ADAPTATIONS - MASTER LIST

Adaptive management approach including time or method of capture, alt. species, levels of exploitation.
Adding insulation to pipelines
Building structures on adjustable foundations
Building structures on deep foundations
Changing hunting quotas (volume restrictions)
Changing hunting season restrictions (i.e. summer instead of spring)
Clearance of snow (near infrastructure) to promote colder winter ground temperatures)
Community freezer programs
Community research projects on climate change/adaptation
Compilation of digital databases of borehole geotechnical data
Comprehensive approach to management of activities that impact northern aquatic ecosystems.
Consider many stresses on bird populations in devising management strategies.
Consideration of climate change in environmental-impact assessments
Design changes to offshore drilling platforms to account for storms
Development and use of central processing facilities
Development of all-season roads or bridges (due to reduced availability of ice roads)
Development of digital databases that provide an inventory of infrastructure and foundation systems
Development of Hazard Mapping for thaw-sensitive soils
Development of water-based transportation systems (as a result of more ice free waterways)
Diversify inshore fishery to encompass wider resource base, thereby increasing the resilience of the community to perturbation.
Dredging selected river channels to improve water transport

Economic support for the pursuit of traditional and subsistence ways of life
Enhancing adaptive capacity of fish species by reducing non-climatic stresses.
Excavating frozen ice-rich material and replacing it with thaw-stable material
Flexibility in resource management
Flexibility in construction, exploration, transit, shipping due to weather and travel conditions
Flexibility in exploration, transit due to weather and travel conditions
Formalized teaching of traditional skills and knowledge
Implement adaptive co-management strategies involving local Aboriginal harvesters (i.e. integrating scientific and traditional knowledge).
Improved infrastructure for communicating weather - cellular or citizens band (CB) radio service
Improved staffing and training of search and rescue/medical personnel
Increase pipeline monitoring (stability, etc.)
Increased development of integrated land and marine transportation networks
Increased ground surface insulation (may require thicker gravel pads)
Increased intercommunity trade
Increased maintenance and remedial work to ensure structural integrity of existing infrastructure
Increased monitoring and evaluation of infrastructure performance, changes and adaptation measures
Increased shipping export of raw materials
Increased shipping hazards
Increased shipping/barge-based transport (cargo, supplies etc.)
Increased use of ATVs instead of snowmobiles
Increased use of exploration drill ships
Increased use of GPS for navigation
Infrastructure engineering that avoids and/or preserves thaw-sensitive soils (limits and withstands

any thaw settlement that occurs)
Intentionally thawing permafrost (by clearing vegetation etc.) and postponing construction until after the ground has settled
Modifications to covers of land-based tailings piles (to ensure stability)
Monitor changes in small and genetically unique groups of animals and adjust management strategies accordingly.
Monitoring of contaminant dynamics in consumable fish.
Monitoring of human health in context of contaminants.
More frequent hunting of species that are more readily available
More frequent water-quality testing
More frequent water-quality testing (municipal and untreated water sources)
People consulting internet-based satellite imagery of ice conditions prior to travelling
People delaying and/or cancelling trips on the land due to weather
People taking more equipment when travelling on ice (small boats etc.)
People taking more supplies with them when travelling on the land (food, clothing, lighters etc.)
Protected area planning with consideration of changes in phenology and movements of individual species.
Protecting key marine areas.
Public education on climate change/adaptations
Reduce non-resident and non-Aboriginal harvest of caribou.
Relocation of infrastructure (buildings, roads, cultural sites etc.) due to erosion risks
Reprofiling sport fisheries to ‘new’ species.
Revising ‘sustainable’ strategies to levels below what is assumed or known to represent ‘total allowable harvest’.
River flow regulation to improve water transport
Setting of attainable goals for sustainable fisheries and their management (i.e. focus on ecosystem rather than single species approaches.)
Snow removal and/or compaction to reduce insulation of ice roads

Surface flooding and/or spray-ice techniques to create rapid-ice thickness for ice roads
The building of more permanent shelters on the land (refuge from storms)
Track trends of contaminants in key wildlife species by collecting data in both biotic and abiotic media.
Transportation of waste (contaminants) to outside the territories
Use of a barge for production facilities (rather than a land-based facility)
Use of a risk-based project screening tool for considering climate change in engineered facilities
Use of air-convection embankments
Use of artificial cooling to ensure foundation soils remain frozen
Use of balloons to assist with transporting heavy loads over ice
Use of down-hole injection
Use of low-impact vehicles
Use of pile foundations (to reduce the impact of ground disturbance)
Use of remote sumps
Using system of area closures, quota limits, gear restrictions to limit both commercial and recreational activities.
Using thermosyphons to induce artificial cooling