

## APPENDIX 1.

## Waikato Regional Council – Climate Action Plan 2021-2024

## Part 1 – Enabling actions and broad actions that support multiple pathways and our overarching response

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
<b>Community and sector engagement</b>							
0.1		Intersectoral collaboration	<b>Regional climate action accord</b> - Undertake stakeholder mapping to identify key stakeholders for opportunities for collaborative action and partners in a regional climate action accord. - Agree climate action accord with stakeholders/partners.	Y	Y		
0.2		Intersectoral collaboration	<b>Waikato Plan Climate Change Workstream</b> A new Climate Change workstream was established under the Waikato Plan (a multi-stakeholder collaborative plan for our region) with five priority areas of focus: - Transportation - Youth - Restoration - Communication and engagement - Knowledge sharing	Y	Y	Y	Y
0.3		Regional resilience, adaptation and emissions reduction	<b>Participation and support of WLASS Climate Officer Forum</b> Participate in the WLASS climate officer forum to enable information sharing and greater collaboration on climate change (current focus corporate emissions reduction, sustainable procurement and capability and capacity building).	Y	Y	Y	Y
<b>Partnerships with Māori</b>							

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
0.4		Knowledge/expertise, understanding and direction	<b>Application of the Mātauranga Project Management Toolkit in climate change responses</b> - Ongoing identification of opportunities to partner with Māori using the Mātauranga Project Management Toolkit - The Climate Action Roadmap Advisory Group will be a key forum to ensure that opportunities for Mātauranga Maori are identified.	Y	Y	Y	Y
0.5	01 Coastal resilience	Knowledge/expertise, understanding and direction	<b>Mātauranga Māori - pilot project</b> - Apply the Mātauranga Project Management Toolkit to the community adaptation work at Wharekawa.	Y	Y	Y	
<b>A decarbonisation pathway for Waikato</b>							
0.6		Regional resilience, adaptation and emissions reduction	<b>Regional greenhouse gas inventory</b> - Undertake a three yearly regional greenhouse gas inventory for the Waikato region (scheduled for 21/22). - Investigate options for real-time reporting of regional GHG emissions by sector and territorial authority.	Y	Y		
0.7		Regional resilience, adaptation and emissions reduction	<b>Science-based regional emissions reduction targets</b> Based on the regional greenhouse gas emissions inventory, develop science-based regional emissions reduction targets to guide actions to achieve emissions reduction trajectories for 2030 and 2050.	Y	Y		
0.8		Regional resilience, adaptation and emissions reduction	<b>Climate lens applied to the review of the Regional Economic Development Strategy (formerly Waikato Means Business)</b> Carry out a three stage review process which involves: 1) Review profile (WRC economist) 2) Development of a strategy 3) Implementation Plan.	Y	Y		

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
0.9		Regional resilience, adaptation and emissions reduction	<p><b>Sustainable homes scheme</b></p> <p>Through the Long Term Plan, the council has resolved to introduce a sustainable homes scheme, subject to certain conditions being satisfied. The aim is to improve community resilience, housing quality and liveability by retrofitting homes with insulation, double glazing, heating, ventilation, rainwater storage, on-site wastewater treatment or power supply etc. These retrofits increase energy efficiency, improve air quality, reduce greenhouse gas (GHG) emissions, reduce dependency and pressure on grid systems, and reduce utility costs for running heating and cooling systems in homes.</p>		Y		
<b>The way we work</b>							
0.10		Corporate resilience, adaptation and emissions reduction	<p><b>Corporate emissions reductions and annual Toitū carbon-reduce certification</b></p> <ul style="list-style-type: none"> <li>- Continue with initiatives to reduce corporate emissions (key emission sources: electricity, fleet, air travel).</li> <li>- Continue to improve the range of material data informing our emissions inventory (such as public transport, land use change, supply chain).</li> <li>- Maintain third party certification (Toitū carbon-reduce programme) through the annual audit of our emissions data.</li> </ul>	Y	Y	Y	Y
0.11		Regional resilience, adaptation and emissions reduction	<p><b>Organisational and regional approach to regional risk assessment</b></p> <p>Develop an approach/plan as to how we will carry out our regional climate change risk assessment. The first-cut regional risk assessment will help inform the current RMA policy / plan work and will provide a platform to inform any future regional climate adaptation plan and/or regional spatial strategy in the medium term.</p> <p><b>Approach developed, phase 1 of assessment underway and regular updates reported to Climate Action Committee.</b></p>	Y	Y		

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
0.12		Regional resilience, adaptation and emissions reduction	<p><b>Emission reduction strategies in council procurement and WCLASS region-wide approach</b></p> <ul style="list-style-type: none"> <li>- Review current state and develop procurement policy, guidelines and tools to consider emission reduction activities and emission offsets when selecting suppliers</li> <li>- Develop example sections/clauses and evaluation tools for contract and tender documents to support the reduction of emissions in what we are purchasing and in the operations of our suppliers</li> <li>- Investigate potential for a WCLASS region-wide approach to reducing emissions in council supply chains.</li> </ul>	y	Y		
0.13		Knowledge/expertise, understanding and direction	<p><b>Update of ICM Climate Change Guideline Policy Series 2017/06</b></p> <ul style="list-style-type: none"> <li>- Update of ICM Climate Change Guideline Policy Series 2017/06 and extend application to all of council and the region</li> <li>- Make available for use across the region to ensure consistency in approaches to information and modelling</li> <li>- Review and update upon receipt of the National Adaptation Plan Presented to June Climate Action Committee.</li> </ul>	Y			
0.14		Knowledge/expertise, understanding and direction	<p><b>Develop organisational approach and plan for carbon decision support tools and analytics, with consideration of potential for joint region-wide tools.</b></p> <ul style="list-style-type: none"> <li>- The tools and analytics will ensure carbon considerations are quantifiable in the development of infrastructure investment options (programme, project and asset level) and the development of policy options and inform decision-making in these areas.</li> <li>- Investigate potential for joint procurement of a region-wide tool/s for use by all Waikato territorial authorities.</li> </ul>	Y	Y		
0.15		Knowledge/expertise, understanding and direction	<p><b>Climate knowledge hub</b></p> <p>Create a climate knowledge hub for both internal use and external use to increase the access of staff, community and stakeholders to relevant evidence, information, tools and guidance on climate change in the Waikato.</p>	Y	Y		

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0.16		Knowledge/expertise, understanding and direction	<p><b>Climate change training programme</b></p> <ul style="list-style-type: none"> <li>- Research and compile climate change training resources for inclusion on the Climate Change Knowledge Hub.</li> <li>-</li> <li>- Work with Co-Lab to develop a council climate change training programme.</li> </ul>	Y	Y		
0.17		Knowledge/expertise, understanding and direction	<p><b>Review climate considerations in council reports to date to identify exemplars</b></p> <ul style="list-style-type: none"> <li>- Gather and share good examples of climate considerations in council reports.</li> <li>- Assess reports from July 2020 to identify knowledge gaps which will inform learning and development requirements.</li> </ul>		Y		
0.18		Regional resilience, adaptation & emissions reduction	<p><b>Update Regional Coastal Plan and Waikato Regional Plan to better recognise and provide for climate change effects on water, land, coastal, air and geothermal resources.</b></p> <ul style="list-style-type: none"> <li>- Scope information requirements for climate, adaptation and risk information needed to inform the regional plan review work programme, in particular upcoming Coastal Plan Review and freshwater plan change.</li> <li>- Scope information requirements to carry out economic analysis (eg peat management and wider climate change) for the section 32 analysis for the coastal plan and regional plan review.</li> <li>- Include climate change models / predictions when setting water quality limits and targets and allocable and minimum flows for water quantity.</li> <li>- Include water efficiency provisions in regional plans.</li> <li>- Investigate / identify appropriate changes to regional plans to provide for climate change, e.g. water storage, efficiency and recycling provisions.</li> </ul>	Y	Y	Y	Y
0.19	00 Partnerships with Maori	Knowledge/expertise, understanding and direction	<p><b>Mātauranga Māori in Healthy Environments   He Taiao Mauriora</b></p> <p>Identify opportunities to integrate Mātauranga Māori on climate into Healthy Environments   He Taiao Mauriora (the combined review of the coastal plan and the regional plan), in particular the coastal plan review and giving effect to the NPS - Freshwater Management.</p>	Y	Y	Y	
<b>General - regulatory</b>							

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0.22		Regional resilience, adaptation & emissions reduction	<b>Waikato Regional Policy Statement (Chapter 6 - Built Environment) - update for National Policy Statement Urban Development</b> - During the update of Chapter 6 (built environment) for NPS-UD, consider the opportunity to strengthen the consideration of urban form in reducing GHG emissions. - This approach could also include urban form policy which improves urban air quality, promotes green buildings, supports solid-waste management and circular-economy approaches, and provides clean and active urban mobility, open green spaces and nature-based solutions for urban cooling, wastewater management and urban biodiversity, as well as any other matters raised by the National Adaptation Plan and National Emissions Reduction Plan.		Y		
0.23		Knowledge/expertise, understanding and direction	<b>Best practice/model district plan provisions in respect of climate</b> Be the conduit for best practice sharing between TAs using the Planning Managers Forum. The objective of this action is to ensure readiness for the resource management amendments commencing 30 November 2022 and the resource management reforms.	Y	Y	Y	Y
0.24	02 Agriculture and Soils	Regional resilience, adaptation & emissions reduction	<b>Regional Spatial Strategy and Plan Readiness</b> Formulate and advocate to central government and regional partners WRC's position on proposed resource management reforms, including on Regional Spatial Strategies and Combined Plans.	Y	Y		
0.25		Knowledge/expertise, understanding and direction	<b>Update consent reporting template</b> - Amend consent reporting template to ensure climate change considerations are explicitly considered in relation to the consent and in the application of the Effects Management Hierarchy to the consent. In 2021, the legal framework changes significantly and Ministry for the Environment have advised they will provide national guidance for regional councils as to how to give effect to these changes.	Y	Y		
0.26		Regional resilience, adaptation & emissions reduction	<b>Update consent application forms</b> Update consent application forms to prompt applicants to consider the effects of climate change on their assessment of effects (noting further changes will be required when 30 November 2022 amendments become operative). This update is planned to occur at the same time as updates in relation to freshwater.	Y	Y		

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0.27		Regional resilience, adaptation & emissions reduction	<b>Climate change at pre-application and post consent-related meetings</b> Discuss the impact of future climate change (eg upcoming legislative changes, impact of climate modelling/projections on planning and compliance etc) at annual peer review panel meetings, pre-application discussions for significant consents and other forums.	Y	Y	Y	Y
0.28		Knowledge/expertise, understanding and direction	<b>Amendments to Resource Management Act effective 30 November 2022 (Resource Management Amendment Act 2020)</b> - Continue conversations with central government requesting guidance on how local government should approach climate change in the amendments provided for in the Resource Management Amendment Act 2020, which come into effect on 30 November 2022 (ideally National Policy Statement or National Environmental Standards) and assurance that there will be some. - Watching brief for guidance from Ministry for the Environment. - If central government does not provide this guidance, work with regional sector to develop a consistent approach. - Implement these legislative changes coming into effect from 30 November 2022: <ul style="list-style-type: none"> <li>in consenting process (allowing greenhouse gases to be considered as a contaminant to air)</li> <li>when reviewing or changing Resource Management Act policy and plans (required to have regard to National Adaptation Plan and National Emissions Reduction Plan).</li> </ul>	Y	Y		

## Part 2 – Actions by pathway

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
<b>1 Coastal resilience   He takutai mārohirohi</b>							

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
1.1		Regional resilience, adaptation & emissions reduction	<b>Key work programmes and projects contributing to this pathway include:</b> <ul style="list-style-type: none"> <li>- Regional Resilience work programme</li> <li>- WRC contribution to TCDC Coromandel Shoreline Management Plans</li> <li>- Wharekawa community engagement</li> <li>- Mātauranga Maori</li> <li>- Strategic Policy Implementation</li> <li>- Coastal research and monitoring work programme</li> <li>- Flood Plain Management Programme</li> <li>- Shoreline change and impact</li> <li>- Coast Care programme</li> <li>- Policy development work programme: Coastal Plan Review</li> <li>- RPS Implementation work programme</li> </ul>	Y	Y	Y	Y
1.2		Regional resilience, adaptation & emissions reduction	<b>Approach to gathering appropriate and relevant hazard information</b> <ul style="list-style-type: none"> <li>- The Regional Resilience work programme will focus on two specific areas (Lower Waikato then Hauraki) and after co-design will explore what further information is required for management decisions.</li> <li>- This work programme will help inform thinking on the best overall approach, priority areas, scale, and funding approach for gathering hazard information and agreeing this with territorial authorities and communities.</li> </ul>	Y	Y	Y	
1.3		Regional resilience, adaptation & emissions reduction	<b>Regional approach to trigger points, thresholds and pathways</b> Apply learnings from prior and current local applications of trigger points, thresholds and pathways to inform other locations.	Y	Y	Y	
1.4		Knowledge/expertise, understanding and direction	<b>Improve knowledge on current and high risk natural hazards by area</b> Assess any gaps in overall knowledge to enable council to clearly delineate some of these areas that will be at risk currently and in the future.	Y	Y	Y	Y
1.5		Regional resilience, adaptation & emissions reduction	<b>Mechanism to remove lifeline services from high hazard areas</b> <ul style="list-style-type: none"> <li>- Support Waikato Lifeline Utility Group to identify a mechanism to manage/remove lifeline services etc from high hazard areas</li> <li>- 21/22 - provide hazard information to assist the WLUG vulnerability assessment</li> </ul>	Y	Y	Y	Y



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1.6		Intersectoral collaboration	<p><b>Opportunities to work with central government on community engagement projects</b></p> <ul style="list-style-type: none"> <li>- Scope opportunities to work more with central government on community engagement projects, especially as part of the regional resilience work programme.</li> <li>- To be considered during the year 1 scoping phase of Regional Resilience work programme for Lower Waikato and Hauraki.</li> </ul>	Y	Y		
1.7		Corporate capacity and co-ordination	<p><b>Internal capacity building for community engagement processes</b></p> <p>Provide opportunities for staff across WRC for involvement for regional resilience community engagement processes to build capacity, skills and experience in our organisation.</p>	Y	Y	Y	Y
1.8	03 Water is life	Regional resilience, adaptation & emissions reduction	<p><b>Regional Climate Modelling Fact Sheets</b></p> <ul style="list-style-type: none"> <li>- Develop more detailed summaries/fact sheets so people (community, stakeholders and internally) understand what our modelling means for them by district/locale (dependency with update of TR2015/26).</li> <li>- To be completed following the update of "Implications of a changing climate in the Waikato region" TR2015/26</li> </ul>		Y		
1.9		Regional resilience, adaptation & emissions reduction	<p><b>Promotion of Coast Care Programme as climate change mitigation tool</b></p> <p>Further promote the Coast Care Programme as a tool to help mitigate the impacts of climate change.</p>	Y	Y	Y	Y
1.10		Knowledge/expertise, understanding and direction	<p><b>Review of Tide Gauge Network</b></p> <ul style="list-style-type: none"> <li>- Understand the state of WRC's Tide Gauge Network (technical report) to ensure that council's ways of monitoring provide an adequate tide gauge network for future climate needs.</li> <li>- Any shortfalls will be addressed in the next LTP, as well as consideration for the need for a dedicated cost centre.</li> </ul>	Y			Y
1.11		Knowledge/expertise, understanding and direction	<p><b>Scope new technology and method development to improve coastal monitoring</b></p> <p>Investigate and scope new technology and method development to improve monitoring of the coastal environment and hazards</p>	Y	Y	Y	

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1.12	02 Agriculture and soils 08 Drainage and flood management	Regional resilience, adaptation and emissions reduction	<b>Role of green infrastructure</b> <b>Not a current piece of work - earmarked for a future LTP business case</b> Recognising the value of coastal wetlands for carbon stocks and a host of other ecosystem services, there is a need to develop better understanding of the cost-effectiveness of green infrastructure as an alternative to hard engineering solutions.				Y
<b>2 Agriculture and soils   Ahuwhenua me te whenua haumako</b>							
2.1		Regional resilience, adaptation and emissions reduction	<b>Key work programmes and projects contributing to this pathway include:</b> - Peat Soils and Soil Carbon Monitoring work programme - Land Management and Advisory Services work programmes (eg training, workshops, advising farm managers and CMOs, work on Farm Environment Plans) - Catchment Management work programme (eg planting programme, education: sources of water and water capture, storage, use and recycling) - Manaaki Whenua Climate Smart landscapes project (TBC) - Policy Development Work Programme - various chapters (Water Land chapters) of the regional plan. - Adapting to Drought in the Waikato project - Regional Soil Quality Monitoring work programme - Rural Advisory Training Platform				
2.2	04 Habitat restoration & planting 07 Biodiversity & biosecurity	Regional resilience, adaptation and emissions reduction	<b>Update of Farm Environment Plan templates and guidance to address climate and biodiversity co-benefits</b> Update the Farm Environment Plan templates and guidance with prioritised pre-populated actions which also provide the biggest co-benefits to climate and biodiversity and create resilience.	Y	Y		
2.3	04 Habitat restoration & planting 07 Biodiversity & biosecurity	Regional resilience, adaptation and emissions reduction	<b>Inclusion of content on climate change and biodiversity co-benefits in Land Management Advisory Services training programmes</b> - Include content on the co-benefits of climate and biodiversity and actions which create resilience in farm advisor, farmer, industry rep, internal staff training programmes.	Y	Y		

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2.4		Regional resilience, adaptation and emissions reduction	<p><b>Development and promotion of peat drainage education resources</b></p> <ul style="list-style-type: none"> <li>- Develop resources/tools to assist in the education of stakeholders on the issues associated with peat drainage. Note this will be part of a wider suite of education resources that Land Management Advisory Services are working on.</li> <li>- Update of For Peat's Sake publication to include climate related information on peat emissions. <b>(completed)</b></li> <li>- Peat seminar videos <b>(completed)</b></li> </ul>	Y	Y		
2.5		Knowledge/expertise, understanding and direction	<p><b>Review of farmland planting guidance for climate co-benefits</b></p> <ul style="list-style-type: none"> <li>- Review current guidance and advice on appropriate farmland planting for climate co-benefits to identify whether we need to do anything differently. Update accordingly.</li> <li>- After the review of guidance and advice on appropriate farmland planting for climate co-benefits, identify users (internal and external) of the guidance and communicate changes ahead of the 2022/2023 planting season.</li> </ul>	Y	Y		
<b>3 Water is life   He orange te wai</b>							
3.1		Regional resilience, adaptation and emissions reduction	<p><b>Key work programmes and projects contributing to this pathway include:</b></p> <ul style="list-style-type: none"> <li>- Adapting to Drought in the Waikato project</li> <li>- Catchment Management work programme (eg planting programme, - education: sources of water and water capture, storage, use and recycling)</li> <li>- Freshwater Management work programme (increase in amount of monitoring of river flows, the data of which is used for setting allocation limits in the regional plan and enabling consent allocations)</li> <li>- FutureProof 3 Waters work, including combined waste water treatment plant business case</li> <li>- Land Management Advisory Services communications campaign on how to cope with a dry summer (farming sector focus but messaging relevant to all)</li> <li>- Policy Development work programme - various chapters (Water and Land chapters) of the regional plan</li> <li>- A range of partnership programs eg Check, Clean, Dry. Co-funding of a pest fish co-ordinator with DOC</li> </ul>				

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3.2	01 Coastal resilience	Knowledge/expertise, understanding and direction	<b>Water security project - phase 1</b> Update of "Implications of a changing climate in the Waikato region" TR2015/26 with CMIP6 data. This is phase 1 of the water security project which focuses on climate impacts on water security. <b>Completed and reported the Climate Action Committee.</b>	Y			
3.3		Regional resilience, adaptation & emissions reduction	<b>Water security project - phase 2</b> Waikato district councils will carry out localised assessments of the climate impacts on water security (this will occur via WLASS). It is expected that WRC (Science) will have a role engaging with the district councils on this.	Y	Y		
3.4		Regional resilience, adaptation & emissions reduction	<b>Water security strategy</b> Develop a water security strategy for the region, taking into account the latest baseline and modelling data provided by the updated Impacts of Climate Change on the Waikato report.	Y	Y		
3.5	02 Agriculture and Soils	Regional resilience, adaptation & emissions reduction	<b>Adapting to drought in the Waikato project</b> Phase 1 - Systems analysis of drought for the Waikato looking at options to adapt to drought, and development of a drought tool for the Waikato. <b>(Completed)</b> Phase 2 - to be used for benefit cost analysis when evaluating and assessing climate adaptation options. (Relevance to hazard management, water allocation, environmental monitoring, LMAS.).	Y	Y		
3.6	01 Coastal resilience 03 Water is life 08 Drainage & flood management	Regional resilience, adaptation & emissions reduction	<b>Understanding of long term impacts of climate change over the next 50 years on Lake Taupō and Waikato River water levels</b> - Build understanding of the implications of climate change over the next 50 years on Lake Taupō and Waikato River water levels in terms of managing the Waikato hydro system and Lake Taupō and Waikato River water levels to ensure we have good resilience to floods, droughts and changing rainfall distribution throughout the year.  - Research (in conjunction with NIWA) to look at the effects of climate change on the water balance for Lake Taupo and evaporation rates.  <b>Updates reported to the Climate Action committee.</b>	Y	Y		

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<b>4 Habitat restoration and planting   Whakaoranga kāinga, whakatupu rākau</b>							
4.1		Regional resilience, adaptation and emissions reduction	<p><b>Key work programmes and projects contributing to this pathway include:</b></p> <ul style="list-style-type: none"> <li>- Biodiversity and biosecurity work programme</li> <li>- Catchment Management work programme (eg planting programme, education: sources of water and water capture, storage, use and recycling)</li> <li>- Implementation of Farm Environment Plans</li> <li>- Identification of flood prone areas</li> <li>- Land Management and Advisory Services work programme, (eg training, workshops, advising farm managers and CMOs, work on Farm Environment Plans)</li> <li>- Peat Soils and Carbon Monitoring programme</li> <li>- Policy Development Work Programme - various chapters (Water and Land chapters) of the regional plan.</li> <li>- Regional Resilience work programme</li> </ul>				
4.2	01 Coastal resilience 04 Water is Life; 07 Biodiversity and biosecurity	Regional resilience, adaptation and emissions reduction	<p><b>Shovel ready projects</b></p> <p>A total of around \$26 million grant funding has been secured for multiple environmental restoration, biosecurity and climate resilience projects totalling about \$40 million across the Waikato region.</p>	Y	Y	Y	
4.3		Regional resilience, adaptation & emissions reduction	<p><b>Incorporation of climate change considerations into three yearly reviews of zone plans and catchment plans</b></p> <p>Incorporate climate change considerations and the direction provided in the climate action roadmap into the programme of three yearly reviews of the zone plans and catchment plans.</p>	Y	Y	Y	Y
4.4		Corporate resilience, adaptation and emissions reduction	<p><b>Inclusion of climate change considerations and carbon calculator in WRC Native Plant Guidelines</b></p> <ul style="list-style-type: none"> <li>- Review draft WRC Native Plant Guidelines to ensure they address the responses and commitments in the Climate Action Roadmap.</li> <li>- Include information on carbon calculators for planting mixes in the guidelines.</li> </ul>	Y	Y		

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4.5	07 Biodiversity & biosecurity	Regional resilience, adaptation and emissions reduction	<b>Update of criteria for Environmental Initiative Fund</b> - Include resilience to a changing climate, carbon sequestration and facilitating shifting bio-geography of species as criteria for Environmental Initiative Fund evaluations. - Consider requiring or promoting the use of a carbon calculator to estimate the carbon sequestration potential of projects. - This will be included in the in scope of the review of the Natural Heritage Partnership Program in 21/22.	Y			
4.6		Regional resilience, adaptation and emissions reduction	<b>Update of Environmental Programme Agreement template</b> Update the Environmental Protection Agreement template to incorporate a section on climate change and the climate co-benefits of the funding. <b>Completed</b>	Y			
<b>5 Future of transport   Te aronga waka</b>							
5.1		Regional resilience, adaptation and emissions reduction	<b>Key work programmes and projects contributing to this pathway include:</b> - Critical infrastructure to electrify PT fleet - Development of roadmap to transition PT fleet to zero emissions by 2028 - Flood Protection and Drainage Infrastructure (provision of road and rail route security and adaptation planning) - Hazard and Risk Work Programme (transport networks as lifeline utility) - Public Transport work programme - Regional Public Transport Plan - Regional Land Transport Plan (climate change as key factor and headline target for emission reduction) - Waikato Plan – EV work and transportation focus				
5.1		Corporate resilience, adaptation and emissions reduction	<b>Reducing emissions of the public transport fleet</b> Continue programme of work to investigate and enable the transition of the region's public transport fleet to lower emissions vehicles including electric vehicles.	Y	Y	Y	Y

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5.3	The way we work	Corporate resilience, adaptation and emissions reduction	<b>Reporting of public transport emissions</b> Begin reporting the emissions associated with the delivery of public transport services in the Waikato in our annual emissions inventory. <b>First included in the reporting period: 20/21.</b>	Y	Y	Y	Y
5.4		Regional resilience, adaptation and emissions reduction	<b>Waikato Regional Land Transport Plan</b> - Includes emission reduction target and a commitment to develop a programme that achieves the target in light of government measures. - Decision support tool for action planning has been procured. - Action plan will commence in 2021/22 FY and inform an RLTP variation or the RLTP 2024.	YY	Y	Y	Y
<b>6 Sustainable investment   He tauwhiro penapena pūtea</b>							
6.1		Regional resilience, adaptation and emissions reduction	Apply the Statement of Investment Policy Objectives (sustainable investment) to council investments.	Y	Y	Y	Y

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<b>7 Biodiversity and biosecurity   Rerenga rauropi, tiakitanga taiao</b>							
7.1		Regional resilience, adaptation and emissions reduction	<b>Key work programmes and projects contributing to this pathway include:</b> <ul style="list-style-type: none"> <li>- Biodiversity and biosecurity work programme</li> <li>- Tools and innovation package of Biodiversity &amp; Biosecurity work programme</li> <li>- Priority Biodiversity Site Programme.</li> <li>- Review of RPMP and associated cost/benefit analysis</li> <li>- Natural Heritage partnership programme (contestable funding)</li> <li>- Catchment Management work programme (eg planting programme, education: sources of water and water capture, storage, use and recycling)</li> <li>- Eco-systems services information</li> <li>- Application of the Effects Management Hierarchy</li> <li>- FutureProof partnership</li> <li>- Land Management and Advisory Services work programme, (eg training, workshops, advising farm managers and CMOs, work on Farm Environment Plans)</li> <li>- Policy Development Work Programme - various chapters (Water and Land chapters) of the regional plan.</li> <li>- RPS implementation</li> <li>- Science BAU – measuring rate of loss of indigenous biodiversity</li> </ul>				
7.2		Knowledge/expertise, understanding and direction	<b>Update of Biosecurity Strategic Plan</b> Ensure the Biosecurity Strategic Plan explicitly articulates how we consider climate change through the biosecurity programme.	Y			
7.3		Knowledge/expertise, understanding and direction	<b>Review of Regional Pest Management Plan (RPMP)</b> Ensure the effects of climate change are considered throughout the RPMP review e.g., analysis of existing and potential pest species as a result of climate change.	Y			



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7.4		Knowledge/expertise, understanding and direction	<p><b>Update of biodiversity offset criteria</b>                      Work with LGNZ (~ Biomanagers) to update the national biodiversity offset criterion/guidance to include climate change alongside the other considerations. Eg: Biodiversity offsets are considered as part of the consent application, often proposed by applicants - opportunity to influence how the biodiversity offset is applied and to consider climate change as a criterion for a particular offset.</p>	Y	Y		
7.5		Intersectoral collaboration	<p><b>Inter-regional and central government collaboration and commitment to emerging biosecurity threats due to climate change</b>                      - Ensure increased focus on inter-regional and central government collaboration and commitment to emerging biosecurity threats influenced by climate change.                      - A range of projects are being commenced by the Ministry of Primary Industries that council will be involved in through the bio managers SIG.</p>	Y	Y	Y	Y

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
<b>8 Drainage and flood management   Ngā awakeri me te whakahaere waipuke</b>							
8.1		Regional resilience, adaptation and emissions reduction	<b>Key work programmes and projects contributing to this pathway include:</b> <ul style="list-style-type: none"> <li>- Shoreline change and impact work programme</li> <li>- Infrastructure Strategy</li> <li>- Infrastructure Capital renewals programme</li> <li>- Infrastructure Level of Service Reviews</li> <li>- Regional Asset Management Plan</li> <li>- Scheme reviews</li> <li>- Scoping and Capital Works infrastructure Document (SCWID)</li> <li>- Sustainable Infrastructure Decision-making framework (SIDF)</li> <li>- WRC Stormwater Guidelines</li> <li>- Coast Care programme</li> <li>- Flood Plain Management Programme</li> <li>- Monitoring work programme</li> <li>- Peat Soils and Carbon Monitoring work programme</li> <li>- Policy development work programme</li> <li>- Regional Infrastructure Technical Specifications</li> <li>- Regional Resilience work programme</li> <li>- RPS Implementation</li> </ul>				
8.2		Regional resilience, adaptation and emissions reduction	<b>Sustainable Infrastructure Decision-Making Framework (SIDF)</b> <ul style="list-style-type: none"> <li>- Begin using the SIDF on live examples to test and refine its use over the next three year period (21/22-23/24). Eg Maungatawhiri compartment 5.</li> <li>- These test cases will help inform the Infrastructure Strategy for the next LTP (24/25 onwards).</li> <li>- The SIDF will be piloted in the next LTP and fully implemented from 2026.</li> </ul>	Y	Y	Y	Y

Action No.	Other key pathways this work contributes to	Action Category	Action Description	Timeframe 21/22	Timeframe 22/23	Timeframe 23/24	Timeframe 4+ yrs
8.3	00 The way we work	Knowledge/expertise, understanding and direction	<p><b>Pilot of carbon decision support tool in pump station design project</b></p> <ul style="list-style-type: none"> <li>- Pilot the use of a carbon decision support tool in a pump station design project.</li> <li>- Review learnings from the pilot to help inform decisions on ongoing organisational requirements for a decision support tool and procurement approaches to consider emissions associated with the construction and operation of infrastructure.</li> </ul> <p><b>Completed</b></p>	Y			
8.4	00 The way we work 07 Biodiversity and biosecurity	Corporate resilience, adaptation and emissions reduction	<p><b>Shovel ready project - installation of enclosed Archimedes screw pumps</b></p> <p>Installation of up to five enclosed Archimedes screw pumps, which are critical to the ongoing flood protection of farmland, to enable the safe passage of native fish (eels). The current infrastructure is due for replacement and this pump design offers many benefits over conventional pumping assets: they rotate very slowly, deliver very high efficiency, and their design means the screw does not inflict damage on fish, even significantly large tuna. We expect the high efficiency design will reduce our emissions through less energy consumption.</p> <p><b>One pump installed, ongoing programme of installation.</b></p>	Y	Y		
<b>9 Energy   Pūngao</b>							
9.1		Regional resilience, adaptation and emissions reduction	<p><b>Key work programmes and projects contributing to this pathway include:</b></p> <ul style="list-style-type: none"> <li>- Policy Development Work Programme – various chapters (Water, Land, Coastal chapters) of the regional plan.</li> <li>- RPS Energy provisions: Policy Implementation work programme – promoting through work on district plans and plan changes</li> </ul>				