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*The Effects of Ice Melts on Water pH*

The intention of this research is to determine whether or not ice melts, specifically: calcium chloride, potassium chloride, magnesium chloride, and sodium chloride, affect the pH of water systems. The results that we are looking for are going to be strong enough that they could support a new regulation, restriction, or law that limits the amount of ice melts used or create a procedure that regulates how the ice melts can be laid on the ground. To discern these results, we used the following procedure: 1) added 200 mL of water to four beakers, 2) used a probe to identify what the pH of the water is, 3) then we added a specific amount of each of ice melt to a corresponding beaker, 4) then tested the water to determine what the pH was after the ice melt was added, 5) we determined what the change in pH was. Our results found that there was a minor amount of change in the pH of the water, and not nearly enough alteration to support new regulations or legislation. This led us to the conclusion that even though the ice melts change the pH of the water, there is not enough change to warrant concern. However, this does not mean that the ice melts are not a negative influence on the environment, we are only stating that the pH is changed enough, but there is a need to further investigate how the ice melts change other abiotic factors.