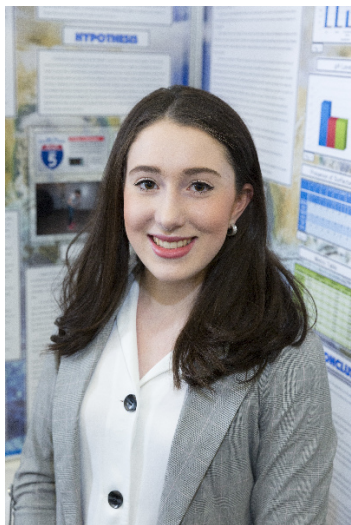


## CWSF 2018 - Ottawa, Ontario



### Stephanie Miller

#### Filter the Future: A Novel Approach to Saving Water

**Challenge:** Innovation

**Category:** Senior

**Region:** Cape Breton

**City:** Sydney, NS

**School:** Riverview High School

**Abstract:** The objective of this project was to design and develop a water filtration system that would be added to a shower to eliminate all water wasted during the shower period. By recycling the water, the domestic consumption of water will be significantly reduced. The water was tested for the presence of contaminants and surfactants to ensure the water is safe to consume for future uses.

#### Biography

My name is Stephanie Miller and I am a grade 12 student from Nova Scotia. After graduation, I plan to pursue Chemical Engineering. When finding an idea for a science fair project, it is important to do something that pertains to today's society. By making your project relevant and identifying a need in our world, you are helping to make a difference. Science is all about finding solutions to our problems, so you cannot go wrong. I would advise students to do a project that interests them, and can further spark the interest of our society as a whole. For instance, my project involved the filtration of water in the domestic domain in an attempt to conserve water in drought-affected areas. With the water restrictions in place during the drought period, it is not an ideal situation for residents. My project could also be applied to Third World countries where water is scarce all year round. All in all, a unique project that interests you will surely interest others.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040