<td>8 Strengthen the national leadership of the emergency management system</td>
<td>By 2025, more directive leadership of the emergency management system, including setting national standards for emergency management, so there is a consistent standard of care across the country. The Hazard Risk Board provides strengthened stewardship of the system, and there is clear understanding of, and arrangements for, lead and support roles for the full range of national risks.</td>
</tr>
<tr>
<td>9 Improve policy and planning to ensure it is clear who is responsible for what, nationally, regionally, and locally, in response and recovery</td>
<td>By 2025, legislative and policy settings support plans at all levels that are clearer about how agencies will work together and who will do what. An updated incident management doctrine provides clarity about roles and functions, and is used by all agencies to manage all events. At a regional level, shared service arrangements are clear about local and regional roles, and mean better use of resources and better holistic service delivery to communities.</td>
</tr>
<tr>
<td>10 Build the capability and capacity of the emergency management workforce for response and recovery</td>
<td>By 2030, all Controllers are trained and accredited; people fulfilling incident management roles have the appropriate training, skills, experience and aptitude and volunteers are appropriately trained, recognised, and kept safe in the system. Fly-in Teams supplement local capability and capacity.</td>
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<tr>
<td>11 Improve the information and intelligence system that supports decision-making in emergencies</td>
<td>By 2025, all stakeholders in the emergency management system have access to the same operational and technical information, which provides greater awareness of the situation at hand, and allows timely and effective decision-making.</td>
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<tr>
<td>12 Embed a strategic approach to recovery planning that takes account of risks identified, recognises long-term priorities, and ensures the needs of the affected are at the centre of recovery processes</td>
<td>By 2030, there is significantly increased understanding of recovery principles and practice by decision-makers; readiness for recovery is based on a strong understanding of communities and the consequences local hazards might have on these communities; in particular, it focuses on long-term resilience by linking recovery to risk reduction, readiness, and response through actions designed to reduce consequences on communities.</td>
</tr>
</tbody>
</table>
7. Strengthening societal resilience

Te whakapakari i te manawaroa o te iwi

What we want to see: New Zealand has a culture of resilience that means individuals, organisations, businesses and communities take action to reduce their risks, connect with others, and build resilience to shocks and stresses.

This Strategy promotes the strengthening of resilience in the social, cultural, economic, built, natural, and governance environments, at all levels from individuals and families’ whānau, to business and organisations, communities and hapū, cities and districts, and at the national level. It promotes integrated, collective, and holistic approaches and the goal of linking bottom-up, grassroots endeavours, with top-down policy and programmes that empower, enable and support individuals and communities.

It is particularly important to ensure an inclusive approach, including engaging with, and considering the needs of, any people or groups who have specific needs, or who are likely to be disproportionately affected by disasters. Not all New Zealanders, or those who work, live, or visit here, will have the same capacity to engage, prepare, or build resilience. It is critical that the needs of all people are accounted for, including how we can best enable, empower, and support people to achieve good outcomes.

A key goal is to strengthen the culture of resilience in New Zealand, whereby New Zealanders see the value of resilience, and understand the range of actions they can take to limit their impact, or the impacts on others, and ensure the hazards, crises, and emergencies we will inevitably face do not become disasters that threaten our prosperity and wellbeing.

Two key features are especially important to this goal: a learning culture, and developing our future foresight. Developing a strong learning culture is critical for expanding our knowledge and skills, for changing behaviours, for innovating, and for adapting to change. Alongside this, an ability to ‘see’ and anticipate the future – in terms of both our risk landscape, and the opportunities for improving our resilience – are key factors for success.

Inclusive and participatory governance of disaster resilience at the national, regional and local levels is an important objective, including the development of clear vision, plans, capability, capacity, guidance and coordination within and across sectors. Champions, partnerships, networks, and coalition approaches are crucial, as well as the development of increased recognition of the role culture plays in resilience. Infrastructure, including physical infrastructure for example roads, bridges, airports, rail, water supply, telecommunications and energy services, and social infrastructure for example health care, education, culture and heritage facilities, banking and finance services, emergency services and the justice system, is recognised as a critical element for healthy economies and stable communities. It enables commerce, movement of people, goods and information, and facilitates society’s daily economic and social wellbeing.

The ability of infrastructure systems to function during adverse conditions and quickly recover to acceptable levels of service after an event is fundamental to the wellbeing of communities. This Strategy supports other key policy and programmes in emphasising the importance of infrastructure resilience, in particular for its role in supporting wider community resilience. This includes assessing the adequacy and capacity of current infrastructure assets and networks, identifying key interdependencies and cascading effects, progressively upgrading assets as practicable, and identifying opportunities to ‘build back better’ in recovery and reconstruction.
The six objectives designed to progress the priority of strengthening societal resilience are at all levels to:

<table>
<thead>
<tr>
<th>Objective</th>
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<tr>
<td>13 Build a culture of resilience, including a ‘future-ready’ ethos, through promotion, advocacy, and education</td>
<td>By 2030, the concept of, and requirements for, resilience are observably built in to more facets of New Zealand society, culture, and economy than in 2019. Resilience is an accepted part of who we are and what we need to do to maintain our wellbeing and prosperity, including in policy, plans, job descriptions, and other statutory or contractual obligations.</td>
</tr>
<tr>
<td>14 Promote and support prepared individuals, households, organisations, and businesses</td>
<td>By 2030, emergency preparedness is part of everyday life. More people are able to thrive through periods of crisis and change because they have a plan to get through an emergency that they regularly practise, and have emergency supplies that are regularly checked and updated. Public, private, and civil society organisations are able to thrive through periods of crisis and change because they understand what they can do to improve their resilience, and are investing in improving their resilience. People and groups who have particular needs, or who are likely to be disproportionately affected by disasters, are engaged in planning and preparedness, and supported to build their resilience.</td>
</tr>
<tr>
<td>15 Cultivate an environment for social connectedness which promotes a culture of mutual help; embed a collective impact approach to building community resilience</td>
<td>By 2030, new methodologies and approaches mean that communities are more knowledgeable about risks, are empowered to problem-solve, and participate in decision-making about their future.</td>
</tr>
<tr>
<td>16 Take a whole of city/district/region approach to resilience, including to embed strategic objectives for resilience in key plans and strategies</td>
<td>By 2030, local authorities have adopted strategic objectives aimed at building resilience in their city/district, and work collaboratively with a broad range of partners to steward the wellbeing and prosperity of the city/district.</td>
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<tr>
<td>17 Recognise the importance of culture to resilience, including to support the continuity of cultural places, institutions and activities, and to enable the participation of different cultures in resilience</td>
<td>By 2030, there is an increased understanding and recognition of the role culture plays in resilience; there are improved multi-cultural partnership approaches to disaster planning, and preparedness; and there is substantially increased resilience to disasters including cultural heritage.</td>
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<tr>
<td>18 Address the capacity and adequacy of critical infrastructure systems, and upgrade them as practicable, according to risks identified</td>
<td>By 2030, we more fully understand infrastructure vulnerabilities, including interdependencies, cascading effects and impacts on society; we have clarified and agreed expectations about levels of service during and after emergencies, and see infrastructure providers that are working to meet those levels (including through planning and investment), and we have improved planning for response to and recovery from infrastructure failure.</td>
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Our commitment to action
E paiherea ana mātau ki te mahi

Transparency and social accountability
Governance
Measuring and monitoring progress
8. Our commitment to action

E paiherea ana mātau ki te mahi

Producing a strategy is not the end of thinking about resilience – it’s the beginning

Ehara te whakairo rautaki i te whakamutunga o te whakaaro mō te manawaroa – he timatanga kē.

Two key features of this Strategy are, firstly, a determined effort to improve our national resilience to disasters, and secondly, taking a whole-of-society, inclusive, and collaborative approach to doing so.

This means holding ourselves to account is paramount. We will do this in three main ways: a principle of transparency and social accountability, formal governance mechanisms, and measuring and monitoring progress.

8.1 Transparency and social accountability

It is critical that we are transparent about both our risks and our capacity to manage them. It is only by exposing the issues and having open conversations that we will make progress on overcoming barriers, and build on strengths and opportunities.

Efforts to tackle the challenge of accountability have traditionally tended to concentrate on improving the ‘supply side’ of governance, including methods such as political checks and balances, administrative rules and procedures, auditing, and formal enforcement processes.

These are still important, and will be built into the process to monitor this Strategy. However, we also want to pay attention to the ‘demand side’ of good governance: strengthening the voice and capacity of all stakeholders (including the public, and any groups disproportionately affected by disasters), to directly demand greater accountability and responsiveness from authorities and service providers.

Enhancing the ability of the public to engage in policy, planning, and practice is key.

We must find ever more effective and practical ways to do this. This could include activities such as representation on governance or planning groups, deliberate efforts to engage different stakeholder groups on specific challenges, citizen or civil society-led action, or utilising the whole new generation of engagement offered by social media.

8.2 Governance of this strategy

The Strategy will be owned and managed by existing governance mechanisms, including those through the National Security System, and at a regional level by CDEM Groups.
8.3 Measuring and monitoring progress

The monitoring and evaluation of resilience building initiatives in New Zealand must capture progress at several points along the pathway to lasting change. A Theory of Change (Figure 3) helps us think about how to assess the process of social change, beginning by defining the desired impacts on society and working backward to programme design and required inputs. The desired impact of government policy in New Zealand is to enhance the intergenerational wellbeing of New Zealanders. Through a resilience lens that must include the continuity and enhancement of wellbeing in the face of acute and chronic shocks.

The decisive measure of the disaster risk reduction and resilience programmes that we implement in New Zealand will be the extent to which it can be associated with reductions in the negative effects of shocks and stresses (outcomes). In most cases, however, we will need to evaluate changes to resilience in the absence of shocks and we will need to assess the actions that have been shown through research and practice to contribute to disaster risk reduction and resilience (outputs). Finally, to assess our capacity to achieve outputs, we must consider the required resources or inputs across the systems supporting resilience building initiatives.

Each step will require a different monitoring and evaluation focus, will fall within the remit of different actors, and be guided by separate, but overlapping policy frameworks. The logframe in Figure 4 highlights the logical linkages between each step in the theory of change model to the guidance and indicators needed for monitoring.\(^7\)

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\(^7\) Acknowledgement: the measuring and monitoring regime for this Strategy was developed in association with the National Science Challenge Resilience to Nature’s Challenges ’Trajectories’ workstream, led by Dr Joanne Stevenson.
8.3.1 Measuring inputs and outputs: progress on our goals and objectives

Inputs and outputs will be guided by the roadmap of actions that will accompany the National Disaster Resilience Strategy, at a regional level by CDEM Group Plans, and at a local level by those designing and implementing resilience outreach and enhancement programmes in communities across New Zealand.

8.3.2 Measuring outcomes: progress on resilience

Interim outcomes refer to proxies that have been identified through research and practice to reflect systems’ capacity to absorb the negative effects of shocks and adapt and transform in dynamic environments. Outcomes are targets that can directly confirm that targeted systems (e.g., individuals, communities, infrastructure systems) are able to absorb, respond, recover, adapt, or transform in the face of hazards and disasters.

A resilience index developed as part of the National Science Challenge: Resilience to Nature’s Challenges will capture progress on a series of indicators designed to measure resilience attributes.

8.3.3 Measuring impact: progress on reduced losses from disasters

Our progress towards the desired impact we want to have will be measured by tracking losses from emergencies on an annualised basis, compared against baseline data collected for 2005-2015. This reflects our Sendai Framework for Disaster Risk Reduction.

Definitions, scope, and baseline data for these monitoring mechanisms will be produced in a separate, supporting document.

8.3.4 Formal reporting

Progress on this Strategy will be reported biennially by the Ministry of Civil Defence and Emergency Management, for the duration of its term, and will include:

- Progress on goals and objectives
- Progress on resilience, and
- Progress on impacts

These reports will be publicly available.
Appendices
Ngā āpitihanga

Overview of this Strategy
What can I do?
Analysis of our current state as a baseline for this Strategy
Two key opportunities
Appendix 1: Overview of this Strategy

National Disaster Resilience Strategy
Working together to manage risk and build resilience

Our Vision
New Zealand is a disaster resilient nation that acts proactively to manage risks and build resilience in a way that contributes to the wellbeing and prosperity of all New Zealanders.

Our Goal
To strengthen the resilience of the nation by managing risks, being ready to respond to and recover from emergencies, and by empowering and supporting individuals, organisations, and communities to act for themselves and others, for the safety and wellbeing of all.

We will do this through:

1. Managing Risks
2. Effective Response to and Recovery from Emergencies
3. Strengthening Societal Resilience

Our Objectives

1. Identify and understand risk scenarios (including the components of hazard, exposure, vulnerability and capacity), and use this knowledge to inform decisionmaking.
2. Put in place organisational structures and identify necessary processes to understand and act on reducing risks.
3. Build risk awareness, risk literacy, and risk management capability, including the ability to assess risk.
4. Address gaps in risk reduction policy (particularly in the light of climate change adaptation).
5. Ensure development and investment practices, particularly in the built environment, are risk-sensitive. Talking care not create any unnecessary or unacceptable new risk.
6. Understand the economic impact of disaster and disruption, and the need for investment in resilience. Identify and develop financial mechanisms that support resilience activities.
7. Implement measures to ensure that the safety and wellbeing of people is at the heart of the emergency management system.
8. Strengthen the national leadership of the emergency management system to provide clearer direction and more consistent response to and recovery from emergencies.
9. Improve legislation policy and planning to ensure it is clear who is responsible for what, nationally, regionally, and locally, in response and recovery.
10. Build the capability and capacity of the emergency management workforce for response and recovery.
11. Improve the information and intelligence system that supports decision-making in emergencies to enable informed, timely, and consistent decisions by stakeholders and the public.
12. Embed a strategic approach to recovery planning that takes account of risks, identifies, recognises long-term priorities, and ensures the needs of the affected are at the centre of recovery processes.
13. Build a culture of resilience, including a ‘future-ready’ ethos, through promotion, advocacy, and education.
14. Promote and support prepared individuals, households, organisations, and businesses.
15. Cultivate an environment for social connectedness which promotes a culture of mutual help, embed a collective impact approach to building community resilience.
16. Take a whole of city/district/regional approach to resilience, including to embed strategic objectives for resilience in key plans and strategies.
17. Recognise the importance of culture to resilience, including to support the continuity of cultural places, institutions and activities, and to enable the participation of different cultures in resilience.
18. Address the capacity and adequacy of critical infrastructure systems and upgrade them as practicable, according to risks identified.
Appendix 2: What can I do?
Ngā āpitihanga 2: He aha he mahi māku?

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<tr>
<td>Kāwanatanga me nga whakahaere ā-motu</td>
<td></td>
</tr>
</tbody>
</table>
Individually and families/whānau
Te tangata me ngā whānau

Understand your risk
... the hazards or disruptions you could experience, your exposure – the things you have that are at risk to those disruptions, and your vulnerability – how you and your things might be adversely affected.

Reduce your risk factors
Think about the range of ways you could reduce your exposure or vulnerability, and invest in doing so where possible.

Future proof where possible
When making new purchases, think about how to future-proof yourself and build in resilience.

Prepare yourself and your household
Think about the range of impacts that could occur from crises or emergencies (for example, power, water, or communications outages, access or transport issues, the need to stay in or out of your home for an extended period), and think about the things you would want or need to have available to you during that time.

Plan for disruption
... including to consider how you would meet up with family/whānau and friends if there was a communications outage or access issues.

Stay informed
Find out more; talk to others about risk and resilience; sign up for alerts and warnings.

Know your neighbours
... and participate in your community – you are each other’s front line.
Businesses and organisations
Ngā pakihi me ērā whakahaere

**Understand your risk**
In all its dimensions (in terms of the hazards or disruptions you could experience, your exposure – the assets you have that are at risk to those disruptions, your vulnerability – how your assets and business might be adversely affected, and your capacity – the strengths and resources you have available to manage it) so you can make good decisions about how to manage it.

**Make resilience a strategic objective and embed it in appropriate plans and strategies**
The continuity of your business (and the wellbeing of the people that rely on your products/services) depends on it.

**Invest in organisational resilience**
By a) reducing and managing the factors that are causing your risk, b) ensuring comprehensive business continuity planning, and c) considering and building your adaptive capacity.

**Benefit today, benefit tomorrow**
Try to find solutions that have an everyday benefit and any crisis/disaster benefit is a by-product.

**Consider your social impact**
Consider how you can contribute to the resilience of your community, city or district – for social good, or because there are benefits for you.

**Keep the long term in mind**
Consider the longer-term changes in your environment, for example, the impact of climate change, and what you could do about them.

**Collaborate with others and build your network**
Find others with similar objectives in respect of risk and resilience, and collaborate with them – we are stronger together, and you have much to contribute and gain.

**Learn about response and recovery**
Understand how response and recovery will work in your district or area of interest, and build your own capacity to respond to and recover from disruption.
Communities and hapū
Ngā hapori me ngā hapū

Understand your risk
Seek to build a collective understanding of your risks: the hazards or disruptions you could face; your collective exposure in terms of people, property, and assets, and your vulnerabilities – how your people/property/assets could be adversely affected.

Reduce your risk factors
Consider whether there are ways to reduce your community’s exposure or vulnerabilities – it needn’t cost money, but there may be avenues if it does.

Keep the long-term in mind
Consider the longer term changes in your environment, for example, the impact of climate change, and what you could do about them.

Learn about response and recovery
Understand how response to and recovery from emergencies will work in your district.

Understand your collective resources
Think about what resources you have, now or in an emergency, and how you could put them to work.

Make a plan
Community response and recovery planning helps communities understand how they can help each other after a disaster. Ask your local emergency management office for help if you need it.

Benefit today, benefit tomorrow
Try to find solutions that have an everyday benefit and any crisis/disaster benefit is by-product.

Organise community events
Communities who know each other are stronger communities – in good times and in bad.
Cities and districts
Ngā tāonenui me ngā takiwā

Understand your risk
Identify and understand risk scenarios, including what is driving high risk ratings, and use this knowledge to inform decision-making.

Organise for resilience
Consider whether your governance of risk and resilience is fit for purpose; engage all interested parties and take a whole-of-city/district approach.

Make resilience a strategic objective
Make resilience a cross-cutting strategic objective: the economic prosperity of your city/district, and the wellbeing of your communities depend on it.

Lead, promote, and champion
... city/district-wide investment in resilience; ensure resilience is a vital partner to economic development.

Tackle gaps in hazard risk management policy
... including matters of retreat or relocation from high risk areas, and adaptation to climate change.

Pursue resilient urban development
... including risk-aware land-use decisions, and urban design and growth that incorporates resilience.

Increase infrastructure resilience
Assess risk, and ensure the resilience of critical assets and continuity of essential services.

Safeguard natural buffers
... to enhance the protective functions offered by natural ecosystems.

Strengthen financial capacity
Understand the economic impact of disasters in your area, and the need for investment in resilience. Identify and develop financial mechanisms that can support resilience activities.

Strengthen societal capacity
Cultivate an environment for social connectedness which promotes a culture of mutual help. Support and enable grassroots efforts and organisations. Support diversity and promote inclusion.

Invest in organisational resilience
... by ensuring you have comprehensive business continuity planning in place, and by considering and building your adaptive capacity.

Build your capability and capacity for response and recovery
... including next-level, designed-for-the-future capability.
Organise for resilience
Participate in mechanisms for the coordination of risk and resilience activity, and the implementation of this Strategy.

Monitor, assess and publicly report
... on a) national risks, b) economic loss from disasters, c) resilience, and d) progress on this strategy.

Champion resilience approaches
... and whole-of-society participation; promote stewardship | kaitiakitanga, wellbeing | manaakitanga, and working together | whanaungatanga.

Make resilience easy
... affordable, and common sense for clients, stakeholders, partners, decision-makers, and the public.

Invest in organisational resilience
... by a) understanding risk scenarios, including what is driving high risk ratings for your organisation and/or clients, b) reducing and managing the factors that are causing your risk, b) ensuring comprehensive business continuity planning, and c) considering and building your adaptive capacity.

Invest in societal resilience
... by understanding societal needs and values, before, during, and after emergencies. Ensure investments are multi-purpose, for stronger communities today and in case of emergency.

Work together
... and align risk/resilience-related policy and practice.

Tackle our complex risks
Tackle and progress some of the most complex risks facing society, including approaches for addressing risk in the highest hazard communities, and adapting to climate change.

Build capability and capacity
... including next-level, designed-for-the-future response and recovery capability.
Appendix 3: Analysis of our current state as a baseline for this Strategy

In order to form an effective strategy for the future and move towards a state of enhanced resilience, it is useful to look at our current state – our strengths, barriers, and opportunities – and how we capitalise on areas of strength and opportunity, overcome obstacles to progress, and make the smartest possible choices about actions and investment. Furthermore, in the quest to be ‘future ready’, it is useful to consider what other environmental and societal trends are occurring around us, even now, and how we can use them to build our resilience.

**Strengths**

New Zealand already has a number of strengths in respect of disaster resilience.

1. We have good social capital in our communities. New Zealand communities are aware, knowledgeable, passionate, and well-connected. In general, they have a strong sense of local identity and belonging to their environment, a belief in manaakitanga and concern for their fellow citizens, and a sense of civic duty.

2. We are a first world nation that has comprehensive education, health, and social welfare systems, which build our people and look after the most vulnerable in society.

3. We have a strong cultural identity, including the special relationship between Māori and the Crown provided through the Treaty of Waitangi. New Zealand is also one of a handful of culturally and linguistically ‘super diverse’ countries, which brings a number of economic and social benefits (the ‘diversity dividend’). We value our culture, our kaupapa and tikanga. We celebrate and foster a rich and diverse cultural life.

4. We have a high-performing and relatively stable economy. The New Zealand economy made a solid recovery after the 2008-09 recession, which was shallower compared to other advanced economies. Annual growth has averaged 2.1% since March 2010, emphasising the economy’s resilience.

5. We have very high insurance penetration. Most countries struggle to get their ratio of insured to non-insured up to an acceptable level. Because of the Earthquake Commission, New Zealand’s insurance penetration is 98 per cent. This means that a good proportion of the economic costs of most natural hazard events are covered by re-insurance.

6. We have a stable political system, low levels of corruption, and freedom of speech.

7. We have a good range of policy in place for disaster risk management, including the Civil Defence Emergency Management Act 2002, the Resource Management Act 1991, the Building Act 2004, the Local Government Act 2002, and a range of other legislation and regulatory instruments. This includes regulation for land-use and building standards – critical factors in building more resilient futures.

8. We have an effective national security coordination system that takes an all-hazards approach and has governance at the political, executive, and operational levels.

9. At the regional level consortia of local authorities, emergency services, lifeline utilities, and social welfare agencies (government and non-government) form Civil Defence Emergency Management Groups that coordinate across agencies and steward emergency management in their regions.

10. We have an engaged and well connected science community, including a number of platforms specifically targeting the advancement of knowledge and understanding about natural hazards and resilience. In general, there are good links between scientists, policy makers and practitioners. Scientists practice an increasing level of community outreach, engage in a co-creation approach, and are focussed on outcomes.

11. Organisations and agencies work well together. While there’s always room for improvement, a multi-agency approach is the norm, which means better coordination of activities, more efficient use of resources, and better outcomes.

12. We are a small country, which makes us well-connected, uncomplicated, and agile. We can get things done’ in relatively short order.

13. We are experienced. We have seemingly had more than our fair share of crises, emergencies, and disasters over the last ten years. This has brought some bad times, but the silver lining is the awareness that it has built in everyone, the knowledge about ‘what works’ and what is needed, and the willingness to act.
Barriers to resilience

While we have a lot going for us, we also have some things that limit our resilience. The process to develop this strategy identified a number of barriers to resilience, and barriers to our pursuit of resilience.

What is limiting our resilience?

1. Some of our people still suffer considerable poverty, social deprivation, and/or health issues that limit wellbeing, quality of life, and resilience.
2. Our level of individual and household preparedness for emergencies is not as high as it should be, given our risks.
3. Our businesses and organisations are not as prepared as they could be, leading to loss of service and loss of income when severe disruption strikes.
4. Some of our critical assets and services are ageing and vulnerable. These are in most places being addressed by asset management plans and asset renewal programmes, (including strengthening, conservation and restoration), but these will take time (and resources) to implement.
5. We live in some high-risk areas, and are continuing to build in high-risk areas – particularly around the coast, on steep slopes, fault lines, reclaimed land, and flood plains. We live and build there because they are nice places to live, and because sometimes there is no other choice. However, at some point we need to consider – how much risk is too much?
6. We are only just starting to tackle some of the ‘truly hard’ issues around existing levels of risk, such as how to adapt to or retreat from the highest risk areas, including to adapt to the impacts of climate change. There is likely high cost around many of these options.
7. We have gaps in our response capability and capacity, as outlined in a recent Ministerial Review into better responses to emergencies in New Zealand (Technical Advisory Group report, 2017). These are predominantly around capability of individuals, capacity of response organisations, and powers and authorities of those individuals and organisations to act. The review also identified issues with communication and technology, in particular, the challenges of response intelligence and communications staying apace with social media.

What is limiting our pursuit of resilience?

1. Not enough people and organisations are taking action to prepare or build their resilience for disasters. This is generally either because it is seen as too expensive or difficult, because of other priorities, because it might never happen, or because of an expectation of a rapid and comprehensive institutional response.
2. Building community resilience – even where playing a facilitative role – is resource intensive. It also requires a high level of skill and understanding to navigate diverse communities with complex issues.
3. Emergency management issues tend to be ‘headline’ issues that require immediate corrective action. This is understandable, and needed, but means we often focus more on fixing the problems of the day, and addressing issues from the last event, than forecasting the future and taking action for the long-term.
4. Risk reduction and resilience are often perceived as ‘expensive’ and limiting of economic development and business growth.
5. At the same time, the full cost of disasters often isn’t visible (particularly the cost of indirect and intangible impacts, including social and cultural impacts), meaning it isn’t factored into investment decision-making.
6. Perverse incentives don’t encourage resilience – too often, as a society, we are aiming for the ‘minimum’ standard or lowest cost. This can deter people from aiming higher or for the ‘most resilient’ solution.
7. Recovery is often underestimated. The Christchurch earthquake recovery and many other smaller events have shown us just how complex, multi-faceted, difficult, expensive, and long-term recovery is. Other parts of the country need to consider how they would manage recovery in their city or district, and give priority to resourcing capability and capacity improvements.
8. We have had difficulty translating resilience theory into action. There is an abundance of academic theory on resilience, but turning that theory into practical action has, until recently anyway, been difficult to come by.
Opportunities

As well as strengths and barriers, it is important to consider what opportunities we have or may have on the horizon. The opportunities the strategy development process has identified are:

1. Awareness and understanding of disasters, disaster impacts and disaster risk, is at an all-time high following a series of domestic events over the last 5-10 years, including the Canterbury and Kāikōura earthquakes. This includes a willingness to act on lessons and to do so in a smart, coordinated, and collaborative way.

2. Our hazards are obvious and manifest. This is both a curse and an opportunity: we have high risk, but we also have an awareness, understanding, and willingness to do something about them, in a way that countries with less tangible risks might not. If we address risk and build resilience to our ‘expected’ hazards, we will hopefully be better prepared for when the ‘less expected’ hazards occur.

3. We have an incredible wealth of resilience-related research currently underway, including several multi-sectoral research platforms that aim to bring increased knowledge to and improved resilience outcomes for New Zealanders. Over the next few years there will be a steady stream of information about what works, and tried and tested methodologies we can employ in all parts of society.

4. We also have a lot of other work – in terms of resilience-related policy and practice – underway in organisations at all levels and across the country. Connecting the pieces of the jigsaw, sharing knowledge, and working together should enable even more improved outcomes.

5. There is a particular opportunity for building processes that support collective impact. Collective impact is a way of organising a range of stakeholders around a common agenda, goals, measurement, activity, and communications to make progress on complex societal challenges. (see page 46)

6. The introduction of the three post-2015 development agendas (Sendai Framework, Sustainable Development Goals, and Paris Agreement for Climate Change) brings an additional impetus and drive for action, as well as practical recommendations that we can implement. They also bring a strong message about integration, collaboration, and a whole-of-society approach.

7. The Government has a strong focus on wellbeing, particularly intergenerational wellbeing, and improved living standards for all. Simultaneously, local government has a renewed interest in the ‘four wellbeing’ concepts being re-introduced to the Local Government Act as a key role of local government. These priorities are entirely harmonious, and lead swiftly into a conversation with both levels of government on how to protect and enhance living standards through a risk management and resilience approach.

8. We have only just begun to scratch the surface of best resilience practice, including how to make the most of investment in resilience. There is much to learn from the ‘triple dividend of resilience’ (see page 47) – ensuring our investments provide multiple benefits or meet multiple needs, and are the smartest possible use of limited resources. The Triple Dividend also supports better business cases, allowing us to better position our case for resilience and convince decision-makers of the benefits of investment.

9. We are a small agile nation. We are ambitious, innovative, motivated, and informed: we can lead the world in our approach to resilience.
‘Wild cards’

The world is changing at an unprecedented rate driven by technical innovation and new ways of thinking that will fundamentally transform the way we live. As we move away from the old structures and processes that shaped our past, a new world of challenges and opportunities awaits us. While there might be uncertainty about how some of these factors might shape our risk and our capacity to manage that risk, there are some common implications that are critical to take account of as we work to build resilience.

1. The revolution in technology and communication is a key feature of today’s world. Regardless of the issue, technology is reshaping how individuals relate to one another. It shifts power to individuals and common interest groups, and enables new roles to be played with greater impact. Organisations and groups that can anticipate and harness changing social uses of technology for meaningful engagement with societal challenges will be more resilient in the future.

2. Local organisations and grassroots engagement is an important component. This is driven in part by the aforementioned technology and communication shifts that give local groups more influence and lower their costs for organising and accessing funding, but also the rising power of populations in driving actions and outcomes.

3. Following on from these, populations currently under the age of 30 will be a dominant force in the coming two decades – both virtually, in terms of their levels of online engagement, and physically, by being a critical source of activity. Younger generations possess significant energy and global perspectives that need to be harnessed for positive change.

4. The role of culture as a major driver in society, and one that desperately needs to be better understood by leaders across governments, the private sector, and civil society. Culture is a powerful force that can play a significant role (both positive and negative, if it is not handled sensitively), and is therefore a force with which stakeholders should prepare to constructively engage.

5. High levels of trust across organisations, sectors and generations will become increasingly important as a precondition for influence and engagement. This trust will need to be based on more than just the existence of regulations and incentives that encourage compliance. Organisations can build trust among stakeholders via a combination of “radical transparency” and by demonstrating a set of social values that drive behaviour that demonstrates an acknowledgement of the common good.

6. The importance of cross-sector engagement, particularly between government, the private sector, and civil society. The challenge of disaster risk can no longer be the domain of government alone. A collective approach is needed, including to utilise all resources, public and private, available to us, and to consider innovative approaches to managing and reducing risk.

   This includes the private sector and civil society participating in policy and planning, and oversight and decision-making. This requires active participation on the part of the private sector, and transparency, openness, and responsiveness on the part of politicians and public officials.

7. The need for higher levels of accountability, transparency, measurement. More work is required to ensure that those tackling societal challenges have the appropriate means of measuring impact. These mechanisms will need to be technology-enabled, customised to the challenge at hand, and transparent.
Appendix 4: Two key opportunities

Working together: making collective impact

Collective Impact is a framework to tackle complex social problems. It is a structured approach to making collaboration work across government, business, non-profit organisations and communities to achieve significant and lasting social change.

The Collective Impact approach is premised on the belief that no single policy, government department, organisation or program can tackle or solve the increasingly complex social problems we face as a society. The approach calls for multiple organisations or entities from different sectors to set aside their own, specific agendas in favour of a common agenda, shared measurement and alignment of effort. Unlike collaboration or partnership, Collective Impact initiatives have centralised infrastructure – known as a backbone organisation – with dedicated resources to help participating organisations shift from acting alone to acting in concert.

Collective Impact was first written about in the Stanford Social Innovation Review in 2011. Five key elements were identified:

1. A common agenda
   This means coming together to collectively define the problem and create a shared vision to solve it.

2. Shared measurement
   This means agreeing to track progress in the same way, which allows for continuous improvement.

3. Mutually reinforcing activities
   This means coordinating collective efforts to maximize the end result.

4. Continuous communication
   This means building trust and relationships among all participants.

5. A backbone organisation
   This means having a team dedicated to orchestrating the work of the group.

This Strategy aims to emulate the intent and conditions of collective impact. The process to develop this Strategy was based on a series of workshops around the country over two years; a measurement and monitoring regime will track achievement of objectives and ensure we are making progress towards outcomes; the objectives of the Strategy detail focus areas in which we can undertake a series of mutually-reinforcing activities at all levels; the Strategy advocates strongly for relationship and partnership building, and the emergency management sector, through the National CDEM Plan, and regional CDEM Group Plans act as backbone organisations, driving the agenda and coordinating activity.
Changing the narrative: the triple dividend of resilience

In New Zealand we have first-hand, recent examples of how much disasters can cost. The direct costs alone can be significant; as we start to consider methodologies for counting the economic cost of social impact, the total cost of disasters and disruptive events will be significantly more - maybe even double the reported 'direct' costs.

Even so, it is often difficult to make a case for investment in disaster risk management and resilience, even as we cite research on benefit-cost ratios - how upfront investment in risk management can save millions in future costs. We know these ratios to be true, we have seen examples of it, even here in New Zealand, so why is it such a hard case to make?

Other than short-term political and management cycles, it is generally due to how we calculate 'value'. Traditional methods of appraising investments in disaster risk management undervalue the benefits associated with resilience. This is linked to the perception that investing in disaster resilience will only yield benefits once disaster strikes, leading decision-makers to view disaster risk management investments as a gamble that only pays off in the event of a disaster - a 'sunk' cost, that gives them no short-term benefit.

However, there is increasing evidence that building resilience yields significant and tangible benefits, even if a disaster does not happen for many years - or ever.

A 2015 report outlines the Triple Dividend of Resilience, or the three types of benefits that investments in disaster risk management can yield. They are:

1. Avoiding losses when disasters strike
2. Stimulating economic activity thanks to reduced disaster risk, and

While the first dividend is the most common motivation for investing in resilience, the second and third dividends are typically overlooked. The report presents evidence that by actively addressing risk, there can be immediate and significant economic benefits to households, the private sector, and, more broadly, at the macro-economic level. Moreover, integrating multi-purpose designs into resilience investments can both save costs, and provide community and other social benefits (for example, strengthened flood protections works that act as pedestrian walkways, parks or roads).

New Zealand needs to learn from this concept and ensure that our investments in resilience are providing multiple benefits to both make smart use of our limited resources, and to assure decision-makers that their investment is worthwhile, and will pay dividends - in the short and long term.

![Figure 6: The Triple Dividend of Resilience Investment](image-url)

Adapted from: The Triple Dividend of Resilience - Realising development goals through the multiple benefits of disaster risk management (Global Facility for Disaster Reduction and Recovery, the World Bank, Overseas Development Institute, 2015)
07 December 2018

National Disaster Resilience Strategy submissions
Ministry of Civil Defence & Emergency Management
PO Box 5010
Wellington 6145
nationalstrategy@dpmc.govt.nz

Dear Sir/Madam,

Please find attached Auckland Council's submission in response to the draft National Disaster Resilience Strategy. Please note that due to time constraints this submission has not been approved by the governing body of Auckland Council. While retrospective political approval will be sought in due course, the contents of this submission should be regarded as an officer-only submission.

If you require any clarification on any aspect of the submission please contact Stephen Town, Chief Executive on 09 890 7742, or by email at stephen.town@aucklandcouncil.govt.nz.

Yours sincerely

Stephen Town
Chief Executive, Auckland Council
Chair, Coordinating Executive Group

Encl.
Submission to the

Ministry of Civil Defence
& Emergency Management

DRAFT NATIONAL DISASTER RESILIENCE STRATEGY

07 December 2018
Auckland Council submission to the Ministry of Civil Defence & Emergency Management

1. This is Auckland Council’s submission on the draft National Disaster Resilience Strategy.

2. The address for service is: Auckland Council, Private Bag 92300, Victoria Street West, Auckland 1142.

3. Please direct any queries to Stephen Town, Chief Executive. Phone 09 890 7742 or email stephen.town@aucklandcouncil.govt.nz

4. This submission has not been approved by the governing body of Auckland Council. Please consider this submission as an officer-only submission.

5. The submission is set out as follows:

   - Section 1: Introduction
   - Section 2: Executive summary
   - Section 3: Auckland Council’s submission on the draft National Disaster Resilience Strategy
   - Section 4: Concluding comments

SECTION 1: INTRODUCTION

6. The vision of ‘Resilient Auckland’, the Auckland 2016-2021 CDEM Group Plan, is: ‘working together to build a resilient Auckland’. The plan recognises that everyone from individuals and families, business and government, both central and local, must work together to build a resilient Auckland.

7. While, arguably, ahead of its time in reflecting the broad nature of resilience and of significant global developments and frameworks such as the Sendai Framework for Disaster Risk Reduction, the Auckland CDEM Group Plan will be reviewed and updated in 2019. The plan will be brought up-to-date to reflect, among other things, the general direction of the National Disaster Resilience Strategy and the 2018 Auckland Plan (see below).

8. Auckland Council recognises that building ‘resilience’ is an all-of-council activity requiring more than just the emergency management sector. For this reason, the draft National Disaster Resilience Strategy has been reviewed within the context of the broader legislative and governance framework that Auckland Council operates under. This broad framework is particularly important for current and future development activity which operates under enabling legislation. Auckland Council’s Natural Hazard Risk Management Action Plan (currently under development) considers all of the activities...
undertaken by Auckland Council and how those activities are influencing risk management and, in turn, resilience.

9. A recent survey\(^1\) representative of the Auckland region showed that 83\% of Aucklanders have a good understanding of the type of disasters that could occur in Auckland and the chances of them occurring; 66\% of Aucklanders (measured using three weighted composite attributes) are prepared for an emergency; and 84\% (measured using four weighted 'resilience' attributes) feel connected to their local communities. While these figures are high, Auckland Council acknowledges that building community resilience in Auckland requires more than just traditional approaches and that an all-of-council approach is required to achieve significant resilience gains in Auckland.

10. The Auckland Plan is Auckland’s 30-year guiding strategy. Required by legislation\(^2\) it sets the high-level direction for Auckland and considers how to address key challenges of high population growth and environmental degradation. Importantly, the plan has recognised ‘resilience’ as an important concept. ‘Resilience’ has been embedded as a ‘cross-cutting’ theme influencing the outcomes sought, the goals to be achieved, and the action to be undertaken by the entire Auckland Council family in delivering the intent of the Auckland Plan. It is an all-of-council and, indeed, an all-of-society plan in much the same way as the National Disaster Resilience Strategy has been designed.

11. Understanding the challenges of meeting demand for development at pace also gives Auckland Council insight into some of the challenges of recovery at pace, following a disaster.

12. This submission, which is structured primarily around the six consultation questions posed in the draft strategy document, seeks to add some commentary and insight from Auckland Council’s perspective. Auckland Council wishes to thank the Ministry of Civil Defence & Emergency Management for the inclusive and comprehensive strategy development process undertaken over the past two years which has seen a range of stakeholders, including Auckland Council, contribute towards the development of the draft strategy.

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\(^1\) Auckland Council, Preparedness and Resilience Monitor, May 2018
\(^2\) Local Government (Auckland Council) Act 2009
SECTION 2: EXECUTIVE SUMMARY

13. Auckland Council submits that the participatory, inclusive and whole-of-society approach to building resilience promoted in the draft strategy is to be applauded and is similar to the approach imbed in both the Auckland Plan and in Auckland's CDEM Group Plan.

14. Auckland Council questions how 'directive' the strategy is and recommends that consideration is given to how the objectives can be achieved consistently across government and council directed outcomes in order to ensure that targets are met and actions delivered.

15. The vision of the draft strategy ('a safe and prosperous nation') is one that aligns well with the Auckland Plan which seeks 'opportunity and prosperity for all' and a safe city.

16. Auckland Council submits that New Zealand's legislative framework needs to be reviewed and integrated as much as possible to ensure that risk mitigation and resilience building is able to be properly considered and supported. The current legislative framework, for example, allows for housing and other developments to be built in risk-prone areas with appropriate mitigations.

17. The draft strategy provides useful commentary on 'how our risks might change in the future' and identifies a number of factors such as climate change. Auckland Council's approach to natural hazard risk management is explained and may provide a useful approach to be adopted across the country.

18. Auckland Council broadly agrees with the objectives and success factors of the proposed strategy and notes that many of these were suggested from the various rounds of consultation undertaken with stakeholders, including Auckland Council. The strategy is, however, ambitious and is light on detail as to how it will be delivered. Many of the success factors, for example, were they to be delivered upon would require significant legislative and other changes in order to be implemented.

19. Auckland Council submits that joint ownership of the strategy through, for example, joint central and local government governance arrangements would be helpful and notes that it is unlikely that current governance mechanisms would fit-for-purpose to deliver such an ambitious strategy.

20. The draft strategy is a clear improvement on the current national strategy. The inclusive nature of the consultation and engagement that the Ministry carried out through the strategy development process is to be applauded.
SECTION 3: AUCKLAND COUNCIL’S SUBMISSION ON THE DRAFT NATIONAL DISASTER RESILIENT STRATEGY

Do you agree with the purpose, vision and goal of the proposed strategy? If not, which of these do you disagree with and what changes would you suggest?

21. The purpose of the draft strategy, as stated in the document, is to outline the vision and long-term goals for civil defence emergency management (CDEM) in New Zealand. Although governed and required by the CDEM Act 2002, Auckland Council is pleased that the scope and intent of the strategy recognises the intent of the legislation which is, ultimately, to build the resilience of New Zealand.

22. Linking resilience to the protection and growth of living standards for all New Zealanders is similar to the approach taken by Auckland Council in the development of the Auckland Plan which seeks to deliver a world-class city while at the same time ensuring shared prosperity for all Aucklanders. The participatory, inclusive and whole-of-society approach promoted in the proposed strategy is to be applauded and, again, is similar to the approach imbued in both the Auckland Plan and in Auckland’s CDEM Group Plan.

23. The need to confine the strategy to the disaster aspects of resilience is understood but not entirely agreed with. The purpose states that ‘while acknowledging the vital importance of wider social and economic attributes of disaster resilience... these issues are well-catered for by other policies and programmes across government and through society’ (p8). While this may be the case, the vision of the document is far broader. Auckland Council suggests that the final strategy outlines how wider aspects of resilience may be monitored, evaluated and reported on, whether through the National Disaster Resilience Strategy or elsewhere, to ensure that progress in building resilience is properly understood across central government, local government and other stakeholders.

24. Related to the above point is the question of how directive the strategy is. The proposed strategy states that central and local government, businesses, organisations and iwi will be able to use the strategy to guide resilience building both for their own organisation, and for the people and communities they support or provide services for. Noting that Auckland Council works on investment cycles of annual, 3-year, 10-year and 30-year financial planning, particularly around infrastructure investment it is acknowledged that a directive approach will make some aspects of resilience easier to implement, but will require extensive planning and engagement. Auckland Council is able to work with the Ministry on developing achievable targets.

25. The vision of ‘a safe and prosperous nation’ is one that aligns well with the Auckland Plan which seeks ‘opportunity and prosperity’ and a safe city in its
broadest sense. Given recent proposals\textsuperscript{3} to restate the promotion of social, economic, environmental and cultural well-being of communities to the statutory purpose of local government it would seem sensible that the proposed strategy considers these factors including, for example, the Four Capitals in the Living Standard's Framework.

26. The proposed strategy states that New Zealand is well-placed in having a 'comprehensive legislative framework in place for risk management' including a number of pieces of legislation and regulatory instruments. While probably outside of the scope of this submission, Auckland Council would like to stress the importance of legislation in its ability to reduce risk and enable decision-making that is able to properly take account of risk and improve resilience planning. New Zealand's current legislative framework, for example, still allows for housing and other developments to take place in risk-prone areas with appropriate mitigations, and is enabling both in its intent and in its openness to challenge. Thought needs to be given to allowing risk and resilience factors to be prioritised over other factors in determining such issues. Auckland Council recommends that the Ministry assesses how central government agencies can develop an integrated approach to legislation in order to enable risk reduction and investment in resilience as much as possible. This may include environmental, building and commercially focused legislation. Auckland Council believes that it is important that legislation, and indeed central government strategies and priorities, where appropriate and where possible, leverage off and support New Zealand's national disaster resilience strategy.

27. Auckland Council agrees with the goals of the draft strategy in general, however, it is recommended that consideration be given to the inclusion of 'wairuatanga' (spirituality) as an additional aspect of 'resilience' in the Māori world view (p14). Māori have always recognised the significance of wairuatanga (spirituality) for wellbeing. Wairuatanga is also reflected in relationships with the natural environment, for example, whenua (land), awa (rivers, lakes) and maunga (mountains) have spiritual significance, and access to the natural environment is important for identity and sense of wellbeing.

28. From a broad perspective, Auckland Council would like to see more of a specific focus on critical infrastructure necessary to sustain quality of life. In particular, readiness to recover, or capacity to recover, is missing from the discussion at present.

\textsuperscript{3} Local Government (Community Well-being) Amendment Bill
Do you agree with the priorities of the proposed strategy? If not, which of these do you disagree with and what changes would you suggest?

29. The draft strategy provides useful commentary on ‘how our risks might change in the future’. Climate change, population trends, digital connectivity and other factors are identified. Auckland Council’s Natural Hazards Risk Management Action Plan (currently being drafted) is a whole-of-council plan which identifies a range of actions with regards to natural hazard risk management and mitigation. The plan, a first-of-its-kind for New Zealand, may be a useful approach to be adopted by the Ministry and others in the CDEM sector, including CDEM Groups. The final document can be shared with the Ministry once complete.

30. The articulation of risks and hazards to communities and to all the entities who are engaged in building resilience, may be better framed in terms of impacts to communities, rather than the hazards and risks themselves.

31. Auckland Council’s recent experiences responding to the significant storm event that passed through Auckland and the upper North Island in April 2018 confirmed, anecdotally at least, that some communities, and in particular some rural and remote communities, have changed and evolved as the city has changed over time. Population growth has been a major factor in Auckland’s development over recent years but so too has other changes in demographics and also in other societal factors. Auckland Council recommends, therefore, that the final strategy acknowledges the importance of community engagement (of both geographic and non-geographic communities of interest) and of establishing opportunities for meaningful community engagement in resilience-building activities.

32. The acknowledgment of, and focus on, climate change and its effects on New Zealand’s risk profile and of the need to consider climate risk reduction, mitigation and adaptation is to be applauded. Auckland’s Climate Action Plan (to be released mid 2019) will set a path to rapidly reduce greenhouse gas emissions and help prepare Auckland for the impacts of climate change.

33. At priority 1, ‘Managing risks’, it is noted that ‘it is critical to recognise how we inadvertently add to (risk) through development choices, including land-use and building choices’ (p23). As above, Auckland Council recommends that thought be given to the legislative framework guiding these decisions and choices as the framework, as it is currently, is enabling of development, with mitigations, in most cases. In addition, managing risks across the 5Rs (with the 5th ‘R’ being ‘Resilience’) requires risks to be envisaged and articulated around recovery, including construction industry capacity, financial implications of recovery and so forth.

34. Priority 2, ‘Effective response to and recovery from emergencies’, is well aligned with the Government’s response to the Technical Advisory Group’s recommendations on the effective response to natural disaster and other
emergencies and to recent legislative changes4 which have helped to embed a more strategic approach to disaster recovery. Auckland Council would like to stress the importance of recovery, and of reinforcing the need to prioritise recovery planning considerations as part of resilience.

35. The final priority; ‘Strengthening societal resilience’ aligns closely with the approach to resilience building in Auckland through both the Auckland Plan and Auckland’s CDEM Group Plan. It is, however, ambitious and it is unclear how the measures of success identified on p28 of the document will be delivered. The priority is appropriate. However, applying a methodology such as a ‘theory of change logic framework’, which requires objectives to be linked with expected outputs and measurable indicators, may help to ensure a common understanding and delivery by the wide range of partners and stakeholders who would have to deliver upon the outcomes sought through this strategy. Auckland Council recommends that the insurance industry is engaged in how this priority may be taken forward across central and local government and other stakeholders, particularly since there were barriers to ‘build back better’ in previous rebuilds.

Do you agree with the objectives and success factors of the proposed strategy? If not, which of these do you disagree with and what changes would you suggest?

36. Auckland Council broadly agrees with the objectives and success factors of the proposed strategy in principle and notes that many of these were suggested from the various rounds of consultation undertaken with stakeholders, including Auckland Council. That said, the comments above related to delivery and implementation and of maximising levels of buy-in across stakeholders apply here. Auckland Council believes that the strategy needs to ensure that steps are in place to enable the strategy to succeed. In particular, for objectives 1-6, having national data platforms will enable a number of these objectives to be more easily met, which will require a more directive and central approach than is currently the case. This is also likely the case for consolidation of financial impact data, and the impetus to respond to such financial pressures at a national level.

37. Objective 12 ‘Embed a strategic approach to recovery planning that takes account of risks identified, recognises long-term priorities, and ensures the needs of the affected are at the centre of recovery processes’ aligns well to the current strategic approach to disaster recovery. However, Auckland Council would prefer to see the suite of objectives at 7-12 to have a higher focus on recovery and preparing for recovery. Auckland Council acknowledges that ‘response’ was a strong focus on the recent reviews of the sector and believes the strategy to be an opportunity to set the equivalent direction in resilience.

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4 Civil Defence Emergency Management Amendment Act 2016
38. Implementation of objective 5, similarly, will require changes to legislation, and in particular to the Resource Management Act 1991, to be enabled. Auckland Council recommends that thought be given as to how best to balance the intent of this objective with other priorities including, for example, those related to infrastructure provision and housing affordability and delivery.

39. In addition, it is recommended that thought be given as to the interdependencies of each of the success factors with other developments across the sector. Objective 10, for example, which relates to the capability and capacity of the emergency management workforce identifies the training of controllers and incident management roles as a success factor but states that these factors will be in place by 2030. Given recent developments and the importance placed on the professionalism of the emergency management workforce, Auckland Council recommends that the Ministry prioritises this success factor and brings the timing of these factors in line with the priority placed on these issues through the current reforms taking place in the sector.

40. Objective 16 is related to embedding strategic objectives for resilience in key plans and strategies at the city/district/regional level. While to be applauded, again, thought needs to be given as to the practicality of this objective. Auckland Council, for example, is the only local authority in New Zealand required by legislation to develop a ‘spatial plan’ (the Auckland Plan) of a type where these kinds of objectives would sit comfortably. In addition, it has to be acknowledged that the priorities of local government do tend to differ across the country in relation to a number of factors including, for example, population growth, infrastructure provision or water quality. Balancing the need to consider resilience factors, for example, with other requirements such as affordability has to be considered.

41. Most of the success factors identified for each objective provide for success to be measured ‘by 2030’. This timeline may be appropriate given the largely systemic nature of the objectives identified, however, without having sight of the ‘action plan’ that will deliver upon this strategy, it is difficult to comment. Commentary on the need to identify a ‘roadmap of actions’ or similar is provided below for the Ministry’s consideration.

42. Auckland Council recommends that as well as identifying a ‘roadmap of actions’ or similar related to each objective, that the Ministry considers the practicalities of each success factor in detail. The success factors are, by-and-large, ambitious and many, if fully implemented, would require significant changes, including legislative changes, to how risks are managed currently in New Zealand. Objective 4, for example, would require an all-of-government approach and strategy related to hazard risk mitigation with a view to informing what could be difficult, complex conversations with communities about risk and about some of the decisions that may have to be made about how risks may be dealt with or not in the future. A pathway for this to occur will have to be provided.
Do you agree that a broader range of stakeholders needs to be involved in governance of the strategy? If so, what ideas do you have for achieving this aim?

43. The proposed strategy is light on detail as to the governance arrangements of this strategy only than to note that “the strategy will be owned and managed by existing governance mechanisms, including those through the National Security System, and at a regional level by CDEM Groups” (p30). Auckland Council recommends that more detail is required in this section including to outline what those mechanisms are, how they report and how stakeholders and the public will be informed of progress. Given the ‘devolved’ nature of CDEM in this country it is recommended that thought be given as to ensuring as much joint ownership of the strategy through, for example, joint central and local government governance. There are various models of joint governance and, perhaps even, joint funding that could be explored for this strategy. It is likely that current governance mechanisms will not be fit-for-purpose to deliver such an ambitious strategy. Auckland Council reiterates the value in taking a cross-agency approach to resilience-building.

Are there any particular strengths of the proposed strategy that you would like to comment on?

44. The inclusive nature of the consultation and engagement that the Ministry carried out through the strategy development process needs to be acknowledged. It is clear that the views of the sector have been taken into account in this draft strategy.

45. The strategy is clearly ambitious, and this is to be applauded. New Zealand’s emergency management sector, given the country’s risk to natural hazards and other events, needs to be world-leading. It is pleasing to see that the draft strategy has taken account of recent developments including reforms to the CDEM sector, international frameworks and best-practice.

Are there any gaps or challenges with the current national civil defence emergency management strategy that are not addressed by the proposed strategy?

46. The proposed strategy is, as stated above, a clear improvement on the current national strategy. That said, one thing that the current strategy does which the proposed strategy does not, is explain in detail the linkages between the national strategy, CDEM Group Plans, legislation and other mechanisms. While not perfect, thought needs to be given as to whether the proposed strategy should include this level of detail. Auckland Council recommends that
central and local government collectively conducts a mapping exercise to understand current and future programmes of work that contribute to the objectives, as well as identifying any interdependencies, gaps and challenges. While this may be included elsewhere (the ‘roadmap of actions’, for example) Auckland Council’s comments above with regards to delivery of the strategy also apply here.

47. As an urban centre, Auckland is acutely aware of the importance of societal resilience, and the complex factors which interplay. Auckland Council believes there needs to be further exploration of ‘preparedness’, and how government (local and national), NGOs and commercial enterprises can be encouraged to manage the provision of more resilient societal ‘infrastructure’, for events larger than those for which individual preparedness would suffice. The strategy document notes this is expensive and difficult. Auckland Council agrees and confirms that expense and difficulty do not detract from the need to do this, if New Zealand is to be a truly resilient country.

48. As noted in the introduction, every local authority has different organisational priorities, and financial imperatives, which are developed with public engagement on a regular basis. Auckland Council requests that consideration is given to the likely additional cost to councils of implementing the strategy by 2030, and in particular consideration as to how the timing and roll out of the strategy and road map will work alongside budgetary and political cycles.

SECTION 4: CONCLUDING COMMENTS

49. Auckland Council wishes to thank the Ministry for providing the opportunity to submit on the proposed National Disaster Resilience Strategy.

50. Auckland Council is broadly supportive in principle of the aims, intent, goals and objectives of the proposed strategy. The document is a clear improvement on the current national strategy.

51. Comment has been made throughout Auckland Council’s submission on the need to strengthen the strategy’s ability to be implemented fully. This includes alignment with the work of other agencies and industry partners.

52. Auckland Council welcomes the broad approach to resilience displayed in the national strategy. This approach aligns well with efforts being undertaken in Auckland as demonstrated through the Auckland Plan and Auckland’s CDEM Group Plan.
Te take mō te pūrongo

Purpose of the report
1. To note progress on the forward work programme (Attachment A)
2. To provide a public record of memos, workshop or briefing papers that have been distributed for the Committee's information since 4 December 2018.

Whakarāpopototanga matua

Executive summary
3. This is regular information-only report which aims to provide public visibility of information circulated to committee members via memo or other means, where no decisions are required.
4. The following papers/memos were circulated to members:
   - 20181205_Project Streetscapes – Weed Management
   - 20181205_Global Activity memo
   - 20181205_Interregional marine pest pathway management memo
   - 20181207_Community Coordination and Facilitation Grant – applications open
   - 20181220_Solid Waste Bylaw 2012 review
   - 20181221_myrtle rust update December 2018
5. Note that **staff will not be present to answer questions about the items referred to in this summary.** Committee members should direct any questions to the authors.
6. This document can be found on the Auckland Council website, at the following link: http://infocouncil.aucklandcouncil.govt.nz/
   - at the top of the page, select meeting “Environment and Community Committee” from the drop-down tab and click ‘View’;
   - under ‘Attachments’, select either the HTML or PDF version of the document entitled “Extra Attachments”.

Ngā tūtohunga

Recommendation/s
That the Environment and Community Committee:

a) receive the summary of the Environment and Community Committee information report – 12 February 2019.
### Attachments

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Environment and Community Committee - forward work programme</td>
<td>193</td>
</tr>
<tr>
<td>B</td>
<td>20181203_Project Streetscapes - Weed Management <em>(Under Separate Cover)</em></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>20181205_Global Activity memo <em>(Under Separate Cover)</em></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>20181205_Interregional marine pest pathway management <em>(Under Separate Cover)</em></td>
<td></td>
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<tr>
<td>E</td>
<td>20181220_Solid Waste Bylaw 2012 review <em>(Under Separate Cover)</em></td>
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<tr>
<td>F</td>
<td>20181221_Myrtle Rust update December 2018 memo <em>(Under Separate Cover)</em></td>
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</table>

### Signatories

<table>
<thead>
<tr>
<th>Author</th>
<th>Maea Petherick - Senior Governance Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoriser</td>
<td>Dean Kimpton - Chief Operating Officer</td>
</tr>
</tbody>
</table>
Environment and Community Committee
12 February 2019

Komiti Taiao a Hapori Hoki / ENVIRONMENT AND COMMUNITY COMMITTEE FORWARD WORK PROGRAMME 2018
This committee deals with strategy and policy decision-making that relates to the environmental, social, economic and cultural activities of Auckland as well as matters that are not the responsibility of another committee or the Governing Body.

Committee Priorities:

1. Clearly demonstrate that Auckland is making progress with climate change adaptation and mitigation and taking action to reduce greenhouse gas emissions
2. Enable green growth with a focus on improved water quality, pest eradication and ecological restoration
3. Strengthen communities and enable Aucklanders to be active and connected
4. Make measurable progress towards the social and community aspects of housing all Aucklanders in secure, healthy homes they can afford
5. Grow skills and a local workforce to support economic growth in Auckland

The work of the committee will:
- Deliver on the outcomes in the Auckland Plan
- Be focused on initiatives that have a high impact
- Meet the Council’s statutory obligations, including funding allocation decisions
- Increase the public’s trust and confidence in the organisation.

<table>
<thead>
<tr>
<th>Area of work</th>
<th>Reason for work</th>
<th>Decision or direction</th>
<th>Expected timeframes (Quarter (month if known))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic approach to Climate Change</td>
<td>To demonstrate that Auckland is making progress with climate change adaptation and mitigation and taking action to reduce emissions.</td>
<td>Strategic direction will be provided in the coming months. Progress to date: A summary of activities to prepare for climate change was given in the presentation on 8/8/17 meeting. Report was considered on 20/2/18, resolution ENV/2018/11 Dec 18 – approval for consultation Feb – Mar 19 - targeted public engagement Apr 19 – feedback presented to elected members Jun 19 – final strategy for adoption</td>
<td></td>
</tr>
</tbody>
</table>
| Attachment A | Item 15 | Low carbon living | Strategic direction and endorse programmes as part of the Low Carbon Auckland Plan implementation.  
**Progress to date:**  
Report was considered at 20/2/18 meeting. Res ENV/2018/11 report back in Dec 18 for a decision. Independent Advisory Group (IAG) was approved. Chairs Planning and Env & Community Cttees, an IMSB member and the Mayor’s office to decide on the membership of the IAG.  
**Q3** (Feb) | **Q4** | **Q1** (Sept) | **Q2** (Dec) |
| --- | --- | --- | --- | --- |
| **Low Carbon Auckland / Climate Change Mitigation** | Four-yearly review of strategic action plan due in 2018; increased engagement with and commitments via C40 Cities membership; development of proactive policy agenda to central government emerging  
**Climate Plan Workshop:**  
- Risks and vulnerabilities (June)  
- Committee workshop on risks and vulnerabilities  
- Communication strategy for broader public engagement  
- Local Board workshops  
- Mana whenua engagement (integrated throughout)  
- Stakeholder workshops  
**Prioritisation criteria and identified actions (Jul/Aug)**  
- Cost benefit and total value analysis  
- Agree prioritisation criteria  
- Review all actions  
- Draft plan  
- Draft plan to committee (Dec 2018)  
- Consultation (linking to other plans, approach tbc)  
- Updates to action plan  
- Adoption of updated plan by council (Proposed December 2018)  
- Final Adoption of Climate Plan (Mar 09)  
**Decision and endorsement of strategic direction**  
**Progress to date:**  
Report was considered at 20/2/18 meeting. Res ENV/2018/11 report back in Dec18 for a decision. Independent Advisory Group was approved.  
Workshops scheduled: 4/7/18 and 26/09/18. An update was included in the 12/06/18 meeting agenda.  
Report reapplication for C40 Cities membership was considered at 13/11/2018 meeting, Res ENV/2018/149 reapplication for membership was approved  
**Q3** (Mar) | **Q4** | **Q1** | **Q2** (Dec) |
| **Urban Forest Strategy** | Strategic approach to delivering on the wider social, economic and environmental benefits of a growing urban forest in the context of rapid population growth and intensification.  
**Decision** on strategic direction and endorsement of strategy.  
**Progress to date:**  
A workshop was held on 14/06/17. Report was considered on 12/09/17 ENV/2017/116 a full draft of the strategy was considered 20/02/18, res ENV/2018/12 with a report back on the results of the LIDAR and an implementation plan on costs and benefits in Aug 2018. An update was included in the 14 Aug agenda regarding several workstreams covered by the 18 high level implementation actions. A report on a full progress on implementing the strategy will be in August 2019.  
**Q3** | **Q4** | **Q1 (Aug19)** | **Q2** |
| **Allocation of the Waste Minimisation and Innovation Fund** | Decision making over medium and large funds from the Waste Minimisation and Innovation fund in line with the fund’s adopted policy. Funds to contribute towards council’s aspirational goal of zero waste to landfill by 2040.  
**Decision** on the annual allocation of the Waste Minimisation and Innovation Fund for the 2018-2019 financial year.  
Decision: Approval of allocation of September 2016 funding round Resolution ENV/2016/19 Item C5. Approval of grants in Dec 17  
**Q3** (Mar) | **Q4** | **Q1** | **Q2** |
### Auckland’s water strategy

The health of Auckland’s waters is a critical issue. Both freshwater and marine environments in Auckland are under pressure from historic under-investment, climate change and rapid growth. The draft Auckland Plan 2050 identifies the need to proactively adapt to a changing water future and develop long-term solutions.

**Progress to date:**

A report was considered on 4/12/18 to note allocations for the 2018/2019 small to med September funding round, res ENV/2018/176. Item C1 approval of medium to large grants September 2018 round.

**Progress to date:**

Report was considered on 4/12/18 to note allocations for the 2018/2019 small to med September funding round, res ENV/2018/176. Item C1 approval of medium to large grants September 2018 round.

**Progress to date:**

A report was considered December 2018 - discussion document ahead of public consultation Res ENV/2018/168. Key timeframes:

- Public consultation on discussion document 17 Feb – 17 March
- Public engagement feedback to committee, April 2019
- Draft options for the finalisation of Auckland’s water strategy, and associated work programmes to be present to committee in June 2019

**Decision and strategic direction and priorities as part of the Auckland Plan.**

Consider the development of an Auckland’s waters strategy to be adopted for consultation December 2018.

**Progress to date:**

A report was considered on 12/06/18 to approve the proposed scope, timeframe and budget for the development of the strategy. Res ENV/2018/78.

**Key milestones:**

- June 2018 – develop a strategic summary of water related outcomes, identify integrated water outcomes,
- July-Sept 2018 – high level regional options are developed and assessed for the five draft themes – consultation with mana whenua

**Progress to date:**

A report was considered on 12/06/18 to approve the proposed scope, timeframe and budget for the development of the strategy. Res ENV/2018/78.

**Key milestones:**

- June 2018 – develop a strategic summary of water related outcomes, identify integrated water outcomes,
- July-Sept 2018 – high level regional options are developed and assessed for the five draft themes – consultation with mana whenua

**Decision and strategic direction on weed and plants that will be subject to statutory controls.**

Consider submissions received on the draft plan in mid 2018 and adopt the final plan by December 2018.

**Progress to date:**

Decision: Agreed to the inconsistencies in ACT at the 14 Feb 2017 ENV/2017/7 Item 12. Workshops held on 4/04/17, 3/05/17 and 27/09/17 Draft plan was approved for consultation in Nov 2017 Funding for implementation of the proposed RPMP through LTP.

### Regional Pest Management Plan review

Statutory obligations under the Biosecurity Act to control weeds and animal pests.

To ensure that the plan is consistent with the national policy direction and up to date.

**Progress to date:**

Q4 (Jun)

Q2 (Dec)

Q4 (Jul)

Q1 (Nov)

Q2 (Nov)
### Inter-regional marine pest pathway management plan

<table>
<thead>
<tr>
<th>Attachment A</th>
<th>Item 15</th>
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</thead>
<tbody>
<tr>
<td><strong>To ensure the plan is consistent with Auckland Council’s:</strong></td>
<td><strong>Progress to date:</strong></td>
</tr>
<tr>
<td>- proposed Regional Pest Management Plan</td>
<td>A memo was distributed on 31/05/18 advising the committee on the Auckland Council’s participation in the development of a discussion document for an inter-regional marine pest pathway management plan, through the Top of the North Marine Biosecurity partnership.</td>
</tr>
<tr>
<td>- current and future marine biosecurity programmes</td>
<td><strong>Progress to date:</strong></td>
</tr>
<tr>
<td>- response to SeaChange – Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan.</td>
<td>A memo was distributed and is attached to the July agenda. Key milestones:</td>
</tr>
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<td>• workshops with local boards on public feedback – September - October 2018</td>
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<td></td>
<td>• workshops with local boards on public feedback – September - October 2018</td>
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<td></td>
<td>• engagement with mana whenua – September – October 2018</td>
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<td></td>
<td>• workshop with Environment and Community Committee – October – November 2018</td>
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<td></td>
<td>• formal feedback from local boards at business meetings – October – November 2018</td>
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<td></td>
<td>• approval of final plan by Environment and Community Committee – March 2019</td>
</tr>
</tbody>
</table>

### Allocation of the Regional Natural Heritage Grant

| **Decision-making over regional environment fund as per the grants funding policy and fund guidelines** | **Progress to date:** |
| Allocated the Regional Environmental Natural Heritage Grant for the 2017-2018 financial year was made on 6 Dec 2016_ENV/2016/11 Item 15 | **Allocation of the Regional Natural Heritage Grant** |
| | **Progress to date:** |
| | Council submission was approved on Central Govt. Clean Water Consultation 2017 process: Minutes of 4 April ENV/2017/54 Item 12. Follow up is required for resolution b) – a workshop held on 14 June. A supplementary submission on the Clean Water Consultation package was made on 25 May 2017, Item 14 13/06/17 Decision ENV/2018/14 on engagement approach for consultation on the National Policy Statement for Freshwater Management in Feb 2018. A report was considered on 26/6/18 : Res ENV/2018/78 |
| | June 2018: develop strategy |
| | July to Oct 2018 – High level regional options are developed and assessed for the five draft themes in consultation with mana whenua, local boards and key stakeholders. | **Q2** (Nov/Dec) |

### National Policy Statement for Freshwater Management

| **The National Policy Statement for Freshwater Management is being implemented, with periodic reporting to council committee on progress, and responding to ongoing central government refinement of the framework for achieving water outcomes.** | **Progress to date:** |
| In December 2018 further decisions will be sought under the national policy statement, including: | Council submission was approved on Central Govt. Clean Water Consultation 2017 process: Minutes of 4 April ENV/2017/54 Item 12. Follow up is required for resolution b) – a workshop held on 14 June. A supplementary submission on the Clean Water Consultation package was made on 25 May 2017, Item 14 13/06/17 Decision ENV/2018/14 on engagement approach for consultation on the National Policy Statement for Freshwater Management in Feb 2018. A report was considered on 26/6/18 : Res ENV/2018/78 |
| - approve final targets for swim-ability of major rivers in the Auckland region | June 2018: develop strategy |
| - approve the updated Progressive Implementation Plan for the National Policy Statement for Freshwater Management | July to Oct 2018 – High level regional options are developed and assessed for the five draft themes in consultation with mana whenua, local boards and key stakeholders. | **Q3** | **Q4** | **Q1** | **Q2** (Dec) |
### Item 15

#### Food Policy Alliance

- **Summary:**
  - Dec 2018: Draft Auckland's waters strategy presented to Environment and Community Committee for approval for release for public consultation
  - Feb to Apr 2019: Targeted public engagement on the draft Auckland's waters strategy in February to March 2019.
  - Apr 2019: Feedback analysed and presented to elected members in April 2019
  - Jun 2019: Final strategy presented to Environment and Community Committee for adoption

#### Auckland Growing Greener

- **Summary:**
  - Consideration of items to give effect to the adopted commitment of Auckland Council to grow greener.

- **Decision on food policy alliance**
  - Q3 (Mar)
  - TBC
  - Q2

- **Strategic direction** and oversight into council’s role to improve the natural environment, and to endorse proposed incentives.
  - This may include endorsing:
    - a framework to ensure planning and growth decisions are underpinned by relevant environmental data
    - proposed incentives for green growth
    - recommendations arising from a current state statutory obligations review.

- **Hunua Aerial 1080 Operation**

  - **Provide information on outcomes of the Hunua 1080 aerial pest control operation**
  - **To note outcomes of the Hunua 1080 aerial pest control operation.**

  - **Progress to date:**
    - Report was considered 5/12/17 Resolution ENV/2017/186 – report back against KPI every six months.
    - A report was considered on 10 July 2018 to approve the strategic partnership grant of $552,000 per annum for a three-year term (2018-2021) Res ENV/2018/90.
    - A funding agreement will be prepared for Aktive that ensures clear accountability and KPIs for each of the four geographical areas (North, West, Central and Southern) for the investment. (TBA)

#### Parks, Sports and Recreation

- **Sport and Rec Strategic Partnership Grant to Aktive Auck Sports Rec**

  - Approval of $552,000 strategic partnership grant to Aktive Auck & Sport to deliver on agreed priority initiatives.

  - **2019 reporting schedule:**
    - January 2019 - Interim report from 1 July – 31 December 2018
    - June 2019 - confirm 2019/20 priorities, outcomes and measures
    - July 2019 – Annual report from 1 January 2019 – 30 June 2019
    - September 2019 - Audited Financial Statements from 1 July 2018 – 30 June 2019

  - **To approve the $552,000 strategic partnership grant to Aktive Auckland Sport & Recreation for 2017/2018**

  - **Progress to date:**
    - Report was considered 5/12/17 Resolution ENV/2017/186 – report back against KPI every six months.
    - A report was considered on 10 July 2018 to approve the strategic partnership grant of $552,000 per annum for a three-year term (2018-2021) Res ENV/2018/90.
    - A funding agreement will be prepared for Aktive that ensures clear accountability and KPIs for each of the four geographical areas (North, West, Central and Southern) for the investment. (TBA)
<table>
<thead>
<tr>
<th>Attachment A</th>
<th>Item 15</th>
<th>Te Motu a Hiaroa (Puketutu Island)</th>
<th>Status update on the Te Motu a Hiaroa Governance Trust</th>
<th>To note further update on progress of the governance trust.</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2 (Oct/Nov)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sport and Recreation Strategic Action Plan</td>
<td>Status report on implementation plan</td>
<td>Direction on future options for sport and recreation.</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2 (Nov)</td>
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<tr>
<td></td>
<td>Sports Investment Plan</td>
<td>Council’s strategic approach to outcomes, priorities and investment in sports</td>
<td><strong>Decision</strong> on issues papers Draft Plan approval Finalise and adopt investment plan – approval of guidelines</td>
<td>Q3</td>
<td>Q4 (2019)</td>
<td>Q1</td>
<td>Q2 (Nov)</td>
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<tr>
<td></td>
<td>Golf Investment Plan</td>
<td>Council’s strategic approach to outcomes, priorities and investment in golf.</td>
<td><strong>Decision</strong> on issues papers Draft Plan approval Finalise and adopt investment plan</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2 (Dec)</td>
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<td></td>
<td>Indoor Courts</td>
<td>Strategic business case for indoor courts investment</td>
<td><strong>Decision</strong> on investment approach</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2 (Nov)</td>
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<tr>
<td></td>
<td>Western Springs Community School Partnership</td>
<td>Improve Community Access to school facilities</td>
<td><strong>Decision</strong> on Business and Investment in indoor court facility at Western Springs</td>
<td>Q3</td>
<td>Q4 (May)</td>
<td>Q1</td>
<td>Q2</td>
<td></td>
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<tr>
<td></td>
<td>Growth Programme</td>
<td>Update on proposed growth funding allocation for 2018-2020</td>
<td><strong>Decision</strong> on growth funding allocation</td>
<td></td>
<td></td>
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<td></td>
<td>Q1</td>
</tr>
<tr>
<td>Item 15</td>
<td>Regional Sport and Recreation grants programme 2018/2020</td>
<td>Review of previous grants allocation and recommendation for next round</td>
<td>Decision on sport and recreation grants programme objectives and approach</td>
<td>Progress to date:</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<td></td>
<td>Review of the Community Occupancy Guidelines 2012: TOR</td>
<td>The review will assess the efficacy of the guidelines in for the council to deliver the best possible outcomes for Auckland through community leases</td>
<td>Decision on the terms of reference for the review of the Community Occupancy Guidelines 2012</td>
<td>Progress to date:</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td>Active Recreation Investment and Visitor Experience</td>
<td>Council’s strategic approach to outcome, priorities and investment for active walking, cycling, waterways and visitor experience on open space, parks and regional parks</td>
<td>Decision on scope and phasing</td>
<td>Progress to date:</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td>Takaro – Investing in Play discussion document</td>
<td>Development of a play investment plan</td>
<td>Decision on approval for public release</td>
<td>Progress to date:</td>
<td>Q3</td>
<td>Q1</td>
<td>Q2</td>
<td></td>
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<tr>
<td></td>
<td>Regional Parks Management Plan 2010 – variation to incorporate land at Piha into the Waitakere Ranges Regional Park</td>
<td>To approve variation to incorporate land purchased at Piha to be known as Taitomo Special Management Zone as part of the Waitakere Ranges Regional Park</td>
<td>Decision on approval to a variation</td>
<td>Progress to date:</td>
<td>Q1</td>
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</table>

**Progress to date:**
- Approved on 12 Sept the 2018/2019 grants programme to proceed in accordance with the Community Grants Policy suggested outcomes and assessment matrix. Applications open 30/10/17 close 8/12/17. Report was considered on 8/5/18 and resolved ENV/2018/57.
- The TOR was approved for the review to commence and will report back in May/July 2018 subject to TLP. An update memo was circulated in August 2017 in response to feedback from the July 2017 meeting. Joint workshop with local board chairs held 20/6/18. Report was considered November 2018 and resolved ENV/2018/150.
- Approved on 16/05/17 for public release the discussion document and will report to E&C for approval in late 2017. Takaro was approved for release on 20 Feb 2018.
- A report back by August 2018 for approval to initiate public consultation.
- Approved on 20/2/2018 Res ENV/2018/15 report Manager, Regional Parks, will prepare an integrated vegetation management and fire–risk reduction plan in consultation with the local community and report back on the resourcing needs for its effective implementation.
<table>
<thead>
<tr>
<th>Item 15</th>
<th>ECONOMIC DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Southern Initiative (TSI)</strong></td>
<td>Provide an update on the TSI approach, priorities and achievements.</td>
</tr>
<tr>
<td></td>
<td><strong>Strategic direction</strong> of the TSI approach to social and community innovation in south Auckland</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
</tr>
<tr>
<td><strong>Global Engagement Strategy</strong></td>
<td>Provide an update and direction of Auckland Council’s global engagement strategy and priorities. It has been three years since a new strategic direction was introduced, progress on this strategy will be presented.</td>
</tr>
<tr>
<td></td>
<td><strong>Strategic direction</strong> of Auckland Council’s global engagement strategy and priorities</td>
</tr>
<tr>
<td></td>
<td><strong>Progress to date:</strong> Monthly global engagement updates are published on each agenda</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
</tr>
<tr>
<td><strong>Options to expand revenue streams for sport facilities investment</strong></td>
<td>Provide strategic direction to expand revenue streams to fund future sports facilities investment in the draft Sport Facilities Investment Plan</td>
</tr>
<tr>
<td></td>
<td><strong>Strategic direction</strong> to expand revenue streams to fund future sports facilities investment in the draft <strong>Sports Facilities Investment Plan</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Progress to date:</strong> A report was considered in Aug. Res ENV/2017/121</td>
</tr>
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<td>Q3</td>
</tr>
</tbody>
</table>

**Attachment A**

<table>
<thead>
<tr>
<th>Attachment A</th>
<th>SOCIAL, COMMUNITY, CULTURAL INFRASTRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community Facilities Network Plan</strong></td>
<td>Update on progress and report back on strategic business case for central west.</td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong> on indicative business case for central west</td>
</tr>
<tr>
<td></td>
<td><strong>Progress to date:</strong> A progress report was considered on 14 March. Resolution ENV/2017/36 Item 11 to report back on an indicative business case for investment in the central-west area.</td>
</tr>
<tr>
<td></td>
<td>Q3 (Mar)</td>
</tr>
<tr>
<td><strong>Auckland Sport Sector: Facility Priorities Plan</strong></td>
<td>Develop and endorse the Sports Facilities Investment Plan to enable Auckland Council to take a more co-ordinated approach to its sports facilities investment.</td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong> on the Auckland Sport Sector: Facility Priorities Plan.</td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong> on sector’s investment priorities and investigate potential funding options.</td>
</tr>
<tr>
<td></td>
<td><strong>Progress to date:</strong> The plan was endorsed on 12 Sept ENV/2017/118. Staff to report back on priorities and potential funding options.</td>
</tr>
<tr>
<td></td>
<td>Q1 (Sept)</td>
</tr>
<tr>
<td><strong>Homelessness</strong></td>
<td>Implementing Regional Policy and Strategy resolution to progress work around Council’s strategic position on addressing homelessness (note this work will be informed by discussions at the Community Development and Safety Committee)</td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong> on scope</td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong> on role and direction addressing homelessness</td>
</tr>
<tr>
<td></td>
<td><strong>Progress to date:</strong> Approved the scope policy 14 Feb Item 17. Auckland council’s position and role was considered at the August meeting report item 12. Staff to report back with an implementation plan. Resolution ENV/2017/118 of preferred position and role</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
</tr>
<tr>
<td>Facilities Partnerships Policy</td>
<td>Identify the range of current council approaches to facility partnerships, issues, opportunities and agree next steps</td>
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</tr>
</tbody>
</table>

**Decision** on facility partnership approach

**Decision** to adopt Facility Partnership Framework in December 2017

Update was given at 14 February meeting on **Phase 1**. Approval was given on the proposed timelines for Phase 2: Minutes 14 February Item 14 preferred option

A report seeking approval to engage on a draft facility partnerships policy on 12/06/18. Resolution ENV/2018/74

**Progress to date:**

**Implementation plan**
- January – March 2019 policy summary released
- April – June 2019 implement initial operational guidance and systems
- July 2019 detailed operational design and testing continues. Benefits realisation plan developed

| Q3 | Q4 | Q1 | Q2 (Dec) |

<table>
<thead>
<tr>
<th>Citizens Advice Bureaux Services</th>
<th>Review of the Citizens Advice Bureaux Services RSP decision in April 2016 (REG/2016/22)</th>
</tr>
</thead>
</table>

**Decision** on review results

**Progress to date:**
- Report was considered at 20 Feb meeting, Decision: lies on the table. A supplementary report was considered on 10 April 2018, Res ENV/2018/48 and with changes for an updated funding model to be agreed by 1 April 2019

| Q3 (Feb) | Q4 | Q1 | Q2 (Feb/Mar19) |

<table>
<thead>
<tr>
<th>Social and Community Housing Strategy and initiatives</th>
<th>Strategic overview of social and community housing initiatives. Wider housing portfolio and spatial outcomes of council’s role in housing is led by the Planning Committee.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Affordable Housing Intervention</th>
<th>Understanding NZ and international interventions to address affordable housing</th>
</tr>
</thead>
</table>

**Decision** on future Auckland Council approaches to affordable housing interventions

| Q3 | Q4 | Q1 | Q2 |

<table>
<thead>
<tr>
<th>Te Kauroa – Library Strategy</th>
<th>Libraries and Information is carrying out a change programme (Fit for the future) to accelerate the implementation of this 2013-2023 strategy (approved by the Governing Body)</th>
</tr>
</thead>
</table>

**Direction** relating to priorities and to receive update on strategic direction and implementation progress

**Approve** an expanded and improved regional mobile library service

**Progress to date:**
- Workshop held on 7 March with local board chairs. Workshop notes were attached to the 10 April agenda

| Q3 | Q4 | Q1 (Sep) | Q2 |

<table>
<thead>
<tr>
<th>Central library strategic review</th>
<th>A strategic review of the Central Library has been commissioned to understand how the current building can meet future need and demand for services, assess the Central Library’s current and potential future role in the region, and guide decision making about future investment and development opportunities</th>
</tr>
</thead>
</table>

**Decide direction** and receive the strategic review

<p>| Q3 | Q4 | Q1 | Q2 |</p>
<table>
<thead>
<tr>
<th>Item 15</th>
<th>Libraries</th>
<th>Work around the integration with customer services</th>
<th>Decision on matters relating to regional aspects of the proposed integration (local boards will decide on local outcomes)</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 15</td>
<td>Intercultural Cities Network</td>
<td>Consideration of a proposal to join the Intercultural Cities Network to support implementation and monitoring of progress on 'Inclusive Auckland' actions.</td>
<td>Decide whether Auckland should be a member of the network</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2 (Dec)</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Investing in Aucklanders (Age Friendly City)</td>
<td>Identify issues and opportunities for an inclusive friendly city (Regional Policy and Strategy resolution REG/2016/92)</td>
<td>Strategic direction on the approach to a friendly, inclusive, diverse city.</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1 (Jul)</td>
<td>Q2</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Social Enterprise approaches for youth and long term unemployed</td>
<td>Improved understanding of social enterprise reach, impacts, costs and benefits</td>
<td>Strategic direction on councils approach to social enterprise.</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1 (Jul)</td>
<td>Q2</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Youth volunteer programmes</td>
<td>Intervention assessment of youth volunteer programmes on long term education and employment – understanding impacts, costs and benefits</td>
<td>Strategic direction on interventions approach</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1 (Jul)</td>
<td>Q2</td>
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<tr>
<td>Attachments A</td>
<td>Events Policy</td>
<td>A review of what is working well and what isn’t</td>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Q1 (Sep)</td>
<td>Q2</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Grant Policy Monitoring</td>
<td>Audit of the application of the Grants Policy</td>
<td>Decision on audit results</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Toi Whitiki Strategy</td>
<td>Targeted analysis of social return on investment on specific art and culture investment</td>
<td>Decision on review results</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2 (Dec)</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Public Art Policy</td>
<td>Review of the Public Arts Policy: what’s working what’s not. Decisions relating to major public arts</td>
<td>Progress to date: The report was considered on 14/08/18. Resolution ENV/2018/103 to report back on implementation within 18 months</td>
<td>Q3</td>
<td>Q4 (Apr)</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>Attachments A</td>
<td>Current Development Contribution revenue and expenditure – funding for open space purposes</td>
<td>Highlight the new parks and open spaces for Aucklanders’ use and enjoyment</td>
<td>A report was considered on 14/08/178 on Open Space acquisition in 2017/18 financial year. Resolution ENV/2018/104 to report back on DC revenue and expenditure by funding area for open space purposes based on current based on the current DC policy.</td>
<td></td>
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<tr>
<td>Investigation in North-west Community Provision</td>
<td>Investigation to identify any current gaps in services or facilities or in the future</td>
<td>Decision on the investigation findings</td>
<td>Progress to date:</td>
<td></td>
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<td>A report was considered on 13/10/18 on the findings. Res ENV/2018/131. Staff will progress the key moves outlined in the report.</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<thead>
<tr>
<th>LEGISLATION/CENTRAL GOVERNMENT</th>
<th></th>
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<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
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<tbody>
<tr>
<td>National Environmental Standards</td>
<td>Council response on the National Direction for aquaculture expected following scheduled release of consultation document in April 2017. The National Direction is likely to address matters relating to re-consenting, bay-wide management, innovation and research, and biosecurity.</td>
<td>Direction Committee agreement to a council submission on the National Direction for Aquaculture</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<tr>
<th>LAND ACQUISITIONS</th>
<th></th>
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<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
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<tbody>
<tr>
<td>Strategic acquisition issues and opportunities</td>
<td>Understanding current acquisition issues and options.</td>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>Land acquisition for stormwater purposes</td>
<td>Delegated responsibility of the committee. To acquire land for stormwater management and development purposes, to either support a structure plan or ad-hoc development.</td>
<td>Decision to acquire land. Reports will come to committee as required. Next report will be in Feb 2018 seeking authority to carry out compulsory acquisition of land in the Henderson area for a flood prevention project.</td>
<td>Q3 (Feb)</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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<thead>
<tr>
<th>OTHER</th>
<th></th>
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<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
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<tbody>
<tr>
<td>Long-term Plan</td>
<td>Informing the development of the 2018-2028 Auckland Council Long-term Plan</td>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
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