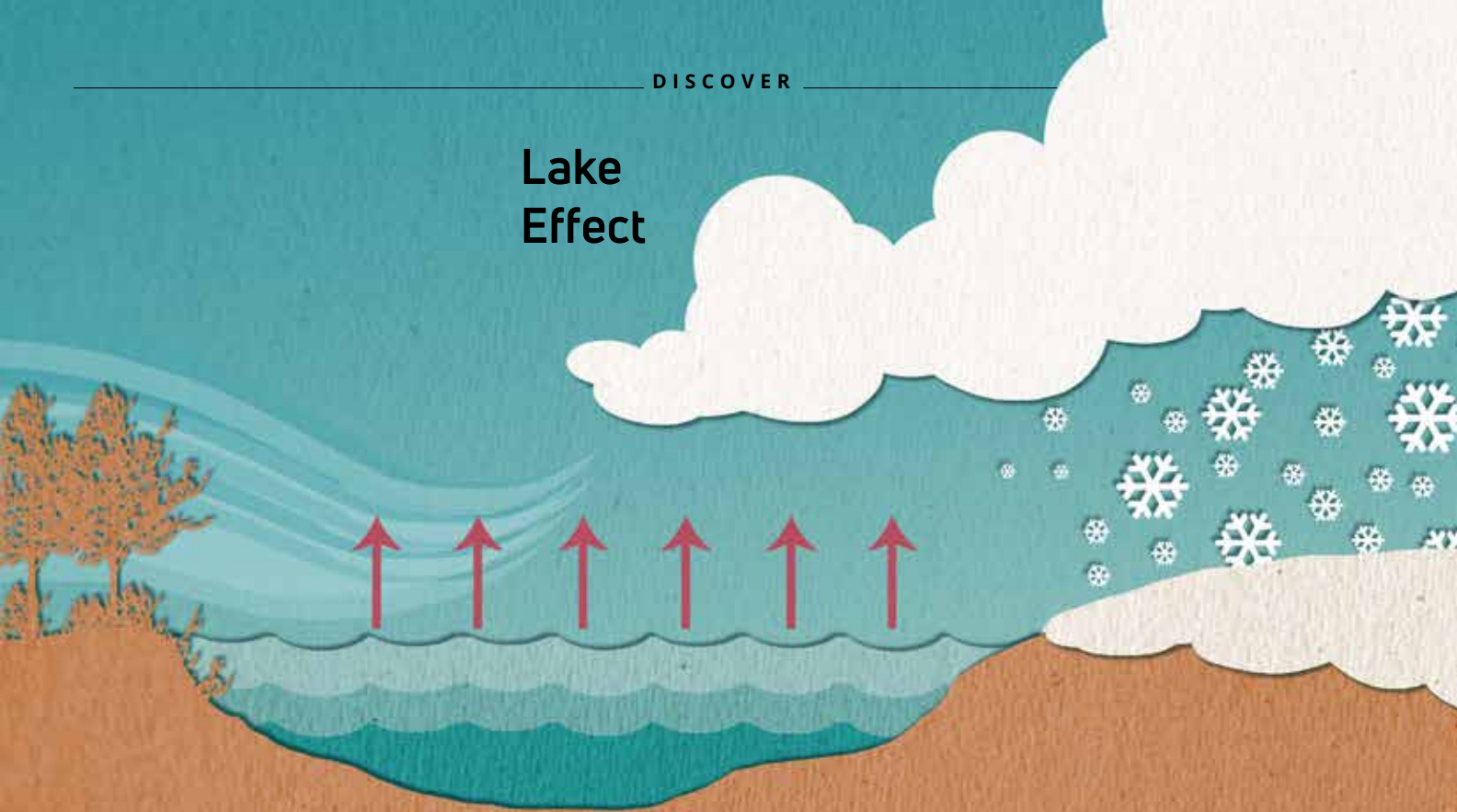


Lake Effect



THOSE OF US LIVING near the Great Lakes often hear the term “lake effect” or “lake-effect snow.” The lakes have a huge effect on the weather. They can temper storms or make them worse.

To understand how the lakes affect weather, it’s important to know that heat means vibration. The faster something vibrates, the hotter it is; the slower it vibrates, the cooler it is.

The faster air vibrates, the warmer it gets and the more water molecules it can hold. So on a warm summer day, if the atmosphere has water it can pick up, it will, and the air feels more humid.



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Water is also very good at storing heat. It takes a lot of heat to warm water, and it takes a long time for water to lose that heat and cool down. Land has a much lower heat capacity, so it can change temperature much faster.

Now imagine it’s December, and much of the U.S. Midwest and Canadian prairie provinces are under a cold snap. The land loses heat quickly, and it gets cold. But the Great Lakes have not changed temperature very much and remain warmer.

When a very cold, more slowly vibrating air mass crosses the Great Lakes from west to east, the warmth from those bodies of water goes into the air, raising the air temperature and causing the air to vibrate faster. And as it warms up and vibrates faster, the air is better able to pick up water out of the lakes.

Once that moisture-heavy mass of air crosses onto land again on the other side of the lake, the land is cooler, and as a result the air mass cools, and the vibrations slow. It can no longer carry that extra moisture, so it drops it. Depending on the temperature, it can become rain or snow, or it can simply form clouds.

When I think of the Great Lakes and their effect on the weather, I’m reminded of what our lives should look like as Christians. God created us to positively influence the world around us, and every day God gives us ways to do that.

Be a positive influencer! 📌