Impacts of Climate Change on Ontario

Northern areas of the globe (like Canada & Ontario) will experience greater warming than other areas.

By 2100, it is predictred that Ontario winters could warm by 3-6 °C and summers could warm by 4-8 °C.

Temperature & Precipitation

- Positive \rightarrow winters warmer with less snow so heating costs will go down
 - → Easier to clear snow & ice (roads safer)
 - → Less ice on Great Lakes so shipping easier
- Negative \rightarrow some areas much wetter and some much drier.

Changing Lake Levels

- Less ice cover on lakes so shipping easier
- Negative \rightarrow trout and cold water fish may die out as waters warm
 - ➔ More algae
 - → Possibly more invading zebra mussels and lampreys

Ecosystems

- Tundra flowers are blooming earlier
- Some animals ie: deer and cardinals can adapt and will be fine
- Some animals ie: moose and black spruce won't adapt and will die
- Negative → kudzu is a very invasive/disruptive plant!! See picture in text

Disease & Illness

- Negative \rightarrow increase in disease ie: West Nile and Lyme disease
 - → Increase in heat related illness/death ie: heat stress, strokes
 - ➔ More smog so more respiratory illness

<u>Agriculture</u>

- Positive → increase in growing season good for soybeans and corn
 - ➔ More fruits & vegetables will grow in Ontario and possible northern Canada could farm!
- Negative \rightarrow increased warmth encourage unwanted plants so more pesticides (not good)

Forests

- Negative \rightarrow rain in heavy bursts and then long dry spells
 - → Hotter summers = more forest fires
 - → Insect pests move north ie: pine beetle. = reduction in our forests

Electricity Use

- Negative → more energy used for air conditioning in summer
 - → Less water in great lakes means less hydroelectric power.

Note: Be able to discuss in short answer paragraph form how Ontario will be positively and negatively affected with climate change. Be able to state specific examples and facts.