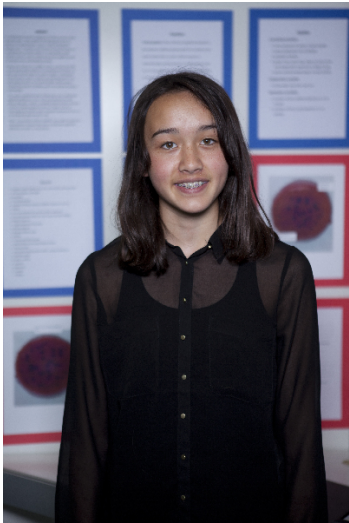


## CWSF 2013 - Lethbridge, Alberta



### Cassidy O'Flaherty

#### Sanitation By Sun

**Challenge:** Resources

**Category:** Junior

**Region:** Cariboo Mainline

**City:** Merritt, BC

**School:** Collettsville Elementary

**Abstract:** Providing clean, potable water by utilizing ultraviolet rays from the sun was the focus of my research. Water contaminated with coliform bacteria was treated with exposure to sunlight and tested for the presence of coliform and specifically, ecoli bacteria. There was no significant difference in the number of coliform bacteria at the end of the project, but there was a significant decrease in ecoli colonies.

#### Biography

My name is Cassidy O'Flaherty and I am 12 years old. I enjoy a variety of sports; equestrian riding, swimming, running and basketball. I play four musical instruments; french horn, piano, flute and guitar. I would like to pursue a career in science as a microbiologist or dermatologist. The inspiration for my project was that people in third world countries have water that is not sanitary and can cause serious health issues. I wanted to see if I could find a way to eliminate some of these organisms. Some of my plans for future study are to try to completely eliminate the dangerous coliform and ecoli as well as additional identified pathogens, using UV light. My advice for people who are thinking about doing a science project is to definitely find a subject you are interested in, pick a good question and work hard at your project because science will open doors and you will enjoy it.

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