

Qualitative Climate Scenario Analysis Risk & Opportunity Summary

FOCUS: PHYSICAL AND TRANSITIONAL RISKS		
SCENARIO: 3-5°C INCREASE		
MODEL USED: AR5 – RCP8.5		
RISK	DESCRIPTION AND POTENTIAL IMPACTS	RESILIENCE STRATEGIES AND ACTIONS
Wildfire	<p>Increased wildfires are expected to be driven by hotter, drier weather in forested areas, impacting Interfor operations and supply. (Days >25°C and consecutive dry days, normalized by historical fire weather index.)</p> <p>Potential impacts: Reductions to fiber supply and quality, shutdowns (supply chain and operations), liability. Increased cost of available raw materials. All regions.</p>	<ul style="list-style-type: none"> Strong wildfire preparedness, prevention and response programs Annual fire plans Shutdown procedures and restrictions beyond legal requirements Daily and continuous weather monitoring protocols Fire preparedness inspections Fire-watch and fire hazard assessment procedures Fire response partnerships Forest thinning and fuel reduction projects in wildfire risk areas and around sites Log supply inventory management plan to account for seasonal shutdowns
Extreme high temperatures	<p>Climate change is expected to increase the average temperature, and the number of days of extreme heat and the number of heat waves. (Days >35°C)</p> <p>Potential impacts: Shutdowns (operations, supply chain), heat-related illness and injury. All regions, highest potential impact in US South.</p>	<ul style="list-style-type: none"> Weather monitoring programs to identify and act on hot weather trends Heat stress programs that provide guidance on ensuring health and well-being of employees during high heat indices Use of air conditioning units within mobile equipment and at-risk areas of our facilities
Extreme precipitation and flooding	<p>The number of days with high precipitation is expected to increase. (Days per year with 20mm or more precipitation.)</p> <p>Potential impacts: Operational disruptions and impacts to log supply, transportation and logistics, increased cost of raw materials, increased erosion, and landslide risk in forest operations. All regions, highest potential impact in BC and US Northwest.</p>	<ul style="list-style-type: none"> Rainfall shutdown procedures in woodlands operations Log supply and inventory flow plans account for seasonal shutdowns Culverts and crossings more resilient to debris flows/floods on our forest roads Enhanced sediment control measures on erosion-prone sites Watershed Risk Management Framework
Coastal and river flooding	<p>Increased extreme precipitation will lead to more river floods. Climate change is expected to lead to melting of glaciers and polar ice caps leading to rising seas. (Inundation depth of 100-year flood events and locations projected to be impacted by sea level rise.)</p> <p>Potential impacts: Flooding at mill sites adjacent to rivers, flooding of mill sites and woodlands facilities (log dumps and logging camps) at sea level. All regions, more exposure in BC, US Northwest, Eastern Canada and Atlantic Canada.</p>	<ul style="list-style-type: none"> Comprehensive flood preparedness plans for our at-risk sites Snowpack and water level tracking as an advanced indicator of flood potential Preventative structural and site upgrades in locations with historic water-damage events Watershed Risk Management Framework
Water stress	<p>Increased droughts and water stress are expected in certain regions. (Increased water stress index.)</p> <p>Potential impacts: Gradual and long-term fiber supply constraints due to impacts such as increased susceptibility to insect and disease. All regions impacted, with greater potential in the US South region. Increased cost of raw materials.</p>	<ul style="list-style-type: none"> Installation of water meters at all sites to track withdrawal Goal to establish a water reduction target Watershed Risk Management Framework Mixed species planting prioritized for new forests to improve resilience, and maintain or enhance ecological diversity Selecting seedlings with consideration to their adaptability to future climate changes in the areas where they will be planted Comply with BC's Climate-Based Seed Transfer Guidelines to select seeds suitable for more extreme weather conditions
Hurricanes and tropical storms	<p>Increased incidence of high-category hurricanes and precipitation from hurricanes.</p> <p>Potential impacts: Damage to Interfor facilities, production disruptions from damage in surrounding regions (infrastructure, supply chain), and forest destruction (impacts to log supply) in US South and Atlantic Canada regions. Increased cost of raw materials.</p>	<p>Procedures for severe weather:</p> <ul style="list-style-type: none"> Severe weather alarms and procedures Notification systems for closure of operations due to weather Weather-related emergency response plans including designated meeting points Weather resilient infrastructure
Pests and disease	<p>Increased incidence and severity of pest outbreaks for pest populations controlled by freezing temperatures (number of frost-free days).</p> <p>Potential impacts: Timber supply impacts. All regions, greater potential in BC, US Northwest, and Eastern Canada. Increased cost of raw materials.</p>	<ul style="list-style-type: none"> Mixed species planting prioritized for new forests to improve resilience, and maintain or enhance ecological diversity Forest health management techniques, such as insect trap trees, root disease control and salvage harvesting Supporting silviculture research in Ontario to assess performance of different seedlots and practices to enhance forest health Participating in a five-year research study "DIVERSE Project in Ontario: Assessment of a Functional Complex Network Approach to Forest Management" Comply with BC's Climate-Based Seed Transfer Guidelines to select seeds suitable for more extreme weather conditions

FOCUS: PHYSICAL AND TRANSITIONAL RISKS

SCENARIO: 1.5-2°C INCREASE

MODEL USED: MESSAGEix-GLOBIOM 1.1

RISK	DESCRIPTION AND POTENTIAL IMPACTS	RESILIENCE STRATEGIES AND ACTIONS
Shifting land use	While the use of wood products can displace higher-carbon energy and building materials, positions and/or protocols that favor forest preservation for land use goals or for carbon mitigation may impact the available fiber supply. Increased cost of raw materials.	<ul style="list-style-type: none"> Continue practicing sustainable forest management and contributing to land use planning discussions Engage with governments on forest carbon and land use protocols to ensure accurate analysis of forest carbon flows
	Potential impacts: Impacts to fiber supply and quality.	
Reputational risks	Increasing interest from investors and stakeholders regarding biodiversity along with the perception of forestry impacts to biodiversity may be compounded by biodiversity losses due to climate change, resulting in backlash against forest harvesting.	<ul style="list-style-type: none"> Continue practicing sustainable forest management and providing disclosure on biodiversity programs Continue to monitor and implement Biodiversity Interface Management Plans Designated 90 acres on our owned sites as pollinator habitat Contribute to landscape-level land use planning discussions Implement agreements with Indigenous communities that include traditional stewardship approaches Conduct stakeholder engagement and address misinformation regarding harvesting practices
	Potential impacts: Impacts to fiber supply and quality.	
Carbon pricing to operations	In most models of the low-carbon transition, significant carbon pricing is required to incentivize industries and societies to remove carbon from processes through either reductions in consumption or technological innovation. In these models, carbon prices exceed \$250USD/tCO ₂ e by 2030, and become significantly higher in some regions, exceeding \$1,000USD/tCO ₂ e (in 2020 currency). Canada currently plans to reach \$170CAD/tCO ₂ e by 2030.	<ul style="list-style-type: none"> Use biomass fuel as a source of energy Reduce Scope 1 and 2 GHG emissions by 40% by 2030 Increase rail use for medium- and long-haul lumber shipments in the US South
	Potential impacts: Increased operating costs.	
Exposure to litigation	Climate impacts may negatively affect nature in ways that imply poor forest management and logging practices, such as flooding, landslide risk, soil erosion and riparian health.	<ul style="list-style-type: none"> Maintaining SFI's Sustainable Forest Management Standard certification validates optimal forest management and logging practices
	Potential impacts: Litigation in Interfor harvest areas. All regions, greater potential in BC and US Northwest.	

FOCUS: OPPORTUNITIES

OPPORTUNITY	DESCRIPTION	STRATEGIES AND ACTIONS
Climate change mitigation	Sustainable forest management helps mitigate climate change through afforestation and practices that minimize the intensity and spread of forest fires.	Sustainable forest management practices help mitigate climate change. These practices include our standard of planting approximately three trees for every tree harvested which contributes to global afforestation, and forest thinning, fuel reduction projects and making fire breaks help mitigate wildfire intensity and spread.
Lower emissions energy sources	Biofuel wood residuals as a lower-emission source of energy for our operations and for the marketplace.	Biofuel wood residuals resulting from timber processing are a lower-emission alternative to fossil fuels for powering operations including heating kilns, and in some cases as a source of energy to heat buildings. Demand for biofuel wood residuals is growing as the marketplace seeks access to renewable energy sources that are lower carbon alternatives to fossil fuels.
Carbon credits	Making carbon credits available to the marketplace.	Through our British Columbia electricity provider partnerships, we make carbon credits available to the marketplace for purchase, supporting the promotion of and investments into cleaner energy sources.
Sustainable products	Wood as a lower carbon building material.	Wood from sources managed according to sustainable forest management standards is a lower embodied carbon building material compared to concrete and steel. Trees absorb carbon dioxide as they grow, and the carbon is stored in the wood for the life of the wood product. Wood is the only building material from a renewable source.
Species selection	Mixed species planting and resilient seed selection for sustainable forestry.	Interfor currently prioritizes mixed species planting, using any of 21 species that are native and ecologically suitable to the specific site, which helps promote forest balance and health. We comply with Climate-Based Seed Transfer Guidelines for forest managers operating on provincial Crown land to use seeds suitable for current conditions and potentially more extreme future conditions caused by climate change, building future resilience into the forest. We continue to support silviculture research initiatives across Canada as scientists continue to explore adaptations that may be necessary.
Supporting biodiversity	Biodiversity on our sites.	We manage to local biodiversity needs on our nearly 2,000 hectares of owned lands across our mill sites. Our Biodiversity Interface Management Plans serve as guidelines for wildlife encounters as migration patterns and timing shift from climate impacts. The plans also guide employees on identification and handling of invasive species that may spread through new pathways and weather patterns due to climate change. We have designated 90 acres on our sites as pollinator habitat to provide resources pollinators need including nesting habitats and flowering plants as their available resources and numbers continue to decline.
Salvage harvesting	Resource blown down logs following storms, fires, insect damage.	Proactively pivoting log resourcing to salvage blowdown following storms, as possible following fires and proactively or in response to insect damage aids in removing logs that, if left down, may act as extra fuel on the forest floor in fire conditions and contribute to pest and disease outbreaks.
Access to the marketplace	Customer and consumer expectations for climate-aware lumber providers.	Many customers and consumers in the marketplace expect lumber providers to identify, monitor and have action plans for climate risk and mitigation to minimize their own climate-related risks.
Investor ESG ratings	Investor consultation of ESG ratings may impact Interfor stock favorability.	We maintain strategic climate and environmental programs and policies that contribute to Interfor's ratings on sustainability performance for investors who consult these ratings to assess non-financial risks and align portfolios with sustainability goals.