

**APPENDIX F**  
**IMPACTS - MASTER LIST**

Advance in egg laying dates.
Altered forest and plant distribution.
Altered wildlife migration patterns.
Appearance of new fish predators.
Appearance of previously unseen species.
Change in diversity and accessibility of vegetation critical to foraging animals.
Changes in abundance or distribution of fish.
Changes in abundance or distribution of wildlife.
Changes in access to hunting grounds due to changed climate conditions.
Changes in composition of flora communities.
Changes in condition, reproduction and recruitment.
Changes in distribution, stability and annual duration of sea ice.
Changes in mortality rates.
Changes in nutrient content of forage.
Changes in survival and recruitment (i.e. ringed seal pups).
Changes in timing of breeding (i.e. guillemots).
Cultural heritage site destruction (from permafrost melting)
Damage to buildings from snow loading
Damage to cultural heritage sites
Damage to pipeline infrastructure
Damage to road infrastructure
Decline in numbers and condition of polar bears.

Declining productivity of arctic species.
Decreased cultural identity due to less traditional activities (hunting, fishing & gathering)
Decreased food security (more reliance on store bought foods)
Emergence of new diseases.
Emergence of zoonotic diseases.
Expansion of distribution and increase in prevalence (i.e. harbour and grey seals).
Extirpation of arctic species along southern margin of distribution – overall range contraction.
Extirpation or local decline in abundance of species.
Fuel and cargo spills
High variability in sea-ice formation affecting the ease of travel and safety of fishers.
Improved access to offshore fisheries due to longer ice- free season.
Improved habitat and conditions for bears and seals at higher latitudes.
Increase in abundance and local productivity of cold water species.
Increase in contaminants in biotic systems.
Increase in contaminants in northern aquatic systems.
Increase in extreme weather events (cold, heat, precipitation, wind)
Increase in number of ‘optimal growing season’ days for cold water fish (i.e. lake trout).
Increased acid-rock drainage
Increased challenges in building snow shelters due to changes in snow composition
Increased cold related injuries (frostbite, hypothermia etc.) and/or deaths
Increased competition between species (i.e. caribou and muskox).
Increased competition for resources (due to northward extension of southern species).
Increased difficulties re-supplying industrial sites during the winter
Increased discharge of contaminants (tailings etc.) into the environment

Increased droughts.
Increased emigration (i.e. caribou).
Increased floods (ice jam floods etc.)
Increased floods.
Increased harassment of animals by insects.
Increased heat related injuries and/or deaths
Increased heavy snowfalls that delay ice growth/load-bearing capacity of ice roads
Increased incidence of avalanches.
Increased incidence of food- and water-borne diseases (Giardia, Salmonella, parasites etc.)
Increased incidence of forest fires.
Increased incidence of human distress (alcohol abuse, violence, suicide) due to environmental / social changes
Increased incidence of landslides.
Increased incidence of parasitic infection (i.e. caribou).
Increased incidence of people stranded due to unpredictable weather
Increased incidence of respiratory and cardiovascular diseases (from air pollution)
Increased incidence of vector-borne diseases
Increased incidence of vector-borne diseases (e.g., Lyme disease, west nile)
Increased incidents of accidents or drowning caused by decreased ice stability and duration
Increased incidents of injury or death from velocity and volume of spring water run-off
Increased injuries from ultraviolet-B exposure (skin cancers, burns, eye damage etc.)
Increased intake of environmental contaminants (mercury, organochlorines) from country foods
Increased mould in buildings
Increased need for snow removal
Increased northern agriculture.

Increased number of accidents caused by weather (storms, draughts etc.)
Increased numbers of insects (biting flies, bees etc).
Increased participation of people in the wage economy (resource development)
Increased power outages
Increased precipitation.
Increased predation and hunting (i.e. of caribou).
Increased property/equipment damage (due to weather)
Increased slope/shore erosion.
Increased storm damage
Increased storms.
Increased waste spills due to permafrost melting (unstable containment)
Increased water transport access to communities (due to melting ice)
Increased water transport/shipping access (due to melting ice)
Increased wave action (effecting offshore equipment and travel)
Increases in winter temperature and precipitation causing increase in expended energy foraging (i.e. caribou).
Increasingly difficult river transport due to low flows
Issues with drinking water (quantity, quality and/or access)
Large scale winter die-off due to harsh winter weather (increase in storm events and increased icing).
Longer construction season
Lost earnings from reduced hunting harvests
Lower adult body mass.
Lower chick growth rates.
New parasites in marine ecosystems.
Northward movement in community structures and loss of polar species.

Problems with building infrastructure (from permafrost melting)
Problems with pipeline infrastructure (from permafrost melting)
Problems with road infrastructure (from permafrost melting)
Problems with sanitation/waste-water treatment infrastructure
Problems with sanitation/waste-water treatment infrastructure (from permafrost melting)
Reduced transmission of traditional knowledge/ environmental respect to younger generations.
Reduction in population (i.e. ivory gulls).
Reductions in maximum loads for ice roads
Rise in number of fish species in arctic waters.
Shellfish replacing groundfish (coastal).
Shifting building infrastructure
Shifts in ecosystem distribution and structures.
Shifts in growth.
Shifts in fish life history (i.e. anadromous to resident).
Shifts in productivity.
Shifts in reproductive capacity.
Shifts in whale species composition.
Stress or decline in species dependent on sea ice for resting, pupping, moulting or feeding.
Unpredictable/ reduced winter road access
Unpredictable/ reduced winter road access e.g, difficulties re-supplying (communities and/or municipal sites) during the winter
Waste spills due to permafrost melting (unstable containment)
Wildlife disturbance due to development (presence, noise etc.)