**Research Question**: If Calgary homeowners switched to clover lawns and implemented basic rainwater harvesting systems, then the city could reduce residential water consumption by approximately 60% during growing seasons, potentially saving millions of dollars in infrastructure costs and conserving water resources.

| October 16, 2024  **Project Title:**  Every Drop Counts: A Model for Sustainable Water Conservation in Calgary Through Smart Lawn Alternatives  **Project Purpose:**  To demonstrate and quantify how alternative lawn solutions and rainwater harvesting can reduce residential water consumption in Calgary, leading to significant environmental and economic benefits for the city.  **Research Question:**  How can changing from traditional lawns to alternative ground covers (like clover) combined with rainwater harvesting impact Calgary's water consumption and infrastructure needs?  **Hypothesis:**  If Calgary homeowners switched to clover lawns and implemented basic rainwater harvesting systems, then the city could reduce residential water consumption by approximately 60% during growing seasons, potentially saving millions of dollars in infrastructure costs and conserving water resources. |
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| November 15, 2024  I went to Canadian Tire to pick up the clover seeds to plant in my model. I am going to plant the seeds as soon as I am partially done with my rough draft. |
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| December 15-30, 2025  Throughout these 15 days I planned, created and typed out my rough draft. I did most of my writing on Google Slides as it was more efficient for me. |
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| January 15-25, 2025  On January 15 I planted the clover seeds and the grass seeds. For the first 3 days of the plants’ germination period I watered irregularly so that the seeds would germinate properly. For the next 12 days, I was mostly altering between 75mL of water for the grass and 25mL of water for the clover. Some days I noticed that the clover seeds were growing with gaps in the middle so I tried to spread the amount of water equally throughout. But, then what happened was that fruit flies took over ad |
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| January 27, 2025  Today I got my school science fair trifold. I brought it home and I will soon be starting to add my print-outs to the trifold. |
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| February 4, 2025  I am adding last minute touches to my rough draft and will soon put all my calculations on a graph in Google Sheets with the help of my dad. |
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| February 7, 2025  I finished my calculations and I put everything onto Google Slides. Now all I have to do is paste everything into my trifold and prepare for the school fair. Chart  Chart  February 9, 2025  I finished and double-checked all my slides, so now I am going to the library and print it all out. I’m going to start practicing for the fair on Wednesday. Today I am also going to put all my print-outs on the tri-fold. |
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| February 10, 2025  Today I went to school with my tri-fold and practiced my presentation. Only two more days until my school science fair! |
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| February 12, 2025  Today was the school science fair. All the students will know in one week if we made it to CYSF. I wish I had prepared more since sometimes I would blunder while talking. |
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| March 18, 2025  Today I finished the CYSF platform since the due date would be on the 21st. My Spring Break is next week so I’m hoping to add a little bit more research and update my tri-fold. |
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