

# CWSF 2018 - Ottawa, Ontario



## Holly Tetzlaff

### Disappearance ? Disintegration ~ The Environmental Impact of Pseudo Flushables

**Challenge:** Environment

**Category:** Senior

**Region:** Peterborough

**City:** Trenton, ON

**School:** East Northumberland S.S.

**Abstract:** Sewer authorities state only toilet paper and human waste should be flushed down toilets; however, manufacturers continue to claim product flushability. Using controlled trials, items labelled as flushable are tested for relative disintegration rates. Testing included: exposure to water with agitation, sewer simulation, toilet bowl flush tests, no agitation, and heat exposure. Conclusions found products labelled as flushable did not disintegrate like toilet paper.

#### Biography

Holly attends ENSS, where she is helping work towards the school's second \$1million fundraising goal for the Terry Fox Foundation. Holly enjoys fencing, cross country running and soccer; as well as slacklining, kayaking and geocaching. She is looking forward to this year's CWSF which will complete a hat-trick for attendance. Holly applied to the University of New Brunswick because she loved the campus and school four years ago at the CWSF, and has accepted her offer for a Bachelor of Science in Kinesiology; with career aspirations in Prosthetics. Holly's project this year addresses the real-world problem of consumers using products labelled flushable, which when tested do not disintegrate like toilet paper, the only sewer approved product. In 2015, she founded an environmental educational program, called Red Fish Route, to teach elementary students that toilets are not garbage cans. To date, she has presented to over 5800 students. Please watch her Toilet Paper Challenge video on Youtube, at Red Fish Route. Her advice to all young scientists is research something you are truly passionate about, and listen to Dr. Marcus Eriksen, when he says, "Science without solutions is only doing half its job." Good luck to all attending CWSF Ottawa.

#### Awards

#### Value

Canadian Stockholm Junior Water Prize - Senior Sponsor: Canadian WEF Member Associations, the Canadian Water and Wastewater Association, and Jacobs	\$2 000
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - \$1,000 Entrance Award Sponsor: Carleton University	\$1 000
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$5 000</b>