



Whakamaheretia,
mahia, arotakea

KŌWAE AKO 6 TE WHAKATAKOTO I TŌ MAHERE URUTAUNGA

He whitake ki te whakamahere mō te āhuarangi hurihuri ki te whakarite i te manawaroa me te auroa anō hoki o tō pakihi.

Ko tā tēnei kōwae ako he whakarato he whakatuwheratanga ngāwari ki te auroatanga pakihi me te whakamahere urutaunga. Ka whāngai tēnei i a koe ki te mātauranga ki te whakatakoto i ngā rautaki pakari e whakamauru ana i ngā tūraru whai hāngai ki te āhuarangi me te whakarei ake i te toitūtanga o tō pakihi.

E whakawhirinaki ana te āwhatawā me te tuatini o te whakamahere mō te urutaunga ki:

- te āhuatanga o ngā tūraru kei mua i a koe
- ngā āhuatanga o tō pakihi
- ō huringa whakamahere, me
- ngā rauemi kei a koe e wātea ana.



Ka taea tō whakamahere, kia ngāwari pēnei i te kōrerorero poto ki ngā mema o tō ohu, kia tuatini rānei pēnei i te whakaputa i tētahi pūrongo rautaki. Ko te mea nui ia ko te tīmata.

Ngā mahere auroatanga pakihi me ngā mahere urutaunga

He huarahi tōmua te mahere auroatanga pakihi ki te whakarite mō ngā tauwhatinga ohorere. I ngā wā o ngā tairaru, ka arotahi ki te whakaora wāpoto me te tiaki i ngā āheinga pakihi kaikini. Ko tā ngā mahere auroatanga pakihi he aromatawai i ngā tūraru pitomata me ngā āhuatanga whitake o tō pakihi, me te rārangī rautaki kia wawe, kia whāomo hoki te whakaoranga o tō pakihi, kia whaihua tonu ō whakahaere ahakoa ngā tauwhatinga.

Engaringari, he huarahi rautaki, wāroa anō hoki te mahere urutaunga. Ko tāna he whakamauru i ngā tūraru whai hāngai ki te āhuarangi o te wā nei, o anamata anō hoki. Ko tāna whai he whakarei ake i te manawaroa o tō pakihi mā te whai whakaaro ki ngā panonitanga whānui ake, ā-pūnaha anō hoki hei whakamāwhe i ngā pānga āhuarangi wāroa.

Ahakoa ka aro atu te mahere auroatanga āhuarangi ki ngā tūraru ka wawe tonu te pā, ko tā te mahere urutaunga he whakarite kia whanake, kia momoho anō hoki tō pakihi i te haere tonu o te pā mai o te āhuarangi hurihuri.

He wāhanga taketake ēnei mahere o tō whakamahere urutaunga. Ka taea ēnei te whakauru ki te whakarato i te whakahaerenga tūraru whānui me ngā rautaki whakapakari manawaroa. E rua, e rua he taputapu whakamahere whaipānga ka taea te whakamahi ngātahi. Ka tautoko i a koe ngā tūraru i tautohu koe i ngā Kōwae Ako 4 me te 5 i roto i aua momo mahere e rua. Te waihanga i tētahi mahere auroatanga pakihi tōtika.

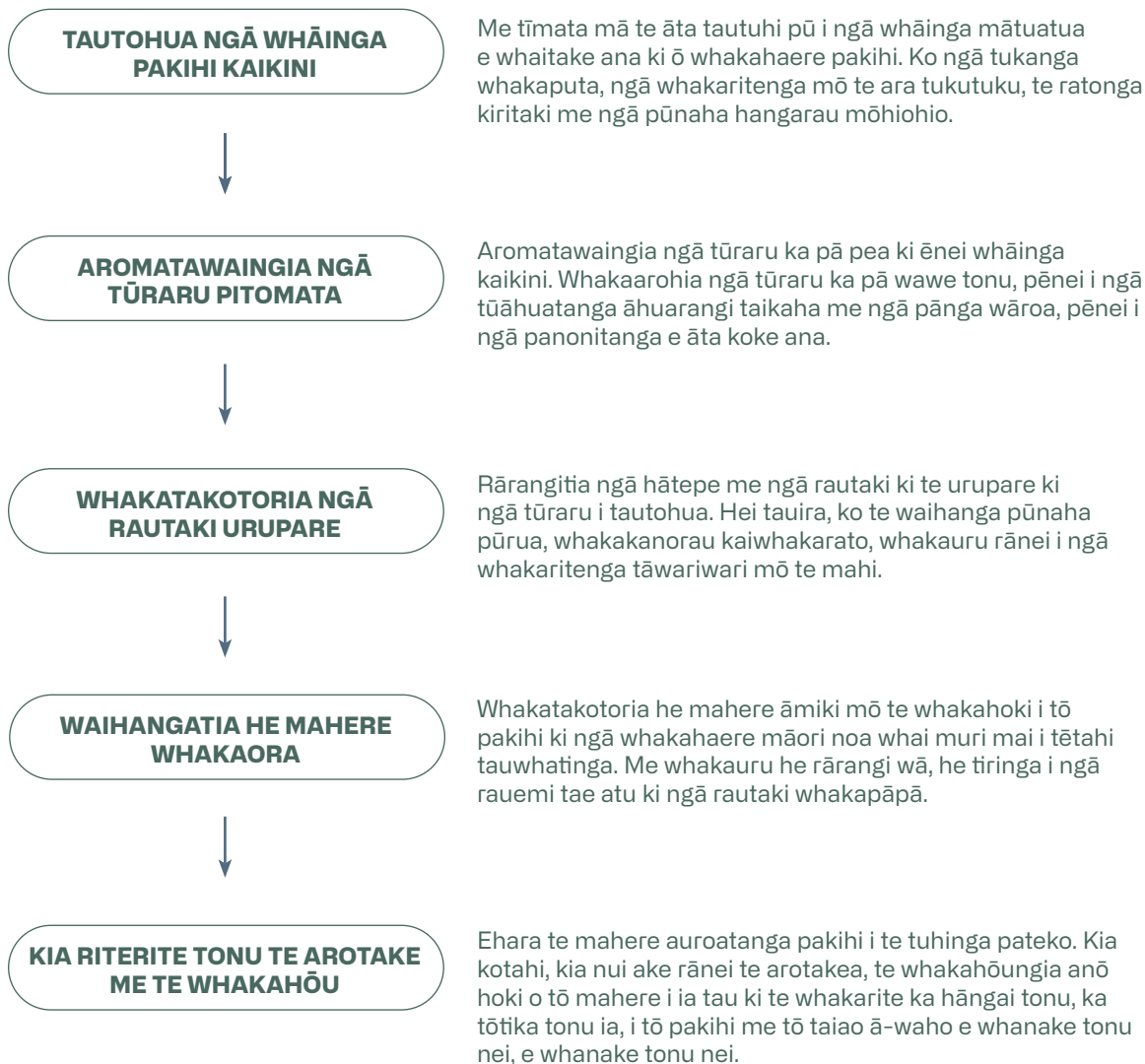
Te whakatakoto i tō mahere urutaunga



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Anei ētahi huarahi ki te waihanga i tētahi mahere auroatanga pakihi tōtika

Anei ētahi huarahi ki te waihanga i tētahi mahere auroatanga pakihi tōtika:



Ko tā te BCP tōtika he whakamihi ki ngā mōrea o ngā tūraru whai hāngai ki te āhuarangi ki ngā whakahaere i tō pakihi. Ka tuku te BCP he huarahi hangahanga hei whakamauru i ēnei tūraru hei whakaū ka taea e tō pakihi te tū kaha, te whakaora mai anō, te karo anō hoki i tētahi tauwhatinga pā whakarere whai hāngai ki te āhuarangi.

Mō ētahi atu tautoko, whakamātaungia ngā ratonga pēnei i a [Tokonga Mate](#) [Ohotata o Tāmaki Makaurau](#) me. Kei aua momo ratonga ngā taputapu hei āwhina i tō pakihi kia pakari ake tōna manawaroa ki ngā aituā.

Te whakatakoto i tō mahere urutaunga



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Te waihanga i tētahi mahere urutaunga tōtika

E rārangi ana te mahere urutaunga i ngā mahinga e whakamahere ana koe ki te mahi hei urupare ki ngā tūraru whai hāngai āhuarangi me ngā arawātea i tautohu, i aromatawai hoki koe. Ko tāna he titiro ki ngā tūraru o te wā nei, o anamata hoki, ā, i te nuinga o te wā ka whakaarohia e ia he wāroa ake i tō tērā e whakaarohia ana e tētahi mahere auroatanga pakihī.

Ka whakarato tā mātou taputapu urutaunga i tētahi wāhi tīmata hei āwhina i a koe ki te whakaaro me pēhea te whakatakoto i tētahi mahere urutaunga waiwai hei urupare ki ngā tūraru i tautohu koe i ngā Kōwae Ako 5 me te 6:

WHAKATŌMENEHIA NGĀ KŌWHIRINGA URUTAUNGA

Rangahaua, aromatawaingia hoki te tini o ngā kōwhiringa urutaunga. Whakaarohia te huhua o ngā huarahi, pēnei i te whakamōhou i ngā tūāhanga, i ngā whakapakaritanga o ngā tukanga, i ngā hangarau hōu rānei.

AROMATAWAINGIA NGĀ KŌWHIRINGA

Aromatawaingia ngā hua pai, kino hoki o ia kōwhiringa, mā te whakamahi i ngā paearu pēnei i:

- Ngā utu (tuatahi me te whakatikatika)
- Te tōtika i roto i te wā
- Te wāora o te hangarau
- Te wanea ki ngā kaimahi, ngā kiritaki, me te hapori
- Ngā whakaaetanga e matea ana, te tautuku ā-waeture rānei.

WHAKARAUPAPATIA NGĀ MAHINGA

Whakaraupapatia ngā mahinga ka nui noa atu ngā painga e ahu mai ana i tō tātaritanga. Me arotahi atu ki te whakatika i ngā tūraru nui taioereore noa mō ngā pae whakaraerae noa, huarawa rānei.

WHAKATAKOTORIA HE MAHERE ĀMIKI

Kia oti i a koe te taputapu urutaunga, whakatakotoria he mahere urutaunga āmiki e whakatakoto ana i ngā kōwhiringa arotau me ngā hātepe ki te whakatinana i aua kōwhiringa. Me whakauru ki tō mahere:

- He mahere tahua, ahumoni hoki
- He mahere mahi me ngā rārangi wā me ngā tūāoma
- Ngā tūnga i mārama te whakamahuki, me ngā haepapa.

WHAKATINANATIA, AROTURUKINGIA

Me tīmata mā te whakatinana i ngā mahinga e rārangitia ana i tō mahere. Kia riterite tonu te aroturuki i te kauneketanga, ā, ina matea me whakatika ki te whakarite he tōtika tonu o kohakoha urutau.

Te whakatakoto i tō mahere urutaunga



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Te rārangi whakaturuma mō te whakamahere urutaunga, auroatanga pakihi hoki

He wāhi tīmata āwhina tā mātou rārangi whakaturuma mō te whakamahere urutaunga, auroatanga pakihi hoki, i mua i te whakakī i te taputapu whakamāherehere urutaunga. Kua whakawhanaketia tēnei rārangi whakaturuma hei whakakī ki te āwhina i tō pakihi ki te tautohu i ngā mahinga mātuatua e matea ana. Kāore e kore ka whakawhirinaki ētahi atu ki tō pakihi. Ina tika, me whai whakaaro ki te tautapa i aua mahinga ki ētahi atu tāngata i tō ohu, hei whakarite ka tohaina ngā haepapa ki te whakaurutau i tō pakihi.

NGĀ KAIMAHI ME NGĀ KIRITAKI

- ☐ Kua pātai atu koe ki ō kaimahi mehemea e tinga ana ka pā kinotia ō rātou kāinga, ō rātou ara haere e ngā mōrearea āhuarangi?
- ☐ Kua whakaarohia e koe te oranga me te hauora hinengaro o ō kaimahi me ngā kaiwhakarato?
- ☐ Kua whakarato tautoko, whakangungu rānei koe ki ō kaimahi mō te āhuarangi hurihuri me ngā pānga o ngā mōrearea āhuarangi (arā, ngā pāmahana taikaha, te hekenga wai)?
- ☐ Kua whakaarohia e koe ngā tikanga hauora me te haumarua mō ō kaimahi e mōrea ana i ngā mōrearea āhuarangi (hei tauira ko ngā pāmahana taikaha)?
- ☐ Kei a koe ngā taipitopito whakapā o te wā mō ō kaimahi, kiritaki, me ngā kaiwhakarato? E arotake ana koe i ēnei i ia ono marama? E arotake ana koe i ēnei i ia toru ki te ono marama?
- ☐ Kua whakaarohia e koe ō here ā-ture mō ngā āhuatanga hauora me te haumarua i roto i tō wāhi mahi?

NGĀ WHĀURUNGA ME NGĀ PUTANGA

- ☐ Kua whakaarohia e koe ka pā pēheatia tō hautaonga, ratonga rānei, e te āhuarangi hurihuri?
- ☐ Kua whakaarohia e koe ngā pānga o ngā mōrearea āhuarangi ki tō ara tukutuku, tae atu ki ō whakaritenga i waenga i ngā kaiwhakarato me ngā kiritaki?
- ☐ Kua arotakea e koe ō mahere pakihi hei whakahāngai i ērā kitō anamata me ngā panonitanga e matapaetia ana mō te āhuarangi? He kaha rānei ōu ki te auaha i ngā hautaonga me

ngā ratonga ki te uru ki ngā māketē hōu, ki te whiwhi rānei i te huanga pakihi?

- ☐ Kua whakaarohia e koe mō te āhua e tae ana koe ki te whakauru i te mahinga āhuarangi hurihuri ki roto i ngā tukanga o te wā nei (hei tauira, i te mahere auroatanga pakihi, i ngā rēhita tūraru, i ngā hōtaka whakatikatika) hei whakaheke i te pikaunga mahi?

NGĀ HUARAWA ME NGĀ TŪĀHANGA

- ☐ Kua tautohua e koe ētahi mōrearea āhuarangi e whakamōrearea ana i ō huarawa me ngā tūāhanga?
- ☐ Kua whakaarohia e koe mehemea e mōrea ana tō pakihi i te waipuke hei tauira, mā te arotake i ngā mahere Mātai Waipuke¹⁸ a Te Kaunihera o Tāmaki Makaurau?
- ☐ Kua whakatau koe ka pēhea tō pakihi e haere tonu ai mehemea ka pā mai he tūāhuatanga?
- ☐ Kua tautohua e koe ngā huarahi ki te whakapakari ake i ō huarawa me ngā tūāhanga kia nui ake te manawaroa ki ngā mōrearea āhuarangi (hei tauira, ka rite tonu te whakapaipai i ngā kōrere me ngā manga)?
- ☐ E aroturuki ana koe i te kaha o ō whare me ō ratonga whare kia tū pakari i te pānga mai o ngā pāmahana taikaha?
- ☐ Kua whakaarohia e koe ngā hiranga ā-ahumoni o te pikinga ake o ngā utu whakatikatika?
- ☐ Kua arotakea e koe ngā kirimana inihua hei whakatūturu ka tiakina ō huarawa me ngā tūāhanga i ngā mōrearea āhuarangi?

¹⁸ Kua whakaritea e te Kaunihera o Tāmaki Makaurau ngā mahere GIS e whakaatu ana i te panonitanga e matapaengia ana mō te waipuke i Tāmaki Makaurau

Te whakatakoto i tō mahere urutaunga



Taputapu whakamahere urutaunga

Whakamahia tā mātou taputapu whakamahere urutaunga ki te tīmata i tō mahere urutaunga. He mea nui kia mahara i a koe ko te āhua o tō aromatawai i ngā kōwhiringa urutaunga (e rite ana ki ngā kōwhiringa aromatawai kei raro iho nei) ka whakawhirinaki atu ki:

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Ngā tūraru mātuatua	Whakatauranga tūraru	Koringa urutaunga pitomata	Aromatawai kōwhiringa			Ngā koringa i whakamātāmuatia e ahu mai ana i te aromatawai kōwhiringa	Te tangata ka noho haepapa ki te koringa	Te rā tīmata me te rā kati
			Ngā āhuatanga ine kounga	Te pūtea āwhiwhiwhi matea (\$, \$\$, \$\$\$, \$\$\$\$)	Te utu āwhiwhiwhi ki te pakihi mehemea e kore tēnei e taea te whakatutuki			
Nō te Taputapu Tuakiri Tūraru Āhuarangi – ko te tūtohu ko te tīmata mai i ngā tūraru i whakatauria he tiketike	Nō te te Taputapu Whakatauranga Tūraru Āhuarangi	Rangahaua, aromatawaingia hoki te tini o ngā kōwhiringa urutaunga. Whakaarohia te huhua o ngā huarahi, pēnei i ngā ngā tūāhanga whakamōhou i ngā tūāhanga, i ngā whakapakaritanga o ngā tukanga, i ngā hangarau hōu rānei.	Aromatawaingia ngā hua pai, kino hoki o ia kōwhiringa, mā te whakamahi i ngā paearu pēnei i te tōtika i roto i te wā, te wāora o te hangarau me ngā whakaaetanga e matea ana, te tautuku ā-waeture Rānei	Purua tētahi o ngā \$ whakataua tata	Hei tauira ko ngā utu whakawhiti i ngā tūāhanga, ko te whakaheke i ngā hokonga, me te maha noa atu.			

Te whakatakoto i tō mahere urutaunga



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Te whakauru i ngā tirohanga a te ao Māori

Mō ngā pakihi e puritia ana e ngāi Māori, he whaitake ki te whakauru i ngā tirohanga a te ao Māori ki tō mahere auroatanga pakihi me ngā mahere urutaunga. He wāhi nui tō ngā uara ahurea o ngāi Māori i te whakaawe i te āhua o te kītenga, o te urupare atu hoki ki ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea. He mea whaihua ki te toai i ngā mātāpono i miramirahia i a Kōwae Ako 3, tae atu ki:

Manaakitanga (te taurima me te tiaki)

Me aro atu ki te oranga o tō hāpori. Me mātua whakarite koe e whakaarohia ana e tō mahere ngā pānga pāpori whānui i te āhuarangi hurihuri, ā, me whai ki te whakarei ake i te manawaroa o tō pakihi, me tō whānau me tō hāpori ā-rohe.

Whakapapa (tātai)

Whakamihia te whātuitanga o ngā āhuetanga katoa. Tirohia ngā tūraru whai hāngai o tō pakihi me ngā arawātea hei wāhi o tētahi pūnaha rahi ake, torowhārahi ake hoki. Ka whakaurutia ki taua pūnaha ko ngā taha taiao, pāpori, me te ahurea.

Mā te whakahāngai i tō kohakoha urutau ki ngā uara o ngāi Māori, ka taea e koe te whakatakoto i ngā mahere hāngai ki te ahurea, aro ki te hāpori, tautaiāo anō hoki.



Te whakatakoto i tō mahere urutaunga



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Mō te roanga atu o ngā pārongo

Kei te hiahia ahau he pārongo anō e pā ana ki...	Rauemi	Whārangī
Whakamahere auroatanga pakihi	Ataata auroatanga me te whakamahere pā whakarere a Business.govt.nz	Ngā whārangī katoa
Ngā tauira whakamahere auroatanga pakihi	Ngā tauira whakamahere auroatanga pakihi a Tokonga Mate Ohotata o Tāmaki Makaurau	Ngā whārangī katoa



Ngā Tohutoro

Wāhanga	Kōwae Ako	Ngā Tohutoro
Kupu Whakataki		Te Tari Tiaki Pūngao (2021). Climate Change and New Zealand Business: Nov 2021: eeca.govt.nz/insights/eeca-insights/climate-change-and-new-zealand-business Sustainable Business Council (2024). SBC Guide: Measure, reduce and report on your business's carbon footprint: sbc.org.nz/wpcontent/uploads/2024/06/SBC-Guide-Measure-reduce-and-report-on-your-business-carbon-footprint.pdf Te Manatū Mō Te Taiao (2021). He kupu ārahi mō te aromatawai tūraru huringa āhuarangi ā-rohe Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Te Manatū Mō Te Taiao (2022). National adaptation plan: environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan Te Manatū Mō Te Taiao (2022). Ngā mahi āhuarangi mō ngāi Māori: Te mahere urutaunga ā-motu: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan
	Ngā painga o te urutau	Queensland Government (n.d). Climate Change Risk Management Tool for Small Businesses in Queensland: qld.gov.au/data/ass-ets/pdf/file/0026/132398/ccrmt-businesses-full.pdf Business.govt.nz (n.d). Te whakamahere auroatanga me te pā whakarere: business.govt.nz/risks-and-operations/planning-for-the-unexpected-bcp/continuity-and-contingency-planning
	Ngā tūāpapa o te āhuarangi hurihuri	The Intergovernmental Panel on Climate Change (IPCC) (2021). Summary for Policymakers: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). National Climate Change Risk Assessment: https://www.landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf NIWA (2020). Auckland region climate change projections and impacts: knowledgeauckland.org.nz/publications/auckland-region-climate-change-projections-and-impacts-revised-september-2020 Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: https://knowledgeauckland.org.nz/publications/auckland-region-climate-change-projections-and-impacts-revised-september-2020 Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan NIWA (2020). Climate change and possible impacts for New Zealand: niwa.co.nz/climate-change-information-climate-solvers/climate-change-and-possible-impacts-new-zealand Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
	He tirohanga ao Māori	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
Te hononga o te āhuarangi hurihuri ki a koe		

Me mōhio koe ki ō tūraru	Te tautohu i ō tūraru me ngā arawātea	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
	Te aromatawai i ō tūraru	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
Whakamaheretia, mahia, arotakea	Te whakatakoto i tāu mahere urutaunga	Business.govt.nz (n.d). Continuity and contingency planning: business.govt.nz/risks-and-operations/planning-for-the-unexpected-bcp/continuity-and-contingency-planning
	Te arotake i tāu mahere urutaunga	UK Climate Impacts Programme (UKCIP) (n.d). AdaptME toolkit: ukcip.org.uk/wp-content/PDFs/UKCIP-AdaptME.pdf