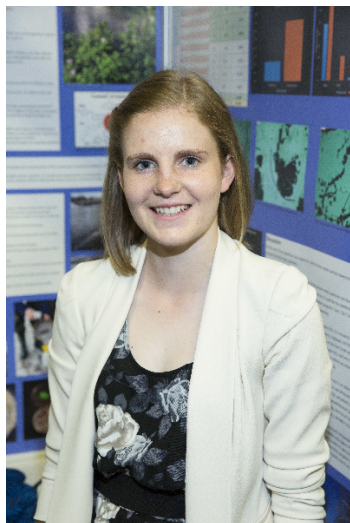


# CWSF 2014 - Windsor, Ontario



## Madeleine Yeomans

### Fishing for Microplastics

**Challenge:** Environment

**Category:** Intermediate

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Dr. E. P. Scarlett High School

**Abstract:** The purpose of my project was to quantify the microplastic content of the Bow River upstream and downstream of the wastewater treatment facilities in Calgary, AB. Microplastic particles are an emerging source of plastic pollution around the world. I collected and analyzed eight samples, four upstream and four downstream of the wastewater treatment facilities. I found significantly more microplastics downstream than upstream.

#### Biography

My name is Madeleine Yeomans and I am a Grade 10 French immersion student at Dr. E.P. Scarlett High School in Calgary, AB. This is my third time going to the Canada-Wide Science Fair, but my first time with Team Alberta. I play ringette in the winter and soccer in the summer. I also participate in many school sports including badminton, field hockey and cross-country running. I am planning to pursue a career in science and technology. The inspiration for my project came from an interview with Alanna Mitchell on the CBC radio show Quirks and Quarks. She discussed her book about microplastic pollution in the oceans. There has been insufficient research done on microplastic particles in fresh water and I would like to contribute to society's understanding. I believe that microplastic pollution will become a substantial threat in the future. My advice for anyone interested in doing a science fair project is to find a good topic that you are passionate about because that is the hardest part. After that, everything is easy.

#### Awards

#### Value

|   |         |
|---|---------|
| Excellence Award - Intermediate - Bronze Medal<br>Sponsor: Nuclear Waste Management Organization                | \$100   |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University | \$1 000 |
| Total   | \$1 100 |