Christchurch City Council

Dear [redacted]

Thank you for your email.

[*Request: I am requesting all information provided by the council to the Ministry for the Environment as part of its "Adaption preparedness 2020/21 baseline" report. The report was created following the first information request under the Climate Change Response Act 2002*].

Please find the survey attached. The survey responses were provided to the Ministry for the Environment (MfE) in response to their survey request for information on climate change preparedness. This survey was undertaken in September/October 2020.

The additional information below provides an update to the survey information provided a year ago.

In reference to Q38, the Christchurch City Council has now adopted Kia Tūroa te Ao – Ōtautahi Christchurch Climate resilience strategy, following public consultation in parallel with Draft Long Term Plan. Appendix A to the strategy presents the predicted local changes to climate and the impacts and implications of these changes. https://ccc.govt.nz/environment/climate-change

The 2021-2031 Long Term Plan adopted by Council in June this year addresses the need for continued investment in our core infrastructure so that we build our resilience and prepare our communities for the impacts of climate change. In a signal of our commitment to implementing the strategy, we included an additional $13.5 million in our Long Term Plan for a range of climate and environmental initiatives.

In reference to Q39, additional funding of $700k a year was provided for the Coastal Hazards Adaptation Planning (CHAP) Programme to proactively work with communities in areas most likely to be affected by the impacts of climate

change. https://newsline.ccc.govt.nz/news/story/council-adopts-climate-resilience-strategy

In reference to Q41, the response provided in the survey was based on incorrect information. Climate change risks are captured and reported to Council through the risk management framework. The risks to service delivery from the impacts of climate change were also considered through the 2021-31 Long Term Plan adopted by Council and these will continue to be identified through implementation of the Climate Resilience Strategy.

In reference to Q49, the Climate Resilience Strategy outlines both the challenges and opportunities presented by climate change. We acknowledge that responding to climate change will require courage and we are committed to working in partnership with our community to address these challenges collectively, providing information based on sound evidence.

In reference to Q51, the information provided in the survey responses has been shared with the Council and community through consultation and development of the Climate Resilience Strategy. There are two councillor working groups established, the Coastal Hazards Adaptation Planning Programme Working Group and the Climate change working group, both which meet regularly to oversee and contribute to these work programmes. We are also setting up a City Climate Leadership Group to be involved with developing the strategy action programmes.

Kind regards.

**Ana Macadie**
**Information Advisor**
Official Information Team

Respondent

39 Anonymous

71:22
Time to complete

## What will happen to the information provided in this survey?

The Minister for Climate Change is required to share the information received in response to this request with the Climate Change Commission.

We do not intend to publicly disclose the information gathered through this survey. Neither the Minister for Climate Change nor the Climate Change Commission can publicly disclose any information received in response to this request unless its disclosure is necessary to perform a function or duty imposed by Part 1C of the Climate Change Response Act 2002.

Information gathered through this survey may be subject to requests under the Official Information Act 1982. Note there is provision for the protection of commercial or trade sensitive information in Section 9 of the Act.

## Personal Information

Any personal information you supply will only be used by the Ministry in relation to information requests under the Adaptation Reporting Power. You have the right to request access to or to correct any personal information you supply to the Ministry. If you would like to access or correct any personal information you have supplied, please email info@mfe.govt.nz (mailto:info@mfe.govt.nz). Providing personal information is not mandatory.

1. What is your name?

2. What organisation do you work for? *

Christchurch City Council

3. What is your role?

4. Please provide a contact email

5. Please indicate if you are happy for the Ministry for the Environment to use the contact details provided above for broader climate change-related communications

- ◉ Yes
- ○ No

6. If this response includes information related to subsidiary organisations, please name these organisations below

## Risks and Impacts

These questions are intended to test general awareness and understanding of impacts and risks from climate change.

7. Is your organisation aware of the impacts that climate change may have on its ability to carry out functions and deliver services? For example, impacts from increased flooding, sea-level rise, more heat waves, more intense storms, more droughts and wildfires. *

- ○ Climate change impacts are well understood and documented
- ◉ Climate change impacts are acknowledged but only partially understood or documented

- ○ Climate change impacts are poorly understood and not documented or considered
- ○ We have not considered climate change impacts to date
- ○ Unsure

8. Please provide further details on why you selected the option you did. For example, links to reports.

flood modelling includes climate change and sea level rise, and we have coastal hazards modelling (erosion and inundation), and tsunami modelling that includes increments of sea level rise. We also have information available on other aspects of climate change for Canterbury Region- e.g. temperature change, seasonal changes and wind. however, the impacts of these things on our ability to fulfil our functions are poorly understood.- e.g. the effects of rising, saline groundwater on pipes, the effects of temperature on wastewater treatment , the effects of sealevel rise on the functionality of a gravity- driven stormwater system, the effects of drought and increased erosion on water supply.

9. Does your organisation have access to data related to the impacts from climate change? *

- ○ Yes – at a regional, local and asset level
- ○ Yes – at a regional and local level
- ◉ Yes – at a regional level
- ○ No
- ○ Unsure

10. Please provide details on any data gaps you are aware of for specific climate change impacts.

How will shallow groundwater respond to sea level rise?

11. Specifically, has your organisation assessed its exposure to climate change impacts, in terms of its ability to continue to carry out functions and deliver services? Note: this includes the exposure of the communities to which these services are provided. *

- ( ) Yes, accurate (quantitative) exposure data is held for all relevant climate change impacts
- (•) Accurate exposure data is held for some climate change impacts
- ( ) No accurate exposure data, but climate change impacts relevant to our organisation are documented
- ( ) Limited or no understanding and assessment of exposure to relevant climate change impacts
- ( ) Unsure

12. Please provide further details on why you selected the option you did. For example, links to reports.

WE are working on a first pass climate change risk assessmetn and are hoping to provide information on exposure to flooding and coastal hazards in asset management plans.

13. Specifically, has your organisation assessed its vulnerability to climate change impacts, in terms of its ability to continue to carry out functions and deliver services? Note: this includes the vulnerability of the communities to which these services are provided. *

- ( ) Yes, vulnerability to climate change impacts is well understood and integrated into decision-making processes
- (•) Some assessment of vulnerability to climate change impacts has been done, but this is not well embedded in organisational processes
- ( ) Limited or no assessment or understanding of vulnerability to climate change impacts
- ( ) Unsure

14. Please provide further details on why you selected the option you did. For example, links to reports.

CLimate change risk assessment is underway for the district, but not yet well embedded in process.

## National Climate Change Risk Assessment

The recently published National Climate Change Risk Assessment identified the 10 most significant risks that New Zealand faces from climate change. The risks are grouped according to five value domains: natural environment domain, human domain, economy domain, built environment domain and governance domain. For each of the risks listed below, indicate to what extent they are expected to impact the quality or consistency of services delivered by your organisation, or impact infrastructure or capital investments owned or used by your organisation. Note: this question also refers to risks affecting the communities to which these services are provided.

15. Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea-level rise and extreme weather events. *

- (●) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers
- ( ) Unsure

16. Please provide further details on why you selected the option you did. *

Coastal acidity a concern. Economic impact. Saltwater intrusion will imapact terrestrial ecology in coastal areas. Concern that innundation and acidity will lead to anoxic environments in estuaries or shallow areas of harbours unless managed. Coastal squeeze along estuary edge (where built up) and in bays of Banks Pen where there are narrow beaches and steep cliffs.

17. Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change. *

- ( ) Potential for significant impacts
- (●) Potential for minor to moderate impacts

- ○ Unlikely to impact my organisation or the services it delivers
- ○ Unsure

18. Please provide further details on why you selected the option you did. *

fewer frost days likely to lead to increased incidents of disease for flora and fauna. Temperature shifts a key driver for increased disease occurence and establishment of new pests. Peak temperatures will stress existing flora and fauna. Places pressure and weakens stock. Exposes to threat of disease and pests. Will disrupt native biodiveristy and terrestrail ecosystems, but difficult to predict exactly how. Environmental disturbance from extreme weather and fires may create conditions for establishment of pests. Flooding (fluvial and pluvial) may introduce pests and disease to increase susceptibility of the natural environment, but the risk is deemed realtively low.However, coastal innundation and warming waters can stress biota and may provide opportunity for pest specieis to establish. Warmer waters may encourage species previously unknown to Cantabrian waters to take hold. Could also exacerbate algal blooms. Areas of most concern include: Lake Ellesmere, Heathcost Estuary, inlets of the Banks Peninsula, and Lytellton Harbour.

19. Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts. *

- ◉ Potential for significant impacts
- ○ Potential for minor to moderate impacts
- ○ Unlikely to impact my organisation or the services it delivers
- ○ Unsure

20. Please provide further details on why you selected the option you did. *

We have thousands of properties- whole suburbs that are in the areas that are within the projected zones for flooding and coastal hazards. Potentially these suburbs will have people leaving as more frequent and more severe impacts are experienced. This will stress and break up communities

21. Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts. *

- (●) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers
- ( ) Unsure

22. Please provide further details on why you selected the option you did. *

coastal and river communities will be subject to more frequent flooding. Who pays for retreat? Banks Peninsula farms are likely to become marginal )or more marginal than they already are) due to frequent severe drought, interspersed by heavy rainfall events leading to erosion, soil loss and landslidesand consequent l

23. Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes. *

- ( ) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers
- (●) Unsure

24. Please provide further details on why you selected the option you did. *

This is something we haven't yet considered. Increased flooding will potentially be a real factor- but to what extent this will affect the economy is unknown.

25. Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes. *

- ( ) Potential for significant impacts
- ( ) Potential for minor to moderate impacts

- ( ) Unlikely to impact my organisation or the services it delivers
- (•) Unsure

26. Please provide further details on why you selected the option you did. *

> This is something we haven't yet considered. Increased flooding will potentially be a real factor- but to what extent this will affect the economy is unknown.

27. Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea-level rise. *

- (•) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers
- ( ) Unsure

28. Please provide further details on why you selected the option you did. *

> For Christchurch not such an issue as supply is from aquifers fed by the Waimakariri River- which is Alpine and therefore may still receive plenty of recharge. However, Banks Peninsula water supply is mostly surface water, with small catchments. Demand will increase when water is most scarce. Increasing erosion will put more sediment in the rivers and increased turbidity affects the ability to treat the water for drinking. Some coastal water supply bores are already expereincing saltwater intrusion

29. Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea-level rise. *

- (•) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers

- ( ) Unsure

30. Please provide further details on why you selected the option you did. *

We have thousands of properties- whole suburbs that are in the areas that are within the projected zones for flooding and coastal hazards. These include residential, industrial, commercial and public buildings. Buildings in the Port Hills and on Banks Peninsula will be subject to increasing fire risk. Land instability and tunnel gully erosion due heavy rainfall after dry spells will affect other buildings.

31. Risk of maladaptation across all domains due to practices, processes and tools that do not account for uncertainty and change over long timeframes. *

- (•) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers
- ( ) Unsure

32. Please provide further details on why you selected the option you did. *

We do not have appropriate policy in place to manage infrastructure decisions that account for how the climate will change/what that means for exposure to hazards over the lifetime of infrastructure. developing policy must occur in conjunction with conversation on adaptation planning with communities to make sure different strands of work align.

33. Risk that climate change impacts across all domains will be exacerbated because current institutional arrangements are not fit for adaptation. Institutional arrangements include legislative and decision-making frameworks, coordination within and across levels of government, and funding mechanisms. *

- (•) Potential for significant impacts
- ( ) Potential for minor to moderate impacts
- ( ) Unlikely to impact my organisation or the services it delivers

- ( ) Unsure

34. Please provide further details on why you selected the option you did. *

Current RMA/BA etc. inhibits planning for future conditions. Just not fit for purpose.

35. What are the most immediate / urgent climate change risks to be managed from your organisation's perspective? *

For Christchurch, coastal and fluvial flooding (including groundwater rise) effects on buildings and infrastructure, health and the natural environment. Port Hills- fire, land stability and wind. For Banks Peninsula, drought on farming, denunudation and soil loss, and water supply issues.

36. Please list any other risks identified in the National Climate Change Risk Assessment that are significant for your organisation.

G2G5 G6 G7 H2 B4 E3 E5 E6 H6 H7 N3 N6 B6 N7 N10

## Strategy, Governance and Metrics

These questions are designed to gather information about internal governance and decision-making processes.

37. Does your organisation have a plan or strategy to improve its resilience and/or the resilience of the community it serves to climate change impacts? *

- ( ) Yes, specifically for resilience to climate change impacts
- ( ) Yes, but it is not focused exclusively on climate change (e.g. risk and resilience strategy)
- (•) A plan is in development
- ( ) No
- ( ) Unsure

38. Please provide more information and/or a link to the plan, and comment on its effectiveness. *

climate change strategy is under development. cannot provide a link at this stage.

39. What are the barriers to developing a plan? *

Need details of what we need to adapt to, before planning for adaptation. Need to involve community in the planning. Very resource intensive. Covid has thoroughly knocked our finances- we need to save 10s of $M and climate adaptation planning may get kicked down the road.

40. Does your organisation have any indicators, or measures to help it monitor and manage its risks from climate change impacts? For example, from increased flooding, sea-level rise, more heat waves, more intense storms, more droughts and wildfires. Note: this question includes risks affecting the communities to which these services are provided. *

- ○ Yes
- ◉ These are in development
- ○ No
- ○ Unsure

41. Are risks to your organisation's ability to carry out functions and deliver services from the impacts of climate change reported to your organisation's governance board? *

- ○ Yes, more often than annually
- ○ Yes, annually
- ○ Yes, less often than annually
- ◉ Not at all

- ( ) Unsure

42. Any comments?

Climate Change risk assessment is underway. This will be reported to council and ELT

43. In the box below, please briefly describe the role that management plays within your organisation in responding to risks from climate change. *

all major decisions need to be approved by ELT and council

44. Does your organisation require the impacts of climate change, and adaptation options to address these impacts, to be assessed and considered in decision-making? For example, will climate change be considered before making a decision to invest in a physical asset. Note: this does not refer to requirements for mitigation/carbon emissions reduction. *

- ( ) Yes
- (•) For some projects
- ( ) Not yet, but this is in development
- ( ) No
- ( ) Unsure

45. If applicable, please provide details about the requirements and their effectiveness.

Climate Change is taken into the reckoning in flood modelling and therefore in any consents or projects that refer to the modelling

## Support and Resources

46. Which actions or resources would help your organisation to better prepare for the impacts of climate change? Tick as many as apply: *

- [x] More information about how climate change is projected to impact a region or a district
- [x] Guidance on how to assess and consider the impacts of climate change on your organisation
- [x] Tools to help quantify impacts from climate change on your organisation
- [x] Methodology for assessing and quantifying climate change risks
- [x] Legislative requirements to consider/plan for the effects of climate change
- [x] Legislative requirements to publicly report on your organisation's climate risks and adaptation plans
- [x] Opportunities to engage and learn from others
- [x] Training to develop skills/capabilities
- [x] Improved and centralised data repository e.g. flooding
- [x] Good practice guides, bench-marking and assessment tools
- [x] Funding to implement a strategy and deliver on-the-ground adaptation actions

47. Any other actions or resources?

Need help with how to deal with Cascading hazards and risk. Data availability is crucial

48. What are the barriers to an effective adaptation response that are faced by your organisation? Tick as many as apply: *

- [x] Lack of awareness/education regarding the impacts of climate change by decision-makers/the wider community
- [ ] Lack of political will or desire from the community for change
- [x] Lack of tools/methods by which to engage decision-makers/the community

- [x] Inflexibility of current legislation
- [ ] None of the above

49. Any other barriers?

Risk aversion of managers to give "bad news stories to council and community

50. Is there any further information you would like to provide about your organisation's response to the risks and impacts of climate change? Please let us know in the box below.

## Sensitive Information

51. Please let us know in the box below if any of the information you have provided is sensitive to you or your organisation.

this information has not yet been shared with council or community. therefore, overall it should be treated as sensitive.