Proposed Scope: Recent flooding impacts, implications, improvements

Te take mō te pūrongo
Purpose of the report

1. To whakaae / approve the proposed scope to investigate the flooding impacts, implications and improvements to public policy and infrastructure settings so that: Auckland and its communities are more resilient to water related hazards.

Whakarāpopototanga matua
Executive summary

2. The Planning, Environment and Parks Committee, has delegated you as the Mayor, Chair, Deputy Chair, and Independent Māori Statutory Board member to approve a scope of work to:

    - investigate the regional and localised impacts of flooding, and the implications for land use planning, regulatory, current plan changes to the Auckland Unitary Plan (including Plan Change 78), infrastructure and other policy settings'

3. Staff propose a scope of work to investigate the flooding impacts, implications and improvements to public policy and infrastructure settings so that: Auckland and its communities are more resilient to water related hazards.

4. A set of questions will guide a current state/ future state assessment, identifying gaps and improvements. The scope of work will be delivered between March 2023 and June 2024. The timeframes for delivery will vary significantly. Actions that can be implemented quickly will be. All statutory planning and regulatory settings will include required statutory consultation processes.

5. Once a scope of work has been approved as delegated by the Planning, Environment and Parks Committee, staff will report back to the committee on the scope and start implementation.

Ngā tūtohunga
Recommendation/s

That the group delegated by the Planning, Environment and Parks Committee:

a) tuhi / note that on 9 February 2023 the Planning, Environment and Parks Committee delegated the Mayor, Chair and Deputy Chair and an Independent Māori Statutory Board member to approve the proposed scope of work to 'investigate the regional and localised impacts of flooding, and the implications for land use planning, regulatory, current plan changes to the Auckland Unitary Plan (including Plan Change 78), infrastructure and other policy settings' to by 17 February 2023 (PEPCC/2023/6)

b) whakaae / approve the scope outlined in paragraphs 18-65, to investigate the flooding impacts, implications and improvements to public policy and infrastructure settings so that: Auckland and its communities are more resilient to water related hazards.

c) tuhi/note that a report back on the agreed scope will be provided to the Planning, Environment and Parks Committee meeting on 2 March 2023.

Horopaki
Context

Extreme weather events prompts re-look at settings to manage community impact

6. Extreme rainfall during Auckland Anniversary weekend caused significant flooding and landslides with devastating impact on Aucklanders, public infrastructure, and homes across the region.
7. Cyclone Gabrielle quickly followed bringing further rain and high winds, adding to the impact on the community and infrastructure.
8. On 9 February 2023 the committee requested that staff urgently prepare a scope of work to 'investigate the regional and localised impacts of flooding, and the implications for land use planning, regulatory, current plan changes to the Auckland Unitary Plan (including Plan Change 78), infrastructure and other policy settings' and to agree this scope of work with the Mayor, Chair and Deputy Chair and an Independent Māori Statutory Board member by 17 February 2023 [refer PEPCC/2023/6].
9. Staff were also requested to report back to the 2 March 2023 meeting on the agreed scope of work and next steps.
10. Auckland Council as a Unitary Authority has a range of regulatory responsibilities. Key legislative responsibilities are outlined below:

National legislation	
Local Government Act 2002	Council must ensure that the current and future needs of the community for good-quality local infrastructure, local public services and performance of regulatory functions are provided for in a cost-effective manner. This includes managing natural hazards risks when providing infrastructure that enables growth, such as stormwater infrastructure.
Resource Management Act 1991	Council must manage our natural and built environment. Council has a range of tools at its disposal that can reduce risk (like land use planning) and increase resilience to a natural hazard event (for example, by ensuring that the environment is protected and managed to provide natural buffers.)
Building Act 2004 and Building Code	Council acts as a regulatory authority and must ensure that buildings and structures are safe and sanitary.
CD EM Act 2002	Council must plan and provide for civil defence emergency management within its district, including natural hazards. This task is undertaken by Auckland Emergency Management.
The council acts in dual capacities as a regional council and territorial authority	
Regional council duties	• Maintain records of river flows, lake levels, rainfalls and past floods. • Model water flows so they can warn of future flooding. • Manage rivers and catchments and control land-use activities. • Issue flood warnings and provide emergency management.
Territorial authority duties	• Collect information on flooding. • Responsible for controlling buildings and the effects of land use to reduce flood risk. • Key tools in the Building Act 2004 and Resource Management Act 1991.

11. The council currently uses a wide range of public policy (statutory planning, regulatory planning and policy, other policy) and infrastructure settings to prepare for and respond to Auckland's water related hazards.
12. Statutory Plans such as the Auckland Plan 2050 set the overall direction for Auckland, in particular identifying that Tāmaki Makaurau Auckland needs to:
    - proactively adapt to a changing water future, develop long-term solutions, and improve our ability to manage and respond to the water-related impacts of climate change.
13. It is underpinned by statutory requirements for a 30-year Infrastructure Strategy, Future Development Strategy, asset strategy and management plans, bylaws, and codes of practice.
14. Resilient Auckland – Auckland Civil Defence and Emergency Management Group Plan 2016 meets the statutory requirement to provide strategic guidance for CDEM in Auckland.
15. Te Mahere Whakakotahi I Tāmaki Makaurau Auckland's Unitary Plan, is the regulatory foundation for managing subdivision, use and development in Auckland, including where related to natural hazards, risks to people, property, infrastructure, and the environment.
16. Policy settings include Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan and the Water Strategy that set long-term direction about:
    - mitigation and adaption to climate change
    - ensuring climate change is a key consideration in decisions that lock the council into long-term outcomes and investment
    - addressing immediate, known risks that affect Aucklanders today
    - equity and affordability.
17. Strategic direction is implemented through other policy and planning programmes such as:
    - Te Ara Urutau: Waikino-100-year adaptation approach
    - Natural Hazards Risk Management Action Plan
    - Coastal Management Framework 2017
    - Shoreline Adaptation Plans.

"Planning for the next thirty to one hundred years needs to be addressed today."

"Clear policy enables communities to know what they need to do to future proof."

"Redevelopment and intensification will only work if the infrastructure can support this."

Tātaritanga me ngā tohutohu
Analysis and advice

Helping Auckland prepare for the impacts of climate change like flooding and sea level rise

Scope problem definition

18. Tāmaki Makaurau Auckland has 3200km of coast made up of a diverse mix of beaches, cliffs, islands, and estuaries, fed by thousands of rivers and streams in 233 catchments.
19. Climate change projections predict that Auckland will:
    - experience stronger ex-tropical cyclones, more extreme rainfall events, ongoing sea level rise.

20. Extreme rainfall and rising sea levels are predicted to lead to increased river flooding, surface water flooding, groundwater flooding and coastal erosion and land instability.

21. Severe weather events as recently experienced across Auckland generate “too much water” and put Aucklanders at risk, causing large scale disruption to people, property, communities, assets, and services.

22. Aucklanders clearly see a role for Auckland Council to take climate action. Eighty-nine per cent of Aucklanders believe Auckland Council has a role in helping Auckland prepare for the impacts of climate change such as flooding, heatwaves, droughts, and sea-level rise. [1]

Warm, tropical air and a marine heatwave primed the atmosphere for heavy rainfall

23. This summer, La Niña conditions in the Pacific and a marine heatwave around New Zealand encouraged moist, tropical winds to affect the North Island, leading to repeated rainfall events.

24. Leading up to 27 January 2023, an atmospheric river extended from the tropics to northern New Zealand, bringing a warm, moisture-packed subtropical low-pressure system towards Auckland.

25. On 27 January 2023, this storm stalled over Auckland as it was blocked by a high-pressure system to the southeast. A unique phenomenon called a low-level jet funnelled in yet more warmth and tropical moisture into the storm.

26. All these factors contributed to the atmosphere above Auckland being completely saturated, leading to the bouts of high intensity rainfall that saw much of the urban area receive an entire summer’s worth of rain in less than a day.

27. It is important to note that weather situations causing extremely heavy rainfall and flooding are not unprecedented for Auckland, as seen recently in events such as the like the 2017 Tasman Tempest and 2021 Kumeu floods. However, the impact of the 27 January 2023 storm was particularly severe due to the extreme atmospheric moisture content combined with the location of the heaviest rainfall over urban areas.

Rainfall intensities were extremely high

28. The storm caused persistent rainfall for more than 24 hours. Rainfall totals exceeded 230 mm at many locations across urban Auckland during the period from midnight 27 January 2023 to 7am 28 January 2023, with the maximum recorded total for this period being 318 mm.

29. Most of the rain fell over four hours between 4-8pm on 27 January 2023. Some astonishing rainfall amounts were recorded during this period. For example, the Onehunga @ Harbourside rain gauge measured 146 mm in two hours; this is twice the average January rainfall total for this site (73.8 mm).

30. It was the wettest day on record for many Auckland sites, some with records going back to the 1960s.

Climate change increases extreme rainfall intensity

31. The rainfall intensity on 27 January 2023 was increased due to the influence of climate change. The Earth has warmed by about 1.1°C. This warming has been accelerated by human activity. This extra heat gives more power to extreme rainfall.

32. It is estimated that climate change contributed 10-20% more rain in the most intense part of the 27 January 2023 storm[2].

33. Climate change projections for Auckland show that the intensity of extreme rainfall events is likely to continue to increase in a warmer future.

[1] Climate Action and Public Perceptions Research Report December 2019
[2] https://niwa.co.nz/news/auckland-suffers-wettest-month-in-history

34. NIWA's research suggests that for rare, short duration events (less than 6 hours), rainfall amounts may increase by 12-14% per degree of warming[3]. Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan outlines an extreme future scenario where Auckland is 3.5°C warmer by 2110 – indicating that rare, short duration rainfall amounts may increase oi the order of 48% if this level of warming is reached.

Impacts were felt across Auckland, particularly in urban areas

35. Intense rainfall on already saturated ground caused widespread surface flooding across urban areas and the roading network, causing major disruptions. Flash flooding forced evacuations from many low-lying homes and businesses as overland flow paths were activated and floodplains inundated. Auckland Airport was flooded and forced to close.

36. The rainfall caused thousands of landslides across the region, mostly in rural areas. However, many hundreds of slips affected homes and businesses as well as road and rail infrastructure.

37. Five deaths are attributed to the Auckland Anniversary storm. Further heavy rain on 1 February 2023 caused flooding in some central and northern areas of Auckland, likely exacerbated by the saturated ground following the 27 January 2023 storm.

38. Auckland's harbours were affected by the outflow of contaminated flood waters, with beaches around the urban areas closed for more than a week due to sewage contamination. Auckland's estuaries and harbours were affected by considerable sedimentation following the storm. Significant coastal erosion was recorded along many of Auckland's coastal cliffs.

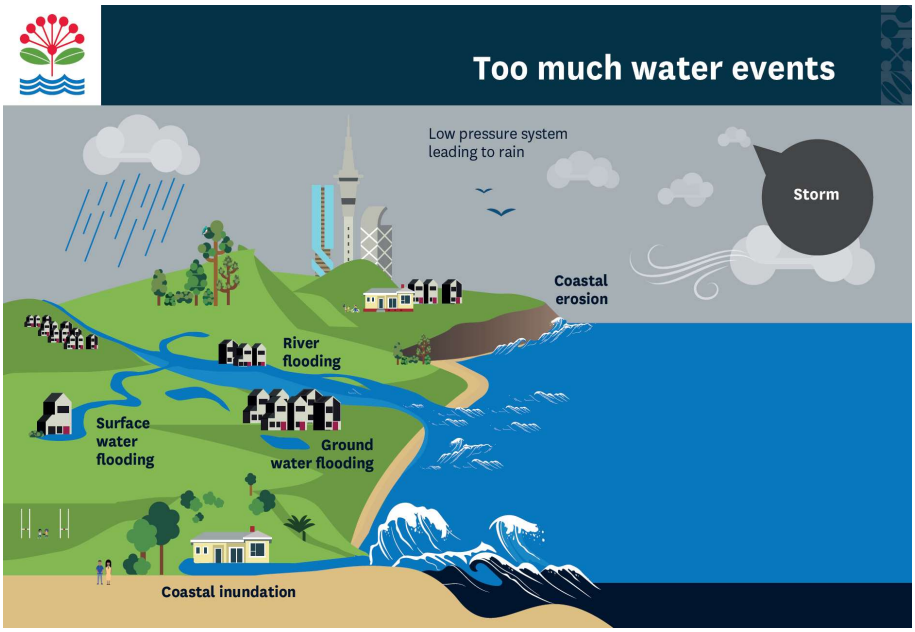
39. Marae and Māori communities were impacted including loss of access to marae and papakāinga, flooding and erosion to urupa and resulting surfacing of koiwi, and damage to wahi tapu in coastal areas.

40. As of 1 pm on 14 February 2023, 297 red, 1724 yellow, and 2724 white placards had been issued by building assessment teams[4], indicating the significance of the damage to property.

41. The insurance industry has indicated that the Auckland Anniversary storm is likely to be the most costly weather event in New Zealand's history[5]. However, it is worth noting that those statements were made before Cyclone Gabrielle caused widespread devastation across the North Island on 13-14 February 2023, with early indications that it would be more costly.

[3] https://knowledgeauckland.org.nz/publications/auckland-region-climate-change-projections-and-impacts-revised-september-2020
[4] https://www.aucklandemergencymanagement.org.nz/major-incident/flooding-2023#Building
[5] https://www.insurancenews.com.au/local/wake-up-call-auckland-floods-must-spur-resilience-debate

In scope



The scope includes water related events and impacts which are increasing in magnitude and frequency with climate change:

- coastal inundation
- coastal erosion
- river/stream flooding/erosion
- surface water flooding
- landslides
- groundwater flooding
- social, cultural, environmental, and economic impacts

Out of scope

42. The scope of work will be informed by but does not include the Auckland Civil Defence and Emergency Management Group Auckland Anniversary response. This is the subject of a separate review.

Investigating what it will take to be more resilient to Auckland's water related hazards

Scope purpose

43. The purpose of the scope of work proposed is to undertake a current state and future state assessment based on the committee resolution as follows:

    - *Current state assessment*: investigate the causes and impacts of recent weather events such as flooding, landslides and the implications for public policy and infrastructure settings
    - *Future state assessment:* identify improvements across our public policy and infrastructure settings so that Auckland and its communities are more resilient to water related hazards.

44. The overriding objective of the scope is to identify the lessons we can learn from the recent weather events and what we can to do to build a region more resilient to water related hazards. The guiding investigation questions for the proposed scope help set the narrative for the council and Aucklanders to understand:

    - what happened during recent extreme weather events
    - what was the social, cultural, environmental, and economic impact
    - how did Auckland get here and how did past approaches shape the region today (for example draining of wetlands, piping of streams, large sections-small houses to small sections -large houses)
    - what is changing for Auckland (using Mātauranga Māori, climate factors and development patterns), how quickly, and what is the level of certainty for Auckland

- what might the future look like and what might happen-short, medium, and long-term (climate change scenario, maramataka and tohu)
- what matters most to Aucklanders, and what do Aucklander's value
- what matters most to hapū/iwi, and what do hapū/iwi value
- what can we do, what would it take, what are the costs and trade- offs, to be resilient to Auckland's water related hazards
- how can statutory, regulatory, policy and infrastructure settings help us collectively adapt to Auckland's water related hazards
- what are we doing now or planning to do that we need to stop or reassess (like investment decisions and reassesses a review underway on the Unitary Plan controls for natural hazards including flooding).

45. The investigation questions will guide the work programme and ensure the deliverables continue to iteratively question assumptions and provide a cohesive narrative and focus for work delivered across diverse teams, communities, and knowledge.

Scope to help build trust and confidence in our future resilience to water related hazards

46. About half of Aucklanders feel some level of confidence that the council is taking effective action to reduce the impacts of climate change on the region in the future:
    - 39 per cent were moderately confident
    - 8 per cent were very confident
    - 2 per cent were extremely confident.[6]
47. This confidence and trust will be further eroded by the experiences Aucklanders endure due to the recent severe weather. The scope will need to help build Aucklanders' trust and confidence in our future resilience to water related hazards.

"These events are just getting more and more severe and more and more frequent, and it's absolutely terrifying"

"Support significant increased budget in the area of adaptation. Need strong policy guidance from the council as to how we are going to plan for sea level rise and flooding. This is sorely lacking."

High level work programme phases and timeline

48. Staff anticipate the scope work programme will include four phases of work:
    - responsive action
    - evidence and insights
    - design solutions/refine/decide
    - deliver.
49. All phases of the work programme tasks will draw on, existing work and knowledge, new work and accelerating improvement initiatives already underway.

[6] Climate Action and Public Perceptions Research Report December 2019

50. It will be important that opportunities to address the key investigation question: *what we are doing now or planning to do that we need to stop or reassess* are pursued and iterated throughout the eight–twelve-week responsive phase and work programme phases.

Phase One: Responsive action and advice

51. The responsive actions focus on what can be delivered over the ***next eight – twelve weeks*** and include some of the questions the committee raised at the 9 February 2023 meeting.

52. The information and advice provided will be fit for purpose and drive towards early insights that are easily communicated. Independent peer review will strengthen the advice provided.

53. The responsive actions are:

- review the council's approach to Proposed Plan Change 78 to inform recommendations to the Independent Hearings Panel
- review the scope of the coastal hazards plan change work discussed with the Planning Committee during the previous council term
- summary of council communications material available to Aucklanders generally, and residents in floodplains specifically, regarding water-related hazard risk
- summary of the legislative and strategic framework that applies to council's role in identifying and managing water-related natural hazard risk. Presentation to include:
  - legal briefing on council's liability as relates to flooding risk and decisions made under the Resource Management Act
  - briefing on council's approach to consenting inside known hazard zones, including summary of 'live' Central Government Housing developments in known hazard zones
  - briefing on council requirements and guidance related to detention tanks.
- summary of planned physical works for water-related hazards
- indicative investigation into social -economic impact of events on Aucklanders
- key trade-offs, (e.g., climate adaptation, climate mitigation, social, economic, and environmental), framework and examples to help guide staff advice and decision-making (Phases two and three)
- briefing on climate change scenarios, projections, and potential impacts for the Auckland region, including understanding of how impacts could have been more severe through risk factors like high tide and storm surges

54. Other questions the committee and mana whenua may have will continue to be collated and used to further refine and adapt the broader work programme, for example:

- are there mātauranga Māori perspectives that can be acknowledged. How can this inform our collective understanding of risk and resilience?
- what is the current risk profile of the Unitary Plan for water related hazards, is it still fit for purpose given recent storm events, are we applying our regulatory framework in appropriate ways to limit flood risk (e.g., risk tolerance with respect to over land flow paths and if change is required, what are the options, impacts and trade-offs?
- what legislative change might be required to better manage water related hazards, what advocacy have we done in the past, what legislative change may be required to effect change for the future?
- what about managed retreat such as the red zones from Christchurch earthquakes?
- are our communication standards fit for purpose to enable our communities to understand the risks and prepare? For example, '1 in 100/200', 'return periods', 'unexpected.'

Phase Two: Evidence and Insights

55. Current State: investigate the causes and impacts recent of weather events such as flooding, landslides and the implications for public policy and infrastructure settings:

- gather evidence and research, take stock, assess the current state, produce briefings, and complete findings, insight, and improvement reports with the objective to answer the investigation questions about causes, impact and to identify:
  - how our statutory and infrastructure plans shaped how Auckland communities were impacted by the flooding, and landslides, how they are positioned to manage the impact of recent water related hazards in the future and what improvements might be made
  - the regulatory challenges, and lessons arising from the impacts of recent water related hazards and how we can future proof our regulatory settings, particularly land use planning in the Unitary Plan
  - how can we strengthen our regional and local policy settings and approach to adaptation pathways and adaptation options like: avoid, accommodate, protect, retreat
- develop findings report (s) – that consider existing, and future risks of water related hazards and identify gaps, constraints, improvements actions, implications and recommended next steps
- consider findings report(s) with committee decision -making and next steps approved.

Phase Three: Design, Refine and Decide

56. Future State: identify what could be done across our public policy and infrastructure settings so that: Auckland and its communities are more resilient to water related hazards:

- refine improvement actions, and clarify implementation requirements and implications
- design the change options including more detailed implications around cost, feasibility, affordability, and trade-offs
- refine, test, and validate options for change with mana whenua, internal and external experts, Aucklanders, and the council whanau
- options considered by appropriately delegated decision-makers and preferred option(s) approved for service design and delivery.

Phase Four: Deliver

57. The timeframes for delivery will vary significantly. Actions that can be implemented quickly will be. All statutory planning and regulatory settings will include required statutory consultation processes.

58. Other changes will require decisions by other bodies such as government or CCOs. Any funding needed to improve infrastructure setting outside of budgeted expenditure is subject to Annual Plan and/or Long-term plan consultation and decision-making process.

Contribution across the council whanau critical- needs to be flexible and actively managed

Work Programme Planning and Collaboration

59. A whole of council whanau integrated work programme is needed to deliver the proposed scope. It is important that duplication of effort or advice is avoided and actively managed.

60. Not all the settings for the scope are within the decision-making power of the committee or the council. However, many of the solutions for our communities sit across the council whanau, including with Auckland Transport and Watercare Services Limited.

61. A centralised information and clearing house will be established to actively manage and co-ordinate work programme inputs and outputs across the council whanau.

62. The existing all of council whanau Chief Executive Group and General Managers Housing and Growth Group will manage the work programme effort and the interface of management and decision-making responsibilities of Governing Body and CCO boards.

63. The contribution of scientists, researchers, planners, engineers, technicians, kaihautū, project managers, land managers, technology specialists, and community connectors is critical.

64. Limited engagement on the scope was possible within reporting timeframes and due to key staff being involved in the wider response to the weather events.

65. The scope of work and the timeframes for delivery will need to be flexible to take this into account. Some work may need to progress out of sequence or be iterated and developed as new information and contributions by others become possible. External sources of expertise can also assist delivery timeframes when internal knowledge specialists are unavailable.

Work Programme Delivery Approach

66. The approach to guide the delivery of the work programme is as follows:

Whakawhanaungatanga	Relationships and connection will be at the heart of the mahi, respect and actively seek a range of knowledge and experience, sense check and build connections.
Te tūhura (discover)	Use qualitative and quantitative research methods to collect data, evidence, views, needs operational, external, expert, community knowledge and lived experience to contribute to observations, insights, and results. Learn from and consider international and national guidance documents: e.g., Sendai Framework for Disaster Risk Reduction 2015-2030, Preparing for Coastal Change 2017, Water Sensitive Benchmarking. Learn from others: Aotearoa New Zealand and overseas- Christchurch, Nelson, Coromandel, Northland. Hawkes Bay, New South Wales, UK, USA.
Te tātari (analyse)	Undertake robust analysis of data, information, knowledge, and views using different analytical tools to contribute to insights, about problems and solutions.
Te auaha (create)	Identify and create opportunities for change (improvements, solutions, and options)
Me mahi tahi tātou	We will work closely with communities and ideas designed, tested and validated; A process of future proofing is used
Te tohutohu (advise)	Produce advice about the 'so what' and the 'what next', costs and trade -offs, advocacy, and improvement for decision-makers
Te whakawhiti kōrero (communicate)	Be responsive, convey information, answer questions, build a common knowledge base, provide briefings, and verbal advice in a way that is objective and transparent and builds trust and confidence of Aucklanders and decision-makers

Te ara urutau	Move forward and be able to learn, interactive, flexi, and adapt the approach.

Adapt to government plans, collaborate, and advocate for change

67. Central government is reviewing legislation to adapt and build resilience to climate change. This includes the Three Waters Reform, repealing and replacing the Resource Management Act 1991 with three new pieces of legislation, including the Climate Adaptation Act. Auckland Council will need to adapt to these legislative changes if or when enacted

68. In addition, advocacy to government on issues is anticipated. The proposed scope work programme may need to collaborate with any future government plans in response to the weather events specifically for Tāmaki Makaurau/Auckland, or as part of a wider response to the nature and scale of damage experienced across Aotearoa New Zealand this summer.

69. On 21 February 2023 a new Cabinet committee was established chaired by Grant Robertson as the new Cyclone Recovery Minister with Barbara Edmonds as associate minister. A Cyclone Recovery taskforce was also established headed by Sir Brian Roche and with regional groups and a regional minister. This may have implications for the scope and will be better understood when more information is released.

Tauākī whakaaweawe āhuarangi

Climate impact statement

70. Climate change will bring more extreme weather events to Auckland, amplifying the natural dangers from too much water. Both the Auckland Plan 2050 and Te Tāruke-Ā-Tāwhiri: Auckland's Climate Plan direct greater resilience to such events.

71. There are no climate impacts arising from this scoping report. Rather this report addresses aspects of climate change to assist in making Aucklanders better prepared and more able to respond to adverse weather events.

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

72. Limited internal engagement was possible within the scope development timeframe. The work programme envisaged by the scope will impact groups and knowledge specialist across the council whanau.

73. Where timing and resources do not align, work programme deliverables may need be flexible to take this into account.

74. Some work may need to progress out of sequence or be iterated and developed as new information and contributions by others become possible. External sources of expertise can also assist delivery timeframes when internal knowledge specialists are unavailable.

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

75. Staff will engage local boards in in accordance with the 'Local Board involvement in Regional Policy, Plan and Bylaws: Agreed Principles and Processes 2019'.

76. The implications of the work programme on specific regional policies is unknown at this stage. The assessment of local board interest and impact required by the guidelines will be undertaken on a case-by-case basis to identify and undertake the agree level of local board involvement required.

Tauākī whakaaweawe Māori
Māori impact statement

77. The proposed scope and resulting work programme will be delivered within the wider national direction "Te Mana o te Wai'. The council public policy settings implementing Te

Mana o te Wai' are the Water Strategy and Te Mahere Whakakotahi i Tāmaki Makaurau Auckland's Unitary Plan which sets the regulatory approach for Auckland.

78. A holistic response to climate change with a whakapapa-centred approach has been identified as critical by mana whenua through both iwi management plans and feedback across a range of public policy settings.

79. Water related hazards can compound issues of equity, social, cultural and physical wellbeing for Māori in Tāmaki Makaurau Auckland. Cultural heritage sites such as marae and urupā are places deeply connected to mana whenua, through whakapapa and ahi kaa, are particularly exposed to water-related hazards.

80. Key actions identified in the Water Strategy and Te Tāruke-ā-Tāwhiri i Auckland's Climate Plan include:

- develop marae community resilience plans
- assess potential impacts of climate change scenarios on Auckland's population and establish targeted programmes for affected communities and individuals to support climate migrants and the current needs of our growing population
- identify how mana whenua communities and their places can be more resilient
- resource mana whenua to develop guidance and assessment methods for mauri-enhancing infrastructure.

81. The call has been for the need to act now to limit the effects of climate change upon our environment and protect the environment so it can continue to support healthy Aucklanders. "Oranga taiao, oranga tangata: a healthy and connected natural environment supports healthy and connected Aucklanders. The mauri (life essence) of Tāmaki Makaurau is restored' is a representative statement from engagement.

82. Mana whenua will have the opportunity to participate and share perspectives based on their view on how we do this mahi together.

83. As a basis for engagement, staff have started a te ao Māori stocktake that pulls together a range of outcomes, values, statements, and actions from key mana whenua and council documents as well as feedback that has been received from mana whenua and mataawaka that relate to water, climate change, community, and the environment

Ngā ritenga ā-pūtea

Financial implications

84. The scope development timeframe did not allow for meaningful costings. The proposed scope will be delivered within existing budgets and staff resource to 30 June 2023.

85. Resourcing needs and the impact on the pace or quality of the work after June 30, 2023, will be defined in May 2023 relative to the budget available subject to the decision-making processes of the 2023-2024 Annual Plan.

86. Any financial implications that may result from staff advice and recommendations resulting from the proposed scope will be included in future decision-making reports.

87. These financial decisions can be considered through the appropriate Annual Plan and Long-term Plan decision making processes or through unbudgeted expenditure decisions delegated to the Governing Body.

Ngā raru tūpono me ngā whakamaurutanga
Risks and mitigations

If	Then	Mitigations
• **There is a moderate risk that a whole of council**	• The scope of potential improvements reduces,	• The scope timeframe duration reflects time built in to mitigate the resource demands across

approach to the scope and/or timeframes cannot be achieved	and/or the timeframes are extended	council involvement in the emergency management response, the big clean up and future big fix up. A process to accommodate the impact of annual budget decisions have also been provided. An independent review/taskforce could be used for the scope of work which can reduce inputs required across the council whanau and would be able to be delivered within the scope timeframes.
• **The programme of work is viewed as a whole it appears that delivery will start in June 2024**	• It appears the work is not urgent and important	• The timeframes for delivery will vary significantly. Actions that can be implemented quickly will be. All statutory planning and regulatory settings will include required statutory consultation processes.
• **Solutions are imposed without exploring the issues and options**	• Resources are wasted, problems will not be addressed.	• The phases of work described in this paper will be undertaken as expressed with flexibility to adapt as needed.
• **A moderate risk the government's policy settings change**	• Phases underway will need to be rescoped	• Committee engagement with central government is important to ensure the crown and council are working together.

Ngā koringa ā-muri
Next steps

88. If the scope is approved by the delegated subgroup, staff will start implementation and report back to the Planning, Environment and Parks Committee at the 2 March 2023 meeting.

89. Regular updates, information and advice will be provided to the Planning, Environment and Parks Committee through memo, briefings, presentations, and agenda reports when decisions are required.

Ngā kaihaina
Signatories

Authoriser	Megan Tyler - Chief of Strategy