

Appendix A: Literature review search information and approach

Component	Description
Databases/ sources	Google Scholar, PubMed, and SHA Library (Saskatchewan Health Authority Library)
Geographic focus	Canada (priority), with selected comparator countries where relevant
Search approach	Iterative keyword searching using combinations of keywords: climate change, Indigenous food systems, food safety, policy, and adaptation/resilience terms
Concept areas	Climate change and food safety; Indigenous food sovereignty and food safety; policy and governance frameworks; adaptation and resilience

Appendix B: List of climate plans reviewed in jurisdictional scan

Jurisdiction	Plan Name	Link	Year
Canada	Pan-Canadian framework on clean growth and climate change	https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/climate-change-plan.html	2018
Canada	Health of Canadians in a changing climate	https://changingclimate.ca/health-in-a-changing-climate/	2022
Canada	Assembly of First Nations: National climate strategy	https://afn.bynder.com/m/77556e1d9da51db7/original/2023-Climate-Strategy-Report.pdf	2023
British Columbia	Climate preparedness and adaptation strategy: Actions for 2022–2025	https://cleanbc.gov.bc.ca/ https://www2.gov.bc.ca/assets/gov/environment/climate-change/adaptation/cpas.pdf	2021
Alberta	Emissions reduction and energy development plan	https://www.alberta.ca/emissions-reduction-and-energy-development-plan	2024
Saskatchewan (1)	Saskatchewan Climate resilience measurement framework	https://publications.saskatchewan.ca/api/v1/products/92479/formats/109479/download	2019
Saskatchewan (2)	Prairie Resilience: A made-in-Saskatchewan climate change strategy	https://www.saskatchewan.ca/business/environmental-protection-and-sustainability/a-made-in-saskatchewan-climate-change-strategy/saskatchewans-climate-change-strategy	2017
Manitoba	Made-in-Manitoba climate and green plan	https://www.gov.mb.ca/asset_library/en/climatechange/climategreenplandiscussionpaper.pdf	2017
Ontario (1)	A Made-in-Ontario environment plan	https://www.ontario.ca/page/made-in-ontario-environment-plan	2022
Ontario (2)	Ontario's climate change strategy (2014)	https://docs.ontario.ca/documents/4928/climate-change-strategy-en.pdf	2014
Quebec	2030 Plan for a green economy 2013–2020 climate change action plan (en français)	https://www.quebec.ca/en/government/policies-orientations/plan-green-economy/ https://www.environnement.gouv.qc.ca/changementsclimatiques/plan-action-en.asp	2020
New Brunswick	New Brunswick's climate change action plan 2022–2027	https://www2.gnb.ca/content/dam/gnb/Corporate/Promo/climate/climate-change-action-plan.pdf	2021
Nova Scotia	Our climate, our future Nova Scotia's climate change plan for clean growth	https://climatechange.novascotia.ca/sites/default/files/uploads/ns-climate-change-plan.pdf	2022
Prince Edward Island	Building resilience: Climate adaptation plan	https://www.princeedwardisland.ca/sites/default/files/publications/building_resilience_climate_adaptation_plan_oct_2022.pdf	2022
Newfoundland and Labrador (1)	Climate change mitigation action plan 2025–2030	https://www.gov.nl.ca/eccc/occ/action-plans/	2025
Newfoundland and Labrador (2)	Climate change adaptation action plan 2025–2030	https://www.gov.nl.ca/eccc/occ/action-plans/	2025
Yukon	Our clean future: A Yukon strategy for climate change	https://our-clean-future.yukon.ca/	2019
NWT (1)	2030 NWT Climate change strategic framework	https://www.gov.nt.ca/ecc/en/2030-nwt-climate-change-strategic-framework-cadre-strategique-sur-le-changement-climatique-des-tno	2018
NWT (2)	2030 NWT Climate change strategic action plan 2019–2023	https://www.gov.nt.ca/ecc/en/2030-nwt-climate-change-strategic-framework-cadre-strategique-sur-le-changement-climatique-des-tno	2018
Nunavut	Climate change impacts and adaptation in Nunavut	https://climatechangenunavut.ca/sites/default/files/3154-315_climate_english_reduced_size_1_0.pdf	

Appendix C: Individual SWOT analysis of seven select plans

Jurisdiction	Strengths	Weaknesses	Opportunities	Threats
Canada¹	<p>Explicit linkage between climate change and food safety</p> <p>Recognition of Indigenous food systems, including traditional food methods</p> <p>Connects food safety to other human health indicators and determinants, and to community</p> <p>Information is evidence-based, using surveillance data</p>	<p>Provides detailed assessment but not actions or implementation pathways</p> <p>Western food safety lens dominant framing of food safety through colonial regulator standards</p> <p>Little guidance or tools for communities to adapt harvesting, storage, or monitoring of traditional foods under changing conditions</p>	<p>Can support updating or developing climate-adapted food safety surveillance approaches</p> <p>Opportunity to move toward co-developed community-defined safety indicators grounded in Indigenous knowledge</p> <p>Can be used to inform federal and provincial food safety, health, and climate adaptation policies affecting Indigenous food safety</p>	<p>Rapid increase in climate impacts may outpace health system capacity to monitor shifts affecting food</p> <p>Rigidity in food safety regulations means traditional foods risks being over-restricted or criminalized rather than supported</p> <p>Loss of safe access to traditional foods increases food safety risk (through unsafe access or having to shift to higher risk practices storage, nutrition, etc.</p>
Canada² (AFN)	<p>Positions food sovereignty at the core of the information holistically</p> <p>Provides Indigenous-defined food safety, such as knowledge around seasonal and spiritual aspects</p> <p>Climate justice lens links unsafe food systems to colonial disruption, infrastructure gaps, and environmental degradation</p> <p>Identifies community-led solutions, knowledge transfer</p>	<p>Limited technical details on monitoring or formal food safety systems may confuse alignment</p> <p>Implementation strategies rely heavily on external funding and government cooperation</p> <p>Focus on place-based food systems make national-level standardization difficult</p>	<p>Supports a policy shift from risk-avoidance to food system resilience and sovereignty</p> <p>Opportunity to establish First Nations-led food safety authorities or monitoring programs</p> <p>Supports knowledge revitalization through climate adaptation strategies around traditional food knowledge and practice</p>	<p>Governments may resist transferring authority over food systems and safety regulation</p> <p>Risk of underfunding or lack of sustained investments leaving communities without support</p> <p>Species decline, habitat loss, and water contamination threaten the foundation of Indigenous food systems</p>

<p>British Columbia³</p>	<p>Strong focus on ecosystems that underpin Indigenous and local food systems</p> <p>Risk awareness of climate hazards that directly affect food safety</p> <p>Commitment to Indigenous engagement</p> <p>Includes actions that can indirectly support food safety (e.g., floodplain management, wildfire mitigation)</p>	<p>Food safety appears mainly through infrastructure and ecosystem protection rather than as a distinct focus</p> <p>Engagement does not always translate into Indigenous decision-making authority over food systems</p> <p>Near-term focus may not match long-term cultural and ecological food system needs</p>	<p>Positioned to integrate Indigenous food systems explicitly as an adaptation priority</p> <p>Opportunities for shared stewardship of fisheries, wildlife, and lands that are critical to food systems</p> <p>Local capacity building through support of community-level infrastructure (cold storage, smokehouses, safe water access)</p>	<p>Extreme unpredictable weather events can rapidly contaminate food sources and disrupt harvesting seasons</p> <p>Adaptation measures may be applied unevenly and prioritize urban or commercial food systems</p> <p>Provincial food safety regulations may unintentionally restrict traditional food practices under climate stress</p>
<p>Saskatchewan⁴</p>	<p>Tracks progress on natural systems, general community preparedness, and well-being, which can indirectly support food systems</p>	<p>Lack of food safety focus</p> <p>Lack of Indigenous food safety or food system; no sovereignty or collaboration focus with Indigenous communities</p> <p>Potential food system resilience gets subsumed under broader measures rather than targeted actions</p>	<p>The resilience measurement framework could add specific indicators for food safety and Indigenous food systems safety</p> <p>Potential for collaboration with Indigenous communities for locally designed climate and food safety indicators</p> <p>Potential for cross-sector integration incorporating agriculture, health, communities, and food safety</p>	<p>Without explicit planning for food safety, climate adaptation actions may overlook important cultural and safety needs of Indigenous communities</p> <p>Lack of specific intentional monitoring for food safety risks (e.g., pathogens, toxins) can mask emerging threats</p>
<p>Saskatchewan⁵</p>	<p>Seeks to build resilience across sectors including agriculture, land use, and ecosystems, which are foundations of food systems</p>	<p>There is no clear focus on food safety issues or foodborne illnesses</p> <p>Indigenous food systems and safety are not clearly defined as priorities</p>	<p>Could integrate food safety standards adapted to climate risks into future updates or resilience reporting frameworks</p> <p>Opportunity to co-develop monitoring of</p>	<p>Increasing temperatures and extreme events risk contaminating water and shifting wildlife patterns, undermining both western and traditional food safety</p>





	<p>Emphasis on natural systems' resilience could benefit ecosystems that underpin wildlife and plant species central to Indigenous food practices, although this link is not made explicitly</p> <p>Consultation commitment with Indigenous communities and stakeholders</p>	<p>Without targeted measures, general resilience planning may not protect traditional food safety specific to Indigenous food systems</p>	<p>climate impacts on traditional plants and animals critical to food sovereignty</p> <p>Programs for drought resilience, soil health, and water access could indirectly strengthen food safety and security</p>	<p>Provincial policies focus on economic resilience over culturally defined food safety needs, deepening inequities for Indigenous communities</p>
<p>Prince Edward Island⁶</p>	<p>Plan acknowledges Indigenous communities' relationship with the land and commits to advance reconciliation and integrate local knowledge</p> <p>Explicitly mentions food and water access and actions that are directly related to food safety</p> <p>Partners with food industry to respond to climate risks and are well positioned to support food safety implementation</p>	<p>Limited detail on Indigenous food system and safety in those systems</p> <p>The actions tend to be broad (infrastructure, coastal resilience) rather than tailored to food safety risks like contamination or ecosystem shifts impacting traditional harvests</p>	<p>Linkage to other climate plans such as seafood sector climate adaptation strategy with incorporation of Indigenous perspectives</p> <p>Region-specific climate model outputs could inform monitoring programs to pre-empt safety risks</p> <p>Building on existing commitments to reconciliation, the plan could include Indigenous-led food system resilience measures</p>	<p>Rising seas and storms may disrupt monitoring and disproportionately impact communities relying on subsistence or small-scale fisheries</p> <p>Lack of targeted food safety infrastructure (cold storage, emergency supplies) could exacerbate system vulnerabilities during climate events</p>
<p>Northwest Territories⁷</p>	<p>Framework supports building resilience to climate change impacts to food issues and production</p> <p>Emphasizes involvement of communities and use of local/traditional knowledge in planning</p>	<p>Food safety not clearly central and lacks detailed actions on food safety (e.g., pathogen monitoring, safe harvest guidelines) for traditional foods</p> <p>Implementation dependency on funding to support</p>	<p>Longer seasons could enhance local food availability and food safety opportunities</p> <p>Traditional and scientific knowledge integration could support co-designed food system monitoring that includes cultural food safety indicators</p>	<p>Climate shifts in the North can lead to unpredictable effects on food availability and safety</p> <p>Logistics and high costs of food storage and transport can compound during climate caused emergency events, disproportionately</p>





	Food production strategy offering groundwork for climate adaptation of food systems and food safety incorporation	Indigenous communities and remote food systems	Co-creating food safety approaches with youth and elders strengthens future resilience	affecting Indigenous and remote food safety
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This document can be cited as: Dale K. Climate adaptation and Indigenous food safety in Canada: Current approaches and the role of environmental public health. Vancouver, BC: National Collaborating Centre for Environmental Health. 2026 Jun.

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contact@ncceh.ca | www.ncceh.ca

